A Correlational Study Examining the Relationship between Social Responsibility and Financial Performance

Sean A. Stanley
WALDEN UNIVERSITY

A major concern among investors, stakeholders, and business organizations continue to be their lack of understanding of the relationship between social responsibility and financial performance. Investors over the years have perceived social responsibility as the nemesis to financial performance. The purpose of this study was to understand the relationship between social responsibility and financial performance, which could be used to assist in investment decision-making processes. Further research in this area could lead to greater insight into the benefit of socially responsible behavior among investors, stakeholders and business organizations and could reduce the number of socially irresponsible activities occurring in our society today.

Keywords: *social responsibility, financial performance, stakeholders, corporate social responsibility, modern portfolio theory, socially responsible investing, stakeholder theory*

Introduction and Background

Social responsibility has been a captivating subject matter for many years; however, not until recently has this topic re-emerged again as a major concern in both business and society. Incidents involving social injustice as well as unethical business practices have caused social responsibility to take center stage.The emergence of socially conscious investors who have embraced a number of social goals that include environmental protection, censoring socially irresponsible firms, and advancing social causes and agendas while maintaining adequate returns on their investments are a very welcomed group in society today. However, throughout history some investors were scrutinized for focusing only on maximizing possible returns in terms of capital gains and dividends given their current risk preferences at a particular time (Spicer, 1978). The economist Milton Friedman reported the only social responsibility of business is to increase profits and serve as an instrument of stockholders (Paskert, 2008). Others have taken a different perspective on Friedman's definition of social responsibility by saying "the difficulty of exercising "social responsibility" illustrates, of course, the great virtue of private competitive enterprise—it forces people to be responsible for their own actions and makes it difficult for them to exploit other people for either selfish or unselfish purposes. People can do good but only at their own expense" (Hartman, 2005).It has been this train of thought by many that warrants further research pertaining to social responsibility and its relationship to financial performance. Despite the heightened focus on social responsibility, financial performance remains the primary objective and requirement for firms by shareholders but social responsibility is now becoming equally important to shareholders.

Statement of the Problem

Investors, business organizations and stakeholders continue to face social woes and financial challenges in their efforts to remain successful in their day-to-day ventures. Understanding the relationship between social responsibility and financial performance is critical to that success and therefore a major concern of the groups. Previous research spanning 25 years and addressing the relationship between social responsibility and financial performance produced 62 studies reported in 51 articles (Griffin and

Mahon, 1997).The studies were categorized into three primary categories: those demonstrating a positive correlation, those demonstrating a negative correlation, and those that showed no effect or were inconclusive. The results of the studies were as follows: 33 studies resulted in a positive relationship, 20 studies resulted in a negative relationship, and in 9 studies no relationship or were inconclusive. The results indicate the importance and necessity for further examination of the relationship between social responsibility and financial performance.

The transition from an industrialized society to a technologically advanced society has brought with it a host of challenges for business organizations, their stakeholders, and the society in which these organizations exist. The relationship between social responsibility and financial performance is one of those challenges. According to Cochran and Wood (1984), whether or not a relationship exists between the two variables is clearly an important issue; therefore, if certain actions by firms classified as socially responsible are negatively correlated with the financial performance of those firms, managers are likely to be cautious in this area. If a positive relationship can be shown to exist, managers may feel encouraged to pursue such activities with vigor and intensity, all to the benefit of investors, business organizations and stakeholders. The research will be beneficial to each group and will address their concerns about the effect that socially responsible or non-socially responsible behavior might have on the financial performance of their business endeavors.

Purpose of the Study

The purpose of this quantitative, correlational study was to examine the relationship between social responsibility and financial performance. The research questions were as follows:

1. For the entire sample, which KLD subscale scores (if any) are rated higher than others?

2. For the entire sample, what is the pattern among the five KLD subscale scores, and is that pattern related to market capitalization or industry sector?

3. For the entire sample, what are the relationships between the company's market capitalization and each of the six KLD scaled scores?

4. How do the relationships between market capitalization and the six KLD scores change (if at all) based on market capitalization category or industry sector?

The following null hypotheses and alternative hypotheses were teste in this study:

$H_0 1$: For the entire sample, all KLD subscale scores are similar.

$H_a 1$: For the entire sample, all KLD subscale scores are not similar.

$H_0 2$: For the entire sample, the pattern of subscale scores is not related to the market capitalization category (small, middle, or large).

Ha2: For the entire sample, the pattern of subscale scores is related to the market capitalization category (small, middle, or large).

$H_0 3$: For the entire sample, the pattern of subscale scores is not related to the industry sector.

Ha3: For the entire sample, the pattern of subscale scores is related to the industry sector.

H_04: For the entire sample, none of the six KLD scores will be related to the company's market capitalization.

Ha4: For the entire sample, at least one of the six KLD scores will be related to the company's market capitalization.

H_05: None of the six KLD scores will be related to the company's market capitalization for any of the three market capitalization categories (small, middle, or large).

Ha5: At least one of the six KLD scores will be related to the company's market capitalization for any of the three market capitalization categories (small, middle, or large).

H_06: None of the six KLD scores will be related to the company's market capitalization for any of the industry sector subgroups.

Ha6: At least one of the six KLD scores will be related to the company's market capitalization for any of the industry sector subgroups.

In addition, the intent of the study was to highlight the importance of socially responsible behavior in business and in society via socially responsible investing by investors, ethical behavior by business organizations and preservation of natural resources by stakeholders.

Definition of Terms

This research focused on the following two main variables: Social responsibility and financial performance. A brief overview of the variables and related concepts follows.

Social Responsibility

There is no commonly accepted definition of social responsibility, the expectation that organizations apply socially responsible practices is increasing rapidly across the globe. The standards used for social responsibility in this study consisted of seven core elements: the environment, human rights, labor practices, organizational governance, fair trade, consumer rights, and society development. These are the standards by which each of the companies in this study were measured in order to obtain a social responsibility score.

Financial Performance

Measuring financial performance is an important part of any business and in this article we focus on the market value because investors are a major focal point of the research. Market capitalization is the stock price multiplied by the total number of outstanding shares of stock.

Assumptions and Limitations

The assumptions of the study were that most managers and investors perceived that social responsibility might have an adverse effect on the financial performance of a business and that society believes it is necessary that future generations understand the importance of social responsibility and its relationship to financial performance. The next assumption was that each company examined in this study provided accurate financial statements and that KLD Research & Analytics, Inc., the company that measured the social responsibility of each company used appropriate and accurate social measures.

The limitations of the study were that it did not distinguish between industries of companies in the selection process, but did allow the social instrument used to dictate which companies were selected based on the criterion of being socially responsible. The study was also restricted with regard to time and scope, and the limit on the number of companies examined.

Literature Review

Introduction and Background

In the United States, economic, social and financial responsibilities have become more important in the world of business. The economic responsibilities refer to business' primary function as a producer of goods and services that consumers need and want, while making an acceptable profit (Subroto, 2003). This type of responsibility is important because without financial abilities, all other responsibilities are handicapped. This view contradicted the view that management's only responsibility is to maximize shareholder profits (Friedman, 1970). There has been an ongoing intellectual debate to determine exactly what type of relationship exists between social responsibility and financial performance (Griffin & Mahon, 1997). The challenges that society faces regarding the controversial issue of social responsibility are daunting. There are still questions such as what is social responsibility, how does it affect the financial performance of a business, and what are investor and manager perceptions about this effect. A complex issue such as social responsibility presents a challenge to business leaders who value their reputation and it challenges them to focus in an unselfish manner while continuing to maintain and improve their financial performance.

Social Responsibility

In past years, the public desire for social action and responsibility in business has been one of great concern but the public confidence that business would respond to that desire has steadily declined (Gunness, 1974). Today that desire is on the rise again and the previous decline can be attributed to the continued belief by management that the only social responsibility of a firm is to increase profits (Friedman, 1970). This one-dimensional view was qualified and based upon the underlying theory by Adam Smith that successful business benefits society and a society can influence business as an invisible hand, leading businesses to perform in a manner that benefits society. The invisible hand doctrine states that its influence creates the greatest good for the greatest number and therefore government has no need to interfere (Stieb, 2009).There have been many variations of social responsibility in terms of how researchers refer to it; one variation is corporate social responsibility, which takes on a firm's perspective. A second variation is social performance, and this term has been relegated to assessing the performance of firms from a social aspect in comparison or relation to the firm's financial performance.

Despite the fact that a universally accepted definition for social responsibility does not exist, many decisions of investors and investment managers aremade in an effort to align with social responsibility. According to McGuire, Sundgren, &Schneeweis (1988), there have been many arguments regarding the relationship between a company's social responsibility and financial performance. However, a major concern about this relationship is whether social responsibility hurts financial performance or supports it. One basic argument has been how firms incur costs from socially responsible actions that place them at an economic disadvantage compared to other firms (Ullmann, 1985). A second argument states when explicit costs of social responsibility are at a minimum, a firm might actually benefit from socially

responsible actions (Soloman& Hansen, 1985). A third perspective contends that the cost of socially responsible actions by the firmhas to be offset by a reduction in other firm costs in order to be effective (Cornell & Shapiro, 1987). The bottom line is that various beliefs about the effectiveness or non-effectiveness of social responsibility on the financial performance of the firm show a need for further investigation into the relationship of these variables.

Financial Performance

Financial performance is a term that resonates in the strategy of every business, regardless of industry. Traditionally, a firm's success was based upon its financial performance, without regard to the many other critical factors associated in the quest for market dominance. According to Jackson and Parsa (2009), there are two primary measures of a firm's financial performance: (a) those that measure the firm's market performance and (b) those that measure the firm's accounting performance. Both measures offer benefits that have been used in the research of previous studies. Some researchers have used market measures in their research to ascertain performance, according to Luo and Bhattacharya (2006), whereas others have used accounting measures to evaluate financial performance. Still other researchers have used a combination of accounting and market measures to evaluate financial performance in their studies (McGuire et al., 1988). It is essential that we appropriately evaluate financial performance in a manner that will allow us to determine its relationship with social responsibility.

From a theoretical perspective, accounting measures evaluate a firm's performance from a historical perspective and are subject to biases that result from managerial competencies and the use and manipulation of accounting procedures. Market measures of performance, which are the alternative, tend to be futuristic and less dependent on a firm's accounting procedures but arerepresentative of investors' perception of a firm's ability to generate future profits (Rust, Lemon, &Zeithami, 2004). Market measures also tend to focus on the real value of the company, which rests with the investors who trade the company's stock. The capturing of market share within a company's industry is very important when assessing the financial performance of a company. An increasing awareness of the present age of globalization has also brought an awareness of financial performance measurement and its importance in adding value to the firm. Until a business returns a profit greater than its overall cost of capital, it operates at a loss. If a business returns less to the economy than it devours in resources, it does not create wealth but destroys it (Drucker, 1995). This study involved examining the relationship between financial performance and social responsibility and it will use the market measure, market capitalization to represent financial performance.

Methodology

Research Method

The purpose of the study was to examine the relationship between social responsibility and financial performance and provide critical research to investors, stakeholders, and society. This study included a quantitative methodology based on the research questions developed. The questions looked at the subscale scores related to market capitalization and industry sector. There are six null and alternative hypotheses tested in this study using a ***p value*** of less than .05 to reject the null hypotheses. The quantitative methodology used is based on the goal of predicting and confirming the relationship between two variables by testing certain null hypotheses. A qualitative methodology was not a consideration for this study because it used to understand and describe some type of phenomenon. This

study took a straightforward approach using statistical analysis to determine the relationship between the two variables.

Research Design

The study included a correlational design to examine the relationship between social responsibility and financial performance. According to Leedy and Ormrod (2010), a correlational design is a type of descriptive quantitative research that involves examining possible relationships among variables. Correlation does not imply causation as in causal-comparative research; however, both research methods are similar in that both are non-experimental methods. Causal-comparative research attempts to infer cause-and-effect relationships and correlational research does not; therefore, causal-comparative research was not an appropriate design for this study.

Population and Sampling

The targeted population for this study was approximately 359 companies deemed socially responsible in 2009 by KLD Research & Analytic, Inc. The companies were listed in the KLD Global Socrates research database. The Global Socrates is a comprehensive research database that measures the environmental, social, and governance (ESG) performance of more than 4,000 companies in more than 50 global markets (Global Socrates, 2010). The population of companies used in this study is contained in the index called the Domini 400 Social Index, which contains U.S.-based companies only that are of particular interest to investors who are socially responsible through their investment decisions. KLD has enabled investors to integrate ESG factors into their investment strategies and decisions since 1988. KLD's research provides an empirical foundation for the rating, scoring, and analysis of the ESG performance of the companies listed in the Domini 400 Social Index. KLD measures the impact of each firm on five categories of stakeholders, (a) environment, (b) community and society, (c) customers, (d) employees and supply chain, and (e) governance and ethics, seeking to understand the broader impact of business.

The sample frame consisted of data on financial performance and social performance in five categories of stakeholders for 2009. The data reflected in the sample included the measurement of market capitalization (financial) and environment, community and society, customers, employees and supply chain, and governance and ethics (social responsibility) for the same time period. The data reflected in the sample were five category measures of social responsibility and the financial performance of market capitalization in each company. It should be noted that only one year was examined because the list of socially responsible companies change each year.

Instrumentation

The study included archival data collected from KLD Research and Analytic's social rating and monitoring database, Socrates Global. In general, a quantitative correlational study has two or more quantitative variables from the same group of subjects, and the researcher tries to determine if a relationship or covariation exists between the two variables (i.e., a similarity between them, not a difference between their means). KLD uses a three-stage process that first determines which data will give a complete picture of a company's ESG impact. Second, KLD gathers, evaluates, and updates thecompany's ESG performance data. Finally, KLD translates the data into comparative, user-friendly metrics (KLD Research & Analytics, 2009). The ESG analysis seeks to understand the broader impact of business by looking at each firm's impact on five categories of stakeholders, which are (a) the environment, (b) community and society, (c) employees and supply chain, (d) customers, and (e) governance and ethics. KLD uses more

than 280 indicators (individual metrics of ESG performance) that are universal and applied to every firm they study.

The description of each company's ESG performance by KLD is articulated using both numerical scores and a letter-based rating scale demonstrated in the appendices of this study. The scores generated for firms were aggregated in a four-step process from performance ratings, to impact ratings, to individual ESG ratings, to the overall company ESG rating. KLD also provides a letter-based rating that falls within a 9-point bond-like scale. KLD does not normalize ratings across individual industries or the overall company universe. A given industry may have no companies with AAA or AA ratings, while companies in another industry may achieve higher ESG performance and the ratings are based solely on the results of the performance indicators for the year the rating was conducted.

The financial proxy of market capitalization for this study was captured through Yahoo Finance, an online resource that provides updated and historical market capitalization results for U.S.-based companies. The market capitalization (market capitalization = total outstanding common shares × current market price) is a measure of how large or small a company is. This represents the current marketvalue of a company or how much a company is worth in traders' and investors' eyes. Although market capitalization is not strictly defined, the following groupings are widely accepted capitalization sizes: (a) mega capitalization = $200 billion or more, (b) large capitalization = $10 billion to $199 billion, (c) mid-capitalization = $2 billion to $9 billion, and (d) small capitalization = 300 million to $1 billion.

Data Collection and Analysis

To examine the relationship between social responsibility and financial performance, archival data were used. The collection of data was retrieved from the KLD social database and the Yahoo Finance database was imported via Excel spreadsheets into SPSS (statistical package for the social sciences), which is use conduct statistical analysis. As noted by Leedy and Ormrod (2010), "Numbers are meaningless unless we analyze and interpret them in order to reveal the truth that lies beneath them" (p. 253). The statistical approaches used in the study were driven by the nature of the data and purpose of the study.

Table 2 summarizes the data analysis plan for this study; specifically, for Research Questions 1 and 2, repeated measures analysis of variance (ANOVA) tests were performed. In Research Questions 3 and 4, Pearson's product–moment correlations were used.

Table 2

Data Analysis Plan for the Study

Research Question	Related Null Hypotheses	Data Elements	Statistical Approach
1. For the entire sample, which KLD sub-scale scores (if any) are rated higher than others?	1. For the entire sample, all KLD subscale scores are similar.	Five KLD subscale scores	Repeated measures ANOVA
2. For the entire sample, what is the pattern among the five KLD sub-scale scores, and is that pattern somehow related to market capitalization or industry sector?	2a. For the entire sample, the pattern of subscale scores are not related to the market capitalization category (small, mid, or large).	Five KLD subscale scores and market capitalization category (small, mid, or large)	Repeated measures ANOVA
	2b. For the entire sample, the pattern of subscale scores are not related to the industry sector	Five KLD subscale scores and industry sector	Repeated measures ANOVA
3. For the entire sample, what are the relationships between the company's market capitalization and each of the six KLD scaled scores?	3. For the entire sample, none of the six KLD scores will be related to the company's market capitalization.	KLD Overall scale, five KLD subscale scores and market capitalization	Pearson correlations
4. How do the relationships between market capitalization and the six KLD scores change (if at all) based on market capitalization category or industry sector?	4a. None of the six KLD scores will be related to the company's market capitalization for any of the three market capitalization categories (small, mid, or large).	KLD Overall scale, five KLD subscale scores, market capitalization, capitalization category (small, mid, or large)	Pearson correlations
	4b. None of the six KLD scores will be related to the company's market capitalization for any of the industry sector sub-groups.	KLD Overall scale, five KLD subscale scores, market capitalization and industry sector.	Pearson correlations

Reliability and Validity

A reliable instrument improves and strengthens a study by representing the true scores of the items being assessed on specific dimensions. According to Simon (2006), reliability refers to the consistency of assessment scores and is concerned with the accuracy, consistency, stability, and repeatability of a measure to represent the true score of a variable being assessed on a particular level or dimension. KLD uses three processes to maintain the accuracy, consistency, and currency of its research: (a) continuous daily updates from media sources, nongovernmental organizations, and government data sources; (b) fiscal year updates that consist of annual updates from the individual company‘s public documents; and (c) an annual review that includes analysis of all information gathered throughout the year, reviews of

company websites, reviews of corporate social responsibility reports, direct communication with senior management, nongovernment organizations, and research partners.Finally, to ensure the quality and reliability of the data presented to researchers, several analysts perform quality reviews of every company profile once a year. An edit of daily updates for content and ratings quality is a standard practice. A ratings review committee composed of senior analysts and the director of research reviews everycontroversial question submitted by critics and maintains the currency of existing ratings, as well as develops new ratings when necessary. KLD evaluates its methodology each year using the experience of rating companies since 1988. According to Gay (1996), establishing reliability is a prerequisite for establishing validity, although a valid assessment is usually, by necessity, reliable. However, the contrary is not true, which is that a reliable assessment is not necessarily valid, and according to Simon (2006), a researcher has an obligation to select the most reliable instrument to use in a study.

The validity of a study refers to the extent to which particular measurements achieve the purpose for which they are designed. The KLD social rating system was designed to determine which companies are socially responsible in their business activities in five major stakeholder categories: (a) environment, (b) community and society, (c) employees and supply chain, (d) customers, and (e) governance and ethics. There are three main types of validity: (a) construct validity, which refers to whether questions accurately represent the construct being measured; (b) construct validity, which refers to the extent an instrument successfully measures a theoretical concept called a construct; and (c) predictive validity, which indicates the ability of an instrument to provide meaningful patterns of results.

Findings

Evaluation of Research Data

The data captured in this study focused on the companies and their industries, as well as the categories of social responsibility measures that were captured by KLD Analytics, Inc. There were 359 companies looked at within 9 full industry sectors.

Table 3 displays the frequency counts for selected variables. The full industry sector is represented by nine industries ranging from basic materials to utilities. The number of companies within each industry ranged from three (conglomerates) to 70 (services), with the median number of companies being 36 (industrial goods). The condensed industry sector is represented by five industries ranging from consumer goods to other and the number of companies within each industry ranged from 50 (financial) to 128 (other), with the median number of companies being 58 (consumer goods). Almost half (48.5%) of the companies were classified as mid cap, having a market capitalization that ranges from $2 billion to $9 billion (see Table 3).

Table 3
Frequency Counts for Selected Variables (N = 359)

Variable and category	*n*	%
Full industry sector		
Basic materials	31	8.6
Conglomerates	3	0.8
Consumer goods	58	16.2
Financial	50	13.9
Health care	33	9.2
Industrial goods	36	10.0
Services	70	19.5

Technology	53	14.8
Utilities	25	7.0
Condensed industry sector		
Consumer goods	58	16.2
Financial	50	13.9
Services	70	19.5
Technology	53	14.8
Other	128	35.7
Market capitalization		
Small capitalization	49	13.6
Mid capitalization	174	48.5
Large capitalization	136	37.9

Table 4 displays the descriptive statistics for company market capitalization in billions, the KLD overall score, and the five KLD subscale scores. Company market capitalization ranged from $300 million to $190.80 billion with a mean score of $15.64 billion. The KLD overall scores ranged from a score of 35 (low) to a score of 77 (high). The five KLD subscale scores ranged from a score of 18 (low) to a score of 100 (high).

Table 4
Descriptive Statistics for Selected Variables (N = 359)

Variable	*M*	*SD*	Low	High
Market capitalization (in billions)	15.64	26.10	0.30	190.80
KLD overall score	56.44	7.10	35.00	77.00
KLD environment score	56.50	10.18	34.00	90.00
KLD community and society score	53.58	12.89	19.00	97.00
KLD customers score	57.97	12.70	21.00	100.00
KLD employees and supply chain score	53.13	12.03	18.00	86.00
KLD governance and ethics score	71.22	12.75	31.00	97.00

Research Question 1

Research Question 1 asked, for the entire sample, which KLD subscale scores (if any) are rated higher than others? The related null hypothesis predicted that, for the entire sample, all KLD subscale scores wouldbe similar. To test this hypothesis, Table 5 displays the results of the relevant repeated measures ANOVA test. Inspection of the table showed significant within-subjects differences across the five subscale scores (p = .001).

Table 5
Repeated Measures ANOVA Table for the Five KLD Subscale Scores (N = 359)

Source	*SS*	*df*	*MS*	*F*	*p*
Score	78,662.71	4	19,665.68	154.37	.001
Error (Score)	182,427.29	1,432	127.39		

Table 6 and Figure 4 display the results of the subsequent Bonferroni post hoc tests comparing the five KLD subscale scores to each other. The five scores yielded three clusters. Specifically, the score for governance and ethics (M = 71.22) was significantly higher than all four other scores. In the next cluster, the scores for environment (M = 56.50) and customers (M = 57.97) were both significantly higher than

the scores in the lowest cluster, which contained the scores for community and society (*M* = 53.58) and employees and supply chain (*M* = 53.13). This combination of findings provided support to reject Null Hypothesis 1.

Table 6
Descriptive Statistics and Bonferroni Post Hoc Tests for the Five KLD Scores (N = 359)

KLD score[a]	*M*	*SE*
1. Environment	56.50	0.54
2. Community and society	53.58	0.68
3. Customers	57.97	0.67
4. Employees and supply chain	53.13	0.64
5. Governance and ethics	71.22	0.67

[a]Bonferroni post hoc tests: 5 > 1, 2, 3, 4 ($p < .05$); 1, 3 < 2, 4 ($p < .05$); no other pair of means was significantly different at the $p < .05$ level.

Research Question 2

Research Question 2 asked, for the entire sample, what is the pattern among the five KLD subscale scores and is that pattern somehow related to market capitalization or industry sector? The research question contained two related hypotheses. In the first one, Hypothesis 2 predicted the pattern of subscale scores would not be related to the market capitalization category (small, mid, or large) for the entire sample. To address this hypothesis, Table 7 displays the relevant repeated measures ANOVA test. Inspection of the table showed significant within-subjects differences across the five subscale scores (p = .001). The between-subjects test based on the size of the company was almost significant (p = .08). The interaction effect between the KLD scores and the size of the company was significant (p = .001).

Table 7
Repeated Measures ANOVA Table for the Five KLD Subscale Scores Based on the Three Market Capitalization Sizes (N = 359)

Source	*SS*	*df*	*MS*	*F*	*p*
Score	57,705.87	4	14,426.47	117.40	.001
Size	1,135.86	2	567.93	2.50	.08
Score x size	7,440.24	8	930.03	7.57	.001
Error (score)	174,987.05	1,424	122.88		
Error (size)	80,722.15	356	226.75		

Table 8 and Figure 4 display the results of the subsequent Bonferroni post hoc tests comparing the five KLD subscale scores to each other. The five scores yielded three clusters. Specifically, the score for governance and ethics (*M* = 71.22) was significantly higher than all four other scores. In the next cluster, the scores for environment (*M* = 56.50) and customers (*M* = 57.97) were both significantly higher than the scores in the lowest cluster that contained the scores for community and society (*M* = 53.58) and employees and supply chain (*M* = 53.13).

Table 8
Descriptive Statistics and Bonferroni Post Hoc Tests for the Five KLD Scores Controlling for Market Capitalization Size (N = 359)

KLD score[a]	*M*	*SE*
1. Environment	56.60	0.60

2. Community and society	53.71	0.79
3. Customers	58.37	0.76
4. Employees and supply chain	54.10	0.72
5. Governance and ethics	71.52	0.78

[a]Bonferroni post hoc tests: 5 > 1, 2, 3, 4 (p< .05); 1, 3 < 2, 4 (p< .05); no other pair of means was significantly different at the p< .05 level.

Table 9 and Figure 5 display the interaction of the five KLD subscale scores with the three market capitalization sizes. Inspection of the table found similar scores for the three company sizes for their community and society scores and their governance and ethics scores. Large capitalization companies had the highest score for environment (M = 60.21) but the lowest score for customers (M = 54.80). In addition, the mid capitalization employees and supply chain score (M = 50.30) was considerably lower than for the other two company sizes (see Table 9 and Figure 5). This combination of findings provided support to reject Null Hypothesis 2.

Table 9

Descriptive Statistics for the Interaction of the Five KLD Scores With the Three Market Capitalization Sizes (N = 359)

Market size and KLD score	*M*	*SE*
Small		
1. Environment	55.78	1.39
2. Community and society	54.00	1.85
3. Customers	60.63	1.78
4. Employees and supply chain	56.45	1.68
5. Governance and ethics	72.86	1.82
Middle		
1. Environment	53.80	0.74
2. Community and society	53.14	0.98
3. Customers	59.69	0.95
4. Employees and supply chain	50.30	0.89
5. Governance and ethics	71.72	0.97
Large		
1. Environment	60.21	0.84
2. Community and society	53.99	1.11
3. Customers	54.80	1.07
4. Employees and supply chain	55.56	1.01
5. Governance and ethics	69.99	1.09

Hypothesis 3 predicted that, for the entire sample, the pattern of subscale scores would not relate to the industry sector. To address this hypothesis, Table 10 displays the relevant repeated measures ANOVA test. Inspection of the table found significant within-subjects differences across the five subscale scores (p = .001). The between-subjects test based on the industry sector was significant (p = .001). In addition, the interaction effect between the KLD scores and the industry sector was significant (p = .001).

Table 10
Repeated Measures ANOVA Table for the Five KLD Subscale Scores Based on the Five Industry Sectors (N = 359)

Source	*SS*	*df*	*MS*	*F*	*p*
Score	66,037.09	4	16,509.27	137.25	.001
Sector	6,504.68	4	1,626.17	7.64	.001
Score x sector	12,097.86	16	756.12	6.29	.001
Error (score)	170,329.43	1,416	120.29		
Error (sector)	75,353.33	354	212.86		

Table 11 and Figure 4 display the results of the subsequent Bonferroni post hoc tests comparing the five KLD subscale scores to each other. The five scores yielded three clusters. Specifically, the score for governance and ethics (*M* = 71.22) was significantly higher than all four other scores. In the next cluster, the scores for environment (*M* = 56.50) and customers (*M* = 57.97) were both significantly higher than the scores in the lowest cluster that contained the scores for community and society (*M* = 53.58) and employees and supply chain (*M* = 53.13).

Table 11
Descriptive Statistics and Bonferroni Post Hoc Tests for the Five KLD Scores Controlling for Industry Sector (N = 359)

KLD score	*M*	*SE*
1. Environment	57.02	0.57
2. Community and society	53.40	0.71
3. Customers	57.62	0.67
4. Employees and supply chain	54.21	0.65
5. Governance and ethics	71.13	0.69

[a]Bonferroni post hoc tests: 5 > 1, 2, 3, 4 ($p < .05$); 1, 3 < 2, 4 ($p < .05$); no other pair of means was significantly different at the $p < .05$ level.

For the between-subjects effect for industry sector, Table 12 displays the relevant descriptive statistics and Bonferroni post hoc tests. Aggregated KLD scores for the consumer goods sector (*M* = 62.38) were significantly higher than for the other four industry sectors. No other pair of industry sectors was significantly different at the $p < .05$ level (see Table 12). This combination of findings provided support to reject Null Hypothesis 3.

Table 12
Descriptive Statistics and Bonferroni Post Hoc Tests for the Five Industry Sectors (N = 359)

Industry sector[a]	*M*	*SE*
1. Consumer goods	62.38	0.86
2. Financial	56.20	0.92
3. Services	58.72	0.78
4. Technology	58.70	0.90
5. Other	57.38	0.58

[a]Bonferroni post hoc tests: 1 > 2, 3, 4, 5 ($p < .05$); no other pair of means was significant at the $p < .05$ level.

Inspection of Table 13 and Figure 6 showed the five industry sectors to be most similar for their environment scores (score range *M* = 54.84 to *M* = 58.47) and most disparate for their customers scores (score range *M* = 50.56 to *M* = 66.03). The most inconsistent pattern of scores was found for the financial sector. Specifically, their score was among the highest for the environment (*M* = 58.10) and the highest for employees and supply chain (*M* = 58.76). However, that sector also had the lowest scores for community and society (*M* = 47.96), customers (*M* = 50.56), and governance and ethics (*M* = 65.64). This combination of findings provided support to reject Null Hypothesis 3.

Table 13
Descriptive Statistics for the Interaction of the Five KLD Scores With the Five Industry Sectors (N = 359)

Industry sector and KLD score	*M*	*SE*
Consumer goods		
1. Environment	58.47	1.33
2. Community and society	56.64	1.66
3. Customers	66.03	1.57
4. Employees and supply chain	53.91	1.52
5. Governance and ethics	76.83	1.63
Financial		
1. Environment	58.10	1.43
2. Community and society	47.96	1.79
3. Customers	50.56	1.69
4. Employees and supply chain	58.76	1.64
5. Governance and ethics	65.64	1.76
Services		
1. Environment	55.50	1.21
2. Community and society	56.00	1.52
3. Customers	58.97	1.43
4. Employees and supply chain	50.77	1.38
5. Governance and ethics	72.37	1.48
Technology		
1. Environment	58.17	1.39
2. Community and society	53.21	1.74
3. Customers	54.43	1.64
4. Employees and supply chain	57.58	1.59
5. Governance & Ethics	70.09	1.71
Other		
1. Environment	54.84	0.89
2. Community and society	53.22	1.12
3. Customers	58.12	1.06
4. Employees and supply chain	50.02	1.02
5. Governance and ethics	70.70	1.10

Research Question 3

Research Question 3 asked, For the entire sample, what are the relationships between the company's market capitalization and each of the six KLD scaled scores? The related null hypothesis predicted that, for the entire sample, none of the six KLD scores would be related to the company's market capitalization. To address this hypothesis, Table 14 displays the results of the six relevant Pearson

product–moment correlations. Four of the six scores were statistically significant. Specifically, companies with higher market capitalization scores had (a) higher environment scores (r = .30, p< .001), (b) lower customers scores (r = -.21, p< .005), (c) higher employee and supply chain scores (r = .17, p< .001), and (d) lower governance and ethics scores (r = -.11, p< .001). This combination of findings provided support to reject Null Hypothesis 4.

Table 14
Correlations for KLD Scores With Company Market Capitalization (N = 359)

KLD score	Market capitalization score
Overall score	.07
Environment score	.30****
Community score	.07
Customers score	-.21****
Employees and supply chain score	.17****
Governance and ethics score	-.11*

* p< .05. ** p< .01. *** p< .005. **** p< .001.

Research Question 4

Research Question 4 asked, How do the relationships between market capitalization and the six KLD scores change (if at all) based on market capitalization category or industry sector? This research question had two related hypotheses. In the first one, Null Hypothesis 5predicted that none of the six KLD scores would be related to the company's market capitalization for any of the three market capitalization categories (small, mid, or large). To address this hypothesis, Table 15 displays the 18 relevant Pearson product–moment correlations. For the 18 correlations, four were significant. Specifically, for companies in the small capitalization size (n = 49), companies with higher market capitalization scores had higher employee and supply chain scores (r = .30, p< .05). In addition, for companies in the large capitalization size (n = 136), higher market capitalization was related to (a) higher environment scores (r = .28, p< .001), (b) lower customers scores (r = -.17, p< .05), and (c) higher governance and ethics scores (r = .18, p< .05). This combination of findings provided support to reject Null Hypothesis 5.

Table 15
Correlations for KLD Scores With Company Market Capitalization Separated Based on Company Size (N = 359)

	Market capitalization score		
KLD score	Small cap (n = 49)	Mid cap (n = 174)	Large cap (n = 136)
Overall score	-.01	-.01	.07
Environment score	-.28	.05	.28****
Community and society score	-.06	.03	.09
Customers score	-.01	-.03	-.17*
Employees and supply chain score	.30*	-.03	.18*
Governance and ethics score	.16	.05	-.12

* p< .05. ** p< .01. *** p< .005. **** p< .001.

Null hypothesis 6 predicted that none of the six KLD scores would be related to the company's market capitalization for any of the industry sector subgroups. To address this hypothesis, Table 16 displays the

30 relevant Pearson product–moment correlations. For the 30 correlations, eight were significant. The strongest correlations were in the technology sector companies (n = 53) where higher market capitalization was related to higher environment scores (r = .50, p< .001) and higher employee and supply chain scores (r = .41, p< .005). This combination of findings provided support to reject Null Hypothesis 6.

Table 16
Correlations for KLD Scores With Company Market Capitalization Separated Based on Industry Sector (N = 359)

	Consumer goods (n = 58)	Financial (n = 50)	Services (n = 70)	Technology (n = 53)	Other (n = 128)
Overall score	-.01	-.09	-.31**	.26	.12
Environment score	.10	.36**	.15	.50****	.20
Community and society score	-.09	-.02	-.17	.35**	.11
Customers score	-.07	-.24	-.33**	-.28*	-.06
Employees and supply chain score	.06	.18	-.24*	.41***	.14
Governance and ethics score	.22	-.15	-.16	-.15	-.11

* p< .05. ** p< .01. *** p< .005. **** p< .001.

Summary and Implication

Summary

The data relevant to the findings in the study came mainly from the archival data retrieved from the databases used. The social rating scores assigned by KLD Research & Analytic, Inc. consisted of five subscale scores and one overall score. The categories for the subscale scores consisted of environment, community and society, customers, employee and supply chain, and governance and ethics. The financial proxy used in this study was market capitalization and companies were divided according to market capitalization size (small, mid, large) and across five condensed industry sectors (consumer goods, financial, services, technology, and other).The results of the study determined that a significant relationship existed between the KLD social rating scores and market capitalization.The statistically significant relationship between the social rating scores and market capitalization was not deemed organizationally relevant based on the restriction of range that existed in this study. The applicability of these findings is important to the decision making of investors by showing some positive correlation between the socially responsible companies and their market capitalization performance. Based on the results of the study, investors are not necessarily disadvantaged financially when investing in a social responsibly manner. This is important because investors are key components of the viability and success of the business entity from a financial perspective. As companies rely on investors to provide capital in support of their business activities and strategize on how to remain appealing to the investor, social responsibility will now become a part of that strategy.

Implications

There is a great need to continue further research into the relationship between social responsibility and financial performance. The fact that a significantly positive relationship was found is reason to continue to examine the relationship between the two variables. Social responsibility and financial performance are two vital parts of the business entity success and both play a major role in the way investors

perceive a business. Many high profile investors such as Warren Buffet consistently report how they look well into a company before making an investment in that company. The perspective of the investor is made up of many facets of the business both financially and socially. They seek to find out how management behave both inside the business and outside of the business, are they innovative and are they moral, both matter. It is very clear today that ethical behavior and social responsibility are just as important as a great product, great returns and market dominance. It is not enough to perform well financially in the eyes of most investors because that can be short lived if the company is behaves in an unethical fashion or just socially irresponsible. The implication of this study in terms of social change is clear and the significant relationship between social responsibility and financial performance creates a venue for social change. In a business environment that thrives on increasing profits for shareholders without major concern for stakeholders, a positive correlation will capture the attention of managers and potential investors. This study may remind managers of the business that profits are important but a regard for social responsibility is just as important.

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