CORPORATE DIVERSIFICATION AND VALUE OF QUOTED CONGLOMERATES IN NIGERIA

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ABSTRACT

The study evaluated the effect of corporate diversification on value of conglomerate listed companies in Nigeria. The specific objective was to ascertain the effect of product diversification, subsidiary diversification, regional diversification and sector diversification on the Tobin's Q of listed conglomerates in Nigeria. Ex-post facto research design was adopted in the study. The population of the study is six (6) listed firms under the Nigerian conglomerate sector. Purposive sampling was used in selecting the sample size of five (5) conglomerates that were listed from 2012 to 2023. Secondary data were collected from the annual reports of the sampled conglomerates for a twelve year period that spanned from 2012 to 2023. The regression model was validated using test of heteroskedasticity, normality, and multicollinearity. Hypotheses of the study were tested using Robust Least Square regression analysis to account for the outliers observed in the data. The findings revealed the following: product diversification has a significant negative effect on corporate value of listed conglomerates in Nigeria (p-value = 0.0000); subsidiary diversification has a significant positive effect on corporate value of listed conglomerates in Nigeria (p-value = 0.0000); regional diversification has a significant positive effect on corporate value of listed conglomerates in Nigeria (p-value = 0.0000); sector diversification has a significant negative effect on corporate value of listed conglomerates in Nigeria (p-value = 0.0072). In conclusion, not all forms of diversification contribute positively to the value of conglomerates in Nigeria. While subsidiary and regional diversification strategies appear to enhance corporate value by leveraging specialized management and geographical expansion, product and sector diversification may introduce inefficiencies and strategic misalignments that diminish firm value. The study recommends that to mitigate the negative impact of product diversification, the Board of Directors and Senior Management should prioritize core competencies and streamline product lines by discontinuing underperforming or non-core products and focusing on areas where the conglomerate has a competitive advantage..

1. INTRODUCTION

In Nigeria, conglomerate firms operate across diverse sectors, including manufacturing, telecommunications, finance, and consumer goods, among others. The rationale behind conglomerate diversification is multidimensional, influenced by factors such as market fragmentation, regulatory environments, and the pursuit of economies of scope. Corporate diversification in Nigerian conglomerates is driven by various strategic objectives. Foremost, diversification serves as a risk management strategy, allowing firms to spread their operations across multiple industries and geographic regions to mitigate the impact of sector-specific challenges or macroeconomic fluctuations (Duho, Duho & Forson, 2023; Osifo & Evbayiro-Osagie, 2020). Additionally, conglomerates may pursue diversification to capitalize on emerging market opportunities, leveraging their existing capabilities and networks to enter new sectors or expand their footprint within existing markets (Adesina, 2021). In today's competitive business terrain where firms keep on seeking for business strategies that will boost their corporate value (Poretti, Weisskopf & de Régie, 2024), corporate diversification stands as a pivotal concept, shaping the trajectories of firms across industries. Corporate diversification encapsulates the strategic expansion of a company into various business lines or industries beyond its core operations (Ajao & Kokumo-Oyakhire, 2021). This strategic maneuver holds significant implications for firms, shareholders, and the broader economic landscape.

Understanding the dynamics of corporate diversification and its impact on firm value is crucial for scholars, practitioners, and policymakers alike as they address the complexities of modern business environments. Corporate diversification embodies the strategic imperative of firms to spread their risks and harness opportunities in multiple domains (Binuyo & Binuyo, 2019). Traditionally, firms have pursued diversification to mitigate the risks associated with economic downturns, industry-specific challenges, or technological disruptions. Moreover, diversification enables firms to capitalize on synergies, leverage core competencies, and explore new revenue streams. This multidimensional approach to growth often entails venturing into unrelated industries or expanding along the value chain, fostering resilience and competitiveness in dynamic markets (Clinton & Salami, 2021). The relationship between corporate diversification and firm value has been a subject of extensive inquiry within academic literature and corporate boardrooms. Firm value, often measured by metrics such as stock prices, market capitalization, or profitability, serves as a barometer of a company's performance and prospects (Poretti, Weisskopf & de Régie, 2024). Understanding how diversification strategies influence firm value is essential for investors seeking to

optimize their portfolios and for managers devising growth strategies. Proponents of diversification argue that it can enhance firm value by providing opportunities for revenue growth, risk reduction, and resource sharing (Ehiedu & Priscilla, 2022; Addai, Tang, Gyimah & Twumasi, 2022; Okpala & Omaliko, 2022; Okoye & Ezenwafor, 2022). By diversifying across industries or markets, firms can tap into new customer segments, exploit economies of scale, and mitigate industry-specific risks. Additionally, diversification can enable firms to capitalize on market cycles, smoothing out fluctuations in performance and enhancing long-term sustainability (Ajwang, 2021).

Conversely, critics contend that corporate diversification may dilute firm value by dispersing managerial attention, increasing complexity, and fostering inefficiencies (Riswan & Suyono, 2016; Volkov & Smith, 2015). The pursuit of diversification can lead to organizational inertia, where resources are allocated suboptimally across diverse business lines. Moreover, diversification can obscure the core competencies of firms, undermining their competitive advantage and market positioning. In cases where diversification ventures underperform or face strategic misalignment, firms may experience value destruction, eroding shareholder wealth and market confidence (Holtes, 2024). Empirical research on the relationship between corporate diversification and firm value has yielded mixed findings, reflecting the subtle nature of this phenomenon (Okpala & Omaliko, 2022; Ehiedu & Priscilla, 2022; Okoye & Ezenwafor, 2022; Addai, Tang, Gyimah & Twumasi, 2022). Some studies have found positive correlations between diversification and firm value, particularly in contexts where synergies are realized, and risk is effectively managed (Suleiman, 2022). For instance, conglomerates with diverse revenue streams may exhibit resilience during economic downturns, buoying investor confidence and stock prices. Conversely, other studies such as Okoye and Ezenwafor (2022); Martiningtiyas, Muchtar, Ristiqomah and Rahman (2022); Quyen, Ha, Darsono and Minh (2021) have highlighted instances where diversification strategies fail to generate value or even lead to value destruction. Poorly executed diversification initiatives, characterized by inadequate due diligence, integration challenges, or misaligned incentives, can undermine firm performance and erode shareholder returns.

The mechanisms through which corporate diversification affects firm value are manifold and contingent on various factors. One mechanism is the impact of diversification on risk management (Haug, Pidun & zu Knyphausen-Aufseß, 2018). By diversifying across industries or markets with low correlation, firms can reduce the volatility of their cash flows and enhance their risk-adjusted returns. This risk reduction effect may appeal to risk-averse

investors, bolstering firm valuations and stock prices (Krivokapić, Njegomir & Stojić, 2017). Another mechanism is the exploitation of synergies and economies of scope. Through diversification, firms can leverage shared resources, capabilities, and knowledge across business units, driving operational efficiencies and cost savings (Mehmood, Hunjra & Chani, 2019). Synergies may arise from cross-selling opportunities, shared distribution channels, or pooled R&D efforts, amplifying the overall value proposition of the firm.

Furthermore, corporate diversification can influence firm value through its impact on managerial decision-making and organizational culture. Diversification initiatives may shape the strategic priorities, incentive structures, and communication channels within firms, impacting their ability to innovate, adapt, and execute effectively (Enrichest, 2023). Effective diversification strategies align managerial incentives with long-term value creation, fostering a culture of accountability, agility, and innovation. Therefore, corporate diversification represents a strategic imperative for firms seeking to address the complexities of modern markets and enhance their competitive resilience. It is against this background that this study examines the effect of corporate diversification on the firm value of listed conglomerate firms in Nigeria.

Corporate diversification is supposed to serve as a strategic tool to enhance firm value, fostering growth, resilience, and long-term sustainability (Githaiga, 2022). Companies strategically expand into new markets or industries, leveraging synergies, and spreading risks to optimize shareholder wealth. In this ideal situation, diversification initiatives are meticulously planned, aligned with core competencies, and executed with precision, resulting in value accretion for all stakeholders involved (Enrichest, 2023). However, embarking on diversification strategies without fully assessing the potential risks, synergies, or strategic fit with the firm's existing business portfolio results in loss of the benefits of diversification (Mindtools, 2024). This is often the case when diversification decisions are driven by short-term market pressures, managerial hubris, or a lack of understanding of the complexities inherent in managing diverse business lines (Enrichest, 2023) especially with respect to the diverse economic domain of Nigeria. As a result, firms may find themselves stretched thin, grappling with operational inefficiencies, and struggling to realize the anticipated benefits of diversification (Mindtools, 2024). Consequently, inadequately planned diversification efforts can lead to value destruction, eroding shareholder confidence and diminishing long-term competitiveness (Ahuja & Novelli, 2017). When diversification ventures underperform or fail to generate synergies, firms may experience financial distress, shareholder activism, or even hostile takeovers. Moreover, the diversion of managerial attention and resources towards non-

core activities can impede innovation, hinder strategic agility, and weaken the overall resilience of the firm. Furthermore, the misalignment between diversification strategies and firm capabilities can exacerbate agency conflicts, exacerbating tensions between management and shareholders. Managers may pursue diversification initiatives to pursue personal agendas or empire-building aspirations, rather than maximizing shareholder value. This misalignment of interests can erode trust in corporate leadership, undermine governance structures, and impede effective decision-making processes. The existing empirical research on corporate diversification and firm performance has primarily focused on quoted companies, with limited attention given to developing countries. Notably, there is a dearth of studies examining the impact of corporate diversification on the value of listed firms in the conglomerate sector of the Nigerian Exchange Group. Previous studies, such as those conducted by Suleiman (2022), Phan, Nguyen, and Hoang (2022), Ehiedu and Priscilla (2022), Suleiman (2022); Phan, Nguyen and Hoang (2022); Ehiedu and Priscilla (2022); Addai, Tang, Gyimah and Twumasi (2022); Okpala and Omaliko (2022); Okoye and Ezenwafor (2022); Lahouel, Taleb, Kočišová and Zaied (2022); Martiningtiyas, Muchtar, Ristiqomah and Rahman (2022); Githaiga (2022); and others, have explored various aspects of corporate diversification individually. However, comprehensive examinations of the combined effects of regional and sectoral diversification strategies are lacking in the context of Nigerian conglomerates firms.

1.1 Objectives

The main objective of the study is to evaluate the effect of corporate diversification on value of conglomerate listed companies in Nigeria. The specific objectives include to:

1. evaluate the effect of product diversification on corporate value of listed conglomerates in Nigeria.
2. ascertain the effect of subsidiary diversification on corporate value of listed conglomerates in Nigeria.
3. investigate the extent of effect that regional diversification has on corporate value among listed conglomerates in Nigeria.
4. ascertain the extent to which Sector diversification affects corporate value of listed conglomerates in Nigeria.

1.2 Hypotheses

The following are the null hypotheses formulated for the study:

H_{01}.   Product diversification has no significant effect on corporate value of listed conglomerates in Nigeria.

H_{02}.   Subsidiary diversification has no significant effect on corporate value of listed conglomerates in Nigeria.

H_{03}.   Regional diversification has no significant effect on corporate value of listed conglomerates in Nigeria.

H_{04}.   Sector diversification has no significant effect on corporate value of listed conglomerates in Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Product Diversification and Firm value

Product diversification can be a useful strategy when the firm is more interested in consolidating their positions within the sector and when there is an arsenal of underutilized resources that can be used in the production of other products at a low opportunity cost (Krivokapić, Njegomir & Stojić, 2017). This diversification strategy enhances the efficient utilization of business resources across multiple products. The underperformance of such resources in the production process can lead to lose in relative term for the firm, it is however, economically profitable for the firm to extend their use to other business line or product. Product diversification strategy was believed to be a strong catalyst for competitiveness in any industry (Haug, Pidun & zu Knyphausen-Aufseß, 2018). There are several advantages that could accrue to the firm from product diversification. The theory of a firm holds that a firm is a bundle of resources that can be used in the production of several separate goods. However, some firm's resources cannot be utilized in the production of several goods as they are product-specific/customized. Other resources may be used in the production of multiple goods or services in many areas of business. Most firm uses multiple products as a competitive, risk mitigation and revenue generation strategy. As firm with multiple products offer to wide classes of customer options to enhance their loyalty. As the life cycle of a given product enters the decline stage, the revenue from other product could be used to caution the effect of the short in the revenue from that product. This strategy would enable the firm maintain balance in their revenue generation, profitability, and dividend payment. Also, it could be a cost efficiency strategy as the advert time in social media and mass media could

be used to show case multiple products. If the cost is spread among all the products could lower the unit cost of the advert per product showcase and the overall cost per each product. Hence improving the profit from each product and the overall profit of the organisation. This has made it is economically profitable for the firm to extend their use to other business lines or products.

Most firms diversify their products to gain and exploit economies of scope in various resources (Mehmood, Hunjra & Chani, 2019). Firms that are into product diversification are faced with the trade-off between the risks of going beyond their reasonable capacity to effectively offer diverse products and the possible demand externalities generated by offering a broad range of products. This indicates that as the degree of product diversification within a certain sector increase, the probability of requiring new managerial skills and the alignment of activities that are core to the business of a firm also increases. Product diversification positively affects firms, with additional demands created by providing assortments of products that maintain more options and reduce customers' shopping costs (Nwakoby & Ihediwa, 2018). However, the study observed that the degree of product concentration varies and can negatively affect profitability due to missed demand externalities, although product concentration can positively affect the capability to offer high-value products. Product diversification can enhance firm performance by creating synergy through internalization of business activities and facilitate demand interaction.

2.1.2 Subsidiary Diversification and Firm value

Corporate diversification is facilitated by the existence of an internal capital market within a business group. The internal capital markets can make a pool of financial resources available for subsidiary firms' access on relatively favorable terms. Corporate diversification across sector, industry or business line by conglomerate firms are often risk reduction measures against government policies, market and customer preference, economic vagaries (Clinton, & Salami 2021). Diversified conglomerates can facilitate obtaining critical business assets for member firms, such as licenses, important technologies, inputs for personnel training, and bases for distribution networks. These assets enable subsidiary firms to develop and maintain entrepreneurial capabilities and diversify into different industries. By utilizing the diverse resources available, companies under a group can achieve better and quicker product customization and effective relationships with buyers in new markets that subsequently lead to higher performance. Unrelated subsidiary firms achieve financial economies through risk reduction, portfolio management, and internal capital markets. Subsidiary diversification is

usually done as a strategy for spreading risk, entering a new sector or market, and gaining control of supplies (Suleiman, 2022). It comes with its own costs and benefits. Diversification can be categorised into concentric, horizontal, and vertical. Horizontal or unrelated subsidiary diversification involves the adoption of unrelated subsidiary business operations (Dhir & Dhir, 2015). Subsidiary diversification has long been regarded as a strategic tool for organizations to sustain growth and profitability (Osifo & Obainoke, 2021). Subsidiary activities may be related to those of the parent or not. The strategy of subsidiary diversification into unrelated subsidiary areas is an important component of strategic management; however, the relationship between subsidiary diversification strategy and how they impact on the value of conglomerate firms has been an issue of considerable interest in this research. Companies whose products are facing threats resulting from environmental uncertainty (political, economic, social, technological, and legal) can engage in unrelated subsidiary diversification. Diversification can lead to a firm's growth, better firm value, and enhance its capability to explore new markets. When a company operates having profitable and growth-related opportunities, diversification is an attractive strategy.

2.1.3 Regional Diversification and Firm value

The quest to expand, spread risk, and gain advantage from input and new market has been identified as the main factor that drives companies to diversify into new regional markets. Grant (2019) believes that a company's diversification into another region is to take advantage of a new market and increase profit; hence, they outperform those that did not diversify into other regional firms. Kim, Hwang, and Burgers, (2019) aligning with the position of Grant opined that international companies have greater opportunities to gain access to input, enter new markets, spread risks, and take advantage of tax havens than other non-diversified companies (Kim, Hwang, & Burgers, 2019). Despite those benefits, there are costs associated with internalization that, if not properly managed, can outweigh the benefits. The cost of internationalization ranges from the cost of managing different business and societal cultures (managerial constraints), new competition (coordination costs), and complex environmental factors like political or legal regulations. Beside the cost of internationalization, most international firm disclose more information than non-international firm. The international firm operating in difference reporting jurisdiction discloses information to meet the needs of various stakeholders in the different jurisdiction. Diversification which enhances the wide reach of firms, and its products / service increases the revenue and spread risk (Okpala & Omaliko, 2022).

Internationalization of operation and market enables the firm benefit from benefit from economic f scale, and shift tax responsibility with the aim of improving the profitability and shareholders value. Though one of the main problems associated with internationalization negatively affect the effective utilization of assets in the company. For instance, the problem of coordination costs can increase the overall cost and reduce profitability while some resources may be overutilized and others may be underutilized. Costs associated with companies increasing their presence in many regions lead to liabilities of newness and coordination costs. In line with this, the study by Hitt (2014) noted that increasing geographic dispersion can increase transaction costs significantly. The regional spread can also increase the coordination pressure and cost on management, which, if not effectively managed, can affect the financial performance and investor perception of the company's performance.

Regional diversification gives companies the opportunity to take advantage of economies of scale and scope, spread risk, increase market share etc. However, these benefits also come with associated transaction and coordination costs, which can negatively impact the company's performance. Kogut and Singh, (2018) empirically finds that these benefits do arise at the early stage of regional diversification but diminish gradually due to transaction and coordination costs. The finding from their study suggested that regional diversification is negatively associated with firm performance. Some companies diversifying into new regions may incur additional costs due to cultural differences, which may increase the difficulties in transferring the anticipated competitive advantages into benefits for the company (Kogut & Singh, 2018).

2.1.4 Sector Diversification and Firm value

Corporate diversification can be facilitated by the existence of an internal capital market within a business group. The internal capital markets can make a pool of financial resources available for the subsidiary firm's access on relatively favourable terms. Diversification endeavours of conglomerates firms are often risk reduction measures in their product markets, such firm's uses resources and capabilities at their disposal to penetrate and become successful in new product-markets. One of the major advantages of sector diversification is that it allows firms to maximize value by enhancing their ability to leverage economies of scale and the scope of markets and industries (Ifurueze & Odesa 2019). The resource-based view of the firm believes that conglomerate firms, due to their size, can have access to a pool of resources (technical, organizational, managerial, operational, and financial) that can enable

them to compete favorably in the market. However, the diverse nature of conglomerate firms can be a disadvantage for them if not properly managed as the failure in one subsidiary can affect the viability of the firm. Examining this from a political perspective, the diversified group structure of conglomerate firms can be counterproductive as it can result in fewer firms in the group receiving favorable treatment than others. From an economic standpoint, conglomerate diversity can increase the cost of management, coordination, and inefficient resource allocation. Inefficient resource allocation may lead to underutilization of resources in some segments. Although the diversity nature of conglomerates can act as a resource pool of explicit and tacit knowledge, the transfer of such knowledge across segments in different sectors can be difficult owing to differences in top manager backgrounds and operating experiences.

Amihud and Lev cited in Ifurueze and Odesa (2019) observed that sector and industrial diversification enhances managers' abilities to spread risks; hence, they tend to perform better and have high value than those that do not. Industrial diversification can undermine the financial positioning of the company's shareholders and could lead to inefficient resource allocation between different departments within companies. Most managers, driven by the desire for power, can excessively diversify their companies into different sectors; such diversification can result in the distortion of resource allocation and utilization in the company's internal capital market. This makes most industrially diversified companies less sensitive to investment opportunities than specialized companies (Berger & Ofek, 2015). The type of diversification strategy adopted by the firm will determine the cost and benefit associated with the diversification. Firms that pursue a sector-related diversification strategy can achieve economic benefits by increasing the intensity of coordination and communication among the different business lines. This strategy has the potential to lower the cost of coordination and information sharing. Although intra-industrial diversification can lead to higher corporate performance when compared to inter-industrial diversification. The realization of economic benefits from intra-industrial diversification is highly dependent on increased coordination and information processing across related businesses. Thus, the ability of a firm to share special technologies, production skills, sector knowledge, distribution channels, resource inputs, research facilities, and competencies of one business is easily transferable and usable by another.

Somnath and Saptarshi (2015), using the quoted conglomerates and manufacturing companies in India between 2008 and 2014, evaluate the relationship that exists between sector

diversification and firm performance. The result indicates that a strong positive relationship exists between corporate diversification and firm performance, but the level is higher in conglomerate companies than in manufacturing companies. The study also finds that the influence of conglomerate size and diversity on performance varies significantly, depending on whether the companies belong to the manufacturing sector or not. In a related study by Sunji and Ogollah (2015), using survey design and stratified random sampling techniques, they selected the sampled companies under the Sameer Group in Kenya finds that industrial diversification has an impact on the level of performance of companies under the Sameer group in Kenya.

3. MATERIAL AND METHOD

This study adopted the ex post facto and longitudinal design because we determined the cause-and-effect relationship between the dependent and the independent variable using the data that already existed and made no attempt to change it nature and values. The data was longitudinal in nature as it has both cross sectional and time series characteristics. The population of the study comprises all the six (6) conglomerate firms listed on the Nigerian exchange group as at 31st December, 2023. A total of five (5) firms for the study, out of a population of six (6) listed conglomerate firms in Nigeria were selected as the sample size. The purposive sampling technique was utilized, to enable the selection of firms that have been listed from 2012 till 2023. This sampling method was chosen because it allowed the researcher to focus on firms that had consistent data for the entire period of the study. The chosen firms are: Chellarams**,** John Holt**,** SCOA Nigeria**,** Trans-nationwide express and UACN Plc. The study used data collected from the annual financial report of those firms. The data sourced from annual report covered the period of ten years between 2012 and 2023. The data generated for this research work were summarily analyzed using descriptive statistical tools. This descriptive analysis allowed for a comprehensive understanding of the central tendencies and distribution of the variables. Model diagnostics were conducted by to ascertain the condition of the model with respect to heteroskedasticity, multicollinearity and normality. The Jarque-Bera test indicated that the presence of outliers in the distribution of the regression errors. Thus, there was need to use a regression tool that is less sensitive to departures from normality during the hypotheses testing. The study therefore implemented robust least square regression analysis as it was necessary to correct the abnormality in the outliers observed in the regression model.

Table 1. Measurement of Variables

S/N	Type	Variable	Proxies	Measured as
1	Independent	Corporate Diversification	Product Diversification	Number of product lines produced and sold by the firm. This measure is in line with the measure used in the Odesa and Ifureze (2019)
2			Subsidiary Diversification	Subsidiary diversification as subsidiary sales to total sales. Inspirations were drawn from prior studies of Odesa and Ifureze (2019)
3			Regional Diversification	Number of geographical settings that contributed to firm's revenue This is in line with the study by Ndungu and Muturi (2019)
4			Sector; Diversification	The number of sectors that the firm is operating in line with the study of Li and Sun (2015).
6	Dependent	Firm Value	TOBINQ	Tobin q is measured as ratio of market value to book value of the company share. Inspirations were drawn from prior studies like Saleh (2018).

Source: Researchers' Compilation.

The model was adopted from the work of Takiah, Rin and Zuraidah (2012) which is; ROA = (PRODIV, MULTDIV, REGDIV). The model was modified to suit the variables to be used. The model assumes that the dependent variable is a linear function of the independent variables with consideration to be heterogeneity in the pooled companies. The model can be expressed as follows:

TOBINQ = f(PRODIV, SUBDIV, REGDIV, SECDIV) ………………………….. Eqn 1

This can be econometrically express as

TOBINQit = C_0 + C_1PRODIVit + C_2SUBDIVit + C_3REGDIVit + C_4SECDIVit + ε_{it} ……Eqn 2

Equation 1 is the linear regression model that was used in testing the null hypotheses.

Where:

TOBINQ = Corporate value (market value);

PRODIV = Product Diversification;

SUBDIV = Subsidiary Diversification;

REGDIV = Regional Diversification;

SECDIV =Sector Diversification;

C_0 = Constant;

$C_1, … C4$, = is the coefficient of the regression equation.

e = Error term;

I = is the cross section of firms used;

t = is years.

The above model would be used to examining the best combination of diversification strategy that best drive corporate value among listed conglomerate companies in Nigeria. This provides a basis for the understanding the reason while firm chose more than one diversification strategy.

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

Table 2. Descriptive Analysis

	TOBINQ	PRODIV	SUBDIV	REGDIV	SECDIV
Mean	13.15370	7.000000	0.470083	2.100000	3.766667
Median	5.860000	6.000000	0.342468	2.000000	4.000000
Maximum	134.0000	16.00000	1.000000	7.000000	6.000000
Minimum	0.800000	4.000000	0.000000	1.000000	2.000000
Std. Dev.	22.69556	4.194427	0.432969	1.643683	1.306654
Skewness	3.558846	1.548161	0.167810	1.917243	0.208973
Kurtosis	16.71681	3.749206	1.210155	5.665494	1.918005
Jarque-Bera	597.0308	25.37129	8.290462	54.52035	3.363480
Probability	0.000000	0.000003	0.015840	0.000000	0.186050
Sum	789.2219	420.0000	28.20500	126.0000	226.0000
Sum Sq. Dev.	30390.22	1038.000	11.06028	159.4000	100.7333
Observations	60	60	60	60	60

Source: Eviews 10 (2024) Output

Table 2 above shows that the average Tobin's Q value is 13.15370, indicating that on average, the market values the listed conglomerate companies in Nigeria at more than thirteen times their book value. This is a high mean, suggesting substantial investor confidence or growth expectations. The maximum value of 134.0000 shows significant outliers or extremely high valuations for certain companies, while the minimum value of 0.800000 indicates some companies are valued below their book value. The standard deviation of 22.69556 reflects high variability in Tobin's Q among these companies. The skewness of 3.558846 suggests a right-skewed distribution, with more firms having Tobin's Q values above the mean. The kurtosis of 16.71681, well above 3, indicates a leptokurtic distribution, meaning there are more extreme values (outliers) than in a normal distribution. The Jarque-Bera probability of 0.000000 confirms that the distribution is not normal.

As per Product Diversification (PRODIV), the mean number of product lines produced and sold by the firms is 7, suggesting moderate product diversification on average. The maximum number of product lines is 16, showing that some firms have a broad range of products, while the minimum number of product lines is 4. The standard deviation of 4.194427 indicates some variation in product diversification among the firms. The skewness of 1.548161 shows that the distribution is right-skewed, meaning there are more firms with a number of product lines above the average. The kurtosis of 3.749206 indicates a distribution with heavier tails than a normal distribution. The Jarque-Bera probability of 0.000003 suggests the data is not normally distributed.

In terms of Subsidiary Diversification (SUBDIV), subsidiary diversification, measured as the ratio of subsidiary sales to total sales, has a mean of 0.470083, indicating that subsidiaries contribute nearly half of the total sales on average. The maximum value is 1.000000, showing that in some cases, subsidiaries account for all the sales, while the minimum value is 0.000000, indicating no subsidiary contribution in some firms. The standard deviation is 0.432969, highlighting considerable variation among firms. The skewness of 0.167810 suggests a distribution slightly right-skewed. The kurtosis of 1.210155 is below 3, indicating a platykurtic distribution with fewer outliers than a normal distribution. The Jarque-Bera probability of 0.015840 indicates a slight deviation from normality.

Furthermore, Regional Diversification (REGDIV) shows the mean number of geographical settings contributing to the firm's revenue is 2.100000, showing that on average, firms have revenues coming from just over two regions. The maximum number is 7, and the minimum is 1, indicating some firms operate in multiple regions while others are confined to one. The

standard deviation of 1.643683 shows moderate variability. The skewness of 1.917243 indicates a right-skewed distribution with more firms having regional operations above the average. The kurtosis of 5.665494 suggests a leptokurtic distribution with more extreme values. The Jarque-Bera probability of 0.000000 shows that the distribution significantly deviates from normality.

Finally, Sector Diversification (SECDIV): shows that the mean number of sectors the firms are operating in is 3.766667, suggesting that firms typically operate in nearly four different sectors. The maximum value of 6 and a minimum of 2 indicate the range of sector involvement. The standard deviation of 1.306654 shows some variability in sector diversification among the firms. The skewness of 0.208973 suggests a slight right skew, while the kurtosis of 1.918005 indicates a platykurtic distribution, implying fewer outliers. The Jarque-Bera probability of 0.186050 indicates that the data is approximately normally distributed.

4.1.2 Heteroskedasticity

The Breusch-Pagan-Godfrey heteroskedasticity test results, shown in Table 4.2 below, include an F-statistic of 1.009867 and a corresponding probability value (Prob. $F_{(4,55)}$) of 0.4104. This probability value is substantially higher than the significance levels of 0.05, indicating that there is no significant evidence of heteroskedasticity in the regression model. In other words, the variance of the error terms is constant across observations, satisfying one of the key assumptions of ordinary least squares (OLS) regression, and suggesting that the model's estimations are reliable and efficient.

Table 3. Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.009867	Prob. F(4,55)	0.4104
Obs*R-squared	4.105189	Prob. Chi-Square(4)	0.3920
Scaled explained SS	26.14921	Prob. Chi-Square(4)	0.0000

Source: Eviews 10 (2024) Output

4.1.3 Multicollinearity

Multicollinearity occurs when two or more predictor variables in a regression model are highly correlated, meaning that one can be linearly predicted from the others with a substantial degree of accuracy. This can make it difficult to determine the individual effect of each

predictor on the dependent variable. The table below presents the Variance Inflation Factors (VIF) for the predictor variables in the model. VIF is a measure of the amount of multicollinearity in a set of multiple regression variables. A VIF value greater than 10 generally indicates high multicollinearity.

As shown in Table 4, the VIF for PRODIV is 1.812457, indicating a low level of multicollinearity and suggesting that PRODIV is not highly correlated with the other predictor variables. SUBDIV has a VIF of 2.267393, which also indicates a low level of multicollinearity. The VIF for REGDIV is 3.663672, showing moderate multicollinearity, but still within an acceptable range. Similarly, SECDIV has a VIF of 3.745955, indicating moderate multicollinearity. In summary, none of the variables have VIF values that suggest severe multicollinearity. While REGDIV and SECDIV have higher VIF values compared to PRODIV and SUBDIV, they are still within an acceptable range. Therefore, multicollinearity does not appear to be a significant issue in this model based on the VIF values presented.

Table 4 Variance Inflation Factors

Date: 06/05/24   Time: 03:36

Sample: 1 60

Included observations: 60

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
PRODIV	0.817711	6.946005	1.812457
SUBDIV	96.00414	4.985469	2.267393
REGDIV	10.76360	9.745274	3.663672
SECDIV	17.41481	35.40188	3.745955
C	151.9019	19.46189	NA

Source: Eviews 10 (2024) Output

4.1.4 Test of Normality

When assessing the normality of residuals in a regression model, one commonly used test is the Jarque-Bera test. This statistical test examines whether the sample data have the skewness and kurtosis matching a normal distribution. The null hypothesis for the Jarque-Bera test is that the data are normally distributed.

The Jarque-Bera test results in a probability value, or p-value, which helps determine whether to reject the null hypothesis. As shown in Figure 4.1, the Jarque-Bera probability is reported as 0.000. The p-value of 0.000 is effectively less than 0.05 significance level. In statistical hypothesis testing, a p-value less than the chosen significance level leads to the rejection of the null hypothesis. Given the p-value is 0.000, we reject the null hypothesis that the residuals are normally distributed. This indicates that there is a statistically significant deviation from normality in the residuals.

Ordinary least squares (OLS) regression assumes that the residuals (errors) are normally distributed. This assumption is important for making valid inferences about the population from the sample data. Non-normal residuals can lead to inaccurate confidence intervals and hypothesis tests, potentially resulting in incorrect conclusions about the relationships between variables. Since normality is violated, Robust Least Square Regression which is less sensitive to departures from normality was implemented in hypotheses testing.
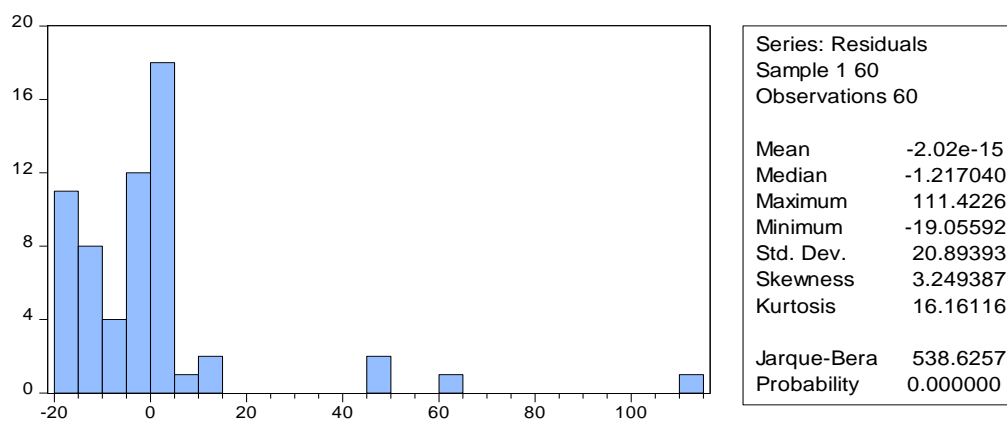

Series: Residuals	
Sample 1 60	
Observations 60	
Mean	-2.02e-15
Median	-1.217040
Maximum	111.4226
Minimum	-19.05592
Std. Dev.	20.89393
Skewness	3.249387
Kurtosis	16.16116
Jarque-Bera	538.6257
Probability	0.000000

Figure 1 Normality Testing

Source: Eviews 10 (2024) Output

4.2 Test of Hypotheses

Table 5 Robust Least Squares

Dependent Variable: TOBINQ

Method: Robust Least Squares

Date: 06/05/24   Time: 03:34

Sample: 1 60

Included observations: 60

Method: M-estimation

M settings: weight=Bisquare, tuning=4.685, scale=MAD (median centered)

Huber Type I Standard Errors & Covariance

Variable	Coefficient	Std. Error	z-Statistic	Prob.
PRODIV	-0.476151	0.074855	-6.361009	0.0000
SUBDIV	3.146852	0.811080	3.879831	0.0001
REGDIV	1.034557	0.271580	3.809405	0.0001
SECDIV	-0.928505	0.345444	-2.687857	0.0072
C	7.813846	1.020235	7.658870	0.0000

	Robust Statistics			
R-squared	0.355738	Adjusted R-squared		0.308882
Rw-squared	0.788160	Adjust Rw-squared		0.788160
Akaike info criterion	130.8145	Schwarz criterion		145.9936
Deviance	416.5283	Scale		1.821640
Rn-squared statistic	115.2216	Prob(Rn-squared stat.)		0.000000

Source: Eviews 10 (2024) Output

Table 5 presents key robust statistics from the regression analysis evaluating the effect of various forms of diversification on the Tobin's Q of conglomerate companies listed in Nigeria. The Adjusted R-squared value indicates the proportion of the variance in the dependent variable (Tobin's Q) that is predictable from the independent variables (product diversification, subsidiary diversification, regional diversification, and sector diversification), adjusted for the number of predictors in the model. An Adjusted R-squared of 0.308882 means that approximately 30.89% of the variability in the Tobin's Q can be explained by the model that includes the various types of diversification. While this indicates a moderate level of

explanatory power, it also suggests that there are other factors not included in the model that could explain the remaining 69.11% of the variability in Tobin's Q.

The Prob(Rn-squared stat) evaluates the overall significance of the regression model. It tests the null hypothesis that all of the regression coefficients are equal to zero, implying that none of the independent variables have an effect on the dependent variable. A Prob(Rn-squared stat) value of 0.000000 (which is essentially less than 0.05) indicates that the model is highly significant. This means that there is a very strong evidence against the null hypothesis, and at least one of the diversification variables (product, subsidiary, regional, or sector diversification) significantly affects Tobin's Q.

4.2.1 Hypothesis I

Table 5 shows that the coefficient for product diversification is -0.476151, indicating a negative relationship between product diversification and Tobin's Q. The probability value (0.0000) which is less than 0.05 indicates that product diversification has a significant and negative impact on the value of conglomerate companies in Nigeria.

4.2.2 Hypothesis II

The coefficient for subsidiary diversification is 3.146852, indicating a positive relationship with Tobin's Q. The probability value (0.0001) which is less than 0.05 shows that this effect is highly statistically significant. Therefore, subsidiary diversification has a significant and positive effect on the value of conglomerate companies in Nigeria.

4.2.3 Hypothesis III

H_{03}: The coefficient for regional diversification is 1.034557, indicating a positive relationship with Tobin's Q. The probability value (0.0001) is less than 0.05 confirms that this relationship is highly statistically significant. Thus, regional diversification positively and significantly affects the value of conglomerate companies in Nigeria.

4.2.4 Hypothesis IV

The coefficient for sector diversification is -0.928505, indicating a negative relationship with Tobin's Q. The probability value (0.0072) suggests that this result is statistically significant. Thus, sector diversification has a significant and negative impact on the value of conglomerate companies in Nigeria.

Discussion of Findings

The study indicates that product diversification has a negative effect on the corporate value of listed companies in Nigeria. This outcome may be attributed to several factors. Primarily, venturing into multiple product lines can stretch a company's resources too thin, leading to inefficiencies and higher operational costs. Additionally, managing a diverse range of products requires significant expertise and coordination, which may not be adequately present in Nigerian conglomerates. This lack of specialized knowledge and the increased complexity can dilute the overall strategic focus, leading to suboptimal performance and a consequent decrease in corporate value. This agrees with the findings by Lahouel, Taleb, Kočišová and Zaied (2022); Martiningtiyas, Muchtar, Ristiqomah and Rahman (2022); Adesina (2021) but counters those by Suleiman (2022); Nova (2022); Okoye and Ezenwafor (2022); Okpala and Omaliko (2022); Ajao and Kokumo-Oyakhire (2021).

Conversely, subsidiary diversification has a positive effect on corporate value. Subsidiary diversification involves expanding through the creation or acquisition of subsidiary companies, each potentially operating in distinct industries or markets. This strategy can be beneficial as it allows companies to leverage the expertise of specialized management teams within each subsidiary. Moreover, subsidiaries can operate with a degree of autonomy, fostering innovation and responsiveness to market changes. For Nigerian conglomerates, this approach might help in mitigating risks associated with any single business line and exploiting growth opportunities in various sectors, thereby enhancing overall corporate value. This agrees with the position of Githaiga (2022); Addai, Tang, Gyimah and Twumasi (2022); but disagreed with Suleiman (2022).

Regional diversification also positively affects corporate value. Expanding operations into different geographic regions can provide several advantages, such as access to new markets, diversification of market risk, and exploitation of regional economic strengths. For Nigerian companies, regional diversification can be particularly beneficial due to the varying economic conditions and consumer behaviors across different regions. By operating in multiple regions, companies can balance the risks and opportunities presented by different markets, leading to more stable and potentially higher earnings, which in turn enhances corporate value. Nova (2022); Addai, Tang, Gyimah and Twumasi (2022); Githaiga (2022); Okpala and Omaliko (2022); Clinton and Salami (2021) found similar positive effect, agreeing with the position of the present study.

Sector diversification, however, shows a negative effect on corporate value. Sector diversification involves spreading business operations across different industry sectors. This strategy might seem advantageous for risk mitigation, but it often leads to a loss of strategic focus and increased complexity in management. In the context of Nigerian conglomerates, entering unfamiliar sectors can result in inadequate market knowledge, inefficient allocation of resources, and difficulties in achieving synergies between disparate business units. These challenges can outweigh the benefits of risk diversification, ultimately leading to a decline in corporate value. This finding does not align with the findings by Bank, Ünal, and Güneysu, (2022) but corroborates that of Martiningtiyas, Muchtar, Ristiqomah and Rahman (2022); Lahouel, Taleb, Kočišová and Zaied (2022).

CONCLUSION AND RECOMMENDATION

Corporate diversification is a strategic approach employed by conglomerate companies to mitigate risks, capitalize on synergies, and enhance overall firm value. In the context of Nigerian conglomerate companies, diversification takes various forms, including product diversification, subsidiary diversification, regional diversification, and sector diversification. The study aimed to evaluate the effect of these diversification strategies on the value of these companies, measured by Tobin's Q. The findings reveal a complex picture: product diversification negatively affects corporate value, while subsidiary and regional diversification have positive effects. Conversely, sector diversification also detracts from corporate value.

Based on the findings, expanding the range of products may lead to inefficiencies and increased operational complexities, which can outweigh the potential benefits of risk reduction. In the Nigerian context, product diversification might dilute the company's focus, leading to challenges in maintaining quality, increasing costs, and misallocating resources. Furthermore, the market for diverse products may not be well-developed, resulting in lower-than-expected returns on diversified product portfolios. However, creating or acquiring subsidiaries allows companies to enter new markets, leverage specialized management, and exploit unique opportunities. Subsidiary diversification can lead to better resource allocation and more effective management of distinct business units, enhancing overall efficiency and profitability. Similarly, expanding operations across different geographical regions helps companies mitigate regional risks, tap into new customer bases, and leverage regional growth opportunities. For Nigerian conglomerates, regional diversification can provide a buffer against local economic downturns and political instability, fostering a more stable revenue

stream. Additionally, entering new regions may facilitate access to diverse resources, talent pools, and market dynamics, enhancing the overall competitive advantage and value of the firm.

Finally, spreading investments across various sectors might dilute strategic focus and lead to suboptimal management of diversified business units. Sector diversification can increase complexity and management challenges, resulting in inefficiencies and higher costs. In conclusion, not all forms of diversification contribute positively to the value of conglomerate companies in Nigeria. While subsidiary and regional diversification strategies appear to enhance corporate value by leveraging specialized management and geographical expansion, product and sector diversification may introduce inefficiencies and strategic misalignments that diminish firm value.

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