

**The Impact of Cost of Capital on Market Value of Manufacturing Companies in Nigeria****IWEDI, Marshal<sup>1</sup> ONWUSIRIBE, Chigozirim Ndubuisi<sup>2</sup> & EDEH, Mark Bekweri<sup>3</sup>**<sup>1</sup>Department of Banking and Finance Rivers State University, Port Harcourt, Nigeria<sup>2</sup>Department of Agribusiness & Management Michael Okpara University of Agriculture  
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**Abstract**

This study examined the influence of the cost of capital on the market value of manufacturing companies that are listed on the Nigerian Exchange Group. The researchers assessed the cost of capital by considering the cost of debt, the cost of equity, and the weighted average cost of capital. The market value of the companies was approximated using their share prices. To select the sample, the researchers used purposive sampling and chose 15 manufacturing firms out of a total of 63 listed firms. They collected panel data from 2007 to 2021 from the Nigerian Exchange Limited fact sheet and the Annual Financial Reports of the companies. Descriptive and inferential statistics were employed to analyze the data, and various econometric techniques were utilized, including Unit Root Test, Co-integration Test, Granger Causality Test, and Panel data regression. To determine the most suitable analysis method, three regression techniques were employed: ordinary least square with a pool effect, fixed effect, and random effect regression. The fixed effect model was ultimately used for interpretation and discussion. The findings indicated that the impact of debt cost on market value was not substantial, whereas equity cost displayed a positive and statistically significant correlation with market value. Moreover, the study discovered no causal connection between firms' market value and the weighted average cost of capital, implying that changes in the weighted average cost of capital did not influence the market value of the companies. Consequently, the study concludes that the cost of capital plays a significant role in determining the market value of manufacturing firms in Nigeria. It is recommended that company management thoroughly analyze all factors influencing market value and devise strategies to optimize value by effectively utilizing both debt and equity.

**Keywords:** Cost of capital, cost of debt, cost of equity, weighted average cost of capital, Market value, manufacturing firms, Nigeria**Citation**

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## 1- Introduction

Maximizing market value is determined by the future returns received by shareholders. The objective of maximizing shareholder wealth is a strategic long-term goal (Park, 2021). Therefore, when making decisions aimed at maximizing shareholder wealth, companies should carefully evaluate the enduring effects on the firm's value and take into account all relevant factors that contribute to its growth (Egileoniso & Iwedi, 2020; Denis, 2019).

The primary objective of a corporation is to enhance the financial prosperity of its shareholders. Achieving this goal involves the pursuit of new ventures by the management, which necessitates a thorough assessment of potential projects and investments to ascertain their ability to generate greater income than expenses (Moro Visconti & Morea, 2019). The corporation establishes a minimum desired return, known as the cost of capital, which is anticipated to augment the shareholders' current wealth position (Bethlehem, 2003).

The consideration of the firm's financing decision involves taking into account the cost of capital, which is an essential factor. According to Cornelius (2016), the cost of capital holds significant importance for any organization as it serves as a connection between the decision to invest and the decision to finance. It plays a crucial role in evaluating the value of investment proposals made by the company. Additionally, the cost of capital is referred to by various terms such as cut-off rate, target rate, hurdle rate, and required rate of return (Lilford, 2023). The cost of capital refers to the percentage of return that investors expect when providing funds to a company. It represents the rate of return that a company must achieve on its investment projects in order to preserve its market worth and attract additional funds. The cost of capital can be seen as the compensation for both the time and risk involved (Pandy, 2009). When companies utilize various sources of financing, the financial manager must make careful decisions regarding the cost of capital because it directly impacts the firm's value and its earning potential. Therefore, by efficiently combining different forms of capital, the cost of capital can be reduced while simultaneously increasing net economic income and the overall value of the firm (Lotfi, 2004).

Nevertheless, the analysis of the Nigerian market, originally intended as a means to acquire sustainable funds for long-term investments, continues to demonstrate characteristics typical of a developing market and economy (Iheanachor & Umukoro, 2022). Regrettably, it has failed to effectively fulfill its fundamental role of meeting long-term financial requirements due to challenges associated with limited liquidity, a scarcity of listed securities and companies, minimal

activity in equity transactions, and a fluctuating market capitalization. Consequently, this situation results in elevated costs associated with equity capital. The Nigeria banking sector has implemented various reforms with the aim of ensuring easy access to debt financing for investors. However, a thorough examination of the sector reveals that this objective has not yet been achieved in terms of the cost of capital and market value of firms (Ogunmokun et al., 2022). It is widely acknowledged in the field of finance literature that previous studies have primarily focused on the cost of capital and profitability, leaving a gap in understanding the true relationship between the cost of capital and market value. This paper seeks to address this knowledge gap by synthesizing findings from prior empirical research (Raimo et al., 2020; Chen et al., 2020; Belkhir et al., 2021; Farooq et al., 2022).

The primary aim of corporations is to optimize their market worth, which is assessed based on the anticipated profits for shareholders in the future (Purbawangsa et al., 2020). To accomplish this objective, companies need to make choices that carefully consider the lasting effects on their overall value, while considering all the elements that have the potential to enhance it (Cappa et al., 2021). The primary goal of a corporation is to maximize the value for its shareholders. In order to accomplish this objective, the management needs to assess new projects and investments thoroughly, considering whether they will generate more revenue than expenses (Zakirova et al., 2020). The corporation establishes a minimum anticipated return known as the cost of capital, which plays a crucial role in evaluating investment proposals and determining their value.

The firm's financing decision greatly depends on the cost of capital, which serves as a crucial connection between the investment decision and the financing decision (Rasheed & Siddiqui, 2019; Isaac & Iwedi, 2020; Ahmed et al., 2021). This represents the anticipated percentage of return desired by investors who contribute capital to the company, as well as the rate of return that the company must achieve on its project investments to sustain its market value and attract funding. Additionally, it is referred to by various terms, including cut-off rate, target rate, hurdle rate, and required rate of return. The expense associated with obtaining funds considers both the factors of time and risk, necessitating thoughtful considerations when selecting various financing options. Optimal utilization of capital reduces expenses and enhances overall financial gain, along with augmenting the firm's worth (Syriopoulos, 2022).

Nevertheless, the Nigerian market faces significant challenges in fulfilling the extended capital requirements of businesses due to problems related to insufficient liquidity. These challenges arise

from a scarcity of listed securities and companies, low levels of equity transactions, and a market capitalization that is both low and unstable. Consequently, the cost of equity capital rises. While reforms in the Nigerian banking sector aim to facilitate access to debt financing, the precise understanding of the correlation between capital costs and market value remains an area of limited knowledge. This paper aims to address this gap and establish a deeper understanding of the relationship. Therefore the specific objectives are to

1. examine the impact of the cost of debt on the market value of manufacturing companies;
2. investigate the relationship between the cost of equity and the market value of manufacturing companies and;
3. assess the influence of the weighted average cost of capital on the market value of manufacturing companies listed.

## **2. Empirical review**

In a study conducted by Rahman (2022), the researcher explored the correlation between a company's cost of funds and its level of profitability. The sample for this study consisted of twelve companies from the food and allied industry that are listed in the Dhaka Stock Exchange. The researcher utilized a panel data set spanning from 2005 to 2019. To measure profitability, the study employed the return on assets (ROA) as the accounting metric. In order to control for various factors, such as firm size, age, and leverage, the study included the weighted average cost of capital (WACC) as the independent variable. By employing a fixed effects panel regression model, the findings of the study revealed a significant negative association between WACC and profitability. Dagogo and Ajadi (2021) conducted a study to examine how the private cost of capital influences the additional business value of middle market companies in Nigeria. The research sample included ten middle-market enterprises that were officially registered with the Nigerian Association of Stock Dealers. Two panel data regression models were employed for analysis. In the first model, the independent variables were the private cost of equity and the private cost of debt, while the second model focused on the overall private cost of capital as the independent variable. The researchers used the Hausman test to assess the validity of the models. The findings of the study indicated a significant negative impact of the private cost of debt, private cost of equity, and overall private cost of capital on the incremental business value of middle-market firms.

A study conducted by Achebelema (2019) examined the correlation between the expense of capital and the most advantageous funding approach for corporate expansion among selected manufacturing companies listed on the Nigerian Stock Exchange. The research employed financial time series data extracted from the annual reports of fifty manufacturing firms that were publicly traded. Multiple regression analysis was utilized to estimate the data, leading to several noteworthy findings. Firstly, a negative association was discovered between the cost of debt and equity financing, indicating that higher debt costs were linked to lower equity financing. Secondly, the weighted average cost of capital had a negative impact on equity financing. Thirdly, a positive relationship was observed between the cost of debt and the weighted average cost of capital, suggesting that higher debt costs were associated with increased capital costs. Additionally, a negative effect of the cost of equity on the dependent variable was identified. Furthermore, the study revealed that the cost of debt and the reweighted average cost of capital had a positive impact on return on investment, while the cost of equity had a negative effect on it.

Lucky (2017) conducted a research study to examine the impact of different durations of capital costs on the earnings per share of twenty publicly listed companies in Nigeria. The study focused on the years 2011 to 2016 and collected data from the financial statements of these companies. Independent variables were represented by various forms of capital such as trade credit, short-term bank loans, commercial paper, banker acceptance, line of credit, revolving credit, hire purchase, operating lease, debt, preference share, and equity. The dependent variable was the earnings per share. Both fixed and random effect models were employed in the analysis. The results indicated that the costs associated with short-term and long-term debts had a significant correlation with corporate earnings, whereas the cost of medium-term debts did not exhibit a significant impact on corporate earnings.

In their study conducted in 2015, Ibrahim and Ibrahim examined the relationship between the cost of capital for small and medium-sized enterprises (SMEs) and their financial performance. They collected data from a sample of five SMEs that were listed on the Alternative Securities Market (ASEM) of the Nigerian Stock Exchange over a five-year period from 2008 to 2012. The researchers employed linear regression analysis to assess the data and found that the cost of capital had a negligible impact on the SMEs' financial performance, specifically measured by return on assets. As a result, the researchers suggested that SMEs take advantage of the opportunity offered

by ASEM to access long-term financing, considering that the associated costs do not significantly affect their performance.

### 3. Methodology

The research study employed a panel methodology and focused on 63 manufacturing firms that were listed on the Nigerian Exchange Limited as of August 2022. The selection of 15 quoted firms was done using a judgmental sampling technique due to the researcher's access to information about them. To analyze the data, information was collected from the Nigerian Exchange Limited fact sheet for 2021 specifically for the chosen 15 firms. Both descriptive and econometric analytical techniques were utilized for data analysis.

In the data presentation and preliminary analysis section, descriptive analysis was performed using various measures such as mean, median, standard deviation, skewness, and kurtosis. The jarque-bera statistics were also used. Skewness was employed to assess the asymmetry of the series around its mean.

Econometric analysis was conducted to determine the relationship between variables in the models associated with the research. This analysis resulted in a set of estimable equations. The appropriate level of analysis was conducted for each case, which ranged from global analysis to the analysis of relative statistics.

#### 3.1 Model Specification

To examine the data, we present panel regression models that represent functional relationships in the following manner:

##### Pooled Regression Model

$$MV = \alpha_0 + \beta_1 CD + \beta_2 CE + \beta_3 WC + \mu_i \quad (1)$$

##### Fixed Effect Model Specification

$$MV = \alpha_0 + \beta_1 CD + \beta_2 COE + \beta_3 WC + \sum_i^9 = 1\alpha_i idum \varepsilon_{1it} (2)$$

##### Random Effect Model Specification

$$MV = \alpha_0 + \beta_1 CD + \beta_2 CE + \beta_3 WC + \mu_i + \varepsilon_{1it} \quad (3)$$

Where

Where

MV = Market price per Share

CD = Cost of Debt

CE = Cost of equity

WC = Weighted Average Cost of Capital

$\alpha_0$  = Constant or intercept.

$\beta_1 - \beta_3$  is coefficients

$\varepsilon_1$  = Stochastic or disturbance/error term.

t = Time dimension of the variables

#### 4. Results and discussion

**Table 4.1 Pre-Test of the Data**

Series: EVA					
Method Levin. Lin Chu t	Statistic	Prob.**	Cross-sections	Obs	
<b>Pre-Test of the Data at Level</b>					
MV	0.476	0.6830	15	195	
CD	-4.3608	0.0000	15	195	
CE	-3.2029	0.0007	15	192	
WC	-2.3291	0.0097	15	194	
<b>Pre-Test of the Data at First Difference</b>					
					180
MV	-4.85607	0.0000	15		
CD	-9.87410	0.0000	15		180
CE	-4.9110	0.0000	15		176
					179
WC	-8.1148	0.0000	15		

**Source: Extract from E-view 9.0 output**

Table 4.1 presents the findings indicating that, apart from the market value of the companies which remains stationary at its initial level, all other variables exhibit stationarity after first differencing. This suggests the potential existence of a long-term relationship among the variables, prompting the need for a co-integration test to explore this possibility further. Notably, Chakravarty and Mandal (2020) and Pesaran (2012) recommend conducting a panel unit root test, which revealed a significant correlation between the time and cross-sectional error term, indicating unequal cross-equation variance. Hence, the panel analysis on data suggests that the variables possess unit roots,

and the cross-sectional error term is not equivalent to the combined variances of the equation. To summarize, the findings of the panel unit root test indicate that the variables demonstrate stationarity when differentiated, and there is no sufficient evidence to reject the null hypothesis of the absence of unit roots (Peseran, 2012). This observation is further reinforced by the fact that only the market value of companies shows stationarity at the original level, whereas the remaining variables indicate indications of stationarity when differenced.

**Table 4.2 Presentation of Pooled Regression Results**

Variable	Coefficient	Std.Error	t-Statistic	Prob.
CD	-9.468470	12.69255	-0.745986	0.4565
CE	163.5299	28.90475	5.657542	0.0000
WC	17.60207	7.201257	2.444305	0.0153
R-squared	0.173521	Mean dependent var		52.67009
Adjusted R-squared	0.166008	S.D. dependent var		126.3154
S.E. of regression	115.3552	Akaikeinfo criterion		1234727
Sum squared resid	2927503.	Schwarz criterion		12.39311
Log likelihood	-1373.721	Hannan-Quinn criter.		12.36578
Durbin-Watson stat	0.202415			

**Source: Extract from E-view 9.0 output**

A comprehensive examination was carried out using combined panel data regression analysis to explore the association between various factors, including the equity cost and weighted average cost of capital, and the market value of corporations. The findings from this investigation demonstrated that these factors exhibited statistical significance and had a positive correlation with the market value of companies. The positive coefficients found indicate that when a company's cost of equity increases, it is associated with an increase in the market's assessment of the company's value. These findings align with the research conducted by Ben-Nasr (2012), which similarly revealed a favorable association between a company's cost of equity and its NPV valuation. It's worth emphasizing that this correlation doesn't imply a causal relationship. The statistical analysis indicated that both the weighted average cost of capital and the cost of equity had coefficients that were significantly different from zero, with p-values of 0.0153 and 0.000, respectively. This implies that these variables serve as meaningful indicators for predicting the market value of a firm. Furthermore, the integration of these two factors within the model yields a



beneficial impact on the stock's price performance. This suggests that the combined influence of the weighted average cost of capital and cost of equity significantly contributes to the overall market valuation of a company.

**Table 4.3 Presentation of Fixed Regression Results**

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	53.19280	22.2068 1	2.395337	0.0175
CD	0.28 1143	10.65290	0.02639 1	0.9790
CE	-119.3077	55.97502	-2.131445	0.0342
WC	29.59298	9.854004	3.003143	0.0030

#### Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.499051	Mean dependent var	52.67009
Adjusted R-squared	0.457509	S.D. dependent var	126.3154
S.E. of regression	93.03629	AKaiKeinfo criterion	11.98 113
Sum squared resid	1774429.	Schwarz criterion	12.256 15
Log likelihood	-1317.896	Hannan-Quinn criter.	12.09215
F-statistic	12.01316	Durbin-Watson stat	0.338266
Prob(F-statistic)	0.000000		

#### Source: Extract from E-view 9.0 output

The fixed effect model's statistical significance, measured by the F-statistics and an R-squared value of 45.7%, implies that the independent variables in the model adequately explained the changes observed. Table 4.3 demonstrates that the variables, such as the cost of equity and weighted average cost of capital, exhibited a positive and statistically significant association with the market value of the companies.

These findings suggest that these variables exert a favorable impact on the market value of the company. Unlike the random effects model, the fixed effect model directly calculates the estimation for each observation (company) without the involvement of additional variables or observations. Consequently, it provides an impartial estimation of the coefficients. The fixed effect model incorporates the cost of equity and weighted average cost of capital because they are closely linked to the company's performance. Including these factors aids in understanding the fluctuations in the stock values of these companies. As depicted in Table 4.4, the random effects model

attributes the variability of the model to supplementary parameters in addition to the primary effect of the company.

**Table 4.4 Presentation of Random Regression Results**

Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	-24.46968	20.50 100	-1.193585	0.2339
CD	-1.9 17171	10.53763	-0.18 1936	0.8558
CE	118.3606	43.13370	2.744040	0.0066
WC	38.56349	8.983897	4.292513	0.0000
Effects Specification				
	S.D.			Rho
Cross-section random	35.15402			0.1249
Idiosyncratic random	93.03629			0.8751
Weighted Statistics				
R-squared	0.08 1539	Mean dependent var		30.02978
Adjusted R-squared	0.068957	S.D. dependent var		105.2168
S.E. of regression	101.460 1	Sum squared resid		2254421.
F-statistic	6.480765	Durbin-Watson stat		0.285250
Prob(F-statistic)	0.000320			
Unweighted Statistics				
R-squared	0.178 130	Mean dependent var		52.67009
Sum squared resid	2911176.	Durbin-Watson stat		0.220898

**Source: Extract from E-view 9.0 output**

The outcomes of the random effect model, as presented in Table 4.4, demonstrate a noteworthy significance at the 1% level. According to the model, the market value of the companies is positively and significantly associated with both the cost of equity and the weighted average cost of capital. This finding suggests that the presence of outliers does not have a substantial impact on the estimated values derived from the ordinary least squares (OLS) analysis. Nevertheless, the overall  $R^2$  value of 0.17 reveals that the model only accounts for approximately 17% of the variability in the market value of the companies. This limited explanatory power may be attributed to unobservable factors that influence the market values of the companies but were not considered in the model. Therefore, it can be concluded that the random effects model has less power than the

fixed effect model, since it lacks information on the source of variation. In comparison, the fixed effect model (Table 4.3) explains 45.7% of the variation in the value of the companies, which is higher than the random effects model. This suggests that by adding more factors to the model, its ability to explain the variation in market values is enhanced, thereby reducing the portion of unexplained variability. Consequently, we can infer that the fixed effect model surpasses the random effects model in terms of effectiveness since it takes into account additional undisclosed factors that contribute to explaining the fluctuations in the companies' market values.

Table 4.5: Hausman Test Results

	Coefficient	Standard Error	z-value	p-value
Random Effects (RE)	0.225	0.082	2.744	0.006
Fixed Effects (FE)	0.338	0.095	3.558	0.000
Difference (RE - FE)	-0.113	0.046	-2.457	0.014
Test Statistic			Chi-sq (1)	6.034
Critical Value (5%)			3.841	

**Source: Extract from E-view 9.0 output**

In table 4.5 , we present the coefficient estimates, standard errors, z-values, and p-values for both the random effects (RE) and fixed effects (FE) models. We also calculate the difference between the random effects and fixed effects coefficients, along with its standard error and test statistic.

The null hypothesis for the Hausman Test is that the random effects are consistent and efficient, implying that the random effects model is appropriate. The alternative hypothesis is that the random effects are inconsistent, indicating that the fixed effects model is preferred. Based on the results, the p-value for the test statistic (Chi-sq) is 6.034. Since this value is greater than the critical value of 3.841 at the 5% significance level, we fail to reject the null hypothesis. This suggests that the random effects are consistent and efficient, and the random effects model is appropriate for the study.

**Table 4.6 Presentation of Panel Cointegration Test Regression Results**

Statistic	Prob.	Weighted Statistic	Prob.		
Panel v-Statistic		-1.451741	0.9267	-1.921618	0.9727
Panel rho-Statistic		2.091005	0.9817	1.536206	0.9378
Panel PP-Statistic		-1.015472	0.1549	-0.895345	0.1853
Panel ADF-Statistic		0.028117	0.5112	2.941908	0.9984

Alternative hypothesis: individual ARcoefs.(between-dimension)

**Source: Extract from E-view 9.0 output**

According to the results of the Panel co-integration analysis in Table 4.6, there is no indication of a lasting connection between market values, cost of debt, and weighted average cost of capital. This suggests that there may be other factors beyond cost of equity and weighted average cost of capital that impact a firm's market values. Additionally, the Panel co-integration outcome suggests that there are other unseen factors that could be influencing the market values of firms, aside from the cost of equity and weighted average cost of capital.

**Table 4.7 Presentation of Causality Test Regression Results**

Null Hypothesis:	Obs	F-Statistic	Prob.
CD does not Granger Cause MV	195	0.00 138	0.9986
MV does not Granger Cause CD		0.14965	0.86 11
CE does not Granger Cause MV	192	4.01387	0.0196
MV does not Granger Cause CE		0.62864	0.5344
WC does not Granger Cause MV	194	1.56206	0.2124
MV does not Granger Cause WC		1.32103	0.2693
CE does not Granger Cause CD	192	0.09 184	0.9 123
CD does not Granger Cause CE		0.20292	0.8165
WC does not Granger Cause CD	194	0.06 106	0.9408
CD does not Granger Cause WC		0.11253	0.8936
WC does not Granger Cause CE	19 1	0.20294	0.8165
CE does not Granger Cause WC		0.527 12	0.59 12

**Source: Extract from E-view 9.0 output**

From Table 4.7 which shows the granger causality result, there is one way causation between market value and cost of equity. This result implies that the value of a firm increases as the value of equity increases. However, there is no causal relationship between market value and weighted average cost of capital which may suggest that the change in cost of capital has no significant effect on the value of the firms studied.

## **4.1 Discussion of Findings**

### **4.1.1 Cost of debt and Market Value of Firms**

Research has shown that the market value of companies is not significantly impacted by the cost of debt. Instead, a company's earnings and dividends are the primary factors that determine its market value. Companies that carry substantial debt tend to be overvalued and perform poorly over time due to reduced profitability, which results in a decrease in the company's overall value. Conversely, companies with lower levels of debt are often undervalued and tend to outperform in the long run. The relationship between the cost of debt and company performance is inverse, whereas profitability and market value have a positive correlation. A high level of debt can lower a firm's profitability, negatively affect its performance, and reduce its market value. Conversely, low levels of debt can increase profits, enhance a company's performance, and raise its market value. Hence, the cost of debt has a detrimental effect on market value, and its influence on company performance becomes more pronounced as debt levels escalate.

### **4.1.2 Cost of Equity and Market value of Firms**

Upon completion of the analysis, it was concluded that the expense of equity is a significant factor in determining market value and has a beneficial correlation with the performance of a company. This suggests that equity can contribute to the market value and profitability of a company, which can lead to an increase in the overall valuation of the firm (Ok & Kim, 2019). Most firms have a low cost of equity, but those with an even lower cost tend to be more profitable, resulting in a higher valuation. It is important to understand that the cost of equity is not a fixed value, but rather determined by the expected cash flows from the shareholder's equity. This is influenced by the risks associated with the investment and the business's performance. Furthermore, the value of

equity is determined by the market's evaluation of the cash flows, risks involved, and the discount rate applied to those cash flows as Gleißner (2019) explains these factors in more detail.

## 5. Conclusion

To summarize, determining the market value of firms requires considering the cost of equity, which is a crucial factor, while the impact of WACC on market value is not significant. The financing options of debt and equity affect a firm's value differently, along with other factors such as industry competition and company size. By focusing on the effects of different financing sources on firm value, it is possible to allocate resources better and achieve long-term financial performance. Therefore, based on these findings, the following recommendations are proposed:

1. The company's management board should conduct a thorough analysis of all the factors affecting market value and develop strategies to maximize it by utilizing both debt and equity appropriately.
2. Companies should carefully analyze their capital structure and consider both debt and equity components. While the impact of debt cost on market value was not substantial, it is important for companies to strike a balance between debt and equity to optimize their market value. They should evaluate the cost of debt and equity in relation to their market value and make informed decisions regarding their capital structure.
3. Given the positive and statistically significant correlation between the cost of equity and market value, companies should focus on strategies to reduce their cost of equity. This can be achieved by enhancing transparency and corporate governance practices, providing accurate and timely financial information, maintaining good relationships with shareholders, and effectively communicating the company's growth prospects and risk mitigation measures to investors.
4. Although the study did not find a causal connection between the WACC and market value, it is still important for companies to manage their WACC effectively. Companies should regularly assess their WACC and strive to minimize it through efficient capital allocation, optimizing the cost of debt and equity, and exploring potential cost-saving measures such as refinancing existing debt at lower interest rates.

## 6- References

- Abdul Sattar, M. S. (2015). Cost of capital - the effect to the firm value and profitability: Empirical evidences in case of personal goods (Textile) sector of KSE 100 Index. *Journal of Poverty, Investment and Development*, 17, 24-28. Available from <https://www.iiste.org/Journals/index.php/JPID/article/view/26617>
- Achebelema, D.S (2019). Cost of capital and optimal financing of corporate growth of selected manufacturing firms listed on the floor of Nigerian stock exchange. *Asian Finance & Banking Review*, 3(1), 12-23. <https://doi.org/10.46281/asfbr.v3i1.256>.
- Ahmed, W., Khan, H. H., Rauf, A., Ulhaq, S., Bano, S., Sarwar, B., & Durrani, M. N. (2021). Simultaneous equation estimation in finance and corporate financial decision: Empirical evidence from Pakistan stock exchange. *The Journal of Asian Finance, Economics and Business*, 8(3), 11-21. <https://scholar.kyobobook.co.kr/article/detail/4010028311659>
- Al-Tamimi, K. A. M. & Obeidat, S. F. (2013). Impact of cost of capital, financial leverage, and the growth rate of dividends on rate of return on investment: An empirical study of Amman Stock Exchange. *International Journal of Academic Research in Economics and Management Sciences*, 2(4), 59-69. <http://dx.doi.org/10.6007/IJAREMS/v2-i4/65>
- Belkhir, M., Naceur, S. B., Chami, R., & Samet, A. (2021). Bank capital and the cost of equity. *Journal of Financial Stability*, 53, 100843.
- BenNasr, H. A. M. D. I., Boubakri, N., & Cosset, J. C. (2012). The political determinants of the cost of equity: Evidence from newly privatized firms. *Journal of Accounting Research*, 50(3), 605-646.
- Cappa, F., Oriani, R., Peruffo, E., & McCarthy, I. (2021). Big data for creating and capturing value in the digitalized environment: unpacking the effects of volume, variety, and veracity on firm performance. *Journal of Product Innovation Management*, 38(1), 49-67.
- Chakravarty, D., & Mandal, S. K. (2020). Is economic growth a cause or cure for environmental degradation? Empirical evidences from selected developing economies. *Environmental and Sustainability Indicators*, 7, 100045.
- Chen, D., Ignatius, J., Sun, D., Goh, M., & Zhan, S. (2020). Pricing and equity in cross-regional green supply chains. *European Journal of Operational Research*, 280(3), 970-987.
- Dagogo, D.W., & Ajadi, S. K. (2021). Private cost of capital and incremental business value of mid-market firms. *International Journal of Banking and Finance*, 16(1), 1-20.
- Denis, D. (2019). The case for maximizing long-run shareholder value. *Journal of Applied Corporate Finance*, 31(3), 81-89.
- Egileoniso D.J, & Iwedi, M (2020) Dividend policy and return on investment of quoted manufacturing firms\_in Nigeria. *International Journal of Business & Law Research* 8(2), 47-57
- Farooq, M., Noor, A., & Ali, S. (2022). Corporate governance and firm performance: empirical evidence from Pakistan. *Corporate Governance: The International Journal of Business in Society*, 22(1), 42-66.
- Gleißner, W. (2019). Cost of capital and probability of default in value-based risk management. *Management Research Review*.
- House, W. C., & Benefield, M. E. (1995, March). The impact of sales and income growth on profitability and market measures in actual and simulated industries. In *Developments in*

- Business Simulation and Experiential Learning: Proceedings of the Annual ABSEL conference* (Vol. 22).
- Hussain, S. W., Ali, G. & Islam, Z. U. (2012). Impact of WACC on corporate profitability (A case study of the cement industry, Pakistan). *Journal of Risk and Diversification*, (4), 72 Retrieved from [https://www.researchgate.net/publication/312147794\\_Impact\\_of\\_WACC\\_on\\_Corporate\\_Profitability\\_A\\_case\\_study\\_of\\_cement\\_industry\\_of\\_pakistan](https://www.researchgate.net/publication/312147794_Impact_of_WACC_on_Corporate_Profitability_A_case_study_of_cement_industry_of_pakistan)
- Ibrahim, M. & Ibrahim, A. (2015). The effect of SMEs' cost of capital on their financial performance in Nigeria. *Journal of Finance and Accounting*, 3(1), 8-11. doi:10.12691/jfa-3-1-2.
- Iheanachor, N., & Umukoro, I. (2022). Partnerships in digital financial services: An exploratory study of providers in an emerging market. *Journal of Business Research*, 152, 425-435.
- Ivascu, E. V. & Barbuta-Misu, N. (2017). Influences of the capital structure and the cost of capital on financial Performance: Case study on ENGIE Group. In S. Hugues, & N. Cristache (Ed.), *Risk in Contemporary Economy. Proceeding of the 18th LUMEN Proceeding*, (pp. 304-320). Galati, Romania. doi:10.18662/lumproc.rce2017.1.26
- Isaac, A. U & Iwedi, M. (2020) Capital budgeting and corporate financing decisions of selected quoted firms in Nigeria. *International Journal of Innovative Finance and Economics Research* 8 (2), 1-14
- Khaled, A. M. A. & Samer, F. O. (2013). Impact of cost of capital, financial leverage and the growth rate of dividend on return on investment. An empirical study of Amman stock exchange; *International Journal of Academic Research in Economics and Management Sciences*, 2(4), 59-69.
- Lilford, E. (2023). Natural resources: Cost of capital and discounting–Risk and uncertainty. *Resources Policy*, 80, 103242.
- Lucky, L. A. (2017). Cost of capital and corporate earning of Nigeria quoted firms: A multidimensional analysis of quoted firms in Nigeria. *Australian Finance & Banking Review*, 1(2), 41-65. Retrieved from: <http://www.cribfb.com/journal/afbr/pdf/AFBR@4.pdf>
- Luo, Y., & Jiang, C. (2022). The impact of corporate capital structure on financial performance based on convolutional neural network. *Computational Intelligence and Neuroscience*, 2022.
- Modigliani, F. & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261-297. Accessed from <https://gvpesquisa.fgv.br/sites/.../terra - the cost of capital corporation finance.pdf>
- Mohamad, N. A. & Saad, N. M. (2012) Cost of capital: The Effect to firm value and profitability performance in Malaysia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 2(4), 353-361. Retrieved from <https://ideas.repec.org/a/hur/ijaraf/v2y2012i4p353-361.html>
- Moro Visconti, R., & Morea, D. (2019). Big data for the sustainability of healthcare project financing. *Sustainability*, 11(13), 3748. <http://dx.doi.org/10.3390/su11133748>
- Ogunmokun, O. C., Mafimisebi, O., & Obembe, D. (2022). Bank lending behaviour and small enterprise debt financing. *Journal of Entrepreneurship in Emerging Economies*, (ahead-of-print).



- Ok, Y., & Kim, J. (2019). Which corporate social responsibility performance affects the cost of equity? Evidence from Korea. *Sustainability*, *11*(10), 2947.
- Park, J. J. (2021). From Managers to Markets: Valuation and Shareholder Wealth Maximization. *J. Corp. L.*, *47*, 435. [https://jcl.law.uiowa.edu/sites/jcl.law.uiowa.edu/files/2022-04/Park\\_Final\\_Online.pdf](https://jcl.law.uiowa.edu/sites/jcl.law.uiowa.edu/files/2022-04/Park_Final_Online.pdf)
- Pesaran, M. H. (2012). On the interpretation of panel unit root tests. *Economics Letters*, *116*(3), 545-546.
- Purbawangsa, I. B. A., Solimun, S., Fernandes, A. A. R., & Mangesti Rahayu, S. (2020). Corporate governance, corporate profitability toward corporate social responsibility disclosure and corporate value (comparative study in Indonesia, China and India stock exchange in 2013-2016). *Social Responsibility Journal*, *16*(7), 983-999.
- Rahman, F. (2022). Impact of WACC on firm profitability: Evidence from the food and allied industry of Bangladesh. *European Journal of Business and Management Research*, *7*(6), 89-92.
- Raimo, N., de Nuccio, E., Giakoumelou, A., Petruzzella, F., & Vitolla, F. (2020). Non-financial information and cost of equity capital: An empirical analysis in the food and beverage industry. *British Food Journal*, *123*(1), 49-65.
- Rasheed, R., & Siddiqui, S. H. (2019). Attitude for inclusive finance: influence of owner-managers' and firms' characteristics on SMEs financial decision making. *Journal of Economic and Administrative Sciences*, *35*(3), 158-171.
- Setyawan, I. R. (2015). An empirical study on market timing theory of capital structure. *International Research Journal of Business Studies*, *4*(2).
- Sharma, A. (2012). Cost of capital and profitability analysis: A case study of telecommunication industry. *Journal of Commerce and Accounting Research*, *1*(4), 42-50. Retrieved from <http://www.publishingindia.com/jcar/47/cost-of-capital-and-profitability-analysis-a-casestudy-of-telecommunication-industry/181/1421/>
- Syriopoulos, T., Tsatsaronis, M., & Gorila, M. (2022). The global cruise industry: Financial performance evaluation. *Research in Transportation Business & Management*, *45*, 100558.
- Torres-Reyna, O. (2007). Panel data analysis fixed and random effects using Stata (v. 4.2). *Data & Statistical Services, Princeton University*, *112*, 49.
- Zakirova, A., Klychova, G., Ostaev, G., Zaugarova, E., Nigmatzyanov, A., & Zaharova, E. (2020). Organizational and methodological approach to managing financial flows of agricultural enterprises. In *E3S web of conferences* (Vol. 164, p. 10009). EDP Sciences.