## Does CSR pay? – The Impact of CSR on Financial Performance. A Comparison between Germany and the US

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## ABSTRACT

Based on the Global RepTrak® 100, the biggest study on corporate reputation worldwide, this paper investigates the influence of CSR on financial performance of firms in Germany and the USA. It investigates the different impact of CSR within these two countries and controls for industry. Financial performance is measured using the accounting variable Return on Assets. In conclusion this paper provides empirical evidence that CSR influences firm performance and that the significance differs between Germany and the US.

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#### Keywords

Corporate Social Responsibility, Financial Performance, ROA, US, Germany, Stakeholder Theory

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## **1. INTRODUCTION**

Starbucks is considered a major actor in the field of corporate social responsibility and known for its numerous social, ethical and environmental responsible activities. As the largest coffeehouse company in the world and named by Fortune as the fifth most admired company worldwide with almost 20.000 stores in over 60 countries, no one can deny its big success. Despite its comparatively expensive prices, Starbucks outdoes its competitors and continues to communicate its corporate social responsibility activities to the public (Rolland & Bazzoni, 2008). Corporate social responsibility is defined as "actions that appear to further some social good, beyond the interest of the firm and what is required by law" and is abbreviated CSR (McWilliams & Siegel, 2005).

A strategic approach to corporate social responsibility seems to be increasingly important to a company's competitiveness. The focus shifts from an interest based solely on profits to an interest incorporating the views of stakeholders and shareholders, aiming at aligning the interests of the economy, society and environment. Still many businesses first concern is performance based, worrying about their profits and financial position. Their main focus is on the short-term and they fail to see the possibilities in the long-term. With this new emerge of attention on the influence of CSR, different views on the direction of this influence become present. Against including CSR is the Neoclassic model of Friedman. Its idea is that firms' only responsibility is to accumulate profit which then is to be redistributed among shareholders. Any further consideration of needs is said to be contra productive (Friedman, 1962 & 2007). The arguments in favor of CSR highlights the stakeholder theory of Freeman, which suggests that a company should not only focus on shareholders but also on stakeholders wants. A firm is expected to act in ways that find a compromise between both interests. Freeman supports the idea of CSR encouraging innovation and opening new doors and leading to higher economic profits in the long-term (Donaldson & Preston, 1995; Freeman, 1984 and Frooman, 1999). Still there is no question about firms needing to make profits in order to survive on the market. Today when talking about the potential impact business ethics has on financial performance, much of the present research refers to the view of Friedman or Freeman (Maron, 2006). Accordingly many firms are interested in the influence CSR has on firms' financial performance. In the following, it is investigated whether the impact of CSR on financial performance is positive and whether it is bigger in Germany compared to the US.

It adds to the current literature by looking at the differences, the impact of corporate social responsibility has on financial performance of two similar developed countries. Existing publications mainly look on the effect in total, one individual country or two differing countries in terms of development. The comparison of Germany and the United States of America (US) might be interesting, since the CSR movement in Europe seems to be much stronger than the movement of the US (Tschopp, 2005).

In consideration of this, the paper seeks to answer the research question:

#### "How does the influence of CSR on financial performance of firms differ between the USA and Germany?"

The study addresses the potential impact CSR has on financial performance of firms in the field of corporate social responsibility. Furthermore it examines the impact of CSR in Germany and in the US from 2011 to 2013 and compares the results. That time frame is chosen since it is possible to find the relevant data for this time and it gives the possibility to observe determinants over some time, being less dependent upon interference factors. Additionally it controls for industry, as industry is indicated by previous literature to have an influence on CSR as well as financial performance of firms. The sample of this study consists of 120 multinational firms, with 38 of them being excluded due to fragmentary data, leading to a valid sample of 82 firms in total. The data is from the years 2011 to 2013 and analyzed by a linear regression. The results indicate a general significant positive impact of CSR on ROA for the total sample and a stronger significant positive influence of CSR on ROA for the German sample than to an insignificant positive influence of CSR on ROA for the US sample. The study contributes to the decision of managers whether investing resources onto the development of corporate social responsibility of firms is beneficial. Besides it might add to the understanding of differences between the relationship of CSR and financial performance among countries for owners of multinational firms. This could help making decisions for each sub holding of the firm individually and more efficient.

#### The paper is structured as followed:

Section 2 starts with a review of the previous literature and develops the hypotheses. Section 3, Methodology and Data describes the measurement of the dependent, independent as well as control variable and the descriptive statistics. In Section 4 the results of the correlation and regression analysis for the total sample as well as both subsamples are presented and it is taken position to the hypothesizes. Section 5 provides a discussion answering the research question and giving possible implications. Finally section 6, Conclusion, again judges the takes position to the hypotheses, features possible limitations of this paper and presents ideas for further research.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This section reviews the literature about the meaning of corporate social responsibility and firm performance and putting it into relation. Additionally the possibly differing impact of firm's corporate social responsibility on their financial performance in Germany and the US is discussed. Current literature mainly focuses on the general effect of CSR on financial performance. In contrast this paper focuses on the finding whether the economic, legal and cultural differing environments, impact this relationship. Lastly the hypotheses are developed.

## 2.1 CSR and financial performance

The term "corporate social responsibility" (CSR) comprises social as well as environmental measures (Orlitzky, 2001 & Orlitzky et al., 2003). One often used definition of McWilliams and Siegel (2001) defines CSR as "actions that appear to further some social good, beyond the interest of the firm and what is required by law". Another popular definition of CSR highlights - besides the avoidance of distributional conflicts - "actions which reduce the extent of externalized costs" (Heal, 2005). CSR views corporations as members of the moral community Corporate social responsibility or CSR can be best described by Carroll's CSR pyramid and the Triple Bottom Line approach (Crane & Matten, 2010, see figure 1). Carroll's pyramid features four responsibilities of CSR starting with the most obvious, the economic responsibility to be profitable. Second is the legal responsibility of the firm to obey the laws set forth by the society. After considering the legal parts, a corporation being corporate

social responsible is expected to act ethically right. This inhibits to do what is seen as right even if the law does not prescribe to do so. The last one is the philanthropic responsibility, the responsibility of a firm to be a good corporate citizen. These are the resources a corporation can contribute towards social, educational, recreational and cultural purposes. (Martinuzzi et al., 2011 & Carroll, 2010). Crane and Matten (2010) also refer to the importance of understanding that even if the responsibilities are categorized with different importance, one does not trump another but that each individual needs to be taken into account when operating in business. Even if established already in the 1990s, still the pyramid is highly important and is often employed by academia.

#### Responsibilities of a firm – Pyramid of CSR/CSP



#### Figure 1: Carroll's CSR pyramid (see Carroll, 2010)

The triple bottom line also acts on the assumption that the corporation is a member of the moral community and has social responsibilities (see figure 2). It focuses on sustainability and contains different parts; society, environment and economy. Also named by the three P's; people, planet and profit (Mitchell, Curtis & Davidson, 2007). The social dimension illustrates the obligation of firms to safeguard fundamental human rights and build up social integration. Fundamental human rights inhibit employee and women rights, rights of the disabled and further. The environmental dimension shows the responsibility of firms to preserve the physical environment onward the entire value chain. Moreover a corporation should use their abilities and competencies to devote to a boost in eco-efficiency. Lastly the economic dimension expresses the first thought-off function of firms to supply society with products and services and grant employment, expertise and further economic benefit (Elkington, 2004 and Crane & Matten, 2010). Still there is no consensus on what exactly needs to be considered in the social responsibility of organization (Frederick, 1994 and Griffin, 2002).



Figure 2: Triple Bottom Approach

The field of corporate social responsibility (CSR) has attracted increasing attention in the last decade (Cramer, Van Der Hiejden & Jonker, 2006). More than half of the Fortune 1000 companies

issue CSR reports. In the past various stakeholders (employees, suppliers, community groups, governments & customers) and some shareholders of firms have expressed their expectance towards firms to make additional investments in CSR. Stakeholders as being able to affect and being affected by the organizations actions. Shareholders as a partly legally owner. Corporate social responsibility originally triggered attention in order to take the interest of the wider stakeholders into consideration instead of just focusing upon the artificial interest of shareholders (Crowther & Aras, 2008). But an increasing section of shareholders seems to articulate interest in the firms CSR activities, triggered through the 2002 crisis of corporate accountability, originated by the break-down of Enron and upcoming voices claiming a positive impact on organizations performance (O'Rourke, 2003). Some firms have reacted to these concerns by incorporating CSR into their daily activities, while others keep being reluctant to change. In their point of view additional investment in CSR is incompatible with the goal of maximizing profits. (McWilliams & Siegel, 2000). Porter and Kramer (2006) address the lack of understanding of the influence CSR can have on a firm's financial long-term performance as a main problem. Corporate social responsibility and its impact on firm performance has been researched by different studies in the past years, coming to different conclusions. It seems that CSR can have differing influences as it is also dependent upon other main determinants, that have an effect on firms' financial as well as corporate social performance (Ullman 1985, McWilliams, A., and D. Siegel 2000). This controversy has put increasing attention on the trade-off between expenditure in CSR and profitability.

Maignan (2001) states that on average consumers are supporting to purchase products from responsible firms. CSR is a core element of reputation and can be used to help establish trust and goodwill among stakeholders. Near to half of people's willingness to feeling good about supporting a company is based on their perceptions of the company's corporate social responsibility efforts. The Reputations Institute found out that only 17% of consumers are willing to recommend a company with a poor CSR reputation while 73% will definitely recommend companies with an excellent CSR reputation. Firms with good corporate reputation are better able to sustain aboveaverage profit over time, showing a positive relationship between reputation and financial performance (Roberts & Dowling, 2002). This leads to the first hypothesis:

#### H1: CSR has a positive impact on financial performance.

#### 2.2 CSR in Germany and the USA

The reporting of CSR still remains voluntary in Germany and the US, the provision of information on CSR is not bound by law (Gamerschlag et al., 2011). From an economic perspective, firms should only incorporate CSR activities if it reduces costs or increases revenues (Gamerschlag et al., 2011). The "profitmaximizing CSR perspective" highlights the need of firms to evaluate the social and environmental costs and benefits to achieve a value maximization (Bowen, 1953; Callens & Tyteca, 1999; Drucker, 1984; Gladwin et a., 1995 and McWilliams & Siegel, 2001). In other words, firms are said to act socially responsible because they expect financial benefits from their doing. As an example a firm offsetting its higher costs incurred through incorporating CSR activities by being able to charge a premium price to consumers or selling higher amounts of their products and services, benefits exceeding the upcoming costs (Siegel and Vitaliano, 2007).

Even if CSR reporting in Germany is based on an optional basis it has taken a more proactive approach than the US (Tschopp, 2005). 46836 companies worldwide follow the ISO 14001 reporting standard 3700 are German while only 2400 are of the US (Peglau, 2003). The ISO 14000 family of standards provides practical tools for companies and organizations of all kinds looking to manage their environmental responsibilities ("ISO 14000 Standards", 2004). Of the 164 companies that prepare reports following the Global Reporting Initiative (GRI), 28 are from Germany and 33 from the US. Considering the size of the countries and the number of firms, the US has a lower percentage of firms following the GRI guidelines than Germany ("Global Reporting Initiative", 2015). GRI enables all organizations to report the sustainability information that matters, addressing economic, social and environmental issues. When taken into relation with the gross domestic product of both countries, which is 3,425,928 million US \$ in Germany and 16,244,600 US \$ in the US, Germany is taking corporate environmental and social responsibility with a more seriously and proactive approach (Tschopp, 2005). Tschopp argues the geopolitical atmosphere in Europe being more conductive to focus on CSR concerns than a capitalist society like the US. Additionally in Germany existent, is the CSR Europe's mission, a European Business Network for Corporate Social Responsibility, to connect companies sharing best practices in CSR for smart, sustainable and inclusive growth ("CSR Europe", 2015) In the US there are no CSR regulations, which have to be met due to concerns that over-regulation having a negative impact on financial performance and markets of firms. The EU protested against the US egocentricity, claiming the US government would be too concerned about maintaining a perfect market economy. Besides, the US are often criticized for its environmental policies and ethical standards. As an economic leader it should act more in the role of a precedent instead of lagging behind European countries like Germany (Tschopp, 2005). But could it be possible that firms in the US simply profit less from incorporating CSR activities than firms in Germany? According to a study of Maignan (2001), German consumers are more active in backing responsible businesses than the US consumers. US consumers highly value corporate economic responsibilities while German consumers care more about businesses being harmonizing with legal and ethical standards (Maignan, 2001).

The comparison of Germany and the US is interesting because both countries are similar in their economic development and democratic tradition but at the same time having completely differing ideologies (Lodge, 1990 and Thurow, 1992) and cultural values (Hofstede, 1980 & 1983 and Schwartz, 1992). Germany is seen as a collectivist and the US more as an individualistic country. Maignan (2001) argues that Germany as a communitarian ideology, putting more thought to the society's well-being in their shopping decisions than US consumers of an individualistic ideology. German consumers appear more willing to pay a higher price or even buy from a place more distant in order to support corporate social responsible firms. People in Germany are significantly more likely to support corporate social responsible organizations than citizens of the US (Maignan, 2001). On the basis of these information the second hypothesis is developed:

H2: The positive impact of CSR on firm's financial performance is stronger in Germany than in the USA.

## 3. METHODOLOGY AND DATA

Section 3.1 starts with describing the method and model used in this article, followed by section 3.2 describing the measurement of concepts of the dependent, independent and control variables. Lastly the sections 3.3 and 3.4 describe the data sample and illustrate the descriptive statistics.

#### 3.1 Method and model

In the interest of testing the hypothesized relationships between CSR reputation and financial performance of firms by its direction and strength, the linear regression model is used. A linear regression models the relationship between independent and dependent variable by fitting a linear equation. Before measuring the relationship, it needs to be checked for an association between the variables. A valuable numerical measure of association between two variables is the correlation coefficient, which takes a value between -1 and 1 indicating the strength of the association of the observed data for the two variables.

Financial Performance =  $\alpha + \beta_1 \text{CSR}$ \_Reputation +  $\beta_2 \text{ Industry} + \epsilon$ 

The means of all variables of the three years 2011, 2012 and 2013 are used and the variables are not lagged, in order to make them less dependent upon interference factors. CSR reputation is of firms is assessed on hand of the RepTrak® 100 ("Reputation Institute", 2015) survey. The data is from the end of each year, which means it represents the reputation of the firm from exactly that year. Lastly no drastic changes happened within the three years that dramatically changed stakeholder perceptions towards corporate social responsibility.

The equation will be used three times, firstly for the financial performance of the total sample (Germany and the US), the second time only for the German sample and lastly for the US sample alone. Following this the results can be compared at the end, testing the hypothesized relationships.

## **3.2 Measurement of concepts**

## 3.2.1 Measurement of corporate social responsibility

The data of the Reputation Institute's Global RepTrak® 100 was used to assess the corporate social responsibility of firms. It uncovers the world's most reputable companies on corporate social areas e.g. innovation, governance, citizenship and more. Furthermore the RI measures the CSR reputation of companies in consumers mind with the help of over 61,000 interviews conducted. RI partners with Forbes, a leading Internet media company, which is among the most trusted resources for the worlds business on investment leaders. Their studies are conducted in up to 32 countries including Germany and the US. The data is compelled out of how the public judges the companies. Due to the awareness that firms increasingly view the entire world as a marketplace, the ranking focuses on the wide view of multiple countries on their CSR reputation. Additionally stakeholders tend to view a corporation as whole instead of putting emphasis on each subsidiary individually and judging it independently. RI ranks the 100 most reputable companies each year, from number 1 being the first to number 100 being the least reputable firm within the ranking. Each year's ranking comprises 100 different firms, demonstrating one firm per rank. Each rank gets a score on a scale from 0 to 100, the higher the score the better the rank. Consequently the measurement of CSR reputation is scaled and can be taken in its original form for the analysis.

#### 3.2.2 Measurement of financial performance

Financial performance is measured using the accounting variable: Return on Assets (ROA). This measure is chosen due to research already published and possible accessibility (e.g. Aupperle et al., 1985; Waddock & Graves, 1997 and Roman et al., 1999). ROA is calculated as the ratio of net income (after tax) to total assets. These information can be accessed through the

ORBIS database, by looking at the annual statements of each company for Germany and the US. An accounting measure instead of the market value is chosen, since not all firms are listed and the sample is supposed to be kept as complete as possible. Moreover it is distinguished between the financial performance of German and US subsidiaries of the holding companies, subsequently the market value of the holding company is no adequate measure. This paper expects differences in financial performance of corporate social responsible firms between nations due to differing political systems and consumer values.

## **3.3** Control variable influencing financial performance

The controlling variable industry is chosen, due to existing literature pointing out the relation between industry and corporate social responsibility as well as financial performance of firms (Brammer & Millington, 2006, Ullman 1985, McWilliams & Siegel 2000 and Orlitzky 2001). Industry has a significant impact on the implementation of CSR activities and in turn on the firm's individual financial performance (Barnett, 2007). For example, corporations with a great environmental part are more exposed to the attention of environmental lobby groups (Gamerschlag et al., 2011). For instance, chemical companies are likely to be more sensitive about disclosures to the public than companies in most other industries (Meek et al. 1995). Industry is divided into five sub industries, namely Technology, Automobile, Lifestyle, Food and Other.

## **3.4 Data collection**

The data consists of firms worldwide listed in the Reputation Institute's Global RepTrak® 100 in the years 2011, 2012 and 2013. Published of Forbs magazine, RI's Global RepTrak® 100 is the biggest study of corporate reputation worldwide with over 15 stakeholder groups, more than 25 different branches in 52 countries and over 5000 firms. It is divided into different subcategories with one of them being the CSR RepTrak. The sample contains 120 multinational companies from different countries all over the world. Due to the incompleteness of the data as well as controlling for outliers, 38 companies have been removed from the sample. Extreme outliers are classified as being more than 3 standard deviations from the mean. For the removed companies there could not be found any annual statement containing information for calculating the ROA for any observed year. Hence, there will be 82 companies examined as a sample in the study. The main independent variable CSR is tested in relation to the dependent variable financial performance measured with the accounting number ROA. The data needed is found on the ORBIS database.

#### **3.5 Descriptive statistics**

Part 3.5 measures the ROA of all German and US firms incorporated in the CSR Global RepTrak® 100 ranking within the years 2011 to 2013 and the effect of CSR and the control variable Industry on it. The control variable Industry is segmented into 5 dummy variables namely Technology, Automobile, Lifestyle, Food and Other. In the following the descriptive statistics will be discussed. Each industry gets assigned 1, if it is within the industry and 0 if it is not.

Table 1 displays the descriptive statistics of the total sample, incorporating Germany and the US. 82 firms are part of the analysis after having firms with missing data and outliers removed. For each variable the lowest value (min) the highest value (max), the mean value and the standard deviation are given. The percentage of ROA is at its lowest -13.12%, its highest is 27.76% and the mean is 4.87% with a standard deviation of 6.22. ROA is an indicator on the profitability company's assets. ROA can vary substantially across industries and therefore should be compared against own values of previous years or the returns of firms in a similar field. The higher the return the more money the company is earning on its assets. Consequently one can say that the return on assets of all German and US firms vary greatly and represent different firm, in different industries. In order to not get a biased result, the regression analysis controls for differences across industries. The CSR Score of all firms within the sample lies between 62.25 and 79.30, with 79.30 being the best score representing the most reputable firm within the field of corporate social responsibility. Technology, Automobile, Lifestyle and Food represent four different industries used as control variables. The means of 0.29, 0.17, 0.12 and 0.17, respectively show that the most industries of the sample can be found in the Technology industry. Firms in the Automobile and Food industries take a same part in the sample and Lifestyle companies represent the smallest part of the sample. The fifth control dummy variables is others, but is taken as the constant within the regression analysis.

Table 1. Descriptive Statistics: Total Sample (Ger & US)

Variables	Mean	Std.Dev	Min	Max	N
ROA (in %)	4.87	6.22	-13.12	21.76	82
CSR	70.80	3.91	62.25	79.30	82
Technology	0.29	0.46	0.00	1.00	82
Automobile	0.17	0.38	0.00	1.00	82
Lifestyle	0.12	0.33	0.00	1.00	82
Food	0.17	0.38	0.00	1.00	82

Table 1 presents the descriptive statistics of the total sample (Germany and US) from 2011 to 2013 and consists of 82 firms. The independent variable corporate social responsibility is determined on hand of the RepTrak® 100 ranking. It evaluates firm's corporate social responsibility by assigning each company a score. The higher the score, the better the firm in terms of CSR. The dependent variable, financial performance, is measured using the accounting variable Return on Assets (ROA). ROA is calculated as the ratio of net income (after tax) to total assets. Technology, Automobile, Lifestyle and Food represent the four dummy variables for the control variable Industry. Each company of the sample gets assigned to one industry.

Table 2 presents the descriptive statistics of the German sample with a number of 64 firms included in the analysis. The ROA of German firms' shows higher standard deviation and a lower mean compared to the total sample but the maximum of the German is higher than of the US sample (table 3). The range of the CSR Score is the same but with a slightly different mean and standard deviation, caused by the particular N of the sample. Firms within the Technology Industry represent the largest part, followed by the Food, Automobile and Lifestyle industry correspondingly.

Table 2. Descriptive Statistics. German Sample

Variables	Mean	Std.Dev	Min	Max	Ν
ROA (in %)	3.02	6.33	-17.93	21.76	64
CSR	70.98	3.99	62.25	79.30	64
Technology	0.31	0.47	0.00	1.00	64
Automobile	0.17	0.38	0.00	1.00	64
Lifestyle	0.14	0.35	0.00	1.00	64
Food	0.19	0.39	0.00	1.00	64

Table 2 displays the descriptive statistics of the German sample from 2011 to 2013 with 64 firms. The measurement of the variables is identical to table 1.

The descriptive statistics of the US sample are listed in table 3. The dataset consist of 41 firms, observed over a period of 3 years. The minimum ROA is 0.44% and the maximum 19.54% with a mean of 8.40% and standard deviation of 4.55. The ROA of US firms seems to be on average higher than the ROA of German firms, with a lower standard deviation. The minimum as well as maximum return on assets has smaller values in the US sample. In almost the same manner is the listing of the industries, with Technology being followed by the Food, Automobile and lastly Lifestyle industry. The CSR Scores vary in a range from 63.72 to 78.73.

Table 3. Descriptive Statistics. US Sample

Variables	Mean	Std. Dev	Min	Max	Ν
ROA (in %)	8.40	4.55	0.44	19.54	41
CSR	71.05	3.73	63.72	78.73	41
Technology	0.29	0.46	0.00	1.00	41
Automobile	0.12	0.38	0.00	1.00	41
Lifestyle	0.07	0.33	0.00	1.00	41
Food	0.17	0.38	0.00	1.00	41

Table 3 presents the descriptive statistics of the US sample from 2011 to 2013 with 41 firms. The measurement of the variables is identical to table 1.

## 4. RESULTS

This part discusses and interprets the results of the correlation and regression model for the total and both subsamples. It compares both subsamples with each other and lastly takes position concerning the significance of the hypotheses.

## 4.1 Results of correlation & regression: Total sample

Table 4 displays the correlation analysis of the dependent, independent and control variable. CSR and ROA of the total sample are positively correlated at the 99% level of confidence. When checking for the control variable industry being categorized as TEC (Technology), AUT (Automobile), LIFE (Lifestyle) and FO (Food), a significant negative correlation at 99% shows for AUT and a significant positive correlation at 95% for LIFE. No significant correlation can be found for TEC (positive) and FO (negative). The level of significance indicates whether it can be assumed that the observed effect may or may not occur by chance. The lower the significance score the more reliable the relationship. Consequently, CSR and ROA are related, just like the industry variables AUT and LIFE. Only a very weak or non-existent relationship is found on the industry variables TEC and FO. While in general CSR seems to be positively correlated, showing a better ROA with a higher CSR, when controlling for industries the relationships are diverse. There is some correlation between the independent variables, but since none of the relationships has a higher correlation than 0.90 the independence assumption is not violated. Since only correlation can be controlled for with a correlation analysis but no causation, additionally a regression analysis will be made.

In table 5 the results of the regression analysis for the total sample are displayed. All assumptions are checked, controlling for outliers, linearity, constant variance and statistically significant F-value. Main emphasis is put on the unstandardized beta coefficient, the standard error and the adjusted R<sup>2</sup>. Adjusted R<sup>2</sup> is used to clarify the percentage of variation explained by only those independent variables that in reality affect the dependent variable ROA. In this case 20.00% of the variation of ROA is explained by the independent and control variables. The unstandardized coefficient explains, depending on the significance, for every one unit increase in the independent variable, the increase/decrease of the dependent variable by the beta coefficient. The main independent variable CSR is statistically significant at 99% and shows per one unit increase of CSR, the ROA will increase by 0.49 %., supporting the positive correlation of CSR with ROA. Hypothesis 1 stated a positive impact of CSR on financial performance, expressed by the accounting measure ROA, which can be supported by the results of the regression analysis. When controlling for specific industries there is only a significant regression of AUT on ROA. Despite the positive first hypothesis and the support by the regression analysis, AUT shows a significant negative regression on ROA. Surprisingly this means that one unit increase of CSR in the AUT industry leads to a decrease of 5.10% on the ROA. All other industries, namely TEC, LIFE and FO, show no significant regression on ROA.

Table 4. Correlation: Total sample (Ger & US)

	ROA (in %)	CSR Rep	Technology	Automobile	Lifestyle
CSR	0.32**				
Technology	0.01	0.07			
Automobile	-0.28**	0.06	-0.29**		
Lifestyle	0.31*	0.10*	-0.24*	-0.17	
Food	-0.09	-0.15	-0.29**	-0.21*	-0.17

Table 4 presents the correlation results of the total sample (Germany and US) which consists of 82 firms. The variables are measures as described in table 1. \*\* indicates a correlation significant at 99%, \* indicates a correlation significant at 95%.

Table	5. Regress	ion Results:	Tota	l sample	(Ger ð	& US)
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	ROA		
Variables	Exp. Relationship	Coefficient	
(Constant)		-28.84*	
		(11.40)	
CSR	+	0.49**	
		(0.16)	
Technology		-1.23	
		(1.69)	
Automobile		-5.10**	
		(1.94)	
Lifestyle		3.49	
		(2.17)	
Food		-1.70	
		(1.94)	
Ν		82	
Adjusted R <sup>2</sup>		0.20	

Table 4 presents the regression results of the total sample for 82 firms on hand of the unstandardised beta coefficient and the standard deviation. The standard deviation is displayed within the parantheses. \*\* is significant at 99% and \* is significant at 95%. The variables are as described in table 1.

# 4.2 Results of correlation & regression: Subsamples

Section 4.2 describes the results of the correlation and regression analysis of both subsamples, Germany and US, individually and comparing them with each other. The correlation resulting for the German subsample is displayed in table 5. Like in the total sample, the German subsample also shows a significant positive correlation between CSR and ROA at 99%. Also AUT and LIFE show a significant correlation with ROA, this time for both cases in a positive direction. TEC shows a positive and FO a negative correlation, but both results are not significant. Again the independence assumption is not violated, since all correlations are smaller than 0.90. Table 7 shows the correlation results for the US sample. Recurring positive correlation can be observed between the independent variable CSR and the dependent variable ROA. But while having a correlation of 0.35 and a significance at 99% for the German sample, the US correlation is weaker with 0.31 and a significance at 95%. This supports the second hypothesis, that CSR has a larger positive effect on ROA in Germany than in the US. However since a correlation analysis does not explain for causation, the linear regression analysis needs to be analyzed. Lastly TEC, AUT an LIFE show a significant correlation, with TEC and LIFE being positive and AUT being negatively correlated to ROA. FO shows an insignificant negative correlation to ROA.

The regression results are demonstrated in table 8 for Germany and in table 9 for the US. Again all assumptions are checked for both subsamples and the values for the unstandardized beta coefficient, standard error and adjusted R<sup>2</sup> can be found in the table. For the German sample 19.2% of the variation of ROA is explained by the independent and control variables. The unstandardized coefficient of the German sample is significant at 99% and shows an ROA increase by 0.50 % per one unit increase of CSR. Similarly to the analysis of the total sample, the results of the correlation are supported. The control variable industry only shows a positive significant regression of LIFE on ROA. TEC, AUT and FO are negatively but not significantly related to ROA. For the US sample 28.2% of the variation of ROA is explained by the independent and control variables. At the US sample the unstandardized coefficient shows a positive but not significant direction. Having the same direction as in the correlation, the regression in contrast to the correlation shows no significance. In contrast, the US sample shows two significant regressions when controlling for industries, with TEC and LIFE both being positively significant at 95%. AUT and FO show a negative, but insignificant sign.

Table 6. Correlation: German samp	le
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	ROA (in %)	CSR Rep	Technology	Automobile	Lifestyle
CSR	0.35**				
Technology	-0.09	-0.03			
Automobile	0.38**	0.10	-0.31**		
Lifestyle	0.31*	0.10	-0.27*	0.18	
Food	0.18	-0.18	-0.32**	-0.22*	-0.19

Table 6 presents the correlation results of the German sample, which consists of 64 firms. The variables are measures as described in table 1. \*\* indicates a correlation significant at 99%, \* indicates a correlation significant at 95%.

#### Table 7. Correlation: US sample

	ROA (in %)	CSR Rep	Technology	Automobile	Lifestyle
CSR	0.31*				
Technology	0.29*	0.29*			
Automobile	-0.44**	-0.12	-0.24		
Lifestyle	0.31*	0.19	-0.18	-0.11	
Food	-0.07	-0.15	-0.29**	-0.17	0.21

Table 7 presents the correlation results of the US sample, which consists of 41 firms. The variables are measures as described in table 1. \*\* indicates a correlation significant at 99%, \* indicates a correlation significant at 95%

Table 8. Regression Results: German sample		Table 9. Regr	ession Results: US samp	le		
	ROA			ROA		
Variables	Exp. Relationship	Coefficient	Variables	Exp. Relationship	Coefficient	
(Constant)		-32.44*	(Constant)		- 5.64	
		(13.18)			(12.54)	
CSR	+	0.50**	CSR	+	0.18	
		(0.18)			(0.18)	
Technology		- 2.57	Technology		2.78*	
		(2.08)			(1.59)	
Automobile		- 1.43	Automobile		-4.05	
		(2.38)			(2.01)	
Lifestyle		5.69*	Lifestyle		5.64*	
		(2.52)			(2.53)	
Food		- 1.44	Food		2.01	
		(2.35)			(1.79)	
Ν		64	Ν		41	
Adjusted R <sup>2</sup>		0.19	Adjusted R <sup>2</sup>		0.28	

Table 8 presents the regression results of the German sample for 64 firms on hand of the unstandardised beta coefficient and the standard deviation. The standard deviation is displayed within the parantheses. \*\* is significant at 99% and \* is significant at 95%. The variables are as described in table 1.

Table 9 presents the regression results of the US sample for 41 firms on hand of the unstandardised beta coefficient and the standard deviation. The standard deviation is displayed within the parantheses. \*\* is significant at 99% and \* is significant at 95%. The variables are as described in table 1.

## 4.3 Testing of hypotheses

Section 4.3 analyses the results of the correlation and regression analyses and refers to the aforementioned hypotheses.

#### 4.2.1 Hypothesis 1

The first hypothesis anticipated a positive impact of CSR on financial performance, measured with the accounting variable ROA for the total sample consisting of the German and US subsamples. Both test results support this positive relationship at a significance of 99%. Consequently the first hypothesis can be confirmed.

#### 4.2.2 Hypothesis 2

Hypothesis 2 expected the positive impact of CSR on firm's financial performance to be stronger in Germany than in the USA. The results of the correlation and regression analysis for the German subsample are significant at 99%, while the US subsample only shows a significant positive correlation at 95% and no significant but positive sign in the regression analysis of CSR Rep on ROA. Therefore the positive influence of CSR on ROA is indeed stronger in Germany and the second hypothesis can be confirmed.

#### 4.2.3 Control Variable: Industry

Industry was chosen as control variable, testing it additional impact on financial performance.

The control variable industry was divided into 5 subindustries, particularly Technology, Automobile, Lifestyle, Food and Other. Other was taken as the constant excluding it out of the analysis. The subindustries showed differing results. TEC, AUT and LIFE showed significant correlation or sign at least once, while FO delivered no significant result. To make solid conclusions about the influence of different branches, further investigation might be interesting. A larger sample size and more tests could lead to clearer outcomes.

#### 5. DISCUSSION

Previous literature yielded conflicting results towards the relationship of CSR and financial performance. Most research concentrated on the impact of CSR on financial performance of firms in general or in one specific region. This paper examined two similar developed regions, Germany and the US, looking for differences possibly due to differing ideologies and values of citizens. Furthermore it aimed at answering the research question:

#### "How does the influence of CSR on financial performance of firms differ between the USA and Germany?"

The results indicate a positive impact of CSR on ROA for the total as well as the subsamples. While for the total sample (Germany and US) and the first subsample (Germany) the results are significant for the correlation and regression analysis, the second subsample (US) shows a significant correlation but an insignificant regression of CSR on ROA. These outcomes support the assumptions and theory of this paper, with CSR having a bigger impact on financial performance in Germany than in the US (Maignan, 2001). CSR seems to have a stronger positive affect on financial performance for firm when operating in Germany. The results are in line with the observation, that even if CSR reporting remains optional in both countries, Germany has taken a more proactive approach than the USA (Tschopp, 2005). If incorporating CSR practice and gaining better CSR reputation in Germany it has a stronger positive impact on firms financial performance than in the USA. The more proactive

approach could be explained by the financial benefits resulting from it. Tschopp also argues that the US are often criticized for its environmental and ethical standards, leaving the reputation as being egocentric. But if the impact of CSR on ROA is indeed stronger in Germany, firms incorporating CSR standards in Germany might also act solely on the base of self-interest, hoping for better financial performance. As German consumers also appear more willing to pay a higher price or put more effort into buying from corporate social responsible firms than US consumers (Maignan, 2001), again taking responsibility in CSR activities would appear more attractive for German firms. The stronger influence of CSR on ROA in Germany could stimulate the importance of CSR in Germany and limit the investment into CSR in the US. Considering the prevailing importance of CSR in regard to common welfare as well as environmental concerns and sustainability, people everywhere should be made aware of this topic, possibly stimulating them to support firms taking responsibility of CSR concerns. Even if firms act with thought of profits, which cannot be readily proven, the environmental, societal and economical welfare is be increased.

## 6. CONCLUSION

This paper has investigated the influence of CSR on firm's financial performance, measured with the accounting size ROA, in Germany and the US. The sample consisted of 82 firms for the total sample (Germany and US), 64 firms for the German subsample and 41 firms for the US subsample. Data was collected for the years 2011, 2012 and 2013 from the ORBIS database as well as the data of the Reputation Institute's Global RepTrak® 100. A linear regression analysis was used to provide empirical evidence of the influence CSR has on ROA.

Hypothesis 1 expected a positive impact of CSR on ROA for the total sample and delivered significant results at 99%. The second hypothesis expected the positive impact of CSR on ROA to be more significant in Germany than the US. The regression analysis showed a significant correlation and significant positive sign at 99% for the German subsample and a positive correlation at 95% as well as a positive, but insignificant sign of CSR on ROA for the US subsample. The outcomes of the subsamples are in line with the second hypothesis. Consequently both hypothesizes can be confirmed. The results support the stakeholder theory which suggests that a company should not only act in the interest of shareholders but also on stakeholders wants. A firm is expected to act in ways that find a compromise between both interests. This would support both hypotheses, as stakeholders wants seem to differ between Germany and the US. Freeman's idea of CSR encouraging innovation and opening new doors and leading to higher economic profits in the long-term needs further investigation with a longer timeframe than this study. When controlling for industry, the regression analysis provided differing results for each analyzed sample. There seem to be differences in the influence of CSR on financial performance between industries, further investigation and research in this direction could be useful.

The results of this study show the contrasting impact CSR can have on financial performance of firms, depending on the country and the industry it is operating in. Possibly giving thought to consumer perceptions about the importance of socially responsive. It seems that not only the development of a country influences its view and responsiveness on CSR but differing ideologies and values. The study contributes to the decision of managers whether investing resources into the development of corporate social responsibility of firms is beneficial. Besides it might add to the understanding of differences between the relationship of CSR and financial performance among countries for owners of multinational firms. This could help making decisions for each sub holding of the firm in a more efficient manner.

Possible limitations are represented by only using one accounting variable for the measurement of firms' financial performance and using a worldwide CSR Reputation score for the firms. One argument in favour of using a worldwide score is that most people think of the company as one entity and not in the form of sub holdings, but other people could also argue that there are country specific views on the reputation of firms. Incorporating not only accounting measures but also the market value of firms could lead to more precise outcomes. Additionally the sample size, especially when controlling for industries could have been higher to provide more reliable results. Lastly there was only one control variable controlled for in this study, other factors could also influence the impact of CSR on financial performance.

Suggestions for further research are to concentrate on a wider range of financial performance measures, as well as on a longer timeframe to control for the influence of CSR in the long-term and for time consistency. Additionally more control variables or even moderating variables could be taken into account for better understanding the relationship between CSR and firms financial performance.

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