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CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE IN THE AIRLINE INDUSTRY IN CENTRAL AND EASTERN EUROPE

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Abstract

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This paper contributes to the knowledge on corporate social responsibility (CSR) initiatives of by businesses and its ability to influence their financial performance. Consequently, the main objective is to examine the relationship between CSR and financial performance in the airline industry in Central and Eastern Europe. The paper does not attempt to establish causality between CŚR and financial performance. The paper attempts to contribute to the existing knowledge in the field by examining the extent to which CSR relates to financial performance of airline firms. A sample of 20 audited financial statements of airline firms were selected randomly. The study analyzed the impact of CSR activities on the financial performance of firms. The Return on Equity (ROE) and Return on Assets (ROA) were used as indicators to measure financial performance of firms whiles the independent variables were Community Performance (CP), Environment Management System (EMS) and Employee Relations (ER). The study found that there is a significant positive relationship between CSR initiatives and financial performance measures. More specifically, there was found to be a positive relationship between the independent variables of CSR thus, CP, EMS and ER and the financial performance of airline firms in terms of the ROE and ROA.

Keywords: Airline industry, Corporate Social Responsibility, Financial Performance

INTRODUCTION

The impact of business on society is becoming an important topic in management practices (Fiori, Donato and Izzo, 2007). By its nature, the airline industry is at the centre stage of Corporate Social Responsibility (CSR) campaigns in many countries (European Commission, 2001). There are a number of market and non-market (social and environmental) factors that affect the performance of business organizations (Werther, Jr. and Chandler, 2011). The CSR approach to decision making covers social and environmental factors. Following from this, CSR can be seen as the deliberate inclusion of the interest of the public in the decision-making process of corporate entities. It furthers seeks to honor the triple bottom line phenomenon which are People, Planet and Profit (Harpreet, 2009). There have been several definitions of CSR. Most the definitions attempt to integrate the three dimensions of CSR, namely economic, environmental and social aspects into their definitions. The three dimensions are commonly known as the triple bottom line approach to CSR. The triple bottom line concept states that business entities do not only exist with the objective of making profits, but also they tend to have an objective of adding value to the environment and society as a whole (Mirfazli, 2008).

From the Green Paper Promoting a European Framework for Corporate Social Responsibility (2001) CSR is defined as a "*concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their*

stakeholders on a voluntary basis". Alternatively, Helg (2007) explains that CSR should be seen as a set of standards to which a company subscribes in order to make its impact on society. A review of literature provides several definitions of CSR. The study of CSR literature borders on the accounting and market impact of CSR on the performance of the firm (Orlitzky, Schmidt and Rynes, 2003). However, because most of the researchers endeavor to understand how initiatives in social responsibility create or destroy the wealth of shareholders, the accounting definition of the firm's performance may not be appropriate. The market performance is considered more appropriate in this context (Margolis and Walsh, 2001).

OBJECTIVES OF THE STUDY

The main objective of this paper is to examine the effect of corporate social responsibility on financial performance in the airline industry in Central and Eastern Europe (CEE). The paper attempts to contribute to the existing knowledge in the field by examining the extent to which CSR relates to the financial performance of airline firms.

LITERATURE REVIEW

CSR has dominated discussions and research into the interaction between society and business. Over the years many researchers have propounded theories on the approaches to the study of CSR. Regarding CSR and the financial performance of firms, literature sources reveal three important components namely: (i) an indication of a positive correlation between CSR and financial outcome (ii) the lack of correlation between CSR and financial outcome; and (iii) an indication of a negative correlation between CSR and financial outcome (Uadiale and Fagbemi, 2012). Some of the proponents of the first component (Preston and O'Bannon, 1997; Mirfazli, 2008) explain from their research findings that, CSR investments have huge returns to firms with regards to their image and particularly their financial outcome. In fact, researchers explain that the related benefits in CSR investments exceed related costs. Other research findings point to the fact that there are some positive externalities associated with the use of CSR investments in meeting the requirements of stakeholders. In the views of Waddock and Graves (1997), the satisfaction of the interest of internal and external stakeholders, as well as being accountable to them, could have a positive impact on all firms' performances, particularly financial performance.

Furthermore, some researchers found direct relationship between a firm's reputation and its financial returns. For instance, Roberts and Dowling (2002); Fombrun, Gardberg and Barnett (2000) and Porter and Van Der Linde (1995), postulate that CSR initiatives can lead to reputation advantages mainly because when there are improvements in invested trust together with new market opportunities and positive reactions of capital market, the firm's financial performance could be enhanced (Haynes, Murray, Dillard, 2013)

The second group of researchers postulates that there is no relationship between CSR and a firm's financial performance (McWilliams and Siegel, 2000; Waddock and Graves, 1997). For instance, Waddock *et al.* (1997) assert that there are some neutral relations in the connection that may indicate that a lot of variables in the relationship between CSR and financial performance make the connection coincidental. Furthermore, a study by McWilliams and Siegel (2000) found that, enterprises that supply CSR products to their customers have a more positive demand curve than enterprises that do not. Also, Ullmann (1985) asserts that, there is not a clear tendency between connections in social information, social performance and economic results mainly because of the inadequacy in theories, keyword definitions that are inappropriate, and a lack of empirical material. It was realized that, the significant parts are not just economic and social performance but also "information" about social performance. However, few studies have analyzed the relationship between these three dimensions. Other researchers have highlighted on the impossibility of defining the existing relationship between CSR and performance, both in the short term (based on the measure of abnormal return and market actions) and in the long term (Haynes, Murray, Dillard, 2013; Uadiale and Fagbemi, 2012).

Lastly, the notion that there is a negative relationship between CSR and financial performance focuses on empirical studies that make inferences from the managerial opportunism hypotheses (Uadiale and Fagbemi, 2012). For instance, Preston and O'Bannon (1997) assert that, the manager of a firm can make CSR investments so as to increase profitability in the short term, and by extension, increase the compensation paid to them. However, other researchers dispute this trend. Barnea and Rubin (2006) indicate the existence of an opposite trend with regards to managerial opportunism. Waddock *et al.* (1997) reported that firms that are responsible in their behaviour may have a competitive disadvantage since they have unnecessary costs. These costs, when allowed to occur, will directly fall on their profitability and would essentially reduce shareholder profits and wealth. Some studies have found that market measures, short term analyses using abnormal returns measurements (Crane, McWilliams, Matten, Moon, and Siegel, 2009), as well as long term studies (Vance, 1975) show a negative relationship between performance and CSR.

The methodology used in many empirical studies on the relationship between CSR and financial performance are mainly of two types. The first is

the event study method which is used to assess the short-run financial impact (abnormal returns) when businesses are involved in either socially responsible or irresponsible acts (Crane *et al*. 2009; McWilliams *et al*., 2000). The second type of study analyzes the relationship between some measure of social performance and the measurement of financial performance in the long term through the use of some accounting and financial methods for profitability measurement (Uadiale and Fagbemi, 2012). In a survey of 95 empirical studies, Margolis *et al*. (2001), assert that: "*When treated as an independent variable, corporate social performance is found to have a positive relationship to financial performance in 42 studies (53%), no relationship in 19 studies (24%), a negative relationship in 4 studies (5%), and a mixed relationship in 15 studies (19%).*" Generally, these empirical studies assess a link between CSR and financial performance, and find mixed evidence.

The measurement of CSR has always been quite difficult for researchers mainly because of the little consensus on the type of instruments to use in measurement. Often indicators that are largely subjective are used. Likewise, the measurement of the financial performance is equally problematic mainly because there is little agreement on the type of instrument to use in measurement. Researchers such as Alexander and Buchholz (1978) use market measures whiles other researchers like Waddock *et al.* (1997) and Cochran and Wood (1984) advance the use of accounting measures. Other researchers such as Hillman and Keim (2001) adopt both methods. However, the two measurement methods used in the evaluation of the financial performance of firms have theoretical implications and each of the measurement method is prone to some particular biases (Hillman and Keim, 2001). When different measurement methods are used, it complicates the comparison of the results obtained from different researchers (Tsoutsoura, 2004). Just like what previous researchers such as Brammer *et al*. (2006) and Fiori *et al.* (2007) used in their work, this study uses the first three dimensions of CSR namely: community performance (CP), employee performance (EP) (employee relations, systems for job creation, equal opportunities policies, training and development, equal opportunity systems, health and safety, and job security) and environmental performance systems (management systems, policies and reporting). These indicators were adopted from the work of Uadiale and Fagbemi (2012).

METHODOLOGY

The content analysis research design was used in this study. The content analysis involved the identification of the components of CSR in the annual reports of the various airlines companies. The study was not based on some specific CSR certification but rather it is based on the use of the voluntary disclosure index derived from the annual financial reports of the sampled airlines. A sample size of twenty (20) airline firms operating in the CEE region were selected and used for this study. The airline firms selected were those that prepare reports on their CSR activities as part of their annual reports. In this research, the independent variables were environment management systems, community performance and employee relations, while the dependent variable was financial performance which is indicated by ROE (determined by the proportion of profit after tax to each issued share capital) and ROA (determined by the proportion of profit after tax to total assets). A regression model adopted from Uadiale and Fagbemi (2012) was used in the research. The regression model is represented as follows:

$$Y_{ROE} = \alpha_0 + \alpha_1 CP + \alpha_2 EMS + \alpha_3 ER \quad (1)$$

$$Y_{ROA} = ß_0 + ß_1 CP + ß_2 EMS + ß_3 ER \quad (2)$$

where

α_0, $ß_0$...Intercept coefficient;

α_1, $ß_1$...Coefficient for each of the independent variables;

EMS ...Environment Management System;

CP.....Community Performance;

ER.....Employee Relations.

RESULTS AND DISCUSSIONS

In this study, the analysis of data and the test of propositions were done with the Statistical Product and Service Solutions (SPSS Version 21). Analysis was done on three main aspects of CSR which were identified from literature as indicators of CSR, namely CP = Community Performance, EMS = Environment Management System and ER = Employee Relations. In order to determine the extent of the relationships between the dependent and independent variables, a Pearson correlation analysis was performed. The significance level used in most of the analysis was 0.05. However, in the regression analysis, the 0.01 test of significance was adopted. This was done to strengthen the outcome of the analysis.

Using $p < 0.05$ significant level, it was found that ROE correlated significantly to EMS (0.51) and CP (0.11). Likewise, at $p < 0.05$ significant level, ROE was significantly correlated to the system for ER (0.13). It can be concluded that, there is a direct relationship between airline CSR investment and earnings. As airline firms invest in CSR, their earnings tend to increase.

Tab. I shows the results of the regression model analysis. From the analysis, the value of R was 0.436 whiles that of R^2 was 0.210. The value of R thus 0.436 signifies the correlation between ROE and the variables of CSR.

The R^2 value 0.210 represents the explanatory power of the independent variables. This indicates

I: *Summary of Regression Model Result*

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.436(a)	0.210	0.152	2.12411

a. Predictors: (Constant), CP, EMS, ER
b. Dependent Variable: ROE
Source: Survey data analysis, 2013

II: *Summary of ANOVA*

	Sum of Squares	df	Mean Square	F	Sig.
Regression	80.210	2	29.82	4.340	0.002(a)
Residual	188.375	33	4.411		
Total	268.585	35			

a. Predictors: (Constant), CP, EMS, ER
b. Dependent Variable: ROE
Source: Survey data analysis, 2013

III: *Summary of Coefficients of Regression Model*

	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta	B	Std. Error
Const.	–.141	.520		–.141	.782
CP	.523	.287	.282	1.140	.027(*)
EMS	0.940	.343	.200	1.269	.018(*)
ER	.523	.255	.117	0.702	.75(**)

a. Dependent Variable: ROE
*significant at 0.05 level
**significant at 0.01 level
Source: Survey data analysis, 2013

IV: *Summary of Regression Model Result*

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.335(a)	0.190	0.121	21.46010

a. Predictors: (Constant), CP, EMS, ER
b. Dependent Variable: ROA
Source: Survey data analysis, 2013

that 21.0% of the variant in ROE is explained by the independent variables. Furthermore, about 79% of the variance in the dependent variable remains unexplained by the model, hence signifying a weak relationship between the explanatory variables and the ROE. This is further complemented by the low R^2 value. Furthermore, the standard error of the estimate is 2.12411, and it gives an explanation on the representativeness of the sample to the population.

Also the fitness of the model can be explained using the F-ratio (F) indicated in Tab. II. In the view of Andy (2000), *"a good model should have a large F-ratio (greater than one at least)"*.

In the analysis, the F-ratio arrived at with the model, thus 4.340, is significant at $p < 0.05$. Consequently, it can be concluded that there is significant evidence that at least one of the explanatory variables is linearly related to ROE.

Further analysis was done using the coefficients of regression model with ROE as a dependent variable with regression model 1. The analyses results are shown in Tab. III.

From the analysis, it was found that, the t-values for CP was 1.140, EMS was 1.269 and ER was 0.702. All the t-values were significant at the 0.05 levels. It can concluded therefore that for each unit amount of money spent on the components of CSR: CP, EMS and ER, ROE tends to increase averagely by 25 currency units, 27 currency units and 19 currency units respectively when all other explanatory variables are held constant. A Pearson correlation analysis which was carried out to determine the level of relationship among the variables revealed that ROA is positively and significantly correlated to CP at the 0.05 significance level. However, there was a positive but not significant relationship between ROA and EMS and ER.

The summary of results from the regression model is shown in Tab. IV. The value of R^2 which represents the explanatory power of the independent variables is 0.190. It shows that 19% of the variance in the ROE is explicated by the independent variables.

V: *Summary of ANOVA*

	Sum of Squares	df	Mean Square	F	Sig.
Reg.	4771.19	2	1517.057	2.160	0.031(a)
Resid	18250.0	33	400.001		
Total	23021.2	35			

a. Predictors: (Constant), CP, EMS, ER
b. Dependent Variable: ROA
Source: Survey data analysis, 2013

VI: *Summary of Coefficients of Regression Model*

	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta	B	Std. Error
Const.	–.425	5.620		–.078	.821
CP	6.356	1.980	.281	1.585	.014(*)
EMS	–.956	3.365	–.032	–.161	.656
ER	4.189	2.920	.14	0.432	.116

a. Dependent Variable: ROA
*significant at 0.01 level
Source: Survey data analysis, 2013

Therefore, it can be concluded that the value of R^2 is quite low because nearly 81% of the variance in the dependent variable is not explained by the model; hence the relationship between the explanatory variable and EPS is quite weak.

Tab. V below shows an explanation of the fitness of the model using the F-ratio (F). From the table, it can be seen that the F-ratio of 2.160 is significant at $p < 0.05$.

It can be concluded that there is a linear relationship between at least one of the explanatory variables and the ROA. Consequently, the analysis confirms the established relationship between ROA and CP.

An analysis was done with the coefficients of regression model using the ROA as a dependent variable with regression model 2. The results are shown in Tab. VI.

From the analysis, it was found that, the t-values for independent variables CP, EMS and ER were 1.585, –0.161 and 0.432 respectively. This means that only CP had a statistically significant impact on ROA. Consequently, for each additional unit of money spent on the community, ROA increases averagely by 36 currency units. This means that EMS and ER did not have a statistically significant impact on ROA. Nevertheless, it is important to note that for each extra unit of money spent on EMS, there is a reduction in ROA by 2 currency units. However, for ER, it was found that for every extra currency unit spent, there is an average increase in ROA by 19 currency units when other explanatory variables are held constant.

CONCLUSION

From the research, it was found that there is a relationship between the independent variables of CSR namely CP, EMS and ER and the financial performance of firms, thus ROE and ROA. The results from this research reinforce the existing empirical findings on the positive impact of CSR initiatives on financial performance. Because there is indeed a positive relationship between CSR and financial performance measures, there is a need for firms in the airline industry to consider the investment in CSR in their expenditure patterns. It is recommended that airlines within the CEE region invest in CSR to boost their image and reputation so as to increase their returns, thus ROE and ROA. It must however, be noted that although there is a positive relationship between CSR and financial performance measures, it cannot be concluded that the financial performance is entirely due to CSR investment. In order words, there is no causality between them. Future research could look at establishing the predictive power or causalities of CSR investment and financial performance of airline firms.

SUMMARY

CSR is important in the world of business. The main objective of this study was to examine empirically the extent to which CSR relates with the financial performance of airlines in the CEE region. The content analysis research design was used in this study. The content analysis involved the identification of the components of CSR in the annual reports of the various airlines companies. The study can be said to be based on the use of the voluntary disclosure index derived from

the annual financial report of the sampled airlines. A sample size of twenty (20) airline firms operating in the CEE region were selected and used for the study. The independent variables were environment management systems, community performance and employee relations, while the dependent variable was financial performance which is indicated by ROE (determined by the proportion of profit after tax to issued share capital) and ROA (determined by the proportion of profit after tax to total assets). The research found that, there is a relationship between the independent variables of CSR thus, CP, EMS and ER and the financial performance of airline firms in terms of the ROE and ROA. The finding from this study strengthens the existing empirical findings on the positive relationship of CSR initiatives on financial performance. Due to the fact that there is a positive relationship between CSR and financial performance measures, it is recommended that firms in the airline industry need to integrate the CSR investment in their expenditure patterns. Furthermore, in order for airlines to boost their corporate image and reputation, it is important that they invest in CSR. This will also contribute to the increment in their ROE and ROA. It must however be noted that, the relationship does not establish causality; hence there is a need for research to establish a cause and effect relationship between the CSR initiatives and financial performance.

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