

## Institutional Quality and Export Intensity of Nigerian SMEs: An Institutional-Based View using Logistic Regression Analysis



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**ABSTRACT:** In many developing nations, weak institutional quality presents significant hurdles for SMEs, hindering their ability to thrive in international markets due to issues like corruption, Bureaucratic red-tapeism, and unpredictable regulations. As a result, there is a widespread acknowledgement that the quality of institutions profoundly shapes the landscape in which SMEs operate, impacting their survival and export capabilities. This study sets out to explore the intricate relationship between institutional quality and export intensity within Nigeria's diverse geopolitical zones. To achieve this, data was collected from all six geopolitical zones in Nigeria and analyzed it using logistic regression techniques. The study reveals a positive relationship between institutional quality and export intensity in Nigeria, but this relationship varies across different geopolitical zones. This study also highlights the crucial role of institutional quality in driving export-led growth and economic development, shedding light on the complexities inherent in navigating diverse institutional environments. By uncovering these dynamics, the study provides valuable insights for policymakers, businesses, and stakeholders seeking to enhance export performance and foster sustainable economic development.

**KEYWORDS:** Institutional Quality, Export Intensity, Institutional-Based View, SMEs, Logistic Regression Techniques.

### 1.0 INTRODUCTION

It is widely acknowledged that nations endowed with strong formal and informal institutions foster environments conducive to firm success. This assertion underscores the critical role institutional quality plays in affecting the activities of SMEs in both developed and developing

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In the modern age of globalization, the prosperity of local enterprises in international arenas stands as a pivotal conduit for numerous economic benefits, such as bolstering foreign exchange reserves, creating employment opportunities, and fostering both backwards and forward economic linkages. Scholars have extensively scrutinized export intensity (EI) as a primary measure of performance for companies engaged in exporting activities (Wang & Ma, 2018). As corporations increasingly assert their relevance in the global economic landscape through diverse internationalization tactics, it becomes evident that exporting serves as the predominant mode of entry into foreign markets. Given that the calibre of institutional frameworks dictates the transactional and production expenses borne by exporters, it is plausible to assume that institutional quality also shapes the viability and profitability of venturing into export-oriented Small-Scale and medium enterprises.

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Institutional quality encompasses economic, political, and legal dimensions, each plays a crucial role in determining the profitability and survival of small and medium-sized enterprises (SMEs) in Nigeria. Research on international trade at the national level has revealed that the legal institutions of a country significantly influence its foreign trade activities. Consequently, the quality of domestic legal institutions emerges as an influential factor in explaining a country's export patterns rather than the combined impact of physical capital and skilled labour. Therefore, understanding the role of domestic institutions in facilitating or hindering firms' export activities is crucial for comprehensively analyzing SMEs' behaviour in international markets (Li, Vertinsky, & Zhang, 2013; Chor 2010; Iwanow and Kirkpatrick 2007; Nunn 2007; Pistor et al. 2006; Leonidou 2004; Katsikeas et al. 2000).

While the institutional-based view and most empirical research have generally suggested a strong positive relationship between institutional quality and export performance, there exist conflicting findings that warrant further investigation. For instance, Abreo, Bustillo, and Rodriguez (2021) uncovered an unexpected adverse effect of corruption control on exports, shedding light on the complex interplay between the social roots of corruption in a country and its varied economic consequences. Similarly, Krasniqi and Desai (2017) reported that formal institutions did not emerge as significant determinants of export performance in their study, challenging conventional notions regarding the influence of formal institutional structures on export outcomes. Moreover, Khan, Khan, and Naqyi (2022) revealed concerns regarding the relationship between SME trade growth and institutional quality, suggesting that the impact of institutional development may not be adequately captured in the short term. Their findings underscored the notion that institutional development is a gradual process that unfolds over the years, making it challenging to discern its immediate effects on specific economic activities. These discrepancies in findings underscore the complexity of the relationship between institutional quality and export intensity, serving as the backdrop for this present research. The objective of this study is to investigate the impact of institutional quality on export intensity in Nigeria, with a particular focus on its six geopolitical zones. Additionally, the study aims to explore how variations in institutional quality across these zones influence export intensity as the quality of institutions is not evenly distributed. To facilitate analysis, institutional quality will be aggregated into a single index variable. This decision is grounded in the rationale of capturing the overall impact of institutional quality on export performance in Nigeria and its distinct geopolitical regions. By adopting this approach, the study seeks to provide a comprehensive understanding of the nuanced relationship between institutional quality and export intensity, considering both national-level and regional dynamics.

The impact of SME exports extends to the broader economy, enhancing its overall health and vitality. Exporting firms are believed to utilize resources more efficiently and tap into larger, more competitive markets, thereby boosting a country's productivity and competitiveness. However, the strategies employed by these firms to achieve export success are heavily influenced by institutional factors, particularly amidst significant economic and political transformations. Such reforms have led emerging economies to grapple with shortages in foreign exchange, which severely hinder macroeconomic growth. Consequently, fostering entrepreneurship through the development of robust institutional infrastructure emerges as a viable strategy to address these challenges. By investing in supportive institutional frameworks, governments can empower SMEs, stimulate market growth, and alleviate constraints posed by foreign exchange shortages, thereby fostering sustainable economic development and prosperity (Nuruzzaman et al. 2020; Buckley et al. 2018; LiPuma, Newbert, & Doh, 2011; Sapsford & Garikipati 2006; Wengel & Rodriguez, 2006).

So, in the presence of weak institutions or governance, the business environment generates undesirable externalities, resulting in detrimental effects on economic growth and development. These repercussions stem from heightened transaction costs and diminished export opportunities for SMEs due to elevated price volatility in markets. Effective institutions play a crucial role in mitigating these challenges by fostering internal trust and navigating complex governing systems. By reducing information asymmetry and exchange rate uncertainty, robust institutions facilitate smoother cross-border trade, promoting economic exchange. However, there exists debate surrounding the impact of stringent institutional frameworks on the ease of conducting business. While strict institutions may enhance environmental and health quality standards, they also raise production costs and subsequently inflate market prices. This trade-off highlights the complexity of balancing regulatory measures aimed at safeguarding public welfare with the imperative of maintaining a conducive business environment (Khan, Khan, and Naqyi, 2022; Wei & Shleifer, 2000).

To conduct this study, we distributed questionnaires to a sample size of 6500 individuals, representing diverse demographics across Nigeria's six geopolitical zones: North Central, North-East, North-West, South-East, South-South, and South-West. The data collected from these surveys underwent analysis using logistic regression. The findings of this research indicate a positive correlation between institutional quality and export intensity in Nigeria. However, it was observed that the nature of this relationship varied across different geopolitical zones, with instances where the relationship showed no statistical significance. This paper is divided into 5 sections, section 1 is an introduction, section 2 is a literature review, Chapter 3 and 4 are methodology and

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discussion of findings, and finally, chapter 5 is the conclusion, recommendation, and policy implication.

## **2.0 LITERATURE REVIEW**

In the introductory section, we have underscored the significance of institutions in the business environment and how their effectiveness can result in cost reduction in production. So, how do different authors define the institution?

Institutions are the rules and habits that guide how people behave in society. They are laws, customs, or even just common ways of doing things. Schmitter (1990) said that institutions are made up of habits, rules, customs, and laws, all working together like parts of a system. Commons (1934) described institutions as the collective actions that control what individuals do. Government, families, companies, and groups like trade associations are examples of institutions that shape society. Hayek (1967) said that institutions are rules that guide how society works. He divided institutions into two types. The first type, called "organization," includes straightforward rules that have clear goals and were intentionally created. The second type, "spontaneous rules," are more complex and evolve without anyone planning them. They happen as people interact with each other. North (1990) sees institutions in terms of formal and informal constraints. Formal constraints are things like laws and constitutions, while informal constraints are more about how people are expected to behave. He noted that formal rules can change quickly, but informal ones tend to stick around longer (Abreu, Bustillo & Rodriguez, 2021).

In this study, we examine the relationship between institutional quality and export intensity, drawing upon the theoretical literature provided by the institutional-based view (IBV). According to institutional base theory, firms' actions are influenced by the expectations set by external institutions. This theory suggests that when firms make strategic decisions, they consider not only industrial factors such as competitive pressures but also organizational aspects like available resources and capabilities, as well as the formal and informal constraints imposed by the institutional context they operate. Institutional factors can shape a firm's strategic choices through cognitive, normative, and regulative mechanisms. These mechanisms may either facilitate and enable the firm's actions or pose challenges and constraints. In essence, institutional theory highlights the importance of understanding the broader institutional environment in which firms operate, as it significantly influences their strategic decision-making processes and subsequent behaviour. (Ngo et al, 2016; Welter & Smallbone, 2011; Peng et al., 2009; Hoskisson et al., 2000).

### **2.1 The Impact of Institutional Quality and Export Performance.**

Due to the peculiarity of institutions in the business environment, numerous research has been carried out to determine the interrelation it has on the Export performance of firms. Also, there are some conflicting results among existing research. Some researchers suggest that the enhancement of domestic institutional frameworks leads to increased efficiency within firms, thereby facilitating their engagement in exporting activities (Gao et al., 2010). Conversely, others argue that improvements in local institutions, such as greater economic freedom and preferential treatment, may heighten the perceived risks associated with expanding overseas, leading to a reduced willingness among firms to engage in exporting (Estrin et al., 2008; Lee & Weng, 2013; Zhou and Zou, 2002).

According to Lin et al. (2020), the influence of institutional quality on the export performance of coconut products serves as a noteworthy illustration of SME product trade dynamics. Enhanced institutions facilitate smoother small business operations and contribute to product quality improvement through effective monitoring and evaluation processes. Also, Lu et al.

(2009) conducted a study that specifically examined how corporate governance and institutional environments influence the export behaviour of firms in China. Their findings, based on a sample of Chinese-listed firms, revealed that firms located in areas with better institutional environments tend to exhibit higher export propensity. This positive impact of institutional environments on export behaviour was observed both directly and through the moderating effects of corporate governance.

In the Corroboration of the findings of Lin et al (2020). Ngo et al. (2015) utilized Structural Equation Modeling (SEM) to analyze data obtained from 109 export firms operating in Vietnam. The research focused on four key institutional attributes: specificity, stability, predictability, and enforceability, and their impact on export performance. The findings of the study revealed a positive relationship between institutional attributes and export performance. Specifically, institutional specificity, stability, predictability, and enforceability were found to have a beneficial effect on export performance outcomes. The research emphasized the significance of clear private property rights and freedom of contract in enhancing performance outcomes in foreign markets, highlighting the importance of having stable and predictable rules and regulations regarding property rights and contracting institutions in the home market to achieve substantial cost reductions in export-related activities. Furthermore, the study emphasized the role of an enforceable institutional setting in fostering trust and confidence among exporters, indicating that a reliable institutional environment can protect exporters from potential issues that may arise in foreign business operations. Other findings in this study are that larger exporting firms tend to derive greater benefits from domestic institutional forces compared

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to smaller enterprises. Also, the study distinguished between direct and indirect exporters, concluding that direct exporters are better positioned to leverage domestic institutional factors to capitalize on opportunities arising from foreign markets. This suggests that direct exporters have a competitive advantage in navigating and exploiting opportunities in foreign markets due to their closer interaction with domestic institutional frameworks.

Lipuma, Newbert, & Doh (2013) Also find that there is a positive statistically significant relationship between institutional quality and firm export performance, particularly in the context of emerging economies. Institutional quality, as categorized by the authors, encompasses various facets such as the fairness of competition, government intervention, financial market regulations, and overall business regulations. Their findings underscore the pivotal role of high-quality institutions in bolstering firm export performance within emerging economies. They highlight the significance of a regulatory framework that fosters rather than hinders commerce, coupled with a manageable tax burden on businesses, in driving optimal export outcomes. They suggest that countries with conducive business regulations tend to witness heightened export performance among firms operating within their borders. Furthermore, the study delves into the impact of institutional quality on the export performance of firms of different sizes. It reveals that small firms stand to benefit disproportionately from improvements in certain institutional dimensions, particularly the judicial system and access to financial capital. This finding indicates that a high-quality court system and transparent, less bureaucratic financial markets exert a more pronounced positive influence on the export performance of small firms compared to their larger counterparts. One intriguing observation is the inverse relationship between institutional quality improvements and export performance among large, established firms. While enhancements in institutional quality positively correlate with export performance for small or new firms, they seem to correspond with declining export performance for larger, established firms. The authors propose that this phenomenon could be attributed to the inherent advantages that large firms possess in navigating deficiencies within the institutional environment, given their substantial resources, prestige, and established networks.

The relationship between the regulatory framework and export intensity was also justified by Anderson & Marcouiller (2002), who see institutions from a legal perspective and conclude that the quality of domestic legal institutions significantly influences export performance due to several key factors. Firstly, robust legal institutions in the exporter's country help decrease international transaction costs for importers. This reduction in costs enhances importers' willingness to pay for the exporter's goods. Often, hidden barriers to international trade stem from information imbalances between importers and exporters, as well as uncertainties surrounding exchange rates.

The study by Abero, Bustillo, and Rodriguez (2021) presents a departure from prevailing research on the influence of institutional quality on Colombia's international trade dynamics. The study Utilizes Colombian governance indicators such as Control of Corruption, Government Effectiveness, Political Stability, Regulatory Quality, Rule of Law, Voice, and Accountability to capture institutional Quality. The study employs the trade gravity model as its analytical framework. The study reveals that variables associated with market competition, legal certainty, and effective governance exert a statistically significant impact on export performance, with market competition and legal certainty exhibiting greater efficacy. Of particular interest is the finding that the Control of Corruption variable demonstrates an adverse effect on exports, indicating a nuanced and potentially conflicting relationship between corruption's societal underpinnings and its economic ramifications. This observation underscores the complexity of corruption's role within Colombian trade dynamics, suggesting diverse and opposing effects. Consequently, the study challenges conventional understandings by highlighting the intricate interplay between institutional factors and export outcomes, thereby enriching scholarly discourse on the subject.

To validate these findings, Krasniqi & Desai (2017) conducted a study focusing on the relationship between institutional factors and export performance across 26 Transition Economies. They divided institutions into two categories: formal and informal. Utilizing data reduction techniques and GLS random effect estimation, their analysis revealed that formal institutions did not demonstrate statistical significance in their impact on export performance. Consequently, they concluded that formal institutions do not exert a significant influence on export performance. In contrast, their study found that informal institutions exhibited statistical significance, positively impacting export performance. These informal institutions were assessed through a composite measure comprising judiciary/courts, uncertainty regarding regulatory policies, corruption, and anti-competitive practices of other market participants. However, it's essential to interpret the conclusion regarding formal institutions with caution. While the lack of statistical significance implies insufficient evidence to definitively establish a relationship between formal institutions and export performance, it does not conclusively negate their potential impact. In essence, the absence of statistical significance indicates ambiguity rather than a definitive assertion of non-effectiveness. Therefore, further research is warranted to explore the nuanced interplay between formal institutions and export performance comprehensively.

Even when there exists a long-run relationship between institutional quality and Export intensity. such a relationship might not be present in the short run. In an examination of the influence of institutional quality on the trade performance of small and medium

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enterprises (SMEs) in Pakistan, Khan, Khan & Naqvi (2022) utilized an index score derived from various metrics including bureaucratic quality, law and order, democratic practices, governance standards, corruption control, and levels of violence. This composite index, sourced from the World Development Indicators (WDI), served as the basis for their analysis. Employing the Autoregressive Distributed Lag (ARDL) approach, they investigated the relationship between institutional quality and export performance. Their findings indicate a significant long-term association between institutional quality and export performance among SMEs. However, they observed that this relationship is not effectively captured in the short run. This suggests that while institutional quality plays a crucial role in shaping export performance over the long term, its impact may not be immediately discernible in shorter time frames.

The disparity observed in the findings across existing literature concerning institutional quality can be traced back to the diverse methodologies utilized for its measurement and the varied interpretations of its definition. While certain scholars tend to emphasize the significance of political institutions, they often overlook the pivotal roles played by legal and economic institutions. This discrepancy may arise due to a lack of comprehensive frameworks capable of encompassing all dimensions of institutional quality effectively. In this study, we aim to bridge this gap by developing an inclusive index that consolidates institutional quality across political, economic, and legal spheres. By adopting this holistic approach, we strive to capture the overall impact of institutional quality on the export intensity of small and medium enterprises (SMEs) in Nigeria. The objective is to provide a comprehensive understanding of how institutions, in their entirety, shape the export performance of SMEs.

Also, Given the uneven distribution of institutional quality across Nigeria, it is essential to examine how institutional quality in different geopolitical zones influences the export intensity of SMEs.

### 3.0 DATA AND METHODOLOGY

This research aims to investigate the empirical correlation between institutional quality and the export intensity of small and medium enterprises (SMEs) in Nigeria. Understanding the significance of institutions in influencing SMEs' export intensity is crucial. Moreover, the study seeks to ascertain whether a linear relationship exists between the growth of SME exports and institutional quality. To address these policy-relevant inquiries, the research employs primary data collection methods and techniques. This chapter is structured to offer a comprehensive overview of the study's methodology. It encompasses details about the data collection process, sampling methodology, as well as the techniques and models employed to achieve the research objectives and address the posed research questions.

#### 3.1 Data

This research employs a dual approach, utilizing both primary and secondary data sources. The rationale behind this decision is to mitigate the limitations of each method by leveraging the strengths of the other. Primary data collection techniques encompass Structured Interviews (questionnaires), Focus Group Discussions (FGDs), and Key Informant Interviews (KIIs). Complementing this, secondary data will be sourced from various repositories including the World Bank Enterprise Survey Data (WBESD) from 2014, the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) surveys from 2010 and 2013, and the National Bureau of Statistics (NBS) 2019 SME Survey.

The study's population comprises owners of Micro, Small, and Medium Enterprises (MSMEs) across the 36 states of Nigeria and the Federal Capital Territory (FCT). From this broad population, a subset consisting of 12 states and the FCT will be selected for in-depth investigation. This selection aims to address the prevalent trend of research focus primarily on Lagos and Ogun states, thereby providing a more comprehensive understanding of the MSME landscape across Nigeria. Furthermore, the chosen states encompass a diverse range of semi-urban and rural economic environments, ensuring representation from all six geo-political zones of the country.

To facilitate the sampling process, 39 local governments are randomly selected from each of the 12 chosen states. This method ensures that the sample adequately captures the heterogeneity of MSMEs across different regions, enabling a robust analysis of the factors influencing export intensity within Nigeria's diverse economic and business landscapes.

#### 3.2 Sampling and Sampling Techniques

The sample size for the SME survey is calculated using the Rao software sample calculation formula in which the sample size  $n$  and margin of error  $E$  are given by:

$$x = Z \left( \frac{c}{100} \right)^2 \frac{r(100-r)}{n} \text{-----} (1)$$

$$n = \frac{Nx}{(N-1)E^2 + x} \text{-----} (2)$$



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$$E = \sqrt{\frac{(N-n)x}{(N-1)}} \quad (3)$$

where  $N$  is the population size,  $r$  is the fraction of responses that you are interested in, and  $Z(c/100)$  is the critical value for the confidence level  $c$ .

The formula gave a sample size of 385 respondents for each of the 12 States and FCT, thus we have a total sample size of 5,005 from a total of 72,000 SMEs based on NBS 2019) estimates. The sample size was however increased to 6500 to make up for issues of no response, inconsistencies of responses, and respondents who may be lost due to migration and other natural occurrences such as death during the experiment.

## 3.3 Model and estimation technique

Two models were estimated. The first model (4) captures the overall impact of institutional Quality on the Export intensity of SMEs in Nigeria, while the other model (5) captures the impact of Institutional Quality on Export intensity in different Geopolitical Zones.

$$EIn = (IQn, IFn, LEn, YRn, BTn) \quad (4)$$

$$EIg = (IQg, IFg, LEg, BTg) \quad (5)$$

EIn is Export intensity of SMEs in Nigeria; IQn is the institutional Quality index in Nigeria which is the aggregation of politic, legal and economic institution; IFn is internal factor which are constraints with the business domain e.g working capital, accessible finance, raw material availability, and enhanced managerial strategies; LEn level of Edcation of SMEs business owner in Nigeria; YRn is the Year of registration of SMEs in Nigeria; BTn is different type of SMEs in Nigeria. Also, Eig, IQg, IFg Leg, and BTg are associated with different geopolitical zones.

We employ logistic regression for estimation in this model due to its suitability for binary outcomes (e.g., yes/no, success/failure). Additionally, as the relationship between institutional quality and export intensity may not be linear, logistic regression is preferred as it does not require the assumption of linearity. The logistic regression is specified below.

$$\log\left(\frac{EI}{1-EI}\right) = \beta_0 + \beta_1 IQn + \beta_2 IFn + \beta_3 LEn + \beta_4 YRn + \beta_5 BTn + \varepsilon \quad (6)$$

The a priori expectation is  $IQn > 0$ ;  $IFn > 0$ ;  $LEn > 0$ ;  $YRn > 0$ ;  $BTn > 0$ .

This model and the a priori expectation are also applied to the estimation of the 6 geopolitical zones in this study.

## 4.0 PRESENTATION OF FINDINGS AND DISCUSSION OF RESULTS

This study contributes to the ongoing discourse surrounding the effect of institutional quality on the export intensity of small and medium-sized enterprises (SMEs) in Nigeria by studying a sample of 6,500 across six (6) geopolitical zones.

The results derived from the logistic regression analysis, as depicted in Table 4.1, indicate a statistically significant relationship between institutional quality and export intensity, for each incremental unit of institutional quality, there is a corresponding increase of 2.182746 units in export intensity. so, enhancing political, legal, and economic institutions in Nigeria is projected to more than double the rise in export intensity. This observation aligns with the insights put forth by Abreo, Bustillo & Rodriguez (2021), underscoring the significant influence of institutional quality on export dynamics, particularly emphasizing the pivotal roles of regulatory quality and commitment to the rule of law. It is evident from research that there exists a positive association between institutional quality and trade in developing countries. Stronger institutions are linked to the expansion of trade, which can result from either productivity growth or per capita income growth (Khan, Khan, & Naqvi, 2022). In contrast to the findings of Khan, Khan & Naqvi (2022), these findings suggest that there is a short-term impact between export intensity and institutional quality. These findings underscore the critical nexus between institutional development and export intensity, suggesting that improvements in governance frameworks can substantially enhance the competitiveness and sustainability of Nigeria's export sector. Similar conclusions drawn from the Colombian context highlight the universal significance of robust institutional structures in fostering vibrant export markets and fostering economic growth. Therefore, prioritizing institutional reforms aimed at bolstering regulatory effectiveness and upholding legal standards could catalyze substantial advancements in Nigeria's export landscape, fostering resilience and competitiveness on the global stage.

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**Table 4.1: The overall effect of institutional quality on Export intensity in Nigeria**

Variable	Coefficient	Standard error	t-statistics	probability	[95% confidence interval]	
<b>Institutional quality</b>	2.182746	0.5180982	4.21	0.000	1.166918	3.198573
<b>Internal Factor</b>	2.353241	0.7894156	2.98	0.003	0.8054446	3.902037
<b>Level of education</b>	-3.350387	0.9126167	-3.67	0.000	-5.139741	-1.561032
<b>Year of registration</b>	-1.406738	0.6333463	-2.22	0.026	-2.648532	-0.1649448
<b>Business Type</b>	1.374308	0.5519742	2.49	0.013	0.2920594	2.456556
<b>Cons</b>	39.87198	4.067549	9.80	0.00	31.8968	47.84717
<b>R squared</b>	0.0149					
<b>Adj. R-Squared</b>	0.0134					
<b>F statistic</b>	9.93					
<b>F(prob)</b>	0.000					

Also, from Table 4.1, Internal Factors are statistically significant, so a unit increase in internal factors will lead to a 2.353241 increase in Export intensity. The constructive impact of factors such as sufficient working capital, accessible finance, raw material availability, and enhanced managerial strategies outweighs the adverse effects of heightened competition with large corporations in Nigeria. This observation resonates with the research findings of Mansilla- Fernandez and Milgram-Baleix (2022), who asserted that inadequate management of working capital diminishes firms' prospects for exporting and reduces the volume of their exports. Similarly, Bernard et. al. (2019) corroborates this notion in their examination of working capital management's influence on the export performance of small and medium enterprises (SMEs) in Sri Lanka's manufacturing sectors. They found that receivables, inventory, and payables positively and significantly impact the export performance of the sampled SMEs. However, their conclusion regarding the positive but statistically insignificant effect of financial management contrasts with our findings. Our research indicates that the collective influence of internal characteristics and constraints, such as finance availability and management, is both positive and significant. These results underscore the critical role of effective working capital management and financial resource utilization in facilitating SMEs' competitiveness and export success. Therefore, prioritizing strategies to optimize working capital, enhance access to finance, and improve managerial practices can mitigate the challenges posed by formidable competition, empowering Nigerian SMEs to thrive in the global market landscape.

Table 4.1 also shows that though the level of education was statistically significant, its impact negatively affected the export intensity of SMEs. A one-unit increase in the level of education will lead to a 3.350387 decrease in export intensity. While this outcome contradicts our A priori expectations, it is not far-fetched from reality, as evidenced by the trend where higher levels of education often lead individuals to pursue employment in larger corporations, potentially diverting their attention from small-scale entrepreneurship, particularly in the Nigerian context. This finding diverges from the conclusions drawn by Sousa, Martinez-Lopez, and Coelho (2008), who demonstrated that managers with advanced education levels tend to achieve greater success in exporting. Additionally, Moghaddam (2013) highlighted the role of educated managers in assisting companies to navigate international challenges and identify new opportunities abroad. He concluded that a high level of education among managers is a crucial factor in enhancing export performance, as it positively influences various aspects such as total export sales, profits, growth, and the evaluation of export performance. Contrarily, Bekteshi (2019) discovered that the education and training of managers do not hold statistical significance in determining export performance. This discrepancy underscores the complexity of the relationship between managerial education and export outcomes, suggesting that other factors may play significant roles in shaping export performance. Despite these findings, the overarching importance of managerial education in facilitating international market

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expansion cannot be discounted. While it may not always directly translate into enhanced export performance, educated managers bring valuable skills and perspectives that can contribute to a company's ability to compete effectively in global markets. Therefore, while the impact of managerial education on export performance may vary depending on contextual factors and the specific dynamics of each market, investing in the education and training of managers remains crucial for ensuring the long-term competitiveness and sustainability of businesses engaged in international trade.

In Table 4.1 year of registration has a negative but statistically significant impact on export intensity. As unity increases in year of registration will lead to 1.406738 in export intensity. The negative impact is attributed to technological obsolescence, as older businesses may lag in adapting to advancements, reducing efficiency and competitiveness. Operational rigidity further limits the exploration of new export opportunities, stemming from established structures resistant to change. Additionally, resource constraints, encompassing limited financial, human capital, and export network access, hinder older businesses. These factors collectively impede their ability to maintain or increase export intensity, highlighting the challenges faced by longstanding firms in adapting to evolving global market demands.

Business type shows a positive and statistically significant impact on export intensity as a unit increase in business type will lead to a 1.374308 unit increase in export intensity. Certain industries produce goods that are naturally suited for export due to factors like demand, quality, and cost competitiveness, such as oil, minerals, and agricultural products. Therefore, Nigeria's export performance can improve with a more diverse range of SMEs. The presence of various types of small and medium-sized enterprises contributes to a broader export base, potentially enhancing the country's overall export capacity and competitiveness in international markets. Also, in Table 4.1 Adjusted R-squared is 0.0134. This means that variation in 1.34% Export intensity in Nigeria is captured by the model. while the confidence interval shows that all the variables used in the model are statistically significant at a 95% confidence level. In Nigeria, institutional quality's impact on export intensity varies across geopolitical zones. Some regions exhibit positive effects, others negative. Additionally, statistical significance varies. Table 4.2 illustrates the significance of institutional quality in determining export intensity across Nigeria's geopolitical zones. Specifically, the South-West, South-East, South-

**Table 4.2: The Effect of Institutional Quality on Export Intensity in Different Geopolitical Zones in Nigeria**

<b>Export Intensity (EI)</b>						
<b>Variables/Regions</b>	South- west	South- East	South- South	North- East	North- central	North- west
Institutional quality	<b>-0.916<sup>a</sup></b> (-1.96)	<b>7.11<sup>a</sup></b> (7.54)	<b>2.850<sup>a</sup></b> (3.14)	-1.038 (-1.37)	<b>-4.009<sup>a</sup></b> (-3.36)	0.760 (1.08)
Internal Factor	<b>-1.643<sup>a</sup></b> (-2.24)	<b>6.480<sup>a</sup></b> (3.22)	1.579 (1.09)	-0.216 (-0.16)	<b>3.670<sup>c</sup></b> (1.84)	<b>4.618<sup>a</sup></b> (4.90)
Level of education	0.621 (0.710)	<b>-4.094<sup>a</sup></b> (-2.53)	0.004 (0.67)	<b>-7.829<sup>a</sup></b> (-7.86)	-1.20 (-0.84)	<b>-3.847<sup>a</sup></b> (-3.42)
Business Type	<b>-2.165<sup>a</sup></b> (-3.04)	<b>3.744<sup>a</sup></b> (4.32)	<b>0.419<sup>b</sup></b> (2.22)	-0.291 (-0.27)	-1.648 (-1.13)	1.529 (1.41)
Cons	<b>-20.165<sup>a</sup></b> (5.34)	<b>36.681<sup>a</sup></b> (4.50)	-41.142 (-3.24)	<b>65.043<sup>a</sup></b> (13.75)	<b>48.336<sup>a</sup></b> (7.28)	<b>35.445<sup>a</sup></b> (6.99)
Adj. R- Squared	0.0099	0.1618	0.0183	0.0680	0.0078	0.0506
F statistic	4.62	43.16	5.42	18.37	2.92	14.64



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F(prob)	0.001	0.000	0.0003	0.000	0.0204	0.000
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Note: <sup>a</sup>, <sup>b</sup> and <sup>c</sup> show significance at 1%, 5%, and 10% levels respectively. ( ) are the t-stat.

Source: Authors

South, and North-Central regions are statistically significant at a 5% level, implying an impact on export intensity. Conversely, the North-East and North-West are not statistically significant at 5%, suggesting uncertainty regarding their influence on export intensity. Furthermore, the South-East, South-South, and North-West display a positive relationship between institutional quality and export intensity, while the South-West, North-East, and North-West demonstrate a negative relationship. The South-East exhibits the highest positive impact, with a 1 unit increase in institutional quality resulting in a 7.11 unit increase in export intensity, whereas the North-West shows the lowest positive impact, with a 1 unit increase in institutional quality leading to a 0.760 unit increase in export intensity. The variation in results comes as no shock, given that even within smaller emerging and transition economies, the institutional landscape can vary significantly depending on the specific region where exporters operate. This regional divergence is driven by a myriad of factors, including political, economic, and other contextual influences. These diverse regional dynamics contribute to the emergence of distinct institutional forces, with each evolving at its own pace (Ngo et al, 2016). Table 4.2 indicates that internal factors in the South-South, South-East, North-Central, and North-West regions are statistically significant at 5% in determining export intensity. Of these four Geopolitical zones, only the South-South have a negative relationship a 1-unit increase in internal factors in the South-South will decrease export intensity by 1.643 units. From the other positive and significant geopolitical zones, the South-East have the largest impact as a 1 unit increase of internal factor will increase the export intensity by 6.480 units, while the lowest is North-central which has 3.670 units increase in export intensity as a result of 1 unit increase on internal factors.

South-East has the highest adjusted R square, which is 0.1618, which implies that 16.18% of export intensity is explained by institutional quality, internal factors, and business type, while North Central has the lowest adjusted R square of 0.0078, which implies that 0.78% of export intensity is captured by the model. This result is not surprising as there are many variables which capture export intensity that are not included in the model.

The analysis underscores significant regional variations in the factors impacting export intensity. Institutional quality, internal factors, education levels, and business type demonstrate varying effects across different regions. As a result, it is critical to implement policies and interventions tailored to each region to enhance export intensity effectively. Customizing efforts to improve institutional quality, internal factors, education levels, and business environments according to the unique characteristics and challenges of each region is essential. This targeted approach ensures that interventions are precisely aligned with the specific needs and circumstances of individual geopolitical zones.

## 5.0 CONCLUSION, RECOMMENDATIONS AND POLICIES IMPLICATIONS

### 5.1 Conclusion

In conclusion, the findings of this study shed light on the multifaceted nature of factors influencing export intensity among small and medium-sized enterprises (SMEs) in Nigeria. Through an in-depth analysis of institutional quality, internal factors, education levels, business type, and regional variations, several key insights have emerged, providing valuable guidance for policymakers, stakeholders, and entrepreneurs alike.

Firstly, the study underscores the critical importance of institutional quality in driving export intensity. The statistically significant relationship between institutional quality and export intensity highlights the pivotal role of robust regulatory frameworks, political stability, and adherence to the rule of law in fostering a conducive environment for SMEs to thrive in international trade. By emphasizing the need for continuous improvements in governance structures, particularly in areas such as regulatory effectiveness and legal standards, policymakers can unlock substantial growth opportunities for Nigeria's export sector.

Furthermore, the analysis reveals the significant impact of internal factors, such as working capital management, access to finance, and managerial strategies, on export intensity. Despite the challenges posed by heightened competition and resource constraints, SMEs stand to benefit from prioritizing strategies aimed at optimizing internal operations and enhancing financial resource utilization. By fostering a culture of innovation and efficiency within SMEs, Nigeria can bolster its competitiveness in global markets and capitalize on a diverse range of export opportunities. Moreover, while the study identifies a negative correlation between education levels and export intensity, it also acknowledges the nuanced nature of this relationship. While higher levels of education may divert individuals towards larger corporations, thereby potentially limiting SME participation in export activities, educated managers bring valuable skills and perspectives that can enhance a company's ability to compete effectively on the international

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stage. Therefore, while the impact of managerial education on export performance may vary, investing in the education and training of managers remains crucial for ensuring the long-term competitiveness and sustainability of Nigerian SME exports.

Also, the study highlights significant regional variations in the factors influencing export intensity across Nigeria's geopolitical zones. By recognizing the unique challenges and opportunities present in each region, policymakers can tailor interventions and policies to enhance export intensity at the local level effectively. Customizing efforts to improve institutional quality, internal factors, education levels, and business environments according to the specific characteristics and needs of each region is essential for driving sustainable growth and economic development nationwide.

In essence, this study emphasizes the importance of a holistic approach to enhancing export intensity among SMEs in Nigeria. By addressing institutional weaknesses, optimizing internal operations, investing in education, and training, and tailoring interventions to regional dynamics, Nigeria can unlock its full export potential, foster economic growth, and establish itself as a competitive player in the global marketplace.

### 5.2 Policy Implication

Based on the findings outlined in the study regarding the impact of institutional quality, internal factors, education levels, business type, and regional variations on export intensity in Nigeria, here are ten recommendations and policy implications:

1. **Enhancing Institutional Quality:** Given the significant positive relationship between institutional quality and export intensity, policymakers should prioritize reforms aimed at bolstering political, legal, and economic institutions in Nigeria. This could involve measures to improve regulatory effectiveness, uphold the rule of law, and enhance governance frameworks at both national and regional levels.
2. **Tailored Regional Interventions:** Recognizing the diverse regional dynamics influencing export intensity, policymakers should adopt a tailored intervention approach. Customizing policies and initiatives according to the unique characteristics and challenges of each geopolitical zone can maximize their effectiveness in promoting export growth and competitiveness.
3. **Investment in Internal Factors:** The study highlights the importance of internal factors such as sufficient working capital, accessible finance, and enhanced managerial strategies in driving export intensity. Therefore, policymakers should prioritize initiatives aimed at optimizing working capital management, improving access to finance, and enhancing managerial practices among SMEs.
4. **Promoting Business Diversity:** Encouraging a diverse range of SMEs across different industries can contribute to a broader export base and enhance Nigeria's overall export capacity. Policymakers should support initiatives that promote entrepreneurship and innovation across various sectors, thereby fostering a more resilient and competitive export landscape.
5. **Addressing Education-Export Paradox:** Despite the negative impact of education levels on export intensity, policymakers should not overlook the potential benefits of investing in managerial education and training. Efforts to enhance the skills and capabilities of SME managers can contribute to long-term competitiveness and sustainability in international markets.
6. **Modernizing Established Businesses:** Recognizing the challenges faced by older businesses in adapting to technological advancements and evolving market demands, policymakers should support initiatives aimed at modernizing established firms. This could involve providing incentives for technology adoption, facilitating access to resources, and promoting flexibility in operational structures.
7. **Fostering Collaboration:** Encouraging collaboration between SMEs and larger corporations can help mitigate the challenges posed by heightened competition. Policymakers should explore mechanisms to facilitate partnerships, knowledge sharing, and resource pooling, thereby enabling SMEs to leverage the strengths of larger entities to enhance their export capabilities.
8. **Improving Export Infrastructure:** Investing in export infrastructure, including transportation, logistics, and trade facilitation, is crucial for reducing transaction costs and enhancing market access for SMEs. Policymakers should prioritize infrastructure development projects aimed at improving connectivity and efficiency in the export supply chain.
9. **Supporting Market Access:** Facilitating market access for Nigerian SMEs through trade agreements, export promotion initiatives, and market intelligence services can help expand export opportunities and diversify export destinations. Policymakers should explore strategies to reduce trade barriers and facilitate entry into new markets, thereby increasing export competitiveness.
10. **Monitoring and Evaluation:** Finally, policymakers should establish robust monitoring and evaluation mechanisms to assess the effectiveness of policies and interventions aimed at promoting export intensity. Regular monitoring of key indicators and feedback mechanisms can help identify areas for improvement and ensure that policy responses remain aligned with the evolving needs of SMEs in Nigeria's export sector.

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