

REVISITING COMPETITIVE RIVALRY AND CORPORATE PERFORMANCE: INSIGHTS FROM PORTER'S FIVE FORCES MODEL IN NIGERIA'S CEMENT INDUSTRY

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ABSTRACT

This paper examines the impact of competitive rivalry on the performance of cement industry in Nigeria, focusing on the impact of strong demand and the country's weak industrial structure. The study examines Porter's Five Forces Model, which considers factors like competition intensity, new entrant risk, substitute product/service risk, supplier negotiating power, and buyer bargaining power. The paper argues that Nigeria's cement industry is impacted by its weak industrial structure, leading to a housing shortfall and high cement prices.

Keywords: Competitive Rivalry, Corporate Performance, Porter's Five Forces Model, and the cement industry in Nigeria

INTRODUCTION

Cement industry plays a crucial role in Nigeria's construction and infrastructure development. With increasing urbanisation, population growth, and recent federal government infrastructure project growth, the demand for cement has increased, making it an important industry to study. Understanding the dynamics of competitive rivalry and its impact on the performance of the cement industry is essential for companies to strategise effectively, increase production and distribution, maintain a moderate price, and gain a competitive advantage. Moreover, analysing this relationship provides valuable insights for investors and policymakers to make informed decisions.

Competitive rivalry refers to the continual series of actions and reactions between rivals who are vying for the same share of a market (Ndungu, 2013; Michael et al., 2019). It is the intensity of competition among existing players in an industry or the measure of the extent of competition among existing firms (Pan & Wang, 2020). The intense competitive rivalry can lead to competitive attacks and

counterattacks that either improve or limit profits and performance (Guntuka, 2022). It is believed that competitive equilibrium is rarely reached because a company's attacks engender counterattacks from rivals (Su & Lin, 2016; Library Guides, 2022). To understand competitive rivalry and performance in this study, we argue that as corporations pull in resources to build capabilities, core competencies, and competitive advantages, their performance depends on the competitive interactions in the industry. It is equally important to analyse the different competitive actions and reactions that corporations undertake within an industry to ascertain how well they are reaching their goals.

As identified in Porter's five forces model of competitive rivalry, factors such as competitive rivalry intensity, the bargaining power of suppliers, the bargaining power of customers, the threat of new entrants, and the threat of substitute products or services all affect the corporate performance of the companies in an industry (Khurram, 2020; Adeleke, 2020). For instance, when a few companies are selling a good or service, the intensity of rivalry is low, but if their customers can easily transfer to a

competitor's product, competitive rivalry will be high (Guntuka, 2022). On the other side of the spectrum, when supplier bargaining power is high over prices and consumers cannot switch easily, firms can attain economies of scale, make profits, and improve performance (Groseclose, 2017). Whereas buyer's bargaining power evaluates consumers' power and the impact of price and product quality. When buyer's bargaining power is high, companies in an industry will need to manoeuvre business level strategies in pricing, branding, distribution, market positioning, etc (Dar & Tariq, 2020). In some cases, the threat posed by new competitors come from factors that make it easy for them to enter the market, such as absolute cost advantages, access to raw materials, economies of scale, and a strong brand identity. When new companies have easy access, competitive rivalries will continue to grow and intensify (Blaabjerg, 2019). In a similar vein, the quantity, quality, and profits of competitors all have an impact on the threat of substitute goods and services. When consumers can use alternative goods or services outside of a particular industry, it influences the performance of the industry's players. In the measurement of performance, we focused on one critical dimension: market performance indexes of the cement producing industry in Nigeria. This sometimes affects the profitability of the companies and their overall performance.

Corporate performance is an integrated assessment of a company's ability to achieve its goals (I, 2020). Corporate performance is categorised into financial, market, employee, and shareholder performance (Eulerich et al., 2020). For example, a report may show a large increase in a company's financial performance, with high profits and increased revenue. However, upon closer examination, it can be revealed that this growth is driven by one-time events or non-recurring factors like the sale of assets. This can give a false impression of sustained profitability and may not accurately reflect the company's long-term success. Additionally, a company's market performance may appear strong if it has gained a significant market share or its stock price has increased.

Thus, this paper explores the relationship between competitive rivalry and the corporate performance of cement-producing companies in Nigeria.

With the heavy strategic approaches used by these top 10 cement brands—Dangote Cement, Bua Cement, Ashaka Cement, Ibeto Cement, Elephant Cement, and UniCem—we anticipate a small shift in the distribution of market shares in 2022 and 2023. Dangote Cement is the largest cement producer in Sub-Saharan Africa and ranks as Africa's leading producer of cement (Alaba & Ayodele, 2022; Empirical Assessment of Performance of Dangote Cement Plc: An End-Users' Perspective, 2021). Bua Cement, owned by billionaire businessman Abdulsamad Rabi, is a subsidiary of the BUA Group and has a combined production capacity of 48.6 million metric tonnes per year across ten countries (Joseph & Otunuya, 2015). Ashaka Cement, a subsidiary of Lafarge Africa Plc, is known as the 'Star of the North' due to its market strength in Northern Nigeria (Ebong, 2022). Ibeto Cement, a subsidiary of the Lafarge Group, began business in the cement sector in 1997 and has a 5 million metric tonnes per year cement manufacturing plant in Effium, Ebonyi State. Elephant Cement, symbolised by the strength of an elephant, is another top cement brand in Nigeria. UniCem cement, another top cement brand from Lafarge, has an installed capacity of 5 MMT and is known for its quality, consistency, and excellent strength performance at all ages. The Nigerian Cement Company, established in 1954, is a leading cement manufacturer in Nigeria. It produces Elephant Supaset, Eagle Cement, and Powermax Cement, all meeting Nigerian standards. Elephant Supaset is used for blockmaking, poles, and precast concrete, while Eagle Cement is a durable, high-quality, and widely preferred cement brand in Nigeria. The cement industry in Nigeria is expected to have grown beyond its current level, with strong demand from both the public and private sectors. For example, a major cement company in Nigeria may decide to acquire a smaller competitor in order to expand its market share and increase production capacity. This acquisition would allow the company to meet

the increasing demand for cement while also benefiting by economies of scale and cost synergies (Cancio Díaz et al., 2017). Additionally, the company may invest in improving its distribution network by establishing regional warehouses and partnering with local distributors, enabling it to efficiently reach both the public and private sectors.

Thus, the paper is divided into four sections. Section one is the introduction, which deals with a brief explanation of the major concepts, the thesis statement, the implication, and the paper's structure. Section two is the literature review, discussing scholars' positions on competitive rivalry, Porter's five forces model, the structure conduct performance model, corporate performance, and the theoretical underpinnings of the paper. Section three is the conclusion, discussing the summary of the paper. And section four is the recommendation for policy decisions.

LITERATURE REVIEW

Competitive Rivalry in the Cement Industry

Competitive rivalry is a crucial aspect of strategic management, as it involves the deliberate pursuit of an advantageous position in the industry. Companies compete when they target the same opportunities, such as resources, revenues, and customers. Competition becomes rivalry when multiple entities pursue a common goal but ultimately fail to achieve it optimally (Krauth, 2002). In competitive rivalry, companies take on and respond to attacks that position them as strategic rivals in the marketplace; these affect their strategic success (Chatain, 2013). Competitive equilibrium is therefore seen as elusive, as no action against a rival can be conducted without consequence, and the success of an action often depends on the reaction of the other rival (Kim & Park, 2014). Competitive rivalry can increase a corporation's chances of strategic success by anticipating and adapting to the moves made by its rivals ("How Modern Technologies Can Generate a Competitive Edge," 2021). Each firm in a given industry adopts some sort of discernible

competitive strategy the moment it enters the industry, which helps companies anticipate the actions and reactions of their rivals and alleviate the uncertainty that comes with competing in the industry.

Although competitive rivalry affects all types of strategies (for example, at the corporate level: restructuring, acquisition, divestiture, merger, etc.), its most dominant influence is on the corporation's business-level strategies (for example, cost leadership, product differentiation, focused cost leadership, focused differentiation, and cost leadership and differentiation) (Khan et al., 2022; Mikhailov, 2019). Indeed, corporations' actions and responses to those of their rivals are the basic building blocks of business-level strategies. We theoretically argue about how Porter's five forces model and the structure-conduct-performance model affect the implementation of business level strategies in the cement industry in Nigeria.

Porter's Five Forces Model and its Application in the Cement Industry

Michael Porter of Harvard Business School came up with Porter's Five Forces in 1979 as a way to look at an industry and make business strategies (Ho, 2019). Porter called these forces the "micro environment" because they are close to a company and affect how well it can serve its customers and make profits (Grandi & Cardinali, 2022). When one of the forces changes, a company usually has to re-evaluate the market because new information has come to light. It should be noted that the overall attractiveness of an industry does not imply that every company in the industry will return the same profitability (Bamiatzi et al., 2015). A company's ability to survive depends on its ability to identify competitors and understand how their products, services, and marketing tactics affect it (Pranta Yudha & Rofiah, 2023). The Porter's five forces model examines competitive rivalry using five distinct factors that determine whether or not a corporation can be profitable in comparison to other businesses in the industry (Khurram, 2020). These factors include the intensity of competitive rivalry, the threat of new entrants, the threat of substitute

products or services, the bargaining power of suppliers, and the bargaining power of buyers (KAMI, 2022). By favouring these factors, businesses can gain insight into the level of competition they face and make strategic decisions to stay profitable.

Competitive rivalry is a crucial factor in determining a corporation's profitability. In a perfectly competitive market, many small companies offer homogeneous products, making it difficult for any single competitor to have a significant impact. Price wars, aggressive marketing tactics, and constant innovation are common in such cases (Lou & Yang, 2022). However, in the luxury watch industry, brands like Rolex and Patek Philippe have established strong market positions, resulting in lower competitive rivalries and less aggressive marketing tactics. The pharmaceutical industry, for example, has a few large firms that dominate the market and have significant control over pricing and product differentiation.

With more businesses emerging to compete with Dangote Cement Company in Nigeria, the cement industry is experiencing fierce competition. Market commonality and resource similarity are important factors in understanding competitive rivalry (Alaba & Ayodele, 2022). Companies with higher multimarket exposure are less likely to initiate attacks but more likely to respond forcefully when attacked. Their resource similarity, which is the extent to which a corporation's tangible and intangible resources are equivalent to a competitor's in terms of type and quantity, can predict the intensity of competitive rivalry. Market commonality and resource similarity are crucial factors in determining competitive behaviour, as they influence awareness, motivation, and capability. High intensity rivalry situations involve offering attractive deals to win over customers, while low intensity situations reduce competition and ensure financial success (Fairchild, 2004). Analysing various factors in an industry can provide valuable insights into the level of rivalry, identify potential threats and

opportunities, and inform strategic decision-making.

The threat of new entrants is one of Porter's five forces that shape the competitive structure of an industry. A high threat of entry indicates that new competitors are likely to be drawn to the industry's profits and can easily enter the market. Low entry barriers and high risk of new entrants can be influenced by factors such as economies of scale, unique products, low initial capital investment requirements, low consumer switching costs, and the absence of relevant advantages.

The threat of substitute products is another factor that affects competitive rivalry and performance potential. When the threat of substitutes is high, industry participants must focus more on operating efficiently to limit profitability. When the threat of substitutes is diminished, industry participants loosen their cost controls, resulting in higher prices charged to customers. The threat of substitutes is influenced by factors like customer switching ease, availability, superior features, quality, and cost. Low threat indicates better investment opportunities, while changes could decline profitability. Strategists monitor the threat's evolution over time.

Porter's Five Forces Analysis is a framework that also focuses on the bargaining power of suppliers, which can significantly impact a company's profitability. Suppliers have direct input into products or services, such as labour, marketing, distribution, and raw materials. Understanding their bargaining power is crucial for businesses to develop effective strategies and mitigate potential risks.

The bargaining power of buyers is another crucial factor in Porter's Five Forces analysis. Buyer's bargaining power is determined by three major factors: high or strong, low or weak, and the threat of substitute products or services. A high buyer's bargaining power can diminish an industry's profitability and lower its attractiveness, potentially deterring new entrants or causing existing firms to make strategic decisions to improve profitability. The number of customers and how frequently they

make purchases affect buyer power. Strategies use price sensitivity and bargaining leverage to determine buyers bargaining. Factors such as the quantity of buyers, the likelihood of backward integration, switching costs, and buyer independence also affect buyer's bargaining power.

Structure, Conduct, and Performance Theory

The Structure-Conduct-Performance (S-C-P) model, developed by Edward Chamberlin and Joan Robinson in 1933, is a causal theoretical explanation for corporate performance in imperfect industries. The S-C-P model focuses on factors driving the intensity of rivalry, such as service homogeneity, service provider concentration, market share changes, industry groups, geographic market nature, change in market demand, cost relationships, technological change, industry age, diversity, barriers to entry, vertical integration, and buyer concentration (Ghouri et al., 2021). According to the structure-conduct-performance theory, low levels of competition and inflated prices and profits result from a market that is controlled by a small number of major corporations. Conversely, an industrial structure with a small number of companies competing with the large ones will have little competitive rivalry intensity, which will result

in high prices and profits (Herbon, 2018). But if these emerging companies are resilient enough to pursue competition and build advantages, it will result in low prices, profits, and performance. Our critique is that there is a low influence of industrial structure on the conduct and performance of the cement industry in Nigeria. This will continue to lead to high prices for cement products in Nigeria.

Corporate Performance in the Cement Industry

Corporate performance is a blended analysis of how well a particular company achieves its goals. These goals are highly dependent on the company but tend to fall within the set categories of financial, market, and shareholder performance. Corporate performance varies among covered executive companies and is calculated using financial statements, liquidity ratios, return on investment, profitability ratios, market share, and employees' productivity, among others.

The Nigerian cement companies are thriving on the continent of Africa, with Dangote Cement as the leading company. In figure one, Dangote is leading the production in Africa with 24.7%, followed by Lafarge WAPCO with 20.8% and Heidelberg Cement with 13.3% as the top three producers in Africa.

Cement Producers in Africa

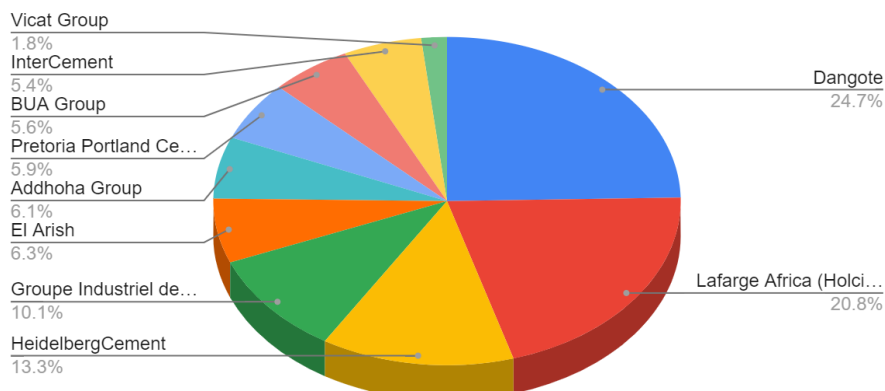


Figure 1:

Source: (Popoola, 2019)

Dangote Cement, WAPCO, and BUA are the major competitors among the 10 cement companies in Nigeria, competing for market share amid a challenging operating environment and the COVID-19 outbreak.

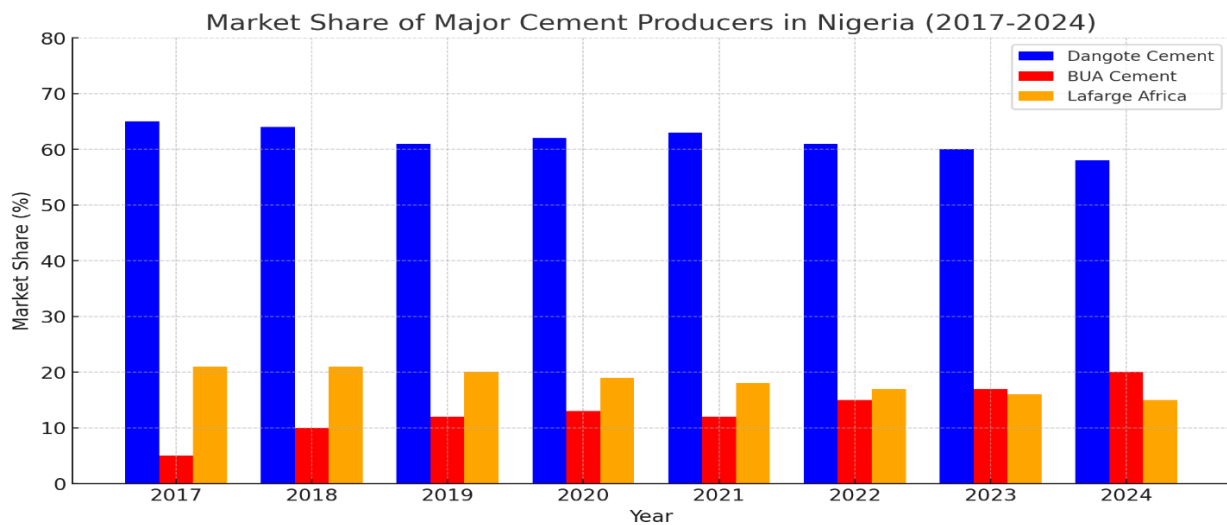


Figure 2

Source: (Adegbeie & Akenronye, 2022)

Theoretical Underpinnings

BUA Cement has created the third-largest cement capacity in Nigeria, trailing Dangote and WAPCO Cement. It emerges as a new entrant that has affected the competitive rivalry of the cement industry. Although the cement industry has a high capital requirement for investment, especially in acquiring production plants and infrastructure, its entry has been drawn from the market share and production capacity of Dangote and Lafarge WAPCO cement. As shown in Figure 2, Dangote has struggled to maintain its share of 60% and above for the past six years, from 2017 to 2022. For Lafarge WAPCO, each year, while BUA cement increases market share and performance, its share decreases in Nigeria. This means that there is a low consumer switching cost affecting Lafarge and Dangote cement in Nigeria. BUA's strategic manoeuvring has kept cement prices temporarily stable despite increased production costs. Both Lafarge and Dangote Cement are fighting to protect their market share from the third force's infiltration. BUA Cement's entry has led to increased competition, with BUA Cement recording a revenue per tonne of ₦41,113/MT, trailing WAPCO's revenue per

tonne of ₦44,316/MT and Dangote Cement's ₦44,855/MT (Adegbeie & Akenronye, 2022). Presently, the Nigerian cement industry shows intensifying competition. Dangote Cement remains the market leader but faces a gradual decline from 65% in 2017 to 58% in 2024. BUA Cement exhibits steady growth, increasing from 5% to 20%, highlighting its rising competitiveness. Meanwhile, Lafarge Africa continues to decline from 21% to 15%, struggling to sustain its market position. Overall, the market dynamics are shifting, driven by strategic investments and growing rivalry.

Drawing from Porter's five forces framework for analysing an industry's competitive intensity and profitability, unattractive industries reduce the overall profitability of companies in them. While a purely competitive and attractive industry drives profits to normal levels and ensures the satisfaction of customers' needs, when companies apply core competencies and business models, they should improve profitability while meeting the needs of their customers (Porter's Five Forces Analysis, Wikipedia, 2020 & Mugo 2020). The cement industry in Nigeria is attractive but with less competitive intensity because few players

do not possess the same market commonality and resource similarity. Dangote possesses a high multimarket advantage with plants across the six geopolitical zones. Similarly, an analysis of the competitive landscape, market structure, and financial performance by Olayinka & Mustapha (2023) shows that Dangote Cement leads the Cement Company of Northern Nigeria (CCNN) while BUA Cement, and Lafarge Africa in times of profitability. Price competition, product differentiation, and market saturation are the main drivers of the intense rivalry in the Nigerian Cement industry. Additionally, mergers and acquisitions have become common in the industry as companies seek to consolidate their market positions and gain economies of scale, just as with the purchase of Benue cement company BCC by Dangote.

With the limited number of cement companies in Nigeria and the high demand for it, the suppliers have high bargaining power, making it difficult for the price of cement products to be reduced. The Suppliers have direct input into products or services, such as labour, marketing, raw materials, and distribution, while consumers only choose from the available products. And prices in an imperfect market are affected by other forces other than supply and demand.

Similarly, buyers of cement in Nigeria have less bargaining power, and this is a crucial factor in Porter's five forces analysis. A high buyer's bargaining power can diminish an industry's profitability and lower its attractiveness, potentially deterring new entrants or causing existing firms to make strategic decisions to improve profitability. The number of customers and how frequently they make purchases affect buyer power in the Nigerian cement industry. Similar to the finding of Seboru and Guyo (2014), who found that Porter's Five Forces Model affected the Performance of the cement industry in Kenya, the competitiveness of the cement industry in Nigeria has been characterised by a continued increase in cost despite the availability of some of the raw materials like gypsum and limestone in the country. The high cost is attributed to the high

cost of energy-intensive production, transportation costs, and weak infrastructure (Mbanefo, 2023).

The rising cement demand in Nigeria has attracted new market entrances, intensifying competition among cement producers (Adeola & Adekola, 2022). This increased competition has led to price wars and a focus on cost-cutting measures, potentially compromising the quality of cement products. As a result, the industry is facing challenges in maintaining its reputation for delivering durable and reliable construction materials. The inability to cut the cost of cement in Nigeria has made housing unaffordable, with a 2020 report estimating a housing deficit of over 17 million (Izebhor, 2022). The cost of building materials, including cement, has increased by four hundred per cent in the last twelve years, reaching an average of N5,000 per 50kg. Although the Central Bank of Nigeria (CBN) has called for cement manufacturers to reduce the price of cement and building materials, cement production in Nigeria is one of the most expensive on the continent, though raw materials such as limestone, marl, calcite, shale, and gypsum are sourced locally. The dominance of the market by BUA, Dangote, and Lafarge has also impacted local manufacturers. Cement is crucial in Nigeria's construction industry, but its high cost has led to many struggling to afford the material needed for homes and businesses.

CONCLUSION AND RECOMMENDATIONS

Dangote's dominance is evident, but BUA Cement is rapidly overtaking Lafarge WAPCO. One can infer that the competitive rivalry will grow stiffer when BUA's market share reaches half that of Dangote and affect the corporate performance. The industrial structure is affecting the price of cement in Nigeria and poses a challenge for construction and infrastructural development. This paper recommends addressing the challenges faced by cement-producing companies in high-cost and limited-access areas:

1. It is important for these companies to focus on improving operational

efficiency and reducing production costs. This can be achieved through the implementation of advanced technologies, such as automation and digitalization, to streamline production processes and optimise resource utilisation.

2. There should be collaboration and knowledge sharing among cement producers to help identify best practices and cost-saving measures.
3. The government and industry associations should work together to create a favourable regulatory environment and provide incentives for investment in the industry
4. To address the challenges of high construction costs and limited access to affordable cement, governments should invest in infrastructure development and create policies that promote competition among cement-producing companies.
5. The cement-producing companies should explore alternative sources of raw materials or adopt more sustainable manufacturing processes, which could help reduce production costs and increase the availability of affordable cement.
6. Additionally, conducting market analysis studies can provide insights into demand patterns and potential areas where new cement plants can be established.

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