

# The relationship between financial performance, firm size, leverage, and corporate social responsibility: A case study of Accenture Plc

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## Abstract

This study examined the relationship between financial performance, firm size, leverage, and Corporate Social Responsibility (CSR) at Accenture Plc. Using a quantitative correlational research design, the research utilized secondary data from Bloomberg (2014-2023) and analyzed the variables through a multiple regression model. Financial performance (measured by Return on Equity), firm size (total revenue), and leverage (debt-to-assets ratio) were the independent variables, while CSR was measured through Environmental, Social, and Governance (ESG) scores. Findings revealed that firm size had a significant positive relationship with CSR, suggesting that larger firms are more likely to engage in CSR activities. However, there was no statistically significant relationship between Return on Equity (ROE) and leverage with CSR scores. These findings aligned with previous research on the impact of firm size on CSR but differed in terms of ROE and leverage's influence on CSR engagement. The study concluded that Accenture's revenue capacity positively influenced its CSR activities, while leverage and financial performance, as measured by ROE, did not have a significant impact. Recommendations were made for policymakers to consider encouraging larger firms to enhance CSR engagement through fiscal incentives.

**Keywords:** Corporate Social Responsibility; Financial Performance; Firm Size; Leverage; ESG Scores.

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## 1. Introduction

In economic terms, a company's overall objective is to maximize shareholder profits. The management then typically start by concentrating on immediate profit. With the shift in perspective, the objective has been refined to maximize stakeholder profits in both the economic and environmental domains, as economists support the company's long-term sustainable growth. A wide range of groups are included in the concept of stakeholders, such as consumers, environmental organizations, the general public, and so forth. To differentiate between these two objectives, the first is based on corporate financial performance, or CFP, while the second one adds corporate social performance, or CSP, to the CFP. These days, a growing number of businesses invest heavily in and integrate social responsibility into their everyday operations (Becchetti, Giacomo, & Pinnacchio, 2008; Olawale & Obinna, 2023b). Research elucidating the correlation among financial performance, corporate size, leverage, and CSR may prove advantageous to stakeholders. According to Girerd-Potin, Jimenez, and Louvet (2014) and Razavi et al (2019), this understanding may therefore result in innovation, effective logistics, employee motivation, favorable press, and sustainability. Wang et al. (2016) emphasized the idea of corporate social responsibility (CSR) and the different aspects of organizational purpose. They also made a request for more study to educate academics and management leadership about business aspects connected to the transformational roles that businesses play in modern society.

The notion of corporate social responsibility (CSR) gained popularity in the 1960s and has since been widely applied globally in a variety of commercial contexts (Wang et al., 2016). CSR was a notion that academics and business

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management debated for decades (Tilt, 2016). Globalization and technological developments improved two business executives' responsiveness to corporate social responsibility (Carroll & Buchholtz, 2014; Olawale & Obinna, 2023a; Razavi et al 2023). Companies can gain and keep a competitive edge in the market by implementing CSR efforts, which are strategically significant (Basera, 2013). In order to attain sustainability and stability, which is one of the most important company concerns, leaders must surpass stakeholder expectations (Carroll & Buchholtz, 2014). Adhering to CSR tactics necessitates a dedication to tackling more significant societal issues that impact the general public (Tilt, 2016; Olawale & Obinna, 2023c). Businesses have started to set up specialized organizational units to handle their CSR responsibilities, according to Wang et al. (2016). Businesses that engage in CSR see improvements in sustainability, reputation, and status in addition to an increase in trust and goodwill rather than a decrease in them (Hollensbe, Wookey, Loughlin, George, & Nichols, 2014). CSR is still a notion that is thought to be worthy of continuing business research, as evidenced by its increasing representation in the peer-reviewed literature (George, Dahlander, Graffin, & Sim, 2016).

Wang et al. (2016) defined corporate social responsibility (CSR) as an organizational phenomenon that extends the value of enterprises in society beyond their core operations, thereby energizing and motivating constituents, also referred to as stakeholders. In actuality, corporate executives like chief financial officers play a crucial role in the strategic decision-making processes concerning the distribution of resources allocation and also these individuals determine the company through their effort. It may be challenging to forecast, monitor, track, and optimize the success of CSR initiatives even with the dedication of these resources, according to Wang et al. (2016). In order to gain a competitive edge in the market, business executives could also be ignorant of the three strategic advantages of CSR activities (Porter & Kramer, 2011). One of the most important responsibilities of corporate leaders involved in CSR efforts is managing stakeholder expectations while keeping an eye on maintaining and growing earnings (Sodhi, 2015). Consequently, corporate executives who make CSR decisions still rely on the corpus of empirical research to help them better understand CSR practices, obstacles, and relevant contextual information (Wang et al., 2016). CSR may be impacted by corporate size, financial performance, and leverage (Maskun, 2013). According to Elliott, Jackson, and Peecher (2014), Razavi et al (2023) and Olawale (2024), in 2011 socially responsible activities financed around \$3.74 trillion of the \$25 trillion in investment assets in the United States, a 22% increase from 2009. The overarching issue facing business was that company executives might not have the necessary expertise to comprehend how corporate social responsibility (CSR) affects their companies' bottom lines (Wang et al., 2016). The particular issue at hand pertained to business leaders in the United States who lack comprehension of the correlation among financial performance, firm size, leverage, and corporate social responsibility.

Despite the growing emphasis on corporate social responsibility (CSR) and its strategic importance in modern business, there remains a lack of clarity on how CSR initiatives directly influence a company's financial performance, particularly when factors like firm size and leverage are considered. For companies like Accenture PLC, understanding this relationship is crucial, as they seek to balance profit maximization with socially responsible practices. Existing research suggests that CSR can enhance innovation, reputation, and long-term sustainability, yet corporate leaders often struggle with assessing the tangible financial benefits of such efforts. Inadequate knowledge of how variables like firm size and leverage interact with CSR initiatives poses a challenge for executives in making informed strategic decisions. This knowledge gap highlights the need for deeper empirical exploration of the interplay between financial performance, firm size, leverage, and CSR within large multinational corporations like Accenture PLC. Without this understanding, businesses risk underutilizing CSR as a tool for competitive advantage, potentially missing out on opportunities for increased profitability and enhanced stakeholder engagement. This quantitative correlational study set out to investigate the relationship between corporate social responsibility (CSR), firm size, financial performance, and leverage, using environmental, social, and governance (ESG) activity scores as criteria, in publicly traded firms in the United States. The study aims to provide insights for policymakers on the potential for implementing rules and financial incentives that promote CSR practices, benefiting employees, customers, the environment, and society as a whole. The overarching research question for this study was as follows: What relationships exist between Accenture PLC financial performance, firm size, leverage, and CSR? In this study, the predictor variables were financial performance (measured by the return on equity), firm size (measured by total revenue), and leverage (measured using the ratio of debt and total assets). The dependent variable was CSR (measured by the companies' environmental, social, and governance activity scores).

In this study, three hypotheses were built to examine the relationship between independent variables and dependent variables. Hypothesis can be defined as a logically conjectured relationship between two or more variables expressed in the form of a testable statement. There are two types of hypotheses namely the null and alternate hypotheses. The null hypothesis is a proposition that states a definitive exact relationship between two variables. In general, the null statement is expressed as no (significant) relationship between two variables or no (significant) difference between two groups. The hypothesis will come out as follows:

- Ho: There is no statistically significant relationship between financial performance and CSR in Accenture PLC
- H<sub>1</sub>: There is a statistically significant relationship between financial performance and CSR in Accenture PLC
- Ho: There is no statistically significant relationship between firm size and CSR in Accenture PLC
- H<sub>1</sub>: There is statistically significant relationship between firm size and CSR in Accenture PLC
- Ho: There is no statistically significant relationship between leverage and CSR in Accenture PLC
- H<sub>1</sub>: There is a statistically significant relationship between leverage and CSR in Accenture PLC

## 2. Materials and Methods

This study employed a quantitative correlational research design to examine the relationship between Accenture's financial performance, firm size, leverage, and Corporate Social Responsibility (CSR) as measured by Environmental, Social, and Governance (ESG) scores. The independent variables were financial performance (measured by Return on Equity), firm size (total revenue), and leverage (debt-to-assets ratio), while the ESG score served as the dependent variable. Using secondary data from the Bloomberg database (2014-2023) and focusing on Accenture, which is part of the Russell 1000 Index, the study utilized a multiple regression model to analyze the degree and direction of relationships among the variables. The choice of secondary data ensured accuracy, and the use of the Ordinary Least Square (OLS) method allowed for the precise estimation of regression coefficients. The researchers applied ratio-level measurements for all variables, enabling detailed statistical analysis. Findings from this analysis are intended to inform policymakers on the need for regulatory measures and fiscal incentives to encourage CSR participation, thereby promoting environmentally friendly practices and positively impacting societal development.

## 3. Results and Discussion

Data gathered on the dependent variables ((ESG activity scores) and independent variables (ROE, total revenue, and leverage) are presented below:

**Table 1** Data Presentation

YEAR	ROE	Total Revenue	ESG Score	Leverage
2014	55.02	32.16	4.44	0.15
2015	51.47	32.98	4.47	0.15
2016	60.08	34.60	4.42	0.13
2017	41.75	36.71	4.52	0.11
2018	42.04	41.26	4.54	0.10
2019	38.58	43.37	4.43	0.08
2020	32.52	44.32	4.59	9.4
2021	32.34	50.53	5.03	8.12
2022	33.04	61.59	5.21	7.04
2023	28.75	64.11	5.18	6.15

Source: Bloomberg 2014 – 2023. NB: Return on Equity (ROE), Total Revenue (REV), Environmental, social and governance (ESG), and Leverage (Lev).

### 3.1. Descriptive Analysis

The descriptive analysis involves the use of descriptive statistics which is a summary statistic that quantitatively describes or summarizes features from a collection of information. The process of using and analysing those statistics is called descriptive analysis. Descriptive analysis table for all the variables are presented below:

Mean is a measure of central tendency. It is the sum of all the series divided by the total number of observations. Table 2, it depicts that the mean average of ESG activity scores, leverage, return on equity (ROE), and total revenue (REV) during the period of observation amounted to 4.683, 3.143, 41.559 and 44.163 respectively. Median is also a measure of central tendency. It is derived by arranging the series in ascending or descending order and selecting the value that falls in the middle. Since the number of observations (2014-2023) is even (10). The median value will be derived by

dividing the two values that fall in the center. It can be depicted by arranging the data presented in Table 4.1 that the median value for ESG Scores lock around the years 2017 and 2018 with 4.53, leverage around the years 2014 and 2015 with 0.15, Return on equity around the years 2019 and 2017 with 40.165 and revenue around the years 2018 and 2019 with 42.315.

**Table 2** Descriptive Result

VARIABLES	ESG Score	LEVERAGE	ROE	TOTAL REVENUE
Mean	4.683000	3.143000	41.55900	44.16300
Median	4.530000	0.150000	40.16500	42.31500
Maximum	5.210000	9.400000	60.08000	64.11000
Minimum	4.420000	0.080000	28.75000	32.16000
Std. Dev.	0.322905	3.985870	10.72346	11.38875
Skewness	0.850360	0.534198	0.522168	0.717235
Kurtosis	1.910835	1.447816	1.926202	2.202338
Jarque-Bera	1.699471	1.479478	0.934866	1.122487
Probability	0.427528	0.477238	0.626609	0.570499
Sum	46.83000	31.43000	415.5900	441.6300
Sum Sq. Dev.	0.938410	142.9844	1034.933	1167.332
Observations	10	10	10	10

Source: Author's computation, 2024 (EViews 11.0)

Maximum (minimum) is another measure central of tendency which shows the highest (lowest) observation recorded from 2014 to 2023. According to the descriptive table, it shows that the highest (lowest) ESG activity scores, leverage, return on equity (ROE), and total revenue (REV) are 5.21 (4.42), 9.4 (0.08), 60.08 (28.75) and 64.11 (32.16) in the year 2022 (2016), 2020 (2019), 2016 (2023) and 2023 (2014) respectively. Standard deviation is a measure of dispersion. It shows how dispersed the data are from the mean of a sample distribution. The table above shows that the deviation of ESG activity scores, leverage, return on equity (ROE), and total revenue (REV) from their means are 0.322905, 3.985870, 10.72346 and 11.38875.

Skewness is a measure of normality. A distribution is said to be skewed when the mean and the median fall at different points in the distribution and the balance or centre of gravity is shifted to one side or the other side to the left or the right. The skewed distribution is of two parts namely symmetrical when the mean, median, and mode coincide and asymmetrical distribution when the mean, median, and mode fails to coincide and it is divided into positively skewed and negatively skewed distribution. A distribution is said to be positively skewed when the mean is greater than the median and the median is greater than the mode while distribution is said to be Negatively skewed when the mode is greater than the median and the median is greater than the mean. The following explains the skewness of all variables used in this study:

The descriptive analysis result in Table 4.2, it depicts that the mean, median, and mode of the variables respectively don't coincide which shows that the distribution is asymmetrical. Again, taking a critical look at Table 4.2, reveals that the mean value of the variables ESG activity scores, leverage, return on equity (ROE), and total revenue (REV) are greater than the median value. Also, taking a critical look depicts that the median is also greater than the mode ( since the mode of all the variables in the study is zero because there are no two or more exact figures recorded in each variable spanning through the period of observation employed in this study except for leverage variable where the mode is 2 which is greater than the median) which depicts that the ESG activity scores (0.850360), leverage (0.534198), return on equity (0.522168), and total revenue (0.717235) will show a positively skewed distribution with the figures. From the result shown in the descriptive table, all the variables truly give a positive skewness figure which truly shows a positively skewed distribution. Since the distribution is positively skewed it will show the centre of gravity is shifted to the right side.

Kurtosis is also a measure of normality. It measures the peakedness of the distribution of frequency distribution. It is classified into three types based on the shape of their peaks namely mesokurtic ( $\beta = 3$ ), leptokurtic ( $\beta > 3$ ), and platykurtic ( $\beta < 3$ ). The peakedness of the variables are explained below: According to the descriptive Table 4.2, the kurtosis for ESG activity scores (1.910835), leverage (1.447816), return on equity (1.926202), and total revenue (2.202338) are clearly below 3 implies the curve is platykurtic (flatted-curve) with lower values than the sample mean. The measure of kurtosis is helpful in the selection of appropriate central tendency which implies that for the platykurtic curve the best average is the quartile range.

The Jarque-Bera/Probability test statistics measure the difference of the skewness and kurtosis of the series with those from the normal distribution. It is a test statistic for testing whether the series is normally distributed. If the reported probability for the Jarque-Bera statistic exceeds (falls below) 5% percent, accept (reject) the null hypothesis that the series is normally distributed and reject (accept) the alternative hypothesis. Looking at Table 4.2, the Jarque-Bera statistic for ESG Score (1.699471), leverage (1.479478), ROE (0.934866) and total revenue (1.122487) with probability values of 0.427528 (42.75%), 0.477238 (47.72%), 0.626609 (62.66%) and 0.570499 (57.05%) which is clearly above 0.05 (5%). The results depict that the variables ESG activity scores, leverage, return on equity (ROE), and total revenue (REV) are normally distributed and will show a normal distribution curve.

**3.2. Inferential Analysis**

The model used is OLS Model – Multiple Linear Regression analysis. Multiple regression analysis is done to examine the simultaneous effects of several independent variables on a dependent variable. The model specifications for this thesis are given below:

**MODEL ONE**

$$ESG_t = \beta_0 + \beta_1Levt + \beta_2ROEt + \beta_3Revt + e \dots\dots\dots (1)$$

Where: *ESG* = Environmental, social and governance ; *LEV* = Leverage ; *ROE* = Return on Equity ; *REV* = Revenue;  $\beta_0$  = Intercept ;  $\beta_1 - \beta_3$  = Partial regression parameters ; *t* = The temporary dimension i. e. 2014 – 2023

*e* = Error Term

**Table 3** Regression analysis Result for Model One

Dependent Variable: ESG_SCORE				
Method: Least Squares				
Sample: 2014 2023				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.038026	0.564781	5.379122	0.0017
LEVERAGE	0.018992	0.016391	1.158667	0.2906
ROE	0.008210	0.007655	1.072528	0.3247
TOTAL_REVENUE	0.028170	0.006699	4.205369	0.0057
R-squared	0.902229	Mean dep. variable		4.683000
Adjusted R-squared	0.853343	S.D. dependent var		0.322905
S.E. of regression	0.123659	Akaike info criterion		-1.053400
Sum squared residual	0.091750	Schwarz criterion		-0.932366
Log-likelihood	9.267002	Hannan-Quinn criterion.		-1.186174
F-statistic	18.45590	Durbin-Watson stat		2.159225

Prob(F-statistic)	0.001968			
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Source: Author's computation, 2024 (EViews 11.0)

The estimated regression analysis results in the table above were based on ordinary least squares. The equation (t-ratio and se values in parenthesis) in respect of the independent variables and dependent variables are represented as:

$$ESG\_SCORE = 3.038026 + 0.018992LEV + 0.008210ROE + 0.028170REV + e$$

$$se = (0.564781) \quad (0.016391) \quad (0.007655) \quad (0.006699)$$

$$t = (5.379122) \quad (1.158667) \quad (1.072528) \quad (4.205369)$$

$$R^2 = 0.902229 \quad \bar{R}^2 = 0.853343$$

The intercept  $\beta_0$  value shows 3.038026 which gives the average or mean effect on ESG\_SCORE of all variables excluded from the model. Although, its mechanical interpretation is the average value of ESG\_SCORE is 3.038026 when *leverage*, *return on equity (ROE)*, and *total revenue (REV)* are set equal to zero which has a positive effect. *Leverage* coefficient  $\beta_1$  shows 0.018992 which has a positive effect on ESG\_SCORE that measures the change in the mean value of ESG\_SCORE per unit change in *leverage* when holding the value of *return on equity (ROE)*, and *total revenue (REV)* constant i.e., for every 1unit increase (decrease) in the independent variable *leverage*, the dependent variable ESG\_SCORE is predicted to increase (decrease) by 0.018992. *ROE* coefficient  $\beta_2$  shows 0.008210 which has a positive effect on ESG\_SCORE that measures the change in the mean value of ESG\_SCORE per unit change in *ROE* when holding the value of *leverage*, and *total revenue (REV)* constant i.e., for every 1unit increase (decrease) in the independent variable *ROE*, the dependent variable ESG\_SCORE is predicted to increase (decrease) by 0.008210.

*REV* coefficient  $\beta_3$  shows 0.028170 which has a positive effect on ESG\_SCORE that measures the change in the mean value of ESG\_SCORE per unit change in *REV* when holding the value of *leverage* and *return on equity (ROE)* constant i.e., for every 1unit increase (decrease) in the independent variable *REV*, the dependent variable ESG\_SCORE is predicted to increase (decrease) by 0.028170. Standard error stands for the standard deviation of the coefficient i.e., it shows by how much the coefficients deviate from the exact values since there will be some variation in the prediction of the coefficients. Therefore, the table above shows that the intercept and Slope coefficients  $\beta_0, \beta_1, \beta_2,$  and  $\beta_3$ , deviate from exact values by the magnitude of 0.564781, 0.016391, 0.007655, and 0.006699 respectively. S.E. of regression which stands for standard error of regression shows that the fitted regression deviates from the actual regression by 0.123659. Akaike/Schwartz/Hannan-Quinn are used to choose between competing models. The decision rule is to select the model that has the lowest value out of the three models. From the table, we can see clearly that the Hannan-Quinn criterion (HQC) has the lowest of the three with the figure of -1.186174 which therefore depicts that it is the best model to adopt in this case.

### 3.3. Evaluation of Data

Evaluation of Data displays the result for testing of the reliability of the result of the estimation from multiple regressions. The evaluation will show whether the estimates of the parameters are theoretically meaningful and statistically satisfactory or significant. The results of the various criteria employed in testing the data generated for the nature of this study are presented below:

#### 3.3.1. Statistical Criteria

This criterion is often referred to as first order. Measures the extent of reliability of the parameter of the variables in the models. A variety of statistical techniques, the *t*-test, the *f*-test, adjusted coefficient of multiple determination, and coefficient of multiple determination were used to analyze the data collected and the results are presented in the tables below:

*Coefficient of Multiple Determination (R<sup>2</sup>):* The coefficient of multiple determination, a multivariate counterpart of coefficient of determination  $r^2$  is used to test the power of explanation of the entire regression equation i.e., for example, the set of predictor variables  $x_1, x_2, x_3,$  and  $x_4$  is used to explain the variability of the criterion variable  $Y$ . The square root of the coefficient of multiple determinations is the coefficient of multiple correlations,  $R$ . The results are explained below:

The value of 0.902229 (90.22%) in Table 4.3 gives the variation in the dependent variable ESG\_SCORE that is explained by the independent variables in the model. The higher the R<sup>2</sup>, the better the model and the more the predictive power the variables have i.e., the joint explanatory power of the regressors leverage, return on equity (ROE), and total revenue (REV) explain about 90.22% of the variation in the dependent variable ESG\_SCORE while the remaining 9.88% gap in the explanatory power of the regressors in the fitted regression model is explained by other variables that are not included in the model which represent the error term e in the regression model. Since the multiple R-squared is more than 60% it signifies that the model is well fitted.

*Adjusted Coefficient of Multiple Determination ( $\bar{R}^2$ ):* Adjusted R-squared takes care of the problem of the increasing the value of multiple R-squared as more independent variables are added to the model. Table 4.3 gives the value 0.853343 (85.33%) i.e., the joint explanatory variables explain 85.33% of the variation in ESG\_SCORE, and the remaining 14.77% is explained by other regressors not included in the model. If more regressors are added to the model the adjusted multiple R-squared keeps decreasing.

*T-test:* The student T-table will be used to measure the statistical significance of the coefficients of the explanatory variable in the specified models. This will be at the 5% level of significance. if the absolute t-statistics is greater than the critical value it shows that the explanatory variable is statistically significant and vice versa.

From the table displayed below, it can be deduced that Total revenue is statistically significant in the model since the absolute value of the t-statistics is greater than the critical value while the explanatory variables leverage and return on equity (ROE) are not statistically significant.

**Table 4** T-test for model one

Variable	t-Statistic	5% Critical Value.	Decision
C	5.379122	1.895	Significant
LEVERAGE	1.158667	1.895	Not Significant
ROE	1.072528	1.895	Not Significant
TOTAL_REVENUE	4.205369	1.895	Significant

Source: Author’s computation, 2024 (EViews 11.0)

### 3.4. Test of Significance

Here, we test the significance of the independent variables in the model using the probability value of the t-statistic. By comparing the p-value with the critical value of 5%, we will be able to know if the independent variable has a significant impact on our model. If the probability value is less than the critical value of 5% (0.05), it means that the independent variable can individually influence the dependent variable and vice versa. Table 4.9 show the summary of the result for the models.

#### MODEL ONE

**Table 5** Test of Significance for model one

Variable	Prob.	5% Critical Value.	Decision
C	0.0017	0.05	Significant
LEVERAGE	0.2906	0.05	Not Significant
ROE	0.3247	0.05	Not Significant
TOTAL_REVENUE	0.0057	0.05	Significant

Source: Author’s computation, 2024 (EViews 11.0)

From the result displayed above, it shows that leverage and return on equity (ROE) have a very high insignificant individual relationship/influence with/on ESG\_SCORE because of the probabilities of 0.2906 and 0.3247 respectively which are far higher than the critical value of 0.05 while total revenue (REV) displays a very high significant individual influence of 0.0057.

### 3.5. Test of Overall Significance (F-test)

F-statistic is conducted to see if the regression is well specified. It explains how jointly significant the independent variables leverage, return on equity (ROE), and total revenue (REV) are in explaining the dependent variable ESG\_SCORE. The decision rule is that if the F-Cal is less than the F-tab at a 5% (0.05) level of significance, it means that we should accept the null hypothesis that the independent variables cannot jointly significantly influence the dependent variable and reject the alternative hypothesis and vice versa. The results are presented below: A critical look at the table below, The F-tab at 5% level of significance is 4.35 and F-Cal is 18.45590 which means that the F-Cal is greater than the F-tab which signifies that we reject the null hypothesis and accept the alternative hypothesis that the independent variables are jointly significant in explaining the independent variable which implies that the model is well specified and the overall regression is statistically significant.

**Table 6** Test of Overall Significance for model one

Dependent Variable ESG_SCORE		
F-Cal	F-tab	Decision
18.45590	4.35	Reject Ho

Source: Author’s computation, 2024 (EViews 11.0)

*Econometric Criteria:* Econometric analysis of data involves the use of a pre-testing procedure to investigate the characteristics of time series data. It involves the use of various econometric criteria such as heteroskedasticity test, autocorrelation test, and others. The results are presented below:

*Diagnostic Test Statistics:* This study will further carry out various diagnostic tests to ensure that the data series is consistent with all the OLS assumptions. These tests include:

*Heteroskedasticity Test:* Heteroskedasticity occurs when the variance of the error term in the residual table in the model is not constant for all our observations. Breusch-pagan LM test will be used to test for heteroskedasticity in a linear regression model and assumes that the error terms are normally distributed. It involves squaring the residuals and regressing them on the regressors in the model leverage, return on equity (ROE), and total revenue (REV). If the LM statistic p-value of the observed R-squared is higher than 0.05 then we should accept the null hypothesis that the model is homoscedastic. Otherwise, we reject the null and accept the alternative. The results are presented below:

#### MODEL ONE

**Table 7** Breusch-Pagan-Godfrey Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey					
Null hypothesis: Homoskedasticity					
F-statistic			1.828182	Prob. F (3,6)	0.2425
Obs*R-squared			4.775588	Prob. Chi-Square (3)	0.1890
Scaled explained SS			0.765531	Prob. Chi-Square (3)	0.8577

Source: Author’s Computation, 2024 (EViews 11.0).

From the table above, the p-value of 0.1890 (18.90%) is greater than the significance level of 0.05 (5%). Therefore, we accept the null hypothesis that the model is homoscedastic (variance of the error term is constant) and the model is free from the problem.

### 3.6. Serial Correlation Test

The Breusch-Pagan-Godfrey Lagrange Multiplier test will be used to test the presence of serial correlation between the residuals. If the p-value of the observed R-Squared is higher than the significance level of 5% (0.05), accept the null hypothesis that there is no serial correlation in the model. Otherwise, accept the alternative hypothesis. The result for each model is presented below:



## 3.6.1. MODEL ONE

**Table 8** Breusch-Pagan-Godfrey LM Test

<b>Breusch-Godfrey Serial Correlation LM Test</b>				
Null hypothesis: No serial correlation at up to 1 lag				
F-statistic		0.157021	Prob. F (1,5)	0.7083
Obs*R-squared		0.304481	Prob. Chi-Square (1)	0.5811

Source: Author's Computation, 2024 (EViews 11.0).

Looking at the result in the table above, the p-value of the observed R-squared 0.5811 (58.11%) is greater than the significance level of 0.05 (5%). Therefore, we accept the null hypothesis of no serial correlation in the model.

**3.7. Multicollinearity Test**

Multicollinearity test is used to test if there is a presence of exact or linear perfect or linear relationship among some or all the explanatory variables used in a regression model in one and two. A glance at the results in the regression tables for models one and two show there might be a collinearity problem for the  $R^2$  is high in both models but quite a few variables are statistically insignificant ( $\beta_1$  &  $\beta_2$ ), which is a classical symptom of multicollinearity. To detect the presence of multicollinearity we will be using the correlation matrix presented below:

**Table 9** Correlation Matrix of Independent Variables

VARIABLES	LEVERAGE	ROE	REVENUE
LEVERAGE	1	-0.761228	0.716298
ROE	-0.761228	1	-0.831612
REVENUE	0.716298	-0.831612	1

Source: Author's Computation, 2024 (EViews 11.0)

The decision rule is that if the correlation between two independent variables of more than 80% then there is the presence of multicollinearity in the data. As we can see the pair-wise correlation between ROE and REVENUE of 83.16% is higher than the critical value suggesting that there may be a presence of a severe collinearity problem.

Another way to detect the presence of multicollinearity is by regressing each independent variable on the remaining independent variables. To save space, we will present only the  $R^2$  which is shown below:

**Table 10** Tolerance value of the independent variables

Dependent Variable	$R^2$ Value	Tolerance (TOL) = $1-R^2$
LEVERAGE	0.601940	0.398060
ROE	0.747862	0.252138
REVENUE	0.708060	0.29194

Source: Author's Computation, 2024 (EViews, 11.0)

The same information is obtained from the tolerance values which the decision rule is that the closer the tolerance factor is to Zero, the greater is the evidence of collinearity. Looking at Table 10, shows that ROE and REVENUE have values of 25.21% and 29.19% which is closer to zero compared to the value of leverage variable in the table.

**3.8. Test of Hypothesis**

In this study, three hypotheses were built to examine the relationship between independent variables and dependent variables. There are two types of hypotheses namely the null and alternate hypotheses. The null hypothesis is a proposition that states a definitive exact relationship between two variables. In general, the null statement is expressed

as no (significant) relationship between two variables or no (significant) difference between two groups. The hypothesis will come out as follows:

- Ho: There is no statistically significant relationship between financial performance and CSR
- H<sub>1</sub>: There is a statistically significant relationship between financial performance and CSR

**3.9. Decision rule**

If the probability value of variable is greater than the critical value of 5% (0.05) we accept the null hypothesis and reject the alternative hypothesis and vice versa.

**Table 11** Hypothesis test one result

<b>Dependent Variable: ESG_SCORE</b>				
Method: Least Squares				
Sample: 2014 2023				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.038026	0.564781	5.379122	0.0017
LEVERAGE	0.018992	0.016391	1.158667	0.2906
ROE	0.008210	0.007655	1.072528	0.3247
TOTAL_REVENUE	0.028170	0.006699	4.205369	0.0057

Source: Author’s computation, 2024 (EViews 11.0)

Since the probability of the variable ROE (0.3247) is higher than the critical value of 5% (0.05). Therefore, we accept the Null hypothesis (Ho) and reject the alternative hypothesis (H<sub>1</sub>) that financial performance significantly does not have a relationship with CSR of Accenture in US.

- Ho: There is no statistically significant relationship between firm size and CSR
- H<sub>1</sub>: There is statistically significant relationship between firm size and CSR

**3.10. Decision rule**

If the probability value of variable is greater than the critical value of 5% (0.05) we accept the null hypothesis and reject the alternative hypothesis and vice versa.

**Table 12** Hypothesis test two result

<b>Dependent Variable: ESG_SCORE</b>				
Method: Least Squares				
Sample: 2014 2023				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.038026	0.564781	5.379122	0.0017
LEVERAGE	0.018992	0.016391	1.158667	0.2906
ROE	0.008210	0.007655	1.072528	0.3247
TOTAL_REVENUE	0.028170	0.006699	4.205369	0.0057

Source: Author’s computation, 2024 (EViews 11.0)

Since the probability of the variable TOTAL\_REVENUE (0.0057) is less than the critical value of 5% (0.05). Therefore, we reject the Null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_1$ ) that firm size significantly does have a relationship with CSR of Accenture in US.

- $H_0$ : There is no statistically significant relationship between leverage and CSR
- $H_1$ : There is a statistically significant relationship between leverage and CSR

### 3.10.1. Decision rule

If the probability value of variable is greater than the critical value of 5% (0.05) we accept the null hypothesis and reject the alternative hypothesis and vice versa.

**Table 13** Hypothesis test one result

Dependent Variable: ESG_SCORE				
Method: Least Squares				
Sample: 2014 2023				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.038026	0.564781	5.379122	0.0017
LEVERAGE	0.018992	0.016391	1.158667	0.2906
ROE	0.008210	0.007655	1.072528	0.3247
TOTAL_REVENUE	0.028170	0.006699	4.205369	0.0057

Source: Author's computation, 2024 (EViews 11.0)

Since the probability of the variable LEVERAGE (0.2906) is higher than the critical value of 5% (0.05). Therefore, we accept the Null hypothesis ( $H_0$ ) and reject the alternative hypothesis ( $H_1$ ) that financial leverage significantly does not have a relationship with CSR of Accenture in US.

## 4. Discussion of Findings

The quantitative analysis conducted in this study aimed to explore the relationships between financial performance, firm size, leverage, and Accenture's corporate social responsibility (CSR) as measured by ESG activity scores. The regression results indicated that total revenue is a significant predictor of ESG scores, aligning with findings from Bidhari, Salim, and Aisjah (2013) who observed a positive relationship between CSR activities and financial performance in Indonesia's banking sector. This suggests that as Accenture's revenue increases, its capacity to invest in CSR initiatives also grows, supporting the notion that larger financial resources enable more substantial CSR engagement. Conversely, the lack of a significant relationship between Return on Equity (ROE) and CSR in this study contrasts with Santos and Feliana (2014), who found that CSR adoption positively impacts financial performance by fostering long-term growth and enhancing market share. This discrepancy may be attributed to differences in industry contexts or the specific financial metrics used.

In examining firm size, the study found a significant positive relationship with CSR, reinforcing the insights of Orlitzky (2001) and Udayasankar (2008), who highlighted that larger firms often have greater visibility, resource access, and operational scale, which facilitate more extensive CSR activities. This finding is consistent with the organizational and technological theories discussed by Dang and Lee (2013), where larger firms allocate more resources toward CSR due to their ability to invest in technology and sustain larger operations. Additionally, the positive association observed in this study echoes the results of Ozcelik, Ozturk, and Gursakal (2014), who reported a similar correlation in companies listed on the Istanbul Stock Index. However, unlike some studies that suggested a U-shaped relationship between firm size and CSR, this research specifically underscores the direct positive impact of firm size on CSR within Accenture, indicating that larger firms are better positioned to engage in socially responsible practices.

Regarding leverage, the study did not find a significant relationship between leverage ratios and CSR scores, which aligns with the findings of Zhu et al. (2014) and Di Giuli and Kostovetsky (2014) who noted that high leverage could

constrain a firm's ability to invest in CSR due to financial vulnerabilities. However, unlike these studies, which emphasized the negative impact of leverage on CSR engagement, the results here did not show a statistically significant effect. This could suggest that Accenture's financial strategies and stability mitigate the potential constraints typically associated with high leverage, allowing the company to maintain its CSR commitments regardless of its debt levels. The insignificance of leverage in this context highlights the complexity of financial dynamics influencing CSR and underscores the need for further research to explore how different forms of leverage might differently affect CSR activities across various industries and corporate structures.

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## 5. Conclusions

The paper's focal point is the investigation of how Accenture financial performance, firm size, leverage and corporate social responsibility (CSR) are interrelated. The research utilizes a standard multiple linear regression to analyse whether Accenture financial performance, firm size and leverage predict ESG activity scores. Results indicate that these variables collectively impact the explanation of dependent variable ESG activity score as evidenced by statistical significance generated from the used regression model. In addition, F-test results show well-specified model with overall statistically significant equal contribution made jointly between independent variables in explaining variation observed within determined identified parameters for analysis related to dependent variable delineation. In addition, the exploration analyzed the correlation among Accenture financial performance, company size, debt-to-equity ratio and CSR. The findings revealed that overall revenue was a valuable predictor of ESG activity scores. Nonetheless, at a 0.05 significance level there was no substantial statistical proof indicating that return on equity (ROE) and leverage have any influence on predicting ESG activity scores in Accenture's CSR program. Therefore, implying that although total income has an important connection with ESG activity scores; ROE and leverage do not exhibit any significant relationship statistically speaking regarding Accenture's approach to corporate social responsibility.

This research offers a descriptive examination that outlines the variables scrutinized in this study, specifically ESG score, leverage, ROE and total revenue. To provide insight into their characteristics, we calculated statistical measures such as mean value, median value, maximum range of values attained by each variable along with minimum boundaries extended to them. Further elaborating on our analysis approach, standard deviation helps us gauge variability whereas skewness and kurtosis reveal how data is distributed within these fields; All contributing tremendously towards understanding central tendency thereby enabling more insightful conclusions about the observed trends. To sum up, the study's results reveal insights into how financial performance, company size, leverage and corporate social responsibility are related. Although total revenue was strongly linked to ESG activity scores; ROE and leverage were not statistically significant in relation to CSR. These outcomes may help us better comprehend Accenture's approach towards corporate social responsibility by examining the influence of their financial metrics and business characteristics. Additional research could investigate other variables that might affect CSR initiatives while further examining the interplay between sustainability endeavours and monetary measurements.

This study reflected continued efforts to improve Accenture PLC processes and may yield information that will be beneficial to investors, stakeholders, government policy makers, academics, and business executives. The study's conclusions and recommendations about the type and degree of the links between Accenture PLC financial performance, firm size, leverage, and CSR were made available to policy makers and business leaders. The outcomes of the partnership could help government policy makers and business executives make decisions related to corporate social responsibility. Business executives may find it helpful to comprehend the relationship when assessing the potential advantages of putting specific policies into place to increase corporate social activities that may be related to financial performance, company growth, and the reduction of financial leverage.

The lack of a substantial correlation between Accenture PLC financial performance and corporate social responsibility (CSR) in this study suggests that government involvement in social and environmental efforts needs to be reviewed and possibly adjusted. Identifying the possibility to expand corporate social responsibility initiatives that may help stakeholders including the environment, the community, and society was one of the implications for good social change. The development of environmentally friendly products, the decrease of carbon emissions, and the management, conservation, and preservation of natural resources and ecological communities are examples of social changes brought about by government catalysts.

### *Recommendations for Action*

The study's results fell short of providing substantial backing for the stakeholder theory on corporate social responsibility. The findings indicated that there was no significant correlation between ROE and ESG activity scores, a notable positive relationship existed between total revenue and ESG activity scores, while an insignificant connection

linked leverage to ESG activities' scoring. Given these mixed outcomes from the research, we cannot conclusively recommend any CSR actions to Accenture leaders based on valid evidence.

Despite potential drawbacks, corporate social responsibility remains a viable idea as certain initiatives can enhance societal and ecological wellbeing, leading to improved financial outcomes. Therefore, it is proposed that Accenture executives must validate expenses of such programs akin to other ordinary business expenditures. Nevertheless, the results obtained through this research do not back investing in CSR undertakings by Accenture leaders solely for enhancing their organization's monetary performance.

If there is adequate evidence to suggest that implementing corporate social programs would benefit society, government agencies and public policy makers may choose to do so. Additionally, distributing the results of this study remains crucial for Accenture leaders and researchers who seek a deeper understanding of the connections between financial performance, firm size, leverage and corporate social responsibility. Publication in academic journals or presentations at professional conferences can help expand research by exploring other variables not studied here; therefore, benefiting scholars, analysts as well as both current and future Accenture leaders alike.

### *Suggestions for Further Research*

The study's results imply that further investigation is necessary to determine the applicability of the correlation between financial performance, firm size, leverage and corporate social responsibility. These findings can offer indispensable direction for Accenture leaders in making well-informed decisions regarding CSR initiatives based on relevant management data. Although this study did not reveal proof confirming the significance of a relationship existing within 2023 U.S. based Accenture company data concerning finance achievement and corporate social accountability; I propose looking into these associations across varied or more extended-time frames since multiple moderating/mediating elements beyond what was tested might positively/negatively impact profitability measurements (Ivanov et al., 2014; Saeidi et al., 2015).

The researchers might have overlooked certain variables that could establish a noteworthy correlation between Accenture financial performance and corporate social responsibility. Future research should incorporate other financial measurement metrics, such as ROA and profit margin which were excluded from this study. Despite analyzing individual variables, the model lacked accuracy in predicting ESG activity scores due to insignificant predictor variables (ROE and leverage). As a result, my findings justify incorporating additional useful factors for comprehending the connection between these two domains.

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## **Compliance with ethical standards**

### *Disclosure of conflict of interest*

The authors declare that they have no conflicting or competing interests related to the publication of this manuscript. There are no financial, personal, or professional relationships with any institutions or products mentioned in the study that could influence the outcome or interpretation of the findings. Additionally, no competing products are involved, and all potential conflicts have been thoroughly evaluated and disclosed. Each author has reviewed and confirmed this statement individually.

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