“The impact of corporate social responsibility on financial performance”

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The impact of corporate social responsibility on financial performance

Abstract

This study investigates whether corporate social responsibility (CSR) affects the financial performance of the United States (US) companies. In particular, the impact of CSR on financial performance is investigated in terms of involvement in socially responsible initiatives instead of outcome. The Environmental, Social and Governance disclosure score as calculated by Bloomberg is used as a proxy for corporate involvement in socially responsible initiatives. Fixed effects regression is employed to estimate the relationship between the extent of corporate social disclosure (CSD) and financial performance using the data of listed companies on the Standard & Poor's 500 during the period 2009-2013. The results suggest that the involvement in socially responsible initiatives has a significantly positive effect on financial performance. In addition, the control variables, such as total compensation to directors, CEO duality and women presence on board are statistically significant to financial performance. It is important to incorporate a longer period in order to validate the positive relationship between CSR and financial performance, whilst the sample is focused on large in size US companies. This study chose to approach the topic from a different angle in order to provide an alternate perspective on this issue taking into account the involvement of socially responsible initiatives via CSD.

Keywords: corporate social responsibility, disclosure, financial performance.
JEL Classification: M140, M410, Q00.

Introduction

The effect of corporate social responsibility (CSR) on financial performance is becoming increasingly important to a broad range of corporate stakeholders, such as investors and strategic managers. A number of different methodological approaches have been developed in order to assess the CSR performance, such as content analysis of annual CSR disclosure, single- and multiple-issue CSR indicators and reputation indices. As the concepts of CSR and CSR/non-financial disclosure have been emerged together (Perrini, 2005), this study chose to approach this topic from a different angle in order to provide an alternative perspective on this issue taking into account the perceived CSR performance via CSD. Gray et al. (2001) stated that CSD is considered as a provision of corporate information regarding its activities, aspirations and public image with regard to stakeholders. O'Connor and Spangenberg (2008) underlined the importance of CSD and mentioned how disclosures can promote the stakeholder dialogue. Moreover, corporate management develops CSD in order to influence the perception of multiple stakeholders regarding the company's social concerns. Finally, CSD can be used as a signal for CSR commitment, as the actual CSR performance can be different from the one that the company wants to present to stakeholders (Ullmann, 1985; Alon et al., 2010; McGuire et al., 1988; Daub, 2007; Fekrat et al., 1996).

As there is confusion around the concept of CSR for a large part of investors and the investors' demand for CSD is clearly rising, this study intends to investigate whether a third party rating of CSD affects the financial performance of the US companies. In the US, the development of CSD remains on voluntary basis (Rodríguez and Le Master, 2007; Tschopp, 2005; Bashtovaya, 2014). The US business environment seems to be more demanding to social information, as the European companies that are cross listed on the US stock exchange provide more non-financial information (Bancel and Mittoo, 2001). Companies that elaborate CSD in accordance with Global Reporting Initiative requirements have raised substantially from 114 US companies in 2009 to 446 US companies in 2012 (Global Reporting Initiative). A number of US Social Responsible Investments (SRI) indices, such as Dow Jones Sustainability Index and KLD index incorporate CSR criteria including reporting ones in order to assess the company's social performance. Holder-Webb et al. (2009) found that the most common information disclosed regards health and safety matters, diversity and human resources and community relations with the corporate websites considered the most important mean for reporting.

This study is focused on large size companies, because they are more possible to develop CSR practices in their business operations and

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disseminate more information with higher quality disclosures than small or medium companies (Mohd Ghazali, 2007; Buniamin, 2010). The study focuses on companies that operated in the US business environment so as to extract homogeneous results consistent to Gamerschlag et al. (2011). As the US economy is considered among global economic leaders, it is interesting to investigate which factors affect the corporate financial performance. Even if the US seems to lag behind other countries regarding CSR reporting process (Cecil, 2008), the US companies are considered familiar with the concept of CSR and reporting process. For instance, Dow Jones Sustainability Index is a well known index that incorporates companies that satisfy social expectations[1], S&P 500 Environmental & Socially Responsible Index was created to assess the performance of listed companies in S&P 500 that comply environmental and social sustainability criteria[2] and Global Reporting Initiative guidelines seem to affect a large number of US companies (Global Reporting Initiative, 2016). Return on assets (ROA) was used as a proxy for financial performance, because it is among the most frequently used financial indicators. ROA is an appropriate financial measure and it is recommended for comparative purposes of a company's performance (Joo et al., 2011). As far as the measurement of CSR performance concerns, a variety of methodological approaches have been developed. As CSD is a means for companies to illustrate their social responsibilities, the extent of CSD is used as a proxy for corporate involvement to social responsible initiatives (Abbott and Monsen, 1979; Alon et al., 2010; Choi and Yu, 2014; Feijoo et al., 2014). In particular, Bloomberg calculates the extent of three sub-categories of CSR disclosure, namely, Environmental, Social and Governance, composing the total Environmental, Social and Governance disclosure (ESGD) index.

Based on prior empirical studies, four control variables are introduced, namely, board size, CEO duality, presence of women on board and total compensation paid to directors. The novelty of this study is the investigation of the effect of CSD on financial performance. Contrary to literature review, this study adopts a third party rating approach in order to estimate the extent of CSD as a proxy for CSR performance. This study incorporates an innovative aggregate disclosure index calculated by Bloomberg as a proxy of CSR performance in terms of involvement for the first time. A number of innovative specifications of Bloomberg's methodology triggered the interest to examine whether the ESGD index can affect the financial performance. In particular, each disclosure item is weighted in terms of importance and is also tailored to the specific characteristics of each industry. In addition, the adopted approach incorporates both "hard" and "soft" items in its methodology, while a wider source of information, such as CSR reports, annual reports, company's web sites and the Bloomberg survey is considered pioneering. Finally, five year data for the extent of CSD are incorporated taking into account the period 2009-2013. The value of this study is significant to stakeholders, but mostly to investors and strategic managers. On the one hand, investments on socially responsible companies have attracted the interest of investors in US. Since 1995 the overall socially responsible investments assets in the US were increased ten times reaching to $6.57 trillion in 2014 (Social Investment Forum Foundation, 2014). Thus, investors are able to identify profitable companies via the CSD level. In particular, companies that increase their involvement in CSR initiatives tend to increase their financial performance. On the other hand, strategic managers are able to satisfy both the social concerns and shareholders' expectations at the same time and attract the interest of socially responsible investors.

The remainder of this study proceeds as follows: section 1 presents the theoretical framework of the study, while section 2 describes the methodological procedure. Section 3 illustrates the results along with the discussion of results in section 4. The final section sets out the conclusions.

1. Literature review

1.1. CSR measurement approaches. The importance of measurement is highlighted by Harrington (1987) who notes that "if you can't measure something, you can't understand it; if you can't understand it, you can't control it; if you can't control it, you can't improve it". Carroll (2000) stated the question if it is possible to develop valid and reliable measures. In addition, it was pointed out how difficult is to introduce performance measures focus on corporate outcomes. However, Graafland et al. (2004) imply that performance measures cannot all be related to output, because social concerns cannot be fully controlled by companies; thus, the company should not be considered as a less responsible company. An important topic of CSR measurement is the type of CSR measures; the first type of CSR measures concerns general ones that does not consider the direct and indirect effects of its sector in society

[1] Dow Jones Sustainability Index: http://www.sustainability-indices.com/ (accessed on 17 August, 2016).
[2] S&P 500 Environmental & Socially Responsible Index: http://us.spindices.com/indices/equity/sp-500-environmental-socially-responsible-index (accessed on 17 August, 2016).

(Graafland et al., 2003, 2004; Hino, 2001; Turker, 2009), while the second one proposes both general and sector-specific indicators (Azapagic, 2004; Azapagic and Perdan, 2000).

Different communication channels are used by companies, such as internal communication, Web, social, newspaper advertisements, press releases report, codes of conduct and stakeholder consultation (Birth et al., 2008; Zeghal and Ahmed, 1990; Adams et al., 1998). However, the major CSR sources of information are the corporate websites and annual reports. More specifically, annual reports offer high levels of credibility and they are widely accessible to stakeholders, whilst the corporate website has revolutionized and reformed the interaction between companies and their stakeholders (Esrock and Leichty, 1998; Adams and Harte, 1998; Tilt, 1994).

Different methodological assessment procedures have been elaborated in order to calculate and assess CSR performance (Maignan and Ferrell, 2000; Turker, 2009; Hino, 2006). According to Wolfe and Aupperle (1991), there is no single method to measure CSR performance. Igalens and Gond (2005) point out five measurement approaches: pollution indices, perceptual measurements derived from questionnaire based surveys, corporate reputation indicators, assessment made by measurement agencies and content analysis of annual reports. Each approach is exposed to different challenges. Firstly, pollution indices, such as Toxic Release Inventory (Griffin and Mahon, 1997) take into account only one dimension of the multidimensional concept of CSR; thus, measuring the environmental aspect cannot be considered as CSR performance (Carroll, 2000; Maignan and Ferrell, 2000). In addition, pollution indices are mostly relevant to industrial companies (Turker, 2009). Regarding perceptional measurement, it is considered the managerial perception of CSR performance. As far as reputation indicators are concerned, it is a purely perceptual measurement derived from surveys of people external to a company (Igalens and Gond, 2005). Furthermore, Maignan and Ferrell (2000) supported that reputation indicator failed to capture the multidimensional concept of CSR, whilst Waddock and Graves (1997) implied that reputation indicators depicted the management quality better than CSR performance. Moreover, assessment made by measurement organizations, such as Dow Jones Sustainability index and Kinder, Lydenberg, and Domini can be considered as the most complete approach, as they intend to capture the multidimensional concept of CSR. However, these agencies do not mention how to treat external and internal sources of information in the CSR score procedure and do not exactly provide the criteria that they take into consideration in order to calculate the CSR score. The methodological information that is not published possibly constitutes a piece of asset information for companies or agencies that support the methodologies (Delmas and Blass, 2010). A major limitation of measurement agencies is that they do not publish the performance measurement criteria. Regarding the assessment of CSR performance via CSR reports, the information presented in a CSR report can be different from the actual performance (McGuire et al., 1988). However, this challenge can be limited as the published information is available to any individual, organization, agency or other body to criticize it in case of unreliability of information. In addition, CSR disclosures inform stakeholders, such as investors, about their CSR performance which motivates companies to decrease their social impact and develop innovative initiatives (Arimura et al., 2008). Expanding the state of Berthelot et al. (2012), investors interpret the publishing of CSR information as a sign of a company's credibility. Finally, the presented CSR performance via CSR disclosures cannot be regarded as the "actual" CSR performance for stakeholders as it is very difficult to them to crosscheck the reliability of the presented data.

This study incorporates the term of involvement in socially responsible initiatives in order to investigate the effect of CSR to financial performance from a different approach.

1.2. The relation between CSR and financial performance. A number of studies have been developed in order to investigate the role of CSR on financial performance (Ducassy, 2013). On the one hand, Friedman (1970) supports that a company should use the corporate resources and engage itself into activities to increase its profits. CSR commitment is perceived as a competitive disadvantage, because incur costs can affect negatively product prices, employee wages, corporate profits and dividends (Aupperle et al., 1985; Reinhardt and Stavins, 2010). On the other hand, the stakeholder theory supports the positive relation between CSR and financial performance (Freeman, 1984; Donaldson and Preston, 1995). Satisfying the implicit expectations of stakeholders improves a company's reputation to citizens in a way that has a positive effect on its financial performance attracting the interest of investors and other stakeholders' bodies (Brammer and Pavalin, 2006; Weber et al., 2008), whilst disappointing stakeholders may have negative consequences on the financial performance (Makni et al., 2009; Preston and O'Bannon, 1997).

A number of empirical studies have been developed in order to test the relationship of Corporate Social

Responsibility (CSR) performance and financial performance; however, the results are elusive (e.g., Griffin and Mahon, 1997). In particular, Margolis and Walsh (2001) who focused on 80 studies concluded that 53% of the studies showed a positive relationship between the two concepts, 24% revealed no relationship, 19% showed mixed results and only 4% concluded to a negative relationship. In addition, Roman et al. (1999) who examined the relationship between CSR performance and financial performance reviewed 52 studies. The results showed 33 studies having a positive CSR performance/financial performance relationship in contrast with 5 studies that illustrated a negative relationship and 14 studies which showed no relationship at all. Finally, Griffin and Mahon (1997) took into account 62 empirical results of the relationship between CSR and financial performance and found that there were 33 studies which illustrated a positive correlation, 20 of them showed a negative one, and the rest of them presented no definite results. An important point of debate is the direction of causality between the company's performance and CSR (Callan and Thomas, 2009). According to Margolis and Walsh (2003), for the period between 1980 and 2002, there are 127 studies which treat the role of CSR as an independent variable in order to predict the financial performance. The results revealed that 54 of them illustrated a positive relationship between CSR and financial performance, 7 studies pointed a negative relationship, 28 of them found no significant relationship and the rest of them reported a mixed set of findings.

Focus on studies that adopted CSD as a proxy for CSR performance, Balabanis et al. (1998) found that CSR performance and disclosure affect each other, while companies with high levels of CSR performance and disclosure could affect positively the company's overall profitability of the top British companies. In addition, Siregar and Bachtiar (2010) developed two CSR performance indexes by developing CSD index and CSD length in order to examine whether CSR performance affects future corporate performance. Based on previous empirical studies, the CSD items incorporate six main categories, namely environment, energy, labor, product, community, and others. Focused on 87 public firms listed in the Indonesian Stock Exchange, the results indicated that only a variety of items disclosure is an important factor of the future performance. This effect is probably exceeded by the fact that CSR disclosure enhances corporate image increasing customers' loyalty and other stakeholders' including investors support. Moreover, Yusoff et al. (2013) developed three CSD indexes, namely, CSD depth based on sentence count, CSD breath based on dichotomous approach CSD concentration based on Gini coefficient in order to examine their effect on financial performance in Malaysian companies. The results revealed that CSD depth affects negatively the financial performance, while the rest two CSD indexes lead to greater financial performance consistent to the stakeholder's theory. It is implied that the variety of items disclosed and concentration to the definitive stakeholders are important determinants of financial performance.

Also, Chen et al. (2015) using a content analysis technique adopted Global Reporting Initiative G3 requirements as a proxy for environmental performance and found that companies across Europe, America and Asia with higher levels of GRI performs well financially. Finally, Nor et al. (2016) constructed a CSD index based on 20 disclosure items for large in size companies that operate in Malaysia. The results showed mixed results between environmental disclosure index and financial performance. However, companies disclosing environmental information gain market benefit and ability to gain profit from investments.

To sum up, the relation between CSR and financial performance is ambiguous. One possible explanation for the mixed results are the different measures of corporate social performance in empirical studies (Orlitzky et al., 2003). For instance, Chen et al. (2015) categorized measures of corporate social performances in four categories. The first category incorporates measures based on reputation ratings, the second one employed measures assessed by social audits and observations, in the third category the CSR performance is measured by managerial principles and values, and finally, the fourth category concerns measures of corporate social performance by disclosures. Another explanation is the different sample that each study incorporates along with different statistical analyses that are employed and, finally, there is lack of cohesion regarding control variables that are employed in proposed models. To summarize, it is postulated that a company with superior CSR performance affects positively the financial performance.

2. Methodology and hypotheses

2.1. Sample. The initial sample compromised all companies listed in the Standard & Poor's 500 Index for the period 2009-2013. The study focused on large sized companies, as it is more possible to incorporate CSR initiatives (Cowen et al., 1987; Ghazali, 2007; Watts and Zimmerman, 1978). However, the final sample consists of 104 companies because of the missing data in Bloomberg online service regarding CSR disclosure

data. There are two main sensible reasons that the companies do not provide ESG information in Bloomberg; firstly, as CSR is voluntary, companies that do not integrate CSR initiatives in their business operations, do not publish CSR data. Secondly, companies do not want to publish important company's information, as it can easily be emulated by their competitors losing in this way its competitive edge.

2.2. Model development. This study intends to examine the impact of CSR performance on financial performance following the trend of prior empirical studies (Margolis and Walsh, 2003). This relationship is based on two theories; the first one mentions that investments in CSR reduce implicit costs having a measurable effect on the company's financial performance (Callan and Thomas, 2009), whilst the second one regards that expectations of stakeholders improve a company's reputation in a way that has a positive effect on its financial performance (Makni et al., 2009).

As far as the dependent variable is concerned, a company's financial performance is measured by an accounting variable. In particular, ROA is used as a proxy for financial performance and it is considered one of the most widely used financial measures (e.g., Chen and Wang, 2011; Mahoney and Roberts, 2007; Waddock and Graves, 1997; Crisóstomo et al., 2011; Aupperle et al., 1985; Luo and Tang, 2014; Braam et al., 2016). Regarding CSR performance, there is a variety of methodologies that assess CSR performance, namely, FTSE4Good, ASSET4, Dow Jones Sustainability Index and KLD index.

In relation to CSD approach, there are two main streams regarding CSD measurement. The first one quantifies the level of CSD using the number of pages, sentences and words. The second one uses a disclosure-scoring measure derived from content analysis (Al-Tuwaijri et al., 2004). A number of empirical studies dealt with the second stream calculating the extent of CSR disclosure (e.g., Jennifer Ho and Taylor, 2007; Khan, 2010; Alsaeed, 2006; Siregar and Bachtiar, 2010). The majority of these approaches was based on the authors' criteria using a content analysis of reports in order to record what CSR disclosure items are presented. A dichotomous scoring system (0/1) approach was used in order to specify the presence or the absence of predetermined CSD items. Then, the aggregate score is determined by adding all the scores with equally weighted neglecting industries specifications.

In this study, a different approach is adopted to calculate the CSR performance introducing the term of involvement in socially responsible initiatives via CSD; thus, a third-party rating calculation is used to estimate the extent of CSR disclosure score in order to assure a subjective assessment. Prior studies took into account specific sources of information, such as official corporate sites and annual reports. However, Bloomberg's calculation procedure takes into account not only CSR reports, annual reports, company websites, but also Bloomberg's survey in order to estimate the CSD score. Bloomberg is responsible for the kind of information that could interest stakeholders regarding three aspects, the environment, the society and the governance (Eccles et al., 2011). The formula that calculates the total ESG disclosure score is presented next.

ESG disclosure score = Environmental disclosure score + Social disclosure score + Governance disclosure score.

Contrary to literature review, in Bloomberg's approach, each disclosure data point is weighted in terms of importance contrary to prior empirical studies which adopted an equal value of importance. The ESG disclosure score ranges from 0.1 for companies that disclose a minimum amount of social and environmental data to 100 for those that disclose every data point. The ESG disclosure score is also tailored to the specific characteristics of each industry. Thus, each company is only evaluated in terms of the data relevant to its industry sector and this is the main advantage of the Bloomberg's approach in relation to prior empirical studies. Thus, each company is only evaluated in terms of the data relevant to its industry sector, as each one has unique concerns (Fafaliou et al., 2006; Pan et al., 2014). Bloomberg's transparency limitations regarding its methodology could be explained, as it can easily be imitated by their competitors and could lose its competitive edge (Delmas and Blass, 2010). Four control variables were included in order to check for other explanations of the company's financial performance. In particular, measures of corporate governance were introduced as control variables, since they are important dimensions for the company's financial performance, namely, the board size, CEO duality, women on board and the executives' compensation since they are important factors in explaining the company's financial performance[3] (e.g., Rechner and Dalton, 1991; Mashayekhi and Bazaz, 2008; Adams and Ferreira, 2009; Leonard, 1990; Murphy, 1999). Control variables were introduced in order not to conclude to biased results (Callan and Thomas, 2009). Table 1 summarizes the definition and the measurement of variables.

[3] A number of control variables were introduced such as corpora size, number of independent directors and audit committee meetings; however, the p-value of the F-test was insignificant.

Table 1. Description of variables

Variable	Description
Dependent variables	
Return on assets	Company's net income divided by total assets
Independent variables	
ESG disclosure score	The extent of CSD regarding ESG criteria
Control variables	
Board size	Number of directors on a company's Board
CEO duality	Indicates whether the company's Chief Executive Officer is also Chairman of the Board, as reported by the company. Dummy variable (value 1=CEO and Chairman, value 0=otherwise)
Women on board	Percentage of women on board
Executives' compensation	Total amount of compensation the company paid to the executives.

In this case, a fixed effect model was used because of the advantages over traditional regression approaches. First of all, fixed effect approach removes the effects of time-invariant causes, independently of whether those causes are measured or not; thus, it can alleviate omitted-variable bias in a less than fully specified model (Firebaugh et al., 2013). The equation for the fixed effects model follows:

$$Y_{it} = \beta_1 X_{it} + \alpha_i + u_{it},$$

where: Y_{it}: dependent variable, α_i: ($i = 1 \ldots n$) is the unknown intercept for each entity (n entity-specific intercepts), t: time, X_{it}: represents one independent variable, β_1: coefficient for that independent variable, u_{it}: error term.

The following model is estimated to investigate the impact of ESG disclosure score on financial performance by using STATA.

$$FP_{it} = b_0 + b_1 * ESGDS + b_2 * BS + b_3 * CEOD + + b_4 * WB + b_5 * EC + u_{it},$$

where: FP = Financial Performance, $ESGDS$ = ESG Disclosure Score, BS = Board Size, $CEOD$ = CEO duality, WB = Women on Board, EC = Executives' compensation, u_{it} = error term, i = company, t = time.

Before conducting the fixed effects models, a number of statistical tests were implemented in order to ensure that the data are appropriate for the statistical analysis taking into account correlation among independent variables, heteroskedasticity, and serial correlation concerns. A number of intentions were made to include more independent variables, such as return on equity and control variables, such as the industry's competitiveness; however, the statistical results were not important.

3. Results

3.1. Descriptive statistics and correlation matrix. The sample of 104 US companies spanning in nine industries, namely, basic materials (n = 8), communications (n = 6), consumer-cyclical (n = 7), consumer-non-cyclical (n = 24), energy (n = 7), financial (n = 12), industrial (n = 15), technology (n = 11) and utilities (n = 14). Table 2 illustrates a summary of the descriptive statistics of the dependent and independent variables. The descriptive statistics table consists of statistics, such as mean, median, minimum, maximum and standard deviation. The mean of CSR disclosure score is 44.57 out of 100 that is generally satisfactory, as the concept of CSR is not mandatory. Regarding the presence of women on board, it seems low, as it reaches only 17 percent with high standard deviation. The board members of the companies have 12 directors approximately, with a standard deviation 1.9 which means that some companies have relatively large board sizes, while others have relatively small board sizes. Finally, the majority of the companies is operated by CEO holding the Chairman's position, as the mean is 0.7.

Table 2. Descriptive statistics of dependent and independent variables

Variables	Mean	Min	Max	Stand. Dev.
ROA	6.529184	-17.359	35.0845	5.687794
ESGDS	44.57682	17.7686	76.3158	11.50835
BS	11.66106	7	18	1.988648
CEOD	0.706731	0	1	0.455809
WB	17.29219	0	45.454	7.774507
EC	34.929.817	4.882.166	135.979.712	19.415.639.62

Table 3 presents the Pearson's correlation among the set of independent variables. The correlation shows no indication of multicollinearity, as the correlations between independent variables do not exceed 0.8 (Judge et al., 1985; Guajarati, 1995). The results revealed that Pearson's correlations between explanatory variables range from 0.10 to 0.34, thus, multicollinearity is not a serious problem.

Table 3. Correlation matrix

	ESGDS	BS	CEOD	WB	EC
ESGDS	1				
BS	0.1192**	1			
CEOD	-0.0739	0.0443	1		
WB	0.1843*	0.1166**	0.1553*	1	
EC	0.1229**	0.3452*	0.0629	0.1345*	1

Notes: *Significant at the 0.01 level (2-tailed), **Significant at the 0.05 level (2-tailed), ***Significant at the 0.1 level (2-tailed).

3.2. Empirical results. Before deployed fixed effect results, Huber-White robust clustered standard errors approach was taken into account in order to adjust any potential heteroskedasticity and serial correlation (Wooldridge, 2002; Stock and Watson, 2007; Neter et al., 1983; Kennedy, 1992; Field, 2013) recommended by Core et al. (2006) and Ashraf et al. (2014).

Regarding fixed effects results, the proposed determinants explain 65% of the variance in ROA with F = 3.68 (p<0.01). Furthermore, the results showed that the ESGDS is significantly positive on ROA at the 1% level. As far as control variables are concerned, CEOD and EC are statistically significant and positive to ROA at 10% and 5% level, respectively, while WB is significantly negative to ROA at the 10% level.

Table 4. Fixed effects results

Variables	Coef.	Std. Err.	p-value
ESGDS	0.1303802*	0.044573	0.004
BS	-0.2869	0.2100068	0.175
CEOD	2.973295***	1.640139	0.073
WB	-0.11637**	0.0612576	0.06
EC	4.13E-08**	0.000000019	0.032
Constant	2.529473	3.41226	0.46
F Value	3.68*		
R-squared	0.7412		
Adj R-squared	0.6502		

Notes: *Significant at the 0.01 level (2-tailed), **Significant at the 0.05 level (2-tailed), ***Significant at the 0.1 level (2-tailed). Adj R-squared was calculated by areg command.

According to Table 4, the final model can be illustrated as follows:

Model: ROA = 0.1303802*ESGDS + +2.973295*CEOD – 0.11637*WB + 4.13E-08*EC.

This study reveals that the commitment on social expectations rewards companies by higher levels of financial performance. Thus, the results show consistency with the stakeholder theory in which socially responsible initiatives lead to superior financial performance (Freeman, 1984; McGuire et al., 1988; Donaldson and Preston, 1995).

It can be inferred that the ESG disclosure score can be used as an additional source of information for investors in order to assess the level of social responsibility which, in turn, affects positively the financial performance. Therefore, higher levels of CSR information in disclosure can be a signal for investors to assess the potential for the management to grow the company's profitability consistent with Eccles et al. (2011).

In addition, strategic managers are able to satisfy the social needs without jeopardizing the shareholders' expectations. Therefore, investments in social responsibility initiatives can be considered as strategic creating legitimacy, reputation, and competitive advantages (Ducassy, 2013). Moreover, the managers can see the involvement to CSR initiatives as a means to improve the company's financial performance. However, managers should weigh the benefits and costs of disclosing CSR information (Li et al., 2013; Choi and Yu, 2014).

Since companies are involved in CSR initiatives, they can be perceived as trustworthy, which, in turn, is a signal for safe market transactions (Jones, 1995); thus, stakeholders can assess this involvement positively leading to higher financial performance. Consequently, the involvement in socially responsible initiatives is a mean in order to establish trust internally, as well as externally.

Regarding CEO duality, the results are consistent with Peng et al. (2007) and Sridharan and Marsinko (1997). Even if CEO duality was the main reason for the decline of major US companies (Balliga et al., 1996), it can promote a unified and strong leadership along with a clear sense of strategic direction and it can underpin the interpersonal concession among managers, employees and other stakeholders (Lam and Lee, 2008; Finkelstein and D'Aveni, 1994) contributing positively to superior financial performance.

Even if the diversity of the board is considered that it improves organizational value and performance (Ujunwa, 2012), the results show a negative impact of women on board on the company's financial performance contrary to significant empirical studies, such as Smith et al. (2006).

The results revealed that management compensation causes a significant effect on ROA, while the coefficient on ROA is very small, but positive. Management compensation is used as a tool in order to align the managers' goals to the shareholders' ones (Jensen and Murphy, 1990). However, it seems that the executives' compensation cannot be considered as an important determinant of the company's financial performance, as the coefficient is very small.

Conclusions

A number of theories and methodologies have been employed to study the impact of CSR on financial performance. The purpose of this study is to extend prior empirical studies by a different point of view incorporating the extent of CSD in relation to the firm's financial performance. The need to conduct the study was triggered by two main reasons. The first one concerns the increased importance of CSR information, as the number of assets being managed by socially responsible investment (SRI) funds had increased over the last years. Specifically, more than three trillion assets are managed under SRI criteria. Secondly, companies do not have the full control of each social concern; thus, the impact of the company's commitment of socially responsible initiatives to financial performance is investigated. Information via CSD can be used as a proxy for the company's involvement to socially responsible initiatives (Abbott and Monsen, 1979; Alon et al., 2010; Choi and Yu, 2014; Feijoo et al., 2014). In this study, the impact of CSR in financial

performance is investigated in terms of involvement in socially responsible initiatives instead of CSR performance in terms of outcome. Taking into account Graafland et al. (2004), the assessment of CSR performance in terms of output probably cannot depict the real intention of companies in relation to social concerns, as companies do not have inexhaustible resources and full control of the operations. Thus, the company should not be characterized as irresponsible.

The contribution of the study offers insights regarding the effect of CSR involvement by incorporating a third party rating approach on financial performance. In particular, Bloomberg's ESG disclosure score is used in order to calculate the extent of CSD in accordance with pre-selected disclosure items taking into account wider disclosure sources, such as CSR reports, annual reports, company websites, as well as the Bloomberg survey. In addition, the study generates homogeneous results by focusing on companies with identical political and societal background; thus, the US companies were the sample of this study, because the US economy is considered one the global economic leaders and US companies seem familiar with the concept of CSR.

The results indicate that those companies that increase the involvement in CSR initiatives increase the financial performance consistent to stakeholder theory. In particular, ESG disclosure score is positively significant to ROA which can be a very interesting conclusion to stakeholders, such as investors and managers.

The study results have implications to investors, corporate managers and policy makers. Firstly, investors can use ESGD score as a signal for the level of social responsibility which, in turn, affects positively the company's financial performance. Therefore, the results promote the value of CSR on conventional investors and encourage them to invest in companies involved in CSR initiatives. Secondly, managers have the opportunity via the commitment to CSR initiatives to satisfy both social concerns and shareholders' goals. Specifically, corporate managers could follow Bloomberg's requirements so as to present to investors their commitment to CSR. Thus, Bloomberg's approach can be used by managers as a guideline for the development of CSR in their businesses. Finally, governmental and organizational policymakers regarding the promotion of CSR should encourage corporate managers to involve CSR initiatives in their business operations. Policymakers should focus their effort on notifying the importance for companies to adopt Bloomberg's reporting systems and how the involvements in CSR can payback companies.

However, study has some limitations. Although it takes account a five year CSD data, it is believed that it is important to incorporate a longer period in order to validate the positive relationship between CSR and financial performance. Even if, in this study, numerous models are developed in order to incorporate more dependent variables, such as return of equity, the statistical tests became critical and it was unable to present the results. Thus, it is recommended to redesign the sample by incorporating more dependent variables. As regards future research, it should consider specific CSD standards, namely, Global Reporting Initiative or Sustainability Reporting Scorecard by Deloitte Touche Tohmatsu in relation to financial performance.

Despite the limitations of the study, it contributes to the literature, because a CSR performance is provided in the view of commitment in socially responsible initiatives. It covers the multi-dimensional aspect of CSR, as the Bloomberg's disclosure score covers three main dimensions, namely, environment, society and governance. Furthermore, the CSD score incorporates a different approach regarding the literature review. Finally, the study can be considered as a starting point for a different angle of CSR performance in relation to financial performance.

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