

Debt-Equity Ratio, CEO Power and Financial Performance of Listed Companies at the Nairobi Securities Exchange, Kenya

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ABSTRACT

Firm financial performance is essential for corporate survival and prosperity. Financial leverage may be used to enhance corporate financial performance, but it can also occasion financial distress and bankruptcy if not carefully managed. At the Nairobi Securities Exchange, a number of firms face poor financial performance, financial distress, and weak corporate governance, commonly associated with excessive leverage and bankruptcy. Recent corporate finance research shows increasing importance of variables, omitted in prior corporate finance studies, with more practical significance to practicing managers such as debt slack and corporate governance. The purpose of this study was to determine the moderating effect of Chief Executive Officer Power on the relationship between financial leverage and financial performance of listed companies at the Nairobi Securities Exchange. The specific objective was to determine the conditional effect of Chief Executive Officer Power on the relationship between Debt-Equity ratio and firm financial performance. The study was grounded on dynamic trade-off, pecking order, agency, and upper echelon theories. Positivist research paradigm with a descriptive research design using a linear regression model on Panel data obtained from a survey of 38 listed companies at Nairobi Securities Exchange over the period 2010 to 2019 was used. The data was mined from financial statements filed at the Nairobi Securities Exchange. Controlling for Firm size, Sales growth and operational efficiency, the study found Chief Executive Officer Power to significantly moderate the relationship between Debt/Equity ratio and Return on Equity ($\Delta R^2 = +0.1314; \beta = 0.1019455, p=0.000$), with scope for lower levels enhancing Return on Equity while higher levels dampening. The study recommended a low Chief Executive Officer Power configuration mandate. The study contributes to theory development by establishing executive power contingency to theories relating financial leverage to firm financial performance; to knowledge by developing a tool for measurement of Executive power; and to policy by providing empirical evidence for regulation of executive power. The study scope was limited to structural and shared ownership sources of Chief Executive Officer Power and recommends further research incorporating personal sources of power.

Keywords: Chief Executive Officer Power, Debt-Equity Ratio, Return on Equity, Financial Performance, Financial Leverage.

Submitted : April 04, 2022

Published : April 28, 2022

ISSN: 2507-1076

DOI: 10.24018/ejbm.2022.7.2.1391

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I. INTRODUCTION

Financial performance not only measures a firm's value proposition to stakeholders, but also its health: the ability to survive and prosper into the future (Naz *et al.*, 2016; Orlitzky *et al.*, 2003). Financial performance depends on a firm's responses to environment changes including threats and opportunities which not only require sufficient economic resources but also flexibility in the resource deployment. Supplementary capital may be obtained from either debt or equity or both. However, when time is of the essence, additional capital is sourced from internal equity or debt. According to Modigliani and Miller (1963), Myers and Majluf (1984), Jensen and Meckling (1976), debt is used for a variety of reasons including; to supplement capital needs,

leverage return on equity, and assure efficient use of free cash flows or as a temporary source of finance before long-term equity can be raised. However, the use of debt entails the risk of financial distress, liquidity crisis and bankruptcy. It also exposes a firm to higher agency cost of debt, financial inflexibility, lost investment opportunities and underinvestment (Ang *et al.*, 2019; Myers, 1977). A firm's stakeholders are all aware of these negative consequences and closely monitor the levels of debt-equity ratio. When making a decision on the use of debt, the primary concern of management are variables affecting debt indentures such as debt buffer and availability of finance. Debt/equity ratio, a managerial discretionary variable subject to the corporate control environment, is not only of secondary concern but also inconsistent with higher managerial discretionary power

(Gormley & Matsa, 2016; Van Essen *et al.*, 2015). Financial performance is a cardinal responsibility of a firm's CEO for which discretionary powers are essential. However, this power can be diverted, and necessarily limited to corporate control (Fama & Jensen, 1983; Jensen & Meckling, 1976; Van Essen *et al.*, 2015).

At the NSE in recent times, a number of listed firms faced poor financial performance, liquidity crises, weak corporate control, and bankruptcies threats (CMA, 2019; Juma, 2019; Anyanzwa, 2018). Extant research shows that adequately financed, controlled, and directed corporations optimally deliver firm objectives to all stakeholders (Aras & Crowther, 2008; Maher & Andersson, 2000; Škare & Golja, 2014; Škare & Hasić, 2016). Whereas the use of debt helps lever a firm's investment in assets and return on equity, excessive use, and partly poor corporate governance and control arising from inappropriate power balance between the executive represented by CEO and the board of directors, results in a liquidity crisis, financial distress, and bankruptcy. This study, therefore, sought to establish the moderating effect of CEO Power on the relationship between Debt-Equity ratio, and financial performance, of listed companies on the Nairobi securities exchange.

II. THEORETICAL AND EMPIRICAL LITERATURE

A. Theoretical Foundation and Literature

This study considered dynamic trade-off, pecking order, Agency, and upper echelon theories, discussed hereafter, relevant to the discourse.

Dynamic Trade off Theory is a family of models that explain the investment finance behavior of firms over a multi-period time-space taking into consideration several macro-economic constraints. The pioneer theory in this family is Stiglitz (1973) static equilibrium theory; he considers corporate and personal taxes, other factors to remain constant and concludes that in the long run, it's economical to maximize the use of retained earnings, and the excess of investment over retained earnings to be financed by debt due to tax savings. The basic model has been improved through consideration of other macroeconomic variables. Fischer, Heinkel, and Zechner (1989) dynamic equilibrium theory considers bankruptcy costs, the uncertainty of returns, taxes, and transaction costs, concludes that firms would not rebalance to target leverage frequently but rather allow it to drift from the target up to upper and lower limits before discrete rebalancing action. The drift explains the diversity in leverage levels in the industry and the inverse relationship between profitability and leverage. Roberts and Leary (2004) confirm that at the lower leverage limit a firm rebalances using debt and at the upper limit equity.

According to Myers (1984) and Myers and Majluf (1984), a firm follows the pecking order of finance if it prefers internal financing to external and, in the case of external finance, debt to equity. Pecking order theory proposes a financing hierarchy based on adverse selection as proposed by Myers and Majluf (1984). Firms only sell shares when overvalued due to information asymmetry and after reaching exogenous debt limit (Agca & Mozumdar, 2004). According to Cadsby *et al.* (1990) in Frank and Goyal (2008), firms

consider equity issues after exhausting opportunities for retained earnings and riskless debt. Whether a firm issues equity or not, depends on the market valuation of the firm's equity: if the shares are severely undervalued due to information asymmetry, the firm skips positive NPV projects. Myers (1984) and Myers and Majluf (1984) consider risky debt to lie between riskless debt and equity in the pecking order of finance.

Whereas dynamic tradeoff theory explains the diversity in leverage within an industry and the persistence of perverse leverage performance relationships, Pecking order theory underscores the significance of debt and the circumstances of its dominance.

Agency theory explains manager behavior in different circumstances in the organization as subject to the manager's self-interest and corporate control environment. Bendickson *et al.* (2016), observe that long before the formal documentation of agency theory by Jensen and Meckling (1976) and later by Fama (1980), and Fama and Jensen (1983), the characteristic self-interest behavior of corporate managers had long been observed by Adam Smith (1776) and Berle and Means (1932), in organizations where ownership is divorced from management. Jensen and Meckling (1976) expound on the theory of agency relationship, the embedded agency conflict, and the resulting agency costs. The theory posits that in a contract where one or more persons (principal(s) engage another person (agent) to perform some service involving delegated decision making authority to the agent, in case both parties to the contract are utility maximizers, it is rational to expect that the agent will not always act in the best interest of the principal and that, the principal cannot reduce the divergence in interests at no cost nor can it be eliminated fully. The full cost of agency problem is the sum of the cost of incentives and monitoring incurred by the principal to reduce the agency costs, bonding costs incurred by the agents, and the residual loss in principal welfare.

According to Upper Echelon theory, organizational outcomes consisting of strategic choices and performance levels are partially determined by the personal background characteristics of its top management (Hambrick & Mason, 1984). Until this theory was formally presented most organization studies explained the major organizational decisions and outcomes purely on the basis of techno-economic principles. This theory explains that; to the extent top management are allowed discretion in decision making, their organization's actions or strategic choices are the results of an interplay between the cognitive and value base of the top managers and the technical-economic job requirements (Hambrick & Mason, 1984). The theory is premised on bounded rationality in complex or strategic decision-making situations which provides space for idiosyncratic decisions or decisions influenced by personal perception arising from the interaction of the manager's cognitive and value base, and the environmental stimuli. While Upper echelon theory explains the contemplation of manager impact on strategic choices and outcomes of the organization, agency theory explains the systematic bias in managerial choices.

B. Empirical Literature

Manager's impact on corporate performance depends on the interaction between manager characteristics and corporate variables. According to Adams, Almeida, and Ferreira (2005), executives can only impact firm outcomes if they have influence over important firm decisions. Agency theory posits that being inherently risk-averse, managerial power is negatively correlated to leverage and positively correlated to the variability of stock returns arising from the direct impact of manager characteristics on firm decisions (Adams *et al.*, 2005; Fama & Jensen, 1983).

According to Gormley and Matsa (2016); Jensen and Meckling (1976), due to career and monetary benefits consideration, managers behave in a more risk-averse way than is in the best interest of more diversified shareholders. According to agency theory, managers face the same odds as debt holders. As long as the firm is successful, they receive fixed payoffs but in the event of bankruptcy, bears full consequences such as career and income loss. Consequently, the manager's interest is naturally aligned with debt holders and would avoid risk-taking such as risky projects: high risk-high return projects, and leverage.

According to Fama and Jensen (1983), the age-old agency conflict inherent in corporations where residual risk bearing is divorced from decision making is solved by a decision system that separates management from the control of strategic decisions at all levels of the organization. Modeling corporate management on the decision system, the board of directors' exercises control over strategic decisions by approval and monitoring of implementation, while the CEO heads the management team that initiates and implements all strategic decisions. The centrality of the CEO in the initiation and implementation of strategic decisions that deliver corporate value cannot be overemphasized (Daily & Johnson, 1997; Hambrick & Mason, 1984). According to Adams *et al.* (2005); Hambrick and Mason (1984) the CEO require discretionary powers to make many strategic choices, amongst which financial leverage is one, that together impacts the organization's outcomes including financial performance.

Debt-equity ratio presents the proportion of capital that is contributed by creditors and the composite debt characteristic of the firm. The total debt may influence financial performance through a differential between ROCE and cost of capital or through the effect of leverage on agency cost of debt and the related discount rate or efficient use of free cash flows. Managers are generally risk averse and would prefer low D/E ratio to High D/E ratio (Jensen & Meckling, 1976). D/E ratio focuses on the risk of financial distress or technical insolvency when total debt is used rather than Long-term debt which focuses on bankruptcy insolvency. A financially distressed firm can be restructured rather than dissolution and need not be bankruptcy insolvent.

III. CONCEPTUAL FRAMEWORK

A. Conceptual Framework

Conceptual framework, according to Kombo and Tromp (2006); Wanjere *et al.* (2021), is the relationship that exists between broad ideas in a field of study applied in the

presentation of relationships in a study. The study conceptualized, CEO Power to moderate the relationship between Debt-Equity ratio and financial performance of listed companies at the Nairobi Securities Exchange as presented in Fig. 1.

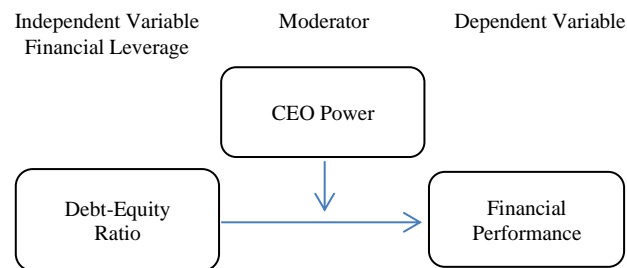


Fig. 1. Conceptual Framework. Source: Researcher, 2021.

B. Conceptual Hypothesis

The hypothesis was generated from the research objective and the conceptual framework as stated:

H₀₁: CEO Power has no significant moderating effect on the relationship between debt ratio and firm financial performance.

IV. METHODOLOGY

The research adopted a positivist research paradigm which allowed the researcher to assume the independent existence of the research phenomenon and to separate ontological process from epistemological matters (Aliyu *et al.*, 2014; S. Kim, 2003; Wardlow, 1989). Preferred for its ability to ensure subject-object dualism, the descriptive research design was applied to obtain information from listed companies regarding financial leverage, CEO power and financial performance and inferential statistical employed to deduce knowledge from the observations (Fosu, 2013; McConnell & Servaes, 1995; Salamba, 2015; Yapa Abeywardhana, 2016).

The study was conducted in Kenya, among companies listed on the Nairobi Securities Exchange. The listed companies were preferred due to the availability of public access to annual financial reports, filed with the securities exchange under a mandate. The study population consisted of all the 63 firms listed at the NSE on 31st December 2018. To enhance the statistical sample size, 10 year panel data was employed for the period from the financial year 2010 to 2019 (Memon *et al.*, 2020). However, firms with less than eight years of financial reports were omitted from the study to ensure a strongly balanced panel data sample size for statistical efficiency (Bonazzi & Iotti, 2014; Mukras, 2015).

Secondary data collection sheet was used to collect data for each financial period from 2010 to 2019. The requisite parameters were then computed from the collected data. The study variables included firm financial performance: the dependent variable, measured as ROE; Financial Leverage: the independent variable, measured as Deb-Equity ratio, and CEO Power: the moderator measured using CEO power index and three covariates: Firm size, Sales Growth, and firm operational efficiency, which were thought to confound the effect of leverage on firm financial performance.

Financial performance closely associates first-order

performance indicators consisting of growth, profitability, and market value. Profitability not only reflects managerial efficiency but also the firm's internal return generation efficiency. It was preferred due to its sensitivity to both internal factors as well as managerial factors. Financial performance was therefore measured as ROE. Other studies that have used this measure include (Leon, 2013; Martis, 2013; Muhammad *et al.*, 2014; Omollo *et al.*, 2016). Financial leverage is the use of fixed charge capital to increase investment in assets and return on equity (Abubakar, 2015; Ahmad *et al.*, 2015). It results in an increasing risk of financial distress. The overall financial risk position given by total debt to total equity is fundamental to estimating the risk of insolvency. This study measured financial leverage as Debt-Equity ratio. Other studies which have used this measure include Booth, Aivazian, Demircug-Kunt, & Maksimovic (2001); Byoun (2008); Kayo & Kimura (2011); Lemmon & Zender (2010).

According to Finkelstein (1992), executive-level power, being multi-dimensional cannot be reliably measured by a single indicator. Daily and Johnson (1997) and Finkelstein (1992) identified four sources of executive power, while some researchers such as French and Raven (1962) in Amedu (2016) identified five sources: legitimate, reward, coercive, referent, and expert power. However, literature also indicates that these sources can be regrouped into two major sources: structural and personal sources (Amedu, 2016). While management personal power mix can be determined at manager recruitment time, structural power mix is determined by the managerial environmental structure and can be subject to corporate governance mandate. This study, therefore, relied on the structural power and the environmental factors which determine the power mix. This

study estimated the CEO influence power on the BOD, the management team and by extension corporate decisions using structural power sources (Amedu, 2016; Combs *et al.*, 2007). Some studies measured this variable using unitary measures as follows: BOD membership and duality (Tien *et al.*, 2013); stock ownership (Kim & Lu, 2011). Studies that adopted composite measures include Adams *et al.* (2005) and Cheikh and de Gabès (2014) who used CEO Influence Power Index. This study adapted composite measures for their simplicity and availability of data. The elements used in the power index construction, Table I and Table III, had also been used in other studies and were consistent with the Corporate Governance Code of good practices drawn by CMA in Kenya.

The study variables were measured as indicated in Table II and Table III. CEO Power index was measured as indicated in Table III CEO Power Index.

Data analysis involves documentation, description, classification, summarization, and presentation of field data in an interpretable and intelligible form, and in a systematic way with due regard to study objectives, to facilitate the identification of data characteristics, relationships, trends, and structures. The identified structures, trends, and relationships, in turn, permit the researcher to identify the study contribution to knowledge, practice and policy. Data were analyzed using descriptive statistics tools such as mean, range, variance, correlation, kurtosis, and skewness to obtain a clear understanding of the natural characteristics of the independent, intervening, and dependent variables and inferential statistics to test the hypothesized cause-effect relationships using regression and analysis of variance models.

TABLE I: CEO POWER ELEMENTS

Measure	Nature	Max score	Min score	Source
1	Ownership Power			
Related to Founder member/ Controlling shareholder (30% or more shareholding)	Dummy	1	0	Adams <i>et al.</i> (2005); Amedu (2016); Cheikh and de Gabès (2014); Daily and Johnson (1997)
CEO shareholding	Likert	3	0	(Daily & Johnson, 1997) E. H. Kim and Lu (2011)
2	Structural Power			
≥5% and above holding but ≤ 30%	Dummy	1	0	(Van Essen <i>et al.</i> , 2015)
Institutional Holding	Dummy	1	0	Van Essen <i>et al.</i> (2015)
CEO Tenure	Likert	2	0	Cheiks and de Gabes(2014)Graham, Kim, and Leary (2019); Van Essen <i>et al.</i> (2015)Amedu (2016)
Independent directors %	Likert	2	0	Graham <i>et al.</i> (2019); Van Essen <i>et al.</i> (2015)
Board Size	Likert	2	0	Van Essen <i>et al.</i> (2015)
Only insider in the BOD	Likert	2	0	(Adams <i>et al.</i> , 2005; Cheikh & de Gabès, 2014; Daily & Johnson, 1997)
Total		14	0	

Source: Researcher, (2021).

TABLE II: OPERATIONALIZATION OF STUDY VARIABLES

Variable	Measures	Source
Financial Performance	Return on Equity (ROE)	Odalo, Achoki, and Njuguna (2016);
Debt-Equity Ratio	Book value of Total Debt to book value of total Equity	Dey, Hossain, and Rahman (2018); Kayo and Kimura (2011)
CEO Power	CEO Power Index (CPI)	Cheikh and de Gabès (2014)
Sales Growth (SG)	$(Sales_t - sales_{t-1}) / (sales_{t-1})$	Dey <i>et al.</i> (2018); Lazär (2016); Odalo, Njuguna, and Achoki (2016)
Firm Operational Efficiency (FOE)	$sales_t / Total\ assets_t$	Baik, Chae, Choi, and Farber (2013); Dey <i>et al.</i> (2018); Ndolo (2015)
Firm size (FS)	Natural Log of total assets _t	Ab Wahab and Ramli (2014); Odalo, Achoki, <i>et al.</i> (2016); Padrón, Apolinario, Santana, Martel, and Sales (2005); Titman and Wessels (1988)

Source: Researcher, 2021.

TABLE III: CEO POWER INDEX

	Measure	Nature	Max score	Min score	Note
1	Ownership Power				
	Related to founder/ Controlling shareholder	Dummy	1	0	1 if related or shareholding ≥ 30% else 0
2	CEO shareholding	Likert	3	0	0 if = 0; 1 if 0 <, <1%, 2 if 1-3%, 3 if >3%,.
	Structural Power				
	5%≤ shareholding <30%	Dummy	1	0	1 if <5%; 0 if ≥ 5% but < 30%
	Institutional Holding	Dummy	1	0	0 if institutional holder exist, else 1
	CEO Tenure	Likert	2	0	If <3/first term 0, if>3 but <6/ second term 1, if>6/ more than second term 2
	Independent directors %	Likert	2	0	2 if < 1/3, 1 if = 1/3, 0 if > 1/3
	Board Size	Likert	2	0	0 if <6, 1 if 6<x<10, 2 if >10
	Only insider in the Board	Likert	2	0	0 if not director; 1 if 1 of two exec member on board, 2 if the only exec in Board
	Total		14	0	

Source: Researcher, 2021.

The study used panel data. The nature of panel data is cluster time series. The relevant regression models are Pooled Effects (PE), Random Effects (RE) or Fixed Effects (FE) models. The pooled effects model is similar to OLS and is efficient when all conditions for OLS are satisfied which is unlikely under panel data. Random effects model is efficient when endogeneity is related to the regressors, while fixed effects model deals with endogeneity related to the entities through clusters and therefore is efficient in both cases. After testing field data for best fit through Hausman-Test, F-Test, and Breusch-Pagan Lagrange Multiplier Test, the fixed-effect model turned out the best fitting model and was adopted for data analysis. The general form of the model is given by:

$$Y_{it} = \alpha_j + \beta_1 X_{1it} + \beta_2 X_{2it} + \dots + \beta_k X_{kit} + \epsilon_{it}$$

Y = ROE; i = ⁱth Company; 1 ≤ i ≤ 38; X1, X2, X3, X4 = D/E Ratio; Sales Growth; Operational Efficiency; Firm Size. ε = Error Term; t = year: 2010 ≤ t ≤ 2019.

V. PRELIMINARY ANALYSIS

The study population was 63 listed firms yielding 630 firm years. However, only 38 firms had complete financial reports for at least eight years yielding 380 (60%) firm years and observations. The study sought to investigate the moderating

effect of CEO Power on the relationship between Debt-Equity ratio and financial performance of companies listed at the NSE controlling for sales growth, firm size and operational efficiency. NSE classifies companies into nine industrial segments: Agriculture, Banking, Commercial and Allied, Construction, Energy, Insurance, Investment, Manufacturing, and Telecommunication. The variables of interest were debt-equity ratio, Return on Equity, Sales Growth, Operational efficiency, Firm size, and CEO Power. Mean of these variables from the field data is presented in Table IV below.

Table IV shows diversity of firms within industry and the market as a whole. The raw data was subject to normal distribution tests and some data presented non-normal distribution and were therefore log-normalized. The data was also subject to multi-collinearity test and the statistical output presented in Table V.

The VIF test confirmed absence of multicollinearity in the field data. Further test was performed using pairwise correlation test Table VI.

Table VI further confirmed absence of multicollinearity in the field data. The data was subject to unit root test for stationarity. This study applied Fisher type unit root test based on both Phillips-Perron (PP) and Augmented Dickey-Fuller(ADF) test statistic and all variables were established to be stationary.

TABLE IV: VARIABLE SUMMARY STATISTIC BY INDUSTRY

INDUSTRY	DERATIO	ROE	SALESG-H	OPEFF	FIRMSIZ	CEOPOW
AGRIC	34.32981	11.17665	10.51727	.4895412	15.58961	5.95
BANK	639.9912	17.29833	13.34498	0.0952389	19.05657	6.183673
COMMER	91.96633	-0.4930978	0.7424468	0.9277768	15.57727	6.76
CONSTR	165.1668	6.959282	2.63195	0.7476845	16.5041	6.416667
ENERG	182.494	6.870885	13.27174	1.234889	18.63534	6.433333
INSUR	261.2095	17.73769	21.19461	0.3401791	17.52583	6.938776
INVEST	112.9749	4.214188	38.02294	0.3227741	17.09066	4.368421
MANUF	210.3677	5.363187	0.3351456	1.055096	16.38206	5.081633
TELECOM	51.88792	30.46089	13.58392	1.08424	18.76921	7.7
Total	288.4953	10.64085	10.67688	0.599979	17.38166	6.201072

Source: Research Data, 2021.

TABLE V: VIF TEST RESULTS

Variable	FIRMSIZ	LNDERATIO	OPEFF	LNSALESGRT	CEOPOW
VIF	1.71	1.60	1.27	1.06	1.03
1/VIF	0.583175	0.623884	0.784414	0.946716	0.970975

Source: Research Data, 2021.

TABLE VI: PAIRWISE CORRELATION TEST RESULTS (CORRELATION MATRIX OF COEFFICIENTS OF REGRESS MODEL) CORRELATION MATRIX OF COEFFICIENTS OF REGRESS MODEL

e(V)	OPEFF	FIRMSIZ	CEOPOW	LNDERATIO	LNSALE~T	_cons
OPEFF	1.0000					
FIRMSIZ	0.2767	1.0000				
CEOPOW	0.0196	-0.1329	1.0000			
LNDERATIO	0.1746	-0.5134	0.1157	1.0000		
LNSALESGRT	-0.0580	-0.1279	0.0063	0.0336	1.0000	
_cons	-0.2281	-0.3710	-0.1562	-0.0269	-0.3187	1.0000

Source: Research Data, 2021

To select the best fitting model for field data the following tests were performed. To select between random effect and pooled effect Breusch Pagan Lagrangian Multiplier Test for Random Effects was performed and the results showed that Prob > chibar² = 0.1354, and at 5% significance, we fail to reject the null hypothesis and conclude that Pooled effect best fit the data. To select between the fixed effect model and the random effect model the Hausman test was performed, and the results showed Prob>chi² = 0.0025. We reject the null hypothesis at 0.05 level of significance and conclude that the fixed effects model fits the data better. The Choice between pooled effect and Fixed effect was based on R², F, and p, shown in Table VII.

Table VII shows that Fixed Effect model better fits the field data. The researcher, therefore, adopted Fixed-effect regression model.

Model	R ²	F	Prob>F
Pooled Effect	0.0986	7.67	0.0000
Fixed Effect	0.1841	14.71	0.0000

Source: Research Data, 2021.

VI. HYPOTHESIS TESTS

A. Test One

Test one confirms the direct effect of debt-equity ratio on firm financial performance. The fixed effect regression results of the test are shown in Table VIII below.

The models' explanatory power was 16.96% and Debt-Equity ratio shows a negative ($\beta=-0.250272$) statistically significant ($p<0.05$) relationship with ROE. Firm size, operational efficiency, and Sales-growth; had a positive relationship with ROE with all and regression constant except

operational efficiency statistically significant.

H01: Debt-Equity ratio has no significant effect on firm financial performance.

Test Results: $\beta= -0.2345286$, $t=-6.84$ $p=0.000$.

Conclusion: Reject the null hypothesis and accept the alternative hypothesis that Debt/Equity ratio has statistically significant effect on financial performance measured as ROE.

B. Test Two

Test Two confirms the direct effect of CEO Power on the financial performance of companies listed at NSE. The results are presented in Table IX.

The model explains 18.41% of the variation in ROE. CEO Power shows a positive ($\beta=0.0454599$) and statistically significant ($p<0.05$) effect on ROE.

C. Test Three

Test three assesses the moderating effect of CEO Power on the relationship between Debt-Equity ratio and Financial Performance. The results are presented in Table X.

The test results in the table 10 show: $\Delta R^2 = 0.3336 - 0.1841 = +0.1495$; $\beta = 0.1033959$; $t= 8.54$ $p=0.000$. The results lead us to reject the null hypothesis and accept the alternate hypothesis. We, therefore, conclude that CEO Power has a statistically significant moderating effect on the relationship between Debt/Equity ratio and financial performance measured as ROE.

D. Margins Predictive Test

The moderating effect of CEO power on the relationship between Debt/Equity ratio and ROE in the model was subjected to margins predictive analysis and the result is presented in Fig. 2.

Fixed-effects (within) regression	Number of obs	=	369			
Group variable: COMPNUM	Number of groups	=	38			
R-sq: within	=	0.1696	Obs per group: min	=	7	
between	=	0.0150	avg	=	9.7	
overall	=	0.0547	max	=	10	
corr(u_i, Xb)	=	-0.7331	F(4, 327)	=	16.70	
			Prob > F	=	0.0000	

LNROE	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
OPEFF	0.1239179	0.0868594	1.43	0.155	-0.0469558	0.2947916
FIRMSIZ	0.0964612	0.0415129	2.32	0.021	0.0147952	0.1781271
LNDERATIO	-0.2345286	0.0342699	-6.84	0.000	-0.3019458	-0.1671114
LNSALESGRT	0.1619656	0.0453902	3.57	0.000	0.0726719	0.2512593
_cons	5.511081	0.7789375	7.08	0.000	3.97872	7.043442

sigma_u	0.23755958					
sigma_e	0.29621739					
rho	0.39141926	(fraction of variance due to u_i)				

F test that all u_i=0:	F(37, 327) =	2.38	Prob > F = 0.0000			

Source: Research Data, 2021.

TABLE IX: EFFECT OF CEO POWER ON ROE

Fixed-effects (within) regression	Number of obs	=	369
Group variable: COMPNUM	Number of groups	=	38
R-sq: within = 0.1841	Obs per group: min	=	7
between = 0.0274	avg	=	9.7
overall = 0.0611	max	=	10
corr(u _i , X _b) = -0.7566	F(5, 326)	=	14.71
	Prob > F	=	0.0000

LNROE	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
CEOPOW	0.0454599	0.0189193	2.40	0.017	0.0082405	0.0826793
OPEFF	0.1095742	0.0864386	1.27	0.206	-0.0604737	0.2796222
FIRMSIZ	0.0819135	0.0416555	1.97	0.050	-0.0000339	0.163861
LNDERATIO	-0.2297315	0.034081	-6.74	0.000	-0.2967779	-0.1626852
LNSALESGRT	0.1622562	0.0450627	3.60	0.000	0.0736058	0.2509065
_cons	5.463455	0.7735674	7.06	0.000	3.941641	6.985269
sigma_u	0.24925741					
sigma_e	0.29407867					
rho	0.41806488	(fraction of variance due to u _i)				

F test that all u_i=0: F(37, 326) = 2.48 Prob > F = 0.0000
Source: Research Data, 2021.

TABLE X: MODERATING EFFECT OF CEO POWER ON THE RELATIONSHIP BETWEEN DEBT/EQUITY RATIO AND ROE

Fixed-effects (within) regression	Number of obs	=	369
Group variable: COMPNUM	Number of groups	=	38
R-sq: within = 0.3336	Obs per group: min	=	7
between = 0.0390	avg	=	9.7
overall = 0.1138	max	=	10
corr(u _i , X _b) = -0.7803	F(6, 325)	=	27.11
	Prob > F	=	0.0000

LNROE	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
c.CEOPOW#c.LNDERATIO3	0.1033959	0.0121097	8.54	0.000	0.0795727	0.1272191
CEOPOW	-0.4785144	0.0637121	-7.51	0.000	-0.6038545	-0.3531742
OPEFF	0.0941417	0.0782608	1.20	0.230	-0.0598199	0.2481034
FIRMSIZ	0.0848579	0.037706	2.25	0.025	0.0106792	0.1590365
LNDERATIO	-0.7948269	0.0730198	-10.89	0.000	-0.938478	-0.6511759
LNSALESGRT	0.10803	0.0412799	2.62	0.009	0.0268204	0.1892396
_cons	8.534564	0.787176	10.84	0.000	6.985961	10.08317
sigma_u	0.2973853					
sigma_e	0.2661852					
rho	0.55519233	(fraction of variance due to u _i)				

F test that all u_i=0: F(37, 325) = 4.17 Prob > F = 0.0000

Source: Research Data, 2021.

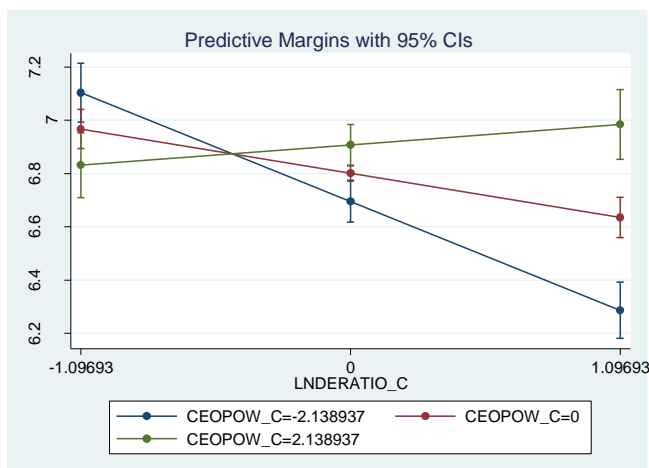


Fig. 2. LNROE/LNDERATIO, CEOPOWER Contingency GRAPH.
Source: Research Data, 2021.

Fig. 2 shows that CEO power of '0', coinciding with the mean CEO power in the data, preserves the negative relationship between LNDERATIO and LNROE. An Increase in CEOPOW by one Standard deviation, attenuates the negative relationship, while a decrease by one standard deviation, reverses the relationship to positive.

VII. DISCUSSION OF RESULTS

The observed negative statistically significant relationship between debt/equity ratio and financial performance is consistent with drift proposed by dynamic tradeoff theory. It is also consistent with pecking order theory preposition in capital markets with asymmetric firm information (Myers & Majluf, 1984). A similar finding was observed by (Omollo *et al.*, 2018; Salamba, 2015). The positive statistically

significant relationship between CEO Power and financial performance is consistent with upper echelon theory (Hambrick & Mason, 1984). A similar observation was made by Adams *et al.* (2005), who assert that executive power motivates management. This however is inconsistent with agency theory prediction (Fama & Jensen, 1983; Gormley & Matsa, 2016). The observed significant conditional effect of CEO Power on the relationship between Debt/Equity ratio and financial performance measured as ROE is consistent with both upper echelon theory (Hambrick & Mason, 1984) and agency theory (Fama & Jensen, 1983; Gormley & Matsa, 2016).

VIII. CONCLUSIONS AND RECOMMENDATIONS

This study concludes based on the results of data analysis: that Debt-Equity ratio has a negative statistically significant effect on firm financial performance measured as ROE; that CEO Power has statistically significant moderating effect on the relationship between Debt-Equity ratio and firm financial performance measured as ROE; and finally; that higher levels of CEO power attenuates the negative relationship between Debt-Equity ratio and firm financial performance while lower levels dampens the negative relationship. The study therefore recommends, with a view to ensuring sufficient ROI to shareholders that: managers should monitor and optimize the Debt-Equity ratio in their firms to avoid suboptimal returns and that Capital market regulators should mandate low CEO Power. The study further recommends replication of this study using a wider population and more extensive CEO Power parameters.

ACKNOWLEDGEMENT

We acknowledge the services provided by the Nairobi Securities exchange and African Financials in maintaining public access digital repository of annual reports of NSE listed companies.

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