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**AGENCY PROBLEMS AND CORPORATE VALUE CONSUMER GOODS  
MANUFACTURING COMPANIES IN NIGERIA**

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**ABSTRACT**

This study examined the relationship between agency problems and corporate value in Nigeria. Agency problem being measured by executive effort, assets structure, overinvestment and risk preference, while corporate value was proxied by net book value. The study examined the relationship between executive effort, assets structure, overinvestment and risk preference on one hand, and net book value on the other by obtaining secondary panel data from the Nigeria Exchange Group and the annual reports of the 21 consumer goods manufacturing companies in Nigeria. Several analytical techniques that include panel regression model, cointegration and causality test were employed to analyse the data. From the results we found that overinvestment has an inverse relationship with net book value, while risk preference, executive effort and assets structure have direct relationships with net book value; with the relationships relating to overinvestment and assets structure being insignificant, while those of risk preference and executive effort being significant. The results further showed long run relationship among the variables, and a uni-directional causality that stems from risk preference to net book value. Based on these findings, it was recommended that regardless of the motivation, only projects with positive net present values should be considered for investment, performance targets should be reviewed periodically and incentivised, and calculated risks can be taken in investment choices.

Keywords: Agency problem, corporate value, executive effort, overinvestment, risk preference,

**INTRODUCTION**

Expertise and specialisation in business management enables attainment of objectives and propel business success. This however, requires that business ownership is divorced from business management. That is, shareholders or owners should abstain from the routine activities of a business, and trust managers to deliver results that align with the interest of the owners. However, in the course of this owner-manager relationship, actions that are privately optimal to the managers may not be in the best interest of the owner, and these actions may be difficult to monitor.

The disparity regarding interest of managers and that of shareholders or owners is the foundation of agency problem. The problem is however exacerbated by the intricate difficulty of the context of the conflict as shareholders, who by virtue of their position as being external to the goings-on in the firm are never fully abreast with the true manifestations of conflict. For instance, the assets structure of the firms could be modelled to ensure stability and risk aversion so as to guarantee job security for management which could be at variance with shareholders aspiration for management to take risky investment opportunities so as to enhance profitability. Other harmful behaviour like over consumption of perquisites, diversion of corporate resources and exertion of insufficient effort can also result in agency conflict (Wang et al., 2014).

Previous studies have attempted to explain the association between agency problems and company value. However, most of these studies utilize subjective data obtained through questionnaire, interviews and observation. This is somewhat preposterous as appropriate secondary data could be obtained with minimal difficulty.

Also, the analysis of data is relatively vast as a plethora of analytical techniques are available for this, however it is observed that most studies subscribe to the use of traditional regression models. Though this is apt, it is vital to tweak the regression model by considering panel regression models. Besides, understanding the long-run relationship between agency problem and company value by utilizing cointegration and causality tests is imperative. Moreover, most studies, especially those that adopt secondary data are domiciled in developed countries (Omuemu & Olowe, 2020); it is therefore pertinent to utilised such secondary data in a study that is based in Nigeria, a developing country.

## LITERATURE REVIEW

### Concept of Agency Problem

Agency conflict has been defined as mismatch of interest in the agent-principal relationship. It manifests where a rift between the interest of shareholders and management of the firm According to Hammadi and Nobanee (2021), agency problem refers to conflict of interest between two parties where one party is expected to act on behalf of another party. Hall (1998) adds that it is a situation where management pursues maximisation of their interest by sacrificing the interest of shareholders. This problem is inherent in any relationship where a party is expected to act in the best interest of another.

A number of possible scenarios or situations exists in today's business world that would give rise to conflict of interests between shareholders and managers. The first happens when managers put in lower levels of efforts since the cost of this inefficiency will not be borne by themselves but by the shareholders. This is of course given that the levels of wages do not reduce (Jensen & Meckling, 1976). Another scenario is when managers are reluctant to accept projects that are risky and opt for less risky options; as well as lower levels of debts (to reduce financial risk) which leads to high tax liability and by implication lower earnings for shareholders (Sdiq & Abdullah, 2022).

Chakraborty (2010) contends that in cases where there are inefficiencies, management will tend to resist takeovers even if it is in the best interest of shareholders. This is because managers will try their best to minimise the likelihood of employment termination (Frierman & Viswanath, 2019, as cited in Baykara & Baykara, 2021). Managers prefer to continue with a firm's current operations even if liquidation is preferred by investors. Managers may also be keen to reinvest all available funds even if paying out cash better serves the interest of shareholder (Stulz, 1990).

Often, agency problems manifest through moral hazard where the chances of a party's insulation from risk may trigger inordinate actions which might be at abeyance of actual behaviour if such a party is exposed to risks (Owusu et al., 2021). Zhang and Li (2018) adds that the tendency to deliberately show laxity towards work heightens where the participant has no ownership stake in the organisation.

The disparity in the duration of investments between shareholders and managers is an ample evidence of agency problem (Sdiq & Abdullah, 2022). Shareholders are interested in the long-term financial prospects of the firm, because the value of their shares depends on expectations for the long-term future. In contrast, managers might only be interested in the short-term as their rewards and benefits are based on such short-term performance such as profits, even if the attainment of such accounting profits may compromise the prospects of achieving long term business success.

### **Corporate Value**

Firms' capacity to utilize their primary resources to generate returns and optimize its worth is essential. Firm value generally represents the assets owned by the company; and which are considered vital by shareholders. Managers are primarily employed to pursue and attain the optimal value of the firm (Sihombing et al., 2023). There are several methods of ascertaining corporate value attained by management through the deployment of resources; one of which is to net off the firm's liabilities from total assets - net book value.

Ohlson and Feltham (1995) claim that under some fairly reasonable assumptions, equity value is the present value of net financial assets plus present value of all future free cash flow operating activities. Purusotomo and Hadinugroho (2021) added that adjusting the book value of a firm's assets and liabilities is a common everyday-world method of deriving the value of a firm. This method is used when liquidating the firm is under consideration, in which case the adjusted value is known as the firm's liquidation value. This method also is used when acquiring the firm is under consideration, in which case the acquiring party adjusts book value to obtain replacement value, because one alternative to the acquisition is to build an equivalent firm from scratch.

Accordingly, firm's value can be determined by examining its assets and liabilities, and adjusting each as needed, to arrive at the adjusted net worth by subtracting the sum of the adjusted liabilities from the sum of the adjusted assets. The adjustment of assets can be approached either by capitalizing investments that have been expensed or by finding the replacement cost of the tangible or intangible assets.

### **Agency Problem and Corporate Value**

Studies on agency problem and corporate value have been reported in literature. Sihombing et al. (2023) investigated agency problem, firm value and governance quality in Singaporean and Indonesian companies. Agency was represented by assets utilisation ratio and ownership concentration, while firm value was measured by market value of equity and net book value divided by book value of assets. The results from the analyses show that agency problem has a negative influence on firm value of Singaporean and Indonesian companies.

Webb (2022) reports that agency problems arising from low entrepreneur equity curtail investment by growth-seeking firms. These scholars shows that agency problem pose greater influence when a firm's capital stock is considerably below par. They further shows that growth firms with significant agency problems when investment is constrained will have high entrepreneur-financier equity ratio and high debt levels.

Sridhar et al. (2022) studied how ownership structure influences operating performance amidst agency problems, using 10 years data from over 42,000 public, and private companies. The study reports that there is significantly higher agency cost for firms jointly owned by corporate entities. It also provide evidence of considerably significant agency costs in public firms relative to private organisations. The study further found that both vertical and horizontal agency problems contribute to reduction in firm's performance and value. Relatedly, Sdiq and Abdullah (2022) examined the relationship between agency cost, capital structure and firm performance; and found that operating expenses ratio and asset utilisation ratio have significant negative relationship with return on assets in the short run.

Boubker and Hicham (2021) in a separate study examined the relationship between agency cost related to managerial discretion and cash holdings in Moroccan firms. The study show that is a strong and positive relationship exists between cash holdings and cashflow. It also show that firms with significant growth opportunities tend to accumulate less cash, which confirms that the risk of overinvestment is higher when firms have liquid funds and few investment opportunities given that managers are more likely to accumulate more cash to strengthen their discretionary power.

## METHODOLOGY

This study adopted an ex post facto research design. 21 consumer goods manufacturing companies listed on the floors of the Nigerian Exchange group (Nigeria Stock Exchange, 2023) consisted the population of the study. Annual panel data relating to the 21 listed consumer goods manufacturing companies for a 10 year period (2013 to 2022) was collected from the data/statistical repository of the Nigeria Exchange group. The data so employed as proxy for agency problem and net book value are considered apt as scholars who have had similar studies locally and in other climes have resorted to same set of data. It is also worthy of note that the data were deflated to natural log. The data was analyzed using panel regression model, cointegration model and granger causality test.

### Regression model specification

The study generally shows that:

$$V = f(AP) \quad 1$$

$$V = (NBV) \quad 2$$

$$AP = AP = (EE, AS, OINVT, RP) \quad 3$$

Consequently, a more detailed expression of the models is specified thus:

$$NBV = f(EE, AS, OINVT, RP) \quad 4$$

Transforming equation 3.2-3.9 to econometrics form, we have

$$NBV = \beta_0 + \beta_1 EE + \beta_2 AS + \beta_3 OINVT + \beta_4 RP + \mu \quad 5$$

Where:

V = Value

AP = Agency Problem

NBV = Net book value of the quoted consumer goods manufacturing firms proxy by log of book value of assets

EE = Executive effort of the quoted consumer goods manufacturing firms proxy by log of return on equity

AS = Assets structure of the quoted consumergoods manufacturing firms proxy by differences between fixed and current assets

OINVT = Over investment of the quoted consumer goods manufacturing firms proxy by percentage of total investment to total capital

RP = Risk preferences of the quoted consumer goods manufacturing firms measured by debt to equity ratio

$\mu$  = Error Term

$\beta_1 - \beta_4$  = Coefficient of Independent Variables to the Dependent Variables

$\beta_0$  = Regression Intercept

## ANALYSIS AND RESULTS

**Table 1: Summary of Panel Regression Analysis Results**

Description	Coefficient	P - Value	Direction	Significance
<b>OverInvestment</b>	-0.061448	0.2390	Negative	Not significant
<b>Risk Preference</b>	0.810510	0.0052	Positive	Significant
<b>Executive Effort</b>	0.919956	0.0053	Positive	Significant
<b>Assets Structure</b>	0.019919	0.0943	Positive	Not significant
<b>Constant</b>	6.823983	0.0000	Positive	Significant

Source: computed from E-view 9.0

The data analysis carried out, shows that the constant of the model is 6.823983, implying that if endogenous variables are held constant or unchanged, the exogenous variable - net book value will be elevated by 6.8 units periodically. It further shows that overinvestment, has a negative relationship with net book value, while risk preference, executive salaries and Assets Structure have a positive relationships with net book value. The severity of relationship shows that risk preference and employees effort have significant relationships; while, overinvestment and asset structure show insignificant relationship with net book value. Overall, agency problems have significant relationship with net book value of quoted consumer goods manufacturing firms in Nigeria.

**Table 2: Panel Unit Roots Tests Results**

Method	Statistic	Prob.**	Cross sections	Obs	Order of int	Remark	Decision
<b>NBV</b>							
Levin, Lin & Chu t*	11.7592	0.0000	22	154	1(I)	Stationary	Reject H0
Im, Pesaran and Shin W-stat	-3.63043	0.0001	22	154	1(I)	Stationary	Reject H0
ADF - Fisher Chi-square	93.1631	0.0000	22	154	1(I)	Stationary	Reject H0
PP - Fisher Chi-square	331.109	0.0000	22	176	1(I)	Stationary	Reject H0
<b>OIVNT</b>							
Levin, Lin & Chu t*	-7.30167	0.0000	22	132	1(I)	Stationary	Reject H0
Im, Pesaran and Shin W-stat	-5.13060	0.0000	22	132	1(I)	Stationary	Reject H0
ADF - Fisher Chi-square	109.092	0.0000	22	132	1(I)	Stationary	Reject H0
PP - Fisher Chi-square	254.353	0.0000	22	154	1(I)	Stationary	Reject H0
<b>RP</b>							
Levin, Lin & Chu t*	-5.67854	0.0000	22	154	1(I)	Stationary	Reject H0
Im, Pesaran and Shin W-stat	-4.95497	0.0000	22	154	1(I)	Stationary	Reject H0
ADF - Fisher Chi-square	119.860	0.0000	22	154	1(I)	Stationary	Reject H0
PP - Fisher Chi-square	254.848	0.0000	22	176	1(I)	Stationary	Reject H0
<b>EE</b>							
Levin, Lin & Chu t*	-8.96658	0.0000	18	126	1(I)	Stationary	Reject H0
Im, Pesaran and Shin W-stat	-3.78235	0.0001	18	126	1(I)	Stationary	Reject H0
ADF - Fisher Chi-square	81.0064	0.0000	18	126	1(I)	Stationary	Reject H0
PP - Fisher Chi-square	152.583	0.0000	18	144	1(I)	Stationary	Reject H0
<b>AS</b>							
Levin, Lin & Chu t*	-16.0446	0.0000	22	154	1(I)	Stationary	Reject H0
Im, Pesaran and Shin W-stat	-4.78958	0.0000	22	154	1(I)	Stationary	Reject H0
ADF - Fisher Chi-square	104.482	0.0000	22	154	1(I)	Stationary	Reject H0
PP - Fisher Chi-square	230.763	0.0000	22	176	1(I)	Stationary	Reject H0

Source: computed from E-view 9.0

The unit root test results show that the data are stationary at first difference for 1%, 5% and 10% levels of significance. It is therefore deduced that the series are characterized as I (1) process; consequently, panel cointegration is resorted to.

**Table 3: Pedroni Residual Cointegration Test Results**

Series: NBV OIVNT RF EE AS

			Weighted	
	Statistic	Prob.	Statistic	Prob.
Panel v-Statistic	-1.669188	0.9525	-2.519088	0.9941
Panel rho-Statistic	2.300447	0.9893	3.314475	0.9995
Panel PP-Statistic	-13.14439	0.0000	-6.830130	0.0000
Panel ADF-Statistic	2.077189	0.9811	0.654614	0.7436
Alternative hypothesis: individual AR coefs. (between-dimension)				
	Statistic	Prob.		
Group rho-Statistic	5.506962	0.0000		
Group PP-Statistic	-12.50502	0.0000		
Group ADF-Statistic	-0.341951	0.3662		

Source: computed from E-view 9.0

The panel cointegration results provide us with evidence of cointegration since most of Pedroni test statistics reject the null hypothesis of no cointegration for the two estimated models. Two out of the four tests proved the presence of cointegration while from the group statistics group ADF is not significant which implies that there is no cointegrating effect.

**Table 4: Pairwise Granger Causality Test Results**

Null Hypothesis:	Obs	F-Statistic	Prob.
OIVNT does not Granger Cause NBV	176	1.60834	0.2032
NBV does not Granger Cause OIVNT		0.22122	0.8018
RP does not Granger Cause NBV	176	5.31310	0.0058
NBV does not Granger Cause RP		0.59181	0.5545
EE does not Granger Cause NBV	176	0.00752	0.9925
NBV does not Granger Cause EE		0.27413	0.7606
AS does not Granger Cause NBV	176	0.00248	0.9975
NBV does not Granger Cause AS		0.72707	0.4848

Source: computed from E-view 9.0

The granger causality test results show that although agency problem does not have a causal effect on net book value of the quoted consumer goods manufacturing firms in Nigeria except uni-directional causality from risk preference to net book value of the quoted consumer goods manufacturing firms in Nigeria.

## DISCUSSION OF FINDINGS

The results from analyses show that the relationship between agency problems and net book value is significant in the short-run, whilst the constituents of agency problem are seen to present mixed results when linked with net book value. For instance, risk preference and executive effort are seen to possess significant relationship with net book value, as against overinvestment and asset structure whose relationships with net book value are insignificant. It is also interesting to note that only one of the endogenous variables – overinvestment, has an inverse relationship with the exogenous variable – net book value. This aligns with the empirical findings of Hou et al. (2016) that investing or acceptance of project for reasons other than economic, value creation and value addition hamper net book value of firms, and manifest in erosion of net assets.

In contrast, risk preference, executive effort and asset structure have been empirically shown to have positive relationship with net book value of consumer goods manufacturing firms in Nigeria. This implies

that heightened managerial efficiency as regards risk preference, assets structure and executive effort would improve net book value of the studied firms. Given the risk – return equivalence phenomenon in finance, it is easily justifiable to rationalise this finding as risk should not deter acceptance of projects with positive NPV as this will ultimately yield appreciation in net assets and net book value for the corporation (Sajuyigbe et al., 2013).

The result also suggest that professional laxity and complacency adversely affect the fortunes of firms, while commitment, competence and character which are emblematic of positive energy and effort for top management culminate in improved net book value, as it naturally reflects quality human resource for the organisation. In addition, proper composition of assets would improve net book value of firms. This implies that practices such as inadequacies in current assets, working capital, receivables and payables mismanagement, non-current assets composition, depreciation and management, as well as assets quality could hamper net book value of quoted consumer goods manufacturing firms.

In addition, there is a long run relationship between agency problem and net book value of quoted consumer goods manufacturing firms in Nigeria. More so, the uni-directional causal relationship that stems from risk preference to net book value implies certain risk should be taken to propel appreciation in net book value as far as the firm would have a positive NPV.

### CONCLUSION AND RECOMMENDATIONS

Certain inferences and deductions can be made from the findings of this study. For instance, the negative relationship between overinvestment and net book value implies that investment in projects with negative net present values ultimately leads to reduction in corporate value, regardless of the rationale for taking up such investments. Generally, corporate executives are motivated by targets thus, seek to achieve set organisational goals, especially where such targets attract pecuniary gains.

Therefore, executive efforts will be geared towards meeting nominated organisational objectives. This drives, increase in performance and ultimately the net book value. Also, risk preference portrays investment in highly risky projects which could either lead to value addition or depletion. As seen in the results, it almost always leads to the former, thereby creating additional value. This implies that embarking on risky projects leads to increased net book (or corporate) value. Furthermore, it can be concluded that the assets of corporate firms are structured in a manner that adds value to them. In view of the findings and conclusions reached, the study recommends that (a) regardless of the motivation, only projects with positive net present values should be considered for investment; (b) performance target should be periodically reviewed and be incentivised; (c) calculated risks can be taken by investing in projects that are risky, as this is likely to lead to increased corporate value; and (d) that the optimal asset structure of the firm should be determined and adopted to enhance corporate value.

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