



Corporate Governance and Challenges of Financial Leverage of Privatised Cement Industry in Nigeria

Bappayo Masu Gombe ^{a*} and Mustapha Mukhtar ^b

^a Department of Economics, Faculty of Social Sciences, University of Abuja, Nigeria.

^b Department of Economics, Faculty of Social Sciences, Bayero University Kano, Nigeria.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The paper studies new corporate governance and the challenges of financial Leverage of privatised cement industry in Nigeria. The variables studied were leverage ratio as Performance proxy (dependent variables) and fourteen Corporate Governance proxies as independent variables. Data was collected from secondary sources, and the statistical tools employed in the Methodology were Trend Analysis and Pooled OLS regressions. Trend Analysis result suggests that; Devaluation, high cost of importation, insufficient power supply, bank strike, and deflation of global oil prices created capacity underutilization in cement industry and severe burden of financial leverage to sustain operational activities pre privatization. The result also, reveals that, the leverage ratio remarkably declined post privatization, however, the global financial crisis of 2009 inflicted high cost of production on the industry which necessitated increased leverage in order to cushion the effects on operational activities. Inferential Statistics Result suggests that corporate governance has positive and significant impact on the leverage ratio of the industry in general. The study concludes that, despite the challenges of unfavourable macroeconomic environment, the new corporate

*Corresponding author: E-mail: bappayomasugombe@gmail.com;

governance reduced the leverage ratio post privatisation and it has positive and significant impact on the financial leverage of the Cement Industry. The researcher recommends that Nigerian government should ensure favourable macroeconomic environment and improve private sector activities. Collectively, the new Corporate Governance of Cement Industry should strategize on how to; Increase Revenue, profitability, better management of inventory, and restructuring of debt to mitigate increased leverage.

Keywords: Corporate governance; financial leverage; privatization; cement industry.

1. INTRODUCTION

Corporate governance of public corporations was framed to strike a balance between social and economic needs of the society. This objective created incentives for the corporations' managements and other stakeholders to concentrate on promoting social needs as against the economic needs that would enhance and sustain the productivity of the corporations [1,2]. Consequently, at the beginning of the 1970s, most of the public enterprises were thrown into financial predicament that culminated in inflicting serious financial burden on fiscal responsibilities of most of the capitalist economies around the globe [3,4]. In an effort to redeem these problems, British government and some organisation of economic cooperation and development (OECD) countries resorted to the introduction of privatization policy. The positive outcome of this experiment on corporate performance and subsequent discoveries of its numerous advantages in enhancing corporate governance mechanisms efficacy, Boubakri and Cosset [5] concluded that privatization is a natural experiment to examine how corporate governance mechanism evolves, interact and affects firm's performance.

In most cases, corporate governance is using debt financing when there is short run financial constraint or pressing need for long term investment that is difficult to be made through equity financing [6-20]. Therefore, financial institutions are granting loans to corporations that have high business prospect, prudent financial management and strong credit collateral. Banks are using leverage ratio as a yard stick for assessing credit worthiness of a firm and prudent financial management of firm's liquidity. An average rational investor takes these factors into cognizance before any investment decision [9-12]. Thus, leverage ratio measures debt to total capital ratio and is used as a measure of financial performance of a firm.

Before privatization, Cement Companies were absolutely owned by federal government of

Nigeria [13,14,15]. Therefore, the industry was enjoying budget constraint such as aid, grand and credit subsidy, these privileges created an opportunity for the board of Directors and the Management to collect credit indiscriminately to finance operations and short term investment, this increases leverage ratio of the industry. This assertion is confirmed in the empirical study of Masu-Gombe (2015) where performance trend analysis established that leverage ratio of the industry is higher pre-privatisation than post-privatisation.

1.1 Statement of the Problem

Soft budget constraint has been an incentive for public enterprises to indulge in high leverage ratio that threw them into a serious financial predicament that led to their privatization of the industry. Furthermore, Okeahalam, and Akinbode, (2003) state that, study of corporate governance related to privatisation is a recent phenomenon that gains little attention from academic circle and policy makers in Nigeria. In view of that, no much conscious effort has been made to investigate the challenges of financial leverage on privatized cement industry in Nigeria and how the new corporate governance addressed the challenges. These and other related problems are the motivating factors to this study.

1.2 Research Questions

Based on the above stated problems, the researcher frame the following questions; what are the factors that affect financial leverage of cement industry pre and post privatization and how does privatization impacted on corporate governance of cement industry.

1.3 Research Objectives

The study has broad and specific objective. The broad objective is to study the corporate governance and the challenges of financial leverage on the privatized cement industry in Nigeria. The specific objectives are; to ascertain the factors that affect financial leverage of

cement industry pre and post privatization, and to examine the impact of new corporate governance on the financial leverage of privatized cement industry.

1.4 Significance of the Study

Nigerian universities offer courses on corporate governance at postgraduate and undergraduate levels; similarly, professional institutions and some supervisory agencies have research wings dedicated to the subject matter in Nigeria. This implied that the findings of the study will contribute to; knowledge, academics, policy makers, cement industry and the economic environments of the country at large.

1.5 Scope and Limitations

The scope of research focused on impact of corporate governance on the performance of cement industry in Nigeria for the period 1991 – 2011. The choice of this period was informed by the desire to have equal years between pre and post privatisation policy, in order to make a valid discernment. However, the limitation of the study is the used of secondary data that is subject to companies' internal manipulations, which is well known by the researchers. In this regard, the researcher used the certified data from Annual Reports of cement companies identified as study sample in the cement industry of Nigeria and BPE Reports respectively. The paper is extracted from the fifteen hypothesis of myPh.D Thesis.

The paper is organized in the following subheadings; Introduction, literature review and theoretical frame work, Methodology, result interpretation and analysis, Conclusion and Recommendations.

2. LITERATURE REVIEW AND THEORITICAL FRAME WORK

It was hypothesized that, if a firm used debt to finance the increased operations, the firm could potentially generate more earnings than it would have without outside financing. However, a contrary circumstance is happening in Nigeria due to exorbitant interest rate of 30% - 45% that is not business friendly (Masu-Gombe 2021). A high debt to total capital ratio generally means that a company has been aggressive in financing its growth with debt, which is not healthy. Nevertheless, the ratio reduced the free cash flows, exposed firm to more market monitoring and induced fear of default in meeting loans

obligations which motivated financial prudence and forces efficiency in firm performance. However, it causes bankruptcy cost or debts agency cost which consequently intensify cash crunch [16].

2.1 Privatization and Public Corporations Financial Leverage

The earlier mentioned privileges of public corporations created incentive to their corporate governance to indulge in collecting unnecessary loans to finance investments or to improve working capital, which consequently threw them into financial predicament that resulted to their privatization. Fully knowing the implication of the financial leverage, globally, rational investors exercise absolute care in bargaining for public corporations with debt burden. According to Jeron (2008), private buyer mostly does not like the burden of debt even when the sale price is discounted by the amount of the debt that is why they used to request for cash flow compliment to reduce risk and finance new Investments. Admirably, debt write-down is a common practice for privatizing government around the globe. Boubakri and Cosset [17] Find that, leverage decline significantly post privatization due to debt write-down, sometimes due to equity capital infusion in executing primary issue, but in most cases due to higher retained profit. Furthermore, Jeron (2008), find that, leverage decreases in private firms because of government removal of debt grantee that increased the cost of borrowing. This reason created disincentive for new corporate governance of privatized firms, that are profit oriented to embark on reckless borrowing to finance new investment or for enhancement of working capital post-privatization (Masu-Gombe, 2021).

Privatization brings about financial and operational restructuring that enhances corporate governance. Operational restructuring embodies replacement or improving production process and machineries, reduction in employment, changing the combination of management and board of director's membership, reorganizing work force and the procedure of channeling information and delegation of powers. The other form of restructuring is the financial restructuring which comprises restructuring financial reporting procedure, leverage ratio and sources of short-term and long-term finances.

Dsouza, Meggison and Nash (2006) conducted an empirical study on the effect of change in

corporate governance and restructuring on operating performance of privatized firms. The results suggest that profitability has significant relationship with state ownership and restructuring, but negative relationship with employment. Real sales have positive relationship with restructuring and output. Efficiency result suggests that restructuring has increases sales efficiency, resources deployment efficiency, operational efficiency and reduction in employment.

Adeyemi, and Fagbemi, [18] study the Audit quality, corporate governance and firm characteristic in Nigeria. The result suggests that non-executive directors' ownership, firm size, and leverage have positive and significant influence on Audit quality. Dsouza, Meggison, and Nash, (2001), Birdsall and Nellis, [19] find that, privatization affects financial and operational performance by significantly increasing firm profitability, real sales, operating efficiency, capital expenditure, investment and dividend policies, output as well as decrease leverage. Privatized firm's corporate governance is more efficient than state own firm (Meggison, and Netta, 2002), because they improve coverage, service quality and reliability as well as prices decline (Delfor and Casarin (2001) Pavede, 2001; Arosina 2001; Barjar and Uguiola, 2000).

Firm performance was higher when local institutions, domestic investors, foreign investors and group affiliation are involved and it also enhanced market valuation [17], Coleman (2007), and Yakovleu, 2008). Group ownership has short term debts repayment ability, low leverage, faster revenue and total asset growth and transparency but weak corporate governance mechanisms and lower share value in Pakistan [20]. Individual and institutional ownership has significant impact on performance most especially high banks ownership, whereas minority holding of non-bank financial firms has negative relation with performance [21].

2.2 Agency- Cost Theory

Jensen and Meckling [22] postulates that, conflict may arise between shareholders and managers and between shareholders and debt holders because manager do not capture the full return of their project making activities or in some situation, they transfer firm's resources to themselves by indulging in projects that promote their personal benefit as against the project that will maximize the firm value. To curtail this

problem, a larger equity ownership by manager, always reduced agency cost. In fact, manager's investment eliminates free right cost flow, uneconomical expenditure, decreases inefficiency and reduced conflict between managers and shareholders. They further state that debt financing decreases conflict between manager and shareholders. However, another conflict may arise between shareholders and debtors on two grounds; Underinvestment incentives and Risk shifting incentives.

Underinvestment Incentives; Means larger debt levels lead to the rejection of more value-increasing project, because the firm will not manage in the best interest of shareholders, projects are evaluated on the basis of cash flows and in the case of bankruptcy, shareholders bear the full cost of investment, while the returns from investment goes to debtors. So, in this regards, debt become a curse to the firm. In respect to risk shift incentives, debtors distort the risk taking incentives of shareholders since at bankruptcy shareholders are supposed to bear the whole burden, but with present of debtors, the equity of the shareholder will be change to "call option" where the debtors will buy the firm at an exercise price equally to the debt obligations. In this situation the debtors bear the consequences due to limited liability. Therefore, the levered firm will be run at the excessive risk of debt financing which is catastrophic to the debtors. To this affects, optimal capital structure is a result of trade-off between cost and benefit.

Demirguc-kunt (1998) reveals that, the above model has some implications, where he argues that, in an ideal situation, bond contract is expected to clearly prevent excess risk taking by the shareholders, even though, some regulated industries like public utilities and bank are expected to have higher debt level, so also, the firms that have large cash flows from operations. Infact, most of the developing economics where private sector is weak, public income depends on government and the financial sector is hostile and the behavior of public investors towards capital market is not encouraging because of ignorance, corporate governance prefer using higher equity and less or zero leverage in capital structure for the safety and sustainability of their firms than otherwise. Ironically, once a corporate governance cultivated culture of using short term loans in addressing financial challenges, the corporation will end up closing their business because of the exorbitant interest rate charged by the banks and other financial investment institutions in developing economies.

3. METHODOLOGY

As stated earlier, the paper is extracted from my Ph.D thesis; therefore, the entire methodology contents are based on the thesis. The data was obtained from the secondary sources of company's annual and BPE reports. The aggregate populations of the study are six cement companies in the building industry of Nigeria. Multistage sampling procedure was adopted based on their financial reporting system. The researcher employed Performance Trend Analysis to serve objective one and pooled OLS regressions to serve objective two.

3.1 Leverage Ratio

Debt to total capital ratio, measures the financial leverage of the firm. It was hypothesized that if a firm used debt to finance the increased operations, the firm could potentially generate more earnings than it would have without outside financing. It is a Gearing ratio and was defined as long-term borrowings/debt divided by the total shareholders' ordinary fund plus long-term debt. The coefficient was expected to be positive since greater borrowing implied that lenders/banks played a greater monitoring role. A high debt to total capital ratio generally means that a company had been aggressive in financing its growth with debt. The ratio reduced the free cash flows, exposed firm to more market monitoring and induced fear of default in meeting loans obligations which motivated financial prudence and forces efficiency in firm performance. However, it causes bankruptcy cost or debts agency cost which consequently intensify cash crunch (Aljifri and Moustafa, 2007).

Thus

$$LEV = \frac{\text{Total debts}}{\text{Total Assets}} = \frac{CL+LTD}{FA+CA}$$

$$LEV_{it} = \beta_0 + \beta_{01}ATMVS_{1it} + \beta_{02}ASTOWN_{2it} + \beta_{03}AINST_{3it} + \beta_{04}AMINOWN_{4it} + \beta_{05}AFOREI_{5it} + \beta_{06}ABSIZE_{6it} + \beta_{07}APED_{7it} + \beta_{08}APNED_{8it} + \beta_{09}ADUAL_{9it} + \beta_{010}ACACNE_{10it} + \beta_{011}AWF_{11it} + \beta_{012}APMS_{12it} + \beta_{013}APNMS_{13it} + \beta_{014}APRIV_{14it} + u_{it}$$

3.2 The Dependent Variable

Where

MVS = Market value of all outstanding shares
 TA = Firm's TOTAL assets
 CA = Current Assets
 FA = Fixed Assets
 D = Debt = Cl + Ltd

Where

CL = Firm's Current Liabilities
 CA = Firm's Current Assets
 LTD= Firm's Long Term Debt.
 NI = Net Income (Earnings Before Tax)

3.3 Independent Variable

- a. TMVS: market value of the company shares measured market capitalization of the companies. It reveals the level of investors assessment on the quality of the company's corporate governance which will persuade them to patronize the ownership of the companies. The expect coefficient is positive.
- b. STOWN: Measures the proportion of state ownership in the firms. The larger the proportion, the higher is the leverage and undue government interference. This implies that restructuring will be difficult in the firms. The coefficient is expected to be positive.
- c. INST: measures the proportion of large institutional investors. The higher the proportion, the greater is the monitoring role of institutional investors and the lesser the financial leverage. It also implies that managers of companies would be under pressure to perform to the expectations of institutional investors. The coefficient is expected to be negative.
- d. MINOWN: Measures the proportion of minority shareholders in the firms. The higher the proportion, the higher the expropriation due monitoring cost and the leverage. This implies that management will connive with concentrated shareholders to promote their personal interests as against the minority owners. The coefficient is expected to be positive.
- e. FOREI: Measures the proportion of foreign investment in the corporations. The higher the proportion, the greater are the possibilities of infusing new talents, new technologies and capital restructuring. This implies that operational and financial reorganization will take place. The coefficient is expected to be negative.
- f. BSIZE: the total number of directors in the board of a company. Cohesiveness of the Board members and having diverse expertise and experience may enhance the financial performance and decline leverage. Unwieldy group on the other hand may be detrimental to financial

- performance. The coefficient is expected to be negative.
- g. PED the percentage of Executive Directors on the board of directors. It is defined as the number of Executive Directors divided by the total number of directors on the board of the company. The coefficient's expected sign is positive, i.e., the lower the proportion, the more independent is the board in making decisions.
 - h. PENED: the percentage of independent directors on the board of directors. It is defined as the number of independent directors divided by the total number of directors on the board of the company. The coefficient is expected to be negative, i.e., the higher the proportion, the more independent is the board in making decisions against the leverage.
 - i. DUAL: a binary variable representing CEOs who also double as the chairmen of the board of directors. This variable takes the value of one if the CEO/Managing Director performs the dual role; otherwise it takes a value of zero. The coefficient's expected sign is negative. This is because the effectiveness of the board as an internal governance device will be perceived to have been compromised by the roles not being separated. On the other hand, a unity of command structure can motivate the CEO to strive for excellent performance. If this is the case, the coefficient's sign is expected to be positive.
 - j. CACNE: a binary variable representing the Chairman of the Audit Committee. If the Chairman of the Audit Committee is a nonexecutive director, the variable takes the value of one; otherwise, this variable takes a value of zero. This serves to test the degree of independence of the audit committee. An independent chairman is expected to contribute to a more rigorous regime of monitoring and therefore decrease leverage and improves performance of the company.
 - k. WF: Work force measures the total number of company employees. It reveals the impact of privatization on work force. The coefficient expected sign is negative. Higher size means higher cost of corporate governance. The coefficient is expected to be negative.
 - l. PMS: Measures the percentage of management staff that are directly involved in the corporate decision making and policy implementation in the company. It is defined as the number of management staff divided by the total number of the workforce of the company. The coefficient expected sign is positive.
 - m. PNMS; measures the total number of company employees that are not involved in the corporate governance. It is defined as the number of non-management staff divided by the total number of the workforce of the company. It reveals the impact of privatization on work force. The coefficient expected sign is positive. The higher the size, the higher the cost of corporate governance.
 - n. PRIVt: Privatization with time which is a dummy variable.

4. RESULTS INTERPRETATIONS AND ANALYSIS

The estimated aggregate demand for cement in Nigeria was 8 million tons in 1991, while the total capacity for all the industry was 5 million tones. However, the Industry produced 3.5 million tons in 1991 as against 4.1 million tons in 1990. The capacity under-utilization emanated mostly from exogenous factors that have direct effect on cost of production and aggregate demand for cement products, such as devaluation of the naira that negatively affected importation of spare parts, prices of fuel and electricity as well as general economic activities. Furthermore, reduction in global oil prices from \$23.284 to \$18.418, again, negatively affected government revenue which resulted in curtailing government expenditure and slowdown in general macroeconomic activities of the country. Consequently, the aforementioned factors adversely impacted on Cement Industry performance. Furthermore, country financial predicament derived from deflation in global oil prices and depreciation of naira value halted economics activities which compelled the industry's corporate governance to engage them in collecting loans to sustain operational activities. Evidence of this decision manifested in leverage of Table 2 which disclosed that 9% of the industry's assets were financed with liability in 1991. However, debt financing rose to 11% in 1992. Increasing leverage by 3% enabled the industry to have healthy working capital which remarkably improved liquidity and profit. To avoid holding excess cash at hand, boards of directors discharged duty of care and directed the managements to pay off some creditors, which dramatically reduced industry leverage from 11% in 1992 to 5% in 1993.

Table 1. Distribution of performance trend analysis results of cement industry

Observation	Leverage Ratio %
1991	9%
1992	11%
1993	5%
1994	39%
1995	8%
1996	7%
1997	8%
1998	6%
1999	7%
2000	9%
2001	9.5%
2002	9.5%
2003	10.5%
2004	9%
2005	7.5%
2006	6%
2007	3.5%
2008	6%
2009	4%
2010	7.5%
2011	8.5%

Source: Author's computations

Macroeconomic problems resulted in reducing the industry's production capacity such as petroleum industry crises led to closure of the industry's Kilns, created temporary shortage for transportation to convey cement products to respective depots across the country, Banks' strikes became a serious obstacle in effecting transactions and obtaining bank's facilities to finance transactions of the industry's suppliers, distributors and collecting soft loan to augment working capital. To rescue the Industry from its financial predicament, the board of directors resorted to long-term loan arrangement that increased industry leverage to 39% in 1994. Fortunately, Federal Government introduced stabilization policies to control Inflation through interest rates and naira exchange rates stability which served as catalyst to enhancing the performance of cement industry. Consequently, the industry reduced leverage ratio to 8% in 1995, 7% in 1996 and sharply increased to 8% in 1997 and declined to 6% in 1998. However, the leverage rose to 7% in 1999, 9% in 2000, 9.5% in 2001 /2002 and to 10% in 2003. This is because, the economy has weak private sector and the governments who are the major consumers of cement product halted capital project that provides market for the cement and leaned toward election.

Shortly after the political stability of new government, economic activities rejuvenate which led to decline of leverage ratio to 9% in 2004, 7.5% in 2005 and 6% in 2006 which was a positive development. Ironically, 2007 has witnessed the least leverage ratio of 3.5% in whole study period, despite the fact that Nigeria government has been accustomed to strangulating economic activities on the eve of every national election as stated above. However, the Leverage rose to, 6% in 2008, declined to 4%, in 2009 and rises to 7.5% in 2010 and 8.5% in 2011 respectively. This persistent increase in leverage ratio of cement industry, is not unconnected with the global financial crisis in 2009 that impacted negatively in virtually all sectors of the Nigerian economy most especially the banking industry. This adverse spillover effect, affected the ability of banking sector to efficiently discharge their primary responsibility of mediation between the deficit sector and surplus sector of the economy, particularly, the mortgage banks, who are the major financiers of the construction industry. This culminated into reduction of effective demand for cement, increased cost of importing spare parts and other inventories needed for the industry's daily operations. In addition, deregulation of the oil sector, inflicted high cost of production on the industry. In conclusion, the result shows that, comparatively, pre privatization has higher sequential leverage ratio as against post privatization. In fact, the highest leverage ratio was obtained in 1994 to the tune of 39% at pre-privatization period. Thus, the new corporate governance remarkably exercised duty of care to reduce debt burden in order to maximized return on investment.

Null Hypothesis: Corporate Governance does not have significant impact on the performance (leverage) of Cement Company of Northern Nigeria.

Alternative Hypothesis: Corporate Governance have significant impact on the performance (leverage) of Cement Company of Northern Nigeria.

The Leverage Ratio result reveals that the total assets financed by long-term liabilities (dependent variable) was associated to the corporate governance proxies (independent variable) to the tune of $R = 0.994$. This implies that 99.4% of the company assets were financed by long term liabilities, which shows that there was a strong relationship between leverage ratio (LEV) and corporate governance performance.

Table 2. Distribution of regression results of leverage ratio on the set of independent variables of cement industry

Independent variables	Coefficient	Significance	SIGN
1 (CONST)	5.606	0.000	0.000
ATMVS	5.844E-11	0.000	0.000
ASTOWN	0.060	0.002	0.002
AINST	-0.051	0.000	0.000
AMINOWN	0.051	0.001	0.001
AFROEI	-0.192	0.000	0.000
ABSIZE	-0.404	0.000	0.000
APED	-0.002	0.846	0.846
APNED	0.000	0.000	0.000
AWF	0.000	0.054	0.054
APMS	0.357	0.077	0.077
APRIVt	6.895	0.000	0.000
R	0.994		0.000
R2	0.988		
Ajd R2	0.974		
F stat	69.796	0.000	

R² result reveals that about 98.8% variation of the leverage ratio (LEV) was explained by the corporate governance proxies. The result of Adjusted R² discloses that corporate governance proxies jointly accounted for 97.4% variation in leverage ratio (LEV). Statutorily, the board of directors was charged with duty of care which saddled it with the responsibility of scrutinizing and approving major management decision that involved capital project and sourcing for long-term loans to finance any activity in the corporation in order to mitigate agency problem.

The calculated F-statistics was 69.795 and the estimated significant value was 0.000 in conducting the test at 5% statistical significance. The model is strong in explaining the variation in leverage ratio (ALEV) of Cement Industry of Nigeria. In view of that it is concluded that the model has a good fit.

The constant value 5.606 was the average value of leverage ratio (ALEV) in the absence of corporate governance variables. Holding other variables constant, the result suggested that a unit increase in ATMVS leads to increase of 5.844E-11 in leverage ratio (ALEV) and the estimated significant value is 0.000. The coefficient conformed to the expected positive coefficient of the study, that market values of shares represent investors' assessment of the quality of Industry corporate governance. The strength and ability of the industry to meet long-term loan repayment potential that enables creditors and investors to make discernment on

contractual agreement with the corporation or otherwise. The market value of the Industry shares serves as a catalyst for exploiting sources of funds to enhance leverage situation of the Industry. The p-value of 0.000 reveals that total market value of shares has significant impact on Cement Company Industry of Nigeria liquidity ratio (performance) in conducting surrogate test at 1% statistical significance. Hence, ATMVS has positive and significant impact on Industry's performance (ALEV).

The result discloses that the coefficient of ASTOWN is 0.060 and the estimated significant value is 0.002. This means, a unit increase of percentage of state ownership leads to 0.060 increase in Industry's performance (ALEV). The coefficient defined the expected study coefficient which suggests that percentage of state ownership promotes corporate governance inefficiency. This result justifies the argument of the proponents of privatization that state ownership promotes corporate governance inefficiency by appointing incompetent people to managerial positions and on board membership based on personal relationship and political interests (Okaehalame *et al* 2003). More so, the p-value asserts that state ownership has significant impact on the operational efficiency. Hence, state ownership has positive and significant impact on operational efficiency.

Furthermore, the coefficient of the percentage of institutional ownership AINST is -0.051 and the estimated significant value is 0.000. This

indicates that a unit increase in AINST will lead to -0.051 decrease in Industry's performance which defies the expected positive coefficient of the study that viewed institutional ownership as a positive development in corporate governance of the Industry. To the contrary, conducting surrogate test at 1% statistical significance, AINST has a significant impact on the Industry's performance. Thus, AINST has positive and significant impact on the Industry's performance.

Similarly, a unit increase in AMINOWN results into -0.051 decrease in leverage ratio (ALEV) p-value of 0.001. The negative coefficient coincides with the expected negative coefficient of the study, which viewed that a unit increase in AMINOWN will result into creating an illegal means for the management team to manipulate corporate decision making to favour their illegitimate interests and that of the concentrated shareholders to the detriment of the other stakeholders. Furthermore, the P-value of AMINOWN of 0.001 is signifying that minority ownership has a significant impact on the Industry's leverage. Thus minority ownership has positive and significant impact on Industry's performance (ALEV).

The AFOREI coefficient of -0.192 and the estimated significant value of 0.000 show that foreign ownership does not have any impact on company's performance. This result repels expected positive coefficient of the study and the argument that tying privatized firms to capital market and foreign investment improved information disclosure and accountability, constrained national government expropriation, and increased liquidity (Dyck 2000).

However, a unit increase in ABSIZE leads to -0.404 decrease in leverage ratio (ALEV) p-value 0.000. The coefficient defies the expected positive coefficient value of the study which opines that an increase in board membership with the right people enhances board decision making efficiency and management performance surveillance. Moreso, the p-value of 0.000 reveals that ABSIZE has significant impact on the company's performance (ALEV). Thus board size has positive and significant impact on Industry's performance. The result suggests that APED is -0.002 and the estimated significant value is 0.846. The positive coefficient of the percentage of executive directors defies the expected negative coefficient of the study which opines that the lower the percentage of the executive directors the higher the board's

independence. Hence, APED has a negative and insignificant impact on Industry's performance.

A unit increase in APNED led to 0.000 increase in leverage ratio (ALEV) p-value 0.000. The positive coefficient of the result is consistent with the expected positive coefficient of the study, which argues that an increase in percentage of non-executive directors will enhance board's independence. This means that board decision making is not influenced by the management and the statutory responsibilities of the independent directors are not compromised. The p-value 0.000 reveals that the APNED has significant impact on Industry's performance (ALEV) in conducting the test at 10% statistical significance. In conclusion we can, therefore, state that the percentage of non-executive directors has negative and significant impact on Industry's performance (ALEV). This is because committees' work particularly the audit and finance committees were responsible for justifying the needs for acquiring long-term loan and recommendations to the board of directors for final approval.

Furthermore, a unit increase in WF brought about 0.000 increase in leverage ratio (LEV) p-value of 0.054. The coefficient of the result is contrary to the expected negative coefficient of the study, which postulates that an increase in WF leads to a decrease in operational efficiency. Moreover, the significant test result reveals that the workforce has p-value of 0.054, which means it has significant impact on profitability in conducting the test at 10%. Thus workforce has positive and significant impact on Industry's performance. The coefficient of APMS is 0.357 and the estimated significant value is 0.077. The result expresses that a unit increase of APMS leads to 0.357 increase in Industry's performance. The coefficient is consistent with the expected positive coefficient of the study which postulates that percentage of management measures the number of staff that are directly involved in corporate decision making, policy formulation and implementation. This signifies that there is harmony between the board decisions and management on leverage. However, the p-value of 0.077 reveals that the APMS has significant impact on the Industry's performance. Therefore, APMS has positive and insignificant impact on Industry's performance.

Finally 6.895 was the difference in leverage ratio (ALEV) p-value of 0.000 after Privatization compared to pre-privatization. The privatization

positive coefficient is consistent with expected positive coefficient of the study, which states that privatization will promote corporate governance efficiency that will impact positively on Industry's performance (ALEV). //The result confirmed trend analysis result that post-privatization has higher liquidity ratio compared to pre-privatization. The p-value of 0.000 reveals that privatization has significant impact on the Industry's performance in conducting the test at 1% statistical significance. For that reason, privatization has positive and significant impact on Industry's performance (ALEV). This negative coefficient established that private owners of Industry were more conscious of financing company assets with equity than debts financing.

4.1 Summary of Findings

Devaluation, high cost of spare parts, insufficient power supply, bank strike and deflation of global oil prices that curtailed government expenditure, created capacity underutilization in cement industry and inflicted a severe burden of financial leverage to sustain operational activities pre-privatization.

Post-privatization the leverage ratio remarkable declined, however, the global financial crisis of 2009 culminated into reduction of effective demand for cement, increased cost of importing spare parts and other inventories needed for the industry's daily operations. In addition, deregulation of the oil sector, inflicted high cost of production on the industry. These factors compelled the industry to increase leverage in order to cushion their effects on operational activities.

Average Market Value of Shares, Average State Ownership, Average Minority Ownership, Average Percentage of Non-Executive Directors, Average Work Force and Average Percentage of Management Staff have positive and significant impact on Cement industry's performance (ALEV).

Average Institutional Ownership, Average Foreign Ownership, and Board Size have negative and significant impact on company's performance (ALEV).

5. DISCUSSION OF RESULTS

The result of trend analysis suggest that leverage ratio was higher pre-privatization and remarkably declined post-privatisation. This finding is

consistent with the finding of Boubakri and Cosset (1998) that, leverage decline significantly post privatization due to debt write-down, sometimes due to equity capital infusion in executing primary issue, but in most cases due to higher retained profit. Similarly, Jeron (2008), find that, leverage decreases in privatised firms because government removal of debt grantee increased the cost of borrowing. The same thing found by Dsouza, Meggison and Nash [18] Coleman [23], and Yakovlev, 2008. The inferential statistics result reveals that corporate governance proxies have positive and significant impact on leverage ratio. Means post-privatisation capital restructuring was observed. This result is the same with the finding of Dsouza, Meggison and Nash (2006) where they conducted an empirical study on the effect of change in corporate governance and restructuring on operating performance of privatized firms. The results suggest that profitability has positive and significant relationship with state ownership and restructuring but negative relationship with employment [24].

6. CONCLUSION

Based on the above findings, the researcher concluded that new Corporate governance has reduced financial leverage remarkably post-privatisation, despite, the weak private sector and unfavourable macroeconomic environment that militated against its efficiency. And it has positive and significant impact on financial leverage of cement industry in Nigeria. In this regards, the result rejected the Null Hypothesis, that corporate governance does not have significant impact on Cement industry's Leverage in Nigeria. Therefore, these findings confirmed some of the previous findings and contradict some. Notably, it differs from studies conducted earlier in Nigeria and elsewhere, by identifying exogenous factors that affected Leverage ratio pre and post privatization.

7. RECOMMENDATIONS

In view of the above conclusion, the researcher drawn the following recommendations;

1. Investors and players of the building industry should be given special access to bank credit and special discount on the lending rate, to create private sector effective demand for cement, in order to stimulate productivity, market opportunities for cement products as against dependence on government projects and

- improve retains earnings to avoid increasing leverage.
2. The corporate governance of cement industry need to strive very well to introduce better management of inventory, and prudent financial management in order to mitigate persistent increase in leverage resulted from 2009 global financial crises post-privatisation
 3. Corporate governance of the Cement Industry in conjunction with Federal Government need to secure alternative domestic sources of energy resource like coal and solar energy. Also, there is need for encouraging Steel Companies in Nigeria to be supplying the Industry with Plants' Spare Parts and related companies that would be supplying the Industry with other inputs to mitigate the adverse effect of fuel scarcity, power supply inconsistency and unfavorable exchange rate that constraint importation of spare parts for daily operations of the industry's plants that necessitated increase in leverage.
 4. Federal Government should provide an enabling environment for the new corporate governance of Cement Industry to create additional demand for their products by creating -a subsidiary in construction industry, particularly, in building affordable mass housing for owner's occupier, hotels, market shops and shopping complex, in all the Nigerian states that will increase profitability.
 5. To address the problem of post privatization performance inefficiency, the foreign investors should embark on restructuring of debts, secure global market opportunities for exporting cement products to enable them maximize returns on their investment, justify the improvement of the quality of corporate governance and promote transfer and infusion of modern technology.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Arocena P. The Reform of the utilities sector in Spain. WIDER Discussion paper 2001/13. Hetsuki: United Nation University/World Institute of Development Research; 2001.
2. Barja G, Mckenzie D, Urquiola M. Capilization and privatistion in Bolivia Manuscrpts. Cornel University, Ithaca, New York US; 2002.
3. Birdsall N, Nellis J. Winners and Loser; Assessing the Distribution Impact of Privetionzation. World Developemnt. 2003;1617-1633.
4. Boubakri N, Cosset JC, Guedham O. Post privatisation corporate governance: The role of ownership structure and investor protection. University Laval Quebec, Canada GIK 7 PA; 2002.
5. Boubakri N, Cosset JC. Does privatisation meet the expectations? Evidence from African countries, paper presented at the plenary on privatisation and corporate governance. African Economic Research Consortium, Biannual Research Workshop, Nairobi, Kenya, 4th – 6th December; 1999.
6. Megginson WL, Maria KB. The impact of privatisation on capital market development and individual share ownership, A Paper Presented at the Third FIBV Global Emerging Markets Conference and Exhibition, Federation of International Stock Exchanges, Istanbul, Turkey; 2000.
7. Megginson WL, Netter JM. From state to market: A survey of empirical studies on privatization. Journal of Economic Literature. 2001;39(2):321-389.
8. Megginson WL, Nash RC, Randenborgh MV. The financial and operational performance of newly privatised firms: An international empirical analysis. Journal of Finance. 1994;49:403 – 452.
9. Megginson WL, Nash RC, Netter JM, Annette BP. The choice of private versus public capital markets: evidence from privatisations. Contact Jetter on jnetter@terry.uga.edu; 2002.
10. Megginson WL, Nash RC, Netter JM, Schwartz AL. The Long-Run Effects to Investors in Share Issue Privatisations. Working Paper need to contact Adam Schwartz on email aschwartz@exchange.sba.miami.edu; 1999.
11. Paredes R. Redistributive impact of privatisation and the regulation of utilities in Chile. WIDER Discussion paper No. 2001/19 Helsinki. United Nation University/World Institute of Development Research; 2001.

12. Yakovlev A. State-business relations and improvement of corporate governance in Russia joint paper of Japan-Russia research paper. Institute of Industrial and Market Studies State University Moscow; 2008.
13. Boubakri N, Cosset JC, Guedham O. Liberalisation, Corporate governance and the performance of newly privatised firms. Annual Conference Paper of Administrative Science Association of Canada; 2001.
14. Jerome A. Privatisation and enterprise performance in Nigeria: Case Study of some Privatized Enterprises; 2008.
15. Megginson WL. The economics of bank Privatisation, a paper presented at conference on bank privatisation in low and middle income countries, sponsored by finance division of the development research group, The World Bank; 2003.
16. Aljifri K, Moustafa M. The impact of corporate governance mechanism on the performance of Uae firms; an empirical analysis. Journal of Economics and Administrative Science. 2007;23(2): 71 – 93.
17. Boubakri N, Cosset JC. The financial and operating performance of newly privatized firms: evidence from developing countries. Journal of Finance. 1998;53.
18. Adeyemi SB, Fagbemi TO. Audit quality, corporate governance and firm characteristics in Nigeria; 2010.
19. Birdsall N, Nellis J. Winners and losers: Assessing the distributional impact of privatisation. Centre for Global Development Working Paper Number 6, May; 2002.
20. Ghani IW, Ashraf J. Corporate governance, business group affiliation and firm performance; descriptive evidence from Pakistan. CMER working paper series No. 105-35; 2005.
21. Badunenko O, Moritz FK, Dorathea S. Private equity, corporate governance and out performance of high-growth firms. Financial System, Efficiency, and Stimulate and Sustainable Growth, Working Paper FINSS D 32; 2010.
22. Jensen M, Meckling W. Theory of the firm: Managerial behavior, agency, cost and ownership structure. Journal of Financial Economics. 1976;3:305 – 360.
23. Coleman AK. Corporate governance and firm performance in Africa: A dynamic panel data analysis. International Conference on Corporate Governance of Emerging Markets. Global Corporate Governance Forum (GCGF); 2007.
24. Delfino JA, Casari AA. The reform of the utilities sector in Argentina, Un University WINDER, Discussion paper No. 2001/17; 2001.

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