

Effect of Supply Chain Resilience on Performance of Manufacturing Industry in Nigeria

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Abstract—Manufacturing organizations that depended greatly on supply chain effectiveness or resilience had greatly cultivated supply chain resilience that suited the firms. With this in mind, the firms carried out this b ensuring that its supply chain is resilience in nature through the components of supply chain agility, supply collaboration and supply chain robustness. This study investigates the effect of supply chain resilience on performance of manufacturing industry in Nigeria. To investigate this objective, Manufacturing Company in Lagos State was used in this case Dangote Cement Company was used due to its heavy dependence on the supply Chain. More so, 202 respondents that were directly involved in supply chain in Dangote were selected for the study. The result of the ANOVA test revealed that supply chain resilience was significant on the performance of the company. The study concluded that supply chain agility, supply chain collaboration and supply chain robustness contributed positively to the performance of the Dangote Cement Company in Lagos.

Index Terms—Supply Chain Resilience, Supply chain Agility, Supply Chain Collaboration, Supply Chain Robustness, Performance

I. INTRODUCTION

In an environment of increasing uncertainty, global disruptions, and evolving inter-organizational connections, organizations need to reevaluate the role of the supply chain in relation to overall organizational performance. This requires moving beyond basic supply chain functions focused on cost efficiency and beginning to grasp supply chain roles that are linked to survival and gaining a competitive edge in current markets. Supply chain strategies are increasingly moving away from viewing supply chains solely as cost centers focused on efficiency.

To understand supply chain roles in areas related to survival and competitive advantage in today's markets. The concept of supply chain resilience (SCR) can therefore be defined as this ability to predict and deal with potential disruptions in supply chain systems and restore them to an improved level of functionality (Naghshineh & Lotfi, 2019; Ming et al., 2021). The ability to predict and respond to such disruptions in supply chain systems tends to have a significant effect on organizational performance capabilities, based on empirical studies and research that indicate supply chain resilience can directly and indirectly affect organisational performance capabilities in organizations under crisis conditions (Chowdhury et al., 2019; Liu et al., 2018).

The emphasis on supply chain resilience has significantly shifted in the last twenty years. The original idea of supply chain resilience referred to how quickly and effectively a supply chain can bounce back from disruptions. Over time, the concept has expanded to encompass the roles of adaptability, transformation, integration, and collaboration in supply chain resilience. In the year 2020, Chunsheng and colleagues. In 2020. Comprehensive studies, including systematic reviews, generally indicate that organizations that actively work to enhance their supply chain resilience are more likely to achieve better financial, operational, and market performance compared to their competitors who are less resilient. Please provide the text you would like me to paraphrase. Current research shows that, in addition to increasing numbers, resilience can enhance functional performance by affecting the structure and operations of an organization and its environment. For example, effective relational capabilities and enhanced supply chain integration are crucial as they

will allow resilience to maximise overall performance through enhanced information exchange, trust, and joint responses to events that may impair an organisation (Chowdhury et al., 2019; Zighan et al., 2023). Organisational human resource management and continuous organisational learning enhance favourable skills and decision-making skills that eventually impact overall superior operational performance (Gu et al., 2023; Eryarsoy et al., 2022). Experience and evidence from various industries such as shipping, energy, manufacturing, and textile industries demonstrate that having flexibility, increased visibility, and integrated systems as forms of resilience can work as positivity catalysts and, apart from that, resilience mechanisms as defensive tools as well (Munir et al., 2023; Munir et al., 2023). Regardless of the mounting body of research, the resilience-performance relationship is quite situation-specific, especially within developing nations such as Nigeria and Calabar in particular. Current meta-analytic research depicts a positive correlation between supply chain resilience performance; however, they identify incongruities due to context factors, the variable of interest being measured, or other mediating factors (Gesese & Singh, 2025; Negi et al., 2025). Specifically, the study conducted by Hamidu et al. (2024) illustrates the paradoxical correlation between supply chain network complexity levels increasing or suppressing performance achievements from resilience efforts as a function of companies' capacity to coordinate this process effectively. Similarly, other research undertaken by Ahmed et al. (2025) exemplifies soft aspects of organisations, such as culture, influencing the conversion of resilience capacities to actual performance outcomes. In other words, resilience is not directly correlated with performance, but rather it is an element of organisational structures.

From a theoretical perspective, the dynamic capabilities approach provides an interesting framework for understanding when supply chain resilience has an impact on organisational performance. The dynamic capabilities approach holds that resilience represents an organisational capability that allows an organisation to detect disturbances, seize opportunities for adaptation, and adjust and re-align resources when faced with a turbulent environment (Gu & Huo, 2017; Singh,

2024). When these capabilities are appropriately leveraged, it results in an increase in organisational performance metrics such as financial performance, customer service, and competitive advantage, in addition to improving organisational capabilities related to day-to-day operating performance in supply chain resilience environments (Huo, 2026)

Li, & Gu, 255555555024; Huang et al., 2023). In this manner, supply chain resilience ceases to operate under a mere responsive approach and instead enters the realm of organisational performance strategy. Therefore, a question related to supply chain resilience continues to serve an important purpose regarding organisational performance metrics in an uncertain and potentially turbulent operating context. The issue with the manufacturing sector in Nigeria can be considered a representation of the numerous problems that exist in the form of common supply chain glitches and logistics bottlenecks. But there are certain issues associated with the Calabar environment concerning the manufacture of goods. In this case, one can see that the infrastructure environment surrounding issues like transport and regional issues increases the various limitations and constraints imposed on manufacturers. Thus, there arises an environment that is prone to supply chain disruption in which being stable is a necessity. Even as there has been prior research conducted in Nigeria based on similar constructs such as agility and risk management, there is a lack of local, empirical knowledge that seeks to establish the specific influence of supply chain resilience on performance in Calabar's manufacturing industry. Thus, there is an apparent research void that can be filled with research that illustrates how resilience in a supply chain affects organisational performance in that context. By so doing, this research will ensure that there is a supply chain resilience solution for improved organisational performance that is based on a clear understanding of Calabar's manufacturing environment. Thus, the study specifically: (i) examines the effect of supply chain agility on the performance of manufacturing firms. (ii) Determine the effect of supply chain collaboration on the performance of manufacturing firms. (iii) Examine the effect of supply chain robustness on the performance of manufacturing firms.

II. LITERATURE REVIEW

Supply Chain Resilience and Manufacturing Industry Performance

A focus on the importance of agile supply chains has been highlighted as an essential consideration for organizations that operate in environments characterized by increased uncertainty, variability, and disruption. On a broader level, agility has been defined as the organization's ability to sense changes in demand and supply and respond quickly through flexible business processes and speedy decision-making in line with the supply chain participants (Wu, 2019; Zhu & Gao, 2021). Unlike efficiency-based approaches, agile supply chains focus on speed, flexibility, and responsiveness as key drivers for ensuring the effectiveness of supply chains in dynamic environments. On a conceptual level, agile supply chains have been highlighted as a dynamic capability that enables organizations to make changes in line with the demands of the environment in which they operate (Khan & Wisner, 2019).

The literature has robustly demonstrated the importance of agile supply chain management for achieving enhanced performance outcomes. This is because agile supply chain management enables organizations to reduce lead times, improve service performance, minimize exceptions in operations, and optimize manufacturing activities in line with the demands of the environment, thus ensuring enhanced performance (Panigrahi et al., 2023). Studies that have used meta-analytic techniques and large-scale studies have demonstrated that organisations that implement agile supply chain management achieve enhanced performance in comparison to their less agile competitors in terms of efficiency, customer satisfaction, and gaining a competitive advantage (Alfalla-Luque et al., 2023). In the manufacturing sector, agility enables organisations to respond to variability in the market in terms of demand and supply risk without any compromises in productivity or quality, thus enabling an agile supply chain management approach for achieving enhanced performance.

Empirical studies suggest that the advantages of supply chain agility are the result of the following virtuous cycles: An agile enterprise demonstrates its capabilities to achieve increased speed, facilitate innovations, and refine products, processes, and

frameworks of logistics in response to changing customer needs and dynamics of the market (Ayoub & Abdallah, 2019). The literature also highlights the significance of developing the capacity to attain higher levels of agility through increased interconnectivity, information sharing, and learning to enhance agility performance (Shukor et al., 2021; Baah et al., 2022). Indeed, in emerging economies characterised by high infrastructural disruption and environmental uncertainty, supply chain agility plays a vital role in improving performance (Alkrait & Almaktoom, 2021).

Empirical findings related to performance improvement in the context of the Nigerian economy also support the literature that supply chain agility is advantageous to manufacturing organisations operating in unstable environments, as they are able to attain more business value by leveraging supply chain agility (Abiji et al., 2025). The benefits of adopting supply chain agility are many, but it also has trade-offs that need to be considered. Supply chains that are highly responsive are associated with significant investments in information technology and coordination mechanisms that can increase costs if not managed effectively and can also cause inefficiencies if high responsiveness is overplayed to the detriment of long-term strategies (Dubey et al., 2019; Feizabadi et al., 2021). Thus, supply chain agilities stand out both as facilitators of high-performing organisations and as capabilities whose balancing act should not result in undesired outcomes. Based on these arguments and prior empirical evidence, this study proposes the following hypothesis:

H₀₁: Supply chain agility has a significant effect on organizational performance.

Supply Chain Collaboration and Manufacturing Industry Performance

Collaboration in supply chains has emerged as an important phenomenon with growing trends, considering the increased uncertainties and disruptions surrounding companies' operations. Collaboration in supply chains can be described based on the extent to which companies collaborate with their upstream and downstream partners, along with information sharing, decision-making, solving problems, and relational contracting to overcome mutual objectives (Ho et al., 2019; Uddin, 2022).

Unlike transactional models, supply chain collaboration involves trust, openness, and shared responsibilities between companies to necessitate their operations despite organisational boundaries. It has been emphasised in literature that collaboration is an important factor for organisational performance. This collaborative method makes the supply chain more transparent, thus mitigating the issue of imbalance in this regard and hence increasing efficiency in the organisation (Baah et al., 2022; Huang et al., 2023). Suppliers and customers can be included in planning and executing activities; this increases the efficiency of an organisation in dealing with fluctuations in organisational performance (Khan & Wisner, 2019; Shukor et al., 2021).

Moreover, the importance of the role played by collaboration in the supply chain, in terms of enhancing the robustness and resilience of the supply chain, with the secondary effect of improving performance, has also been emphasised in the relevant literature. Chowdhury et al. (2019) found that the activities of relationship building, including collaboration and joint decision-making, have a substantial positive impact on the resilience of the supply chain, enabling the firm to recover well. Further, the findings of the study conducted by Liu et al. (2018) and Munir et al. (2023) also suggest that the activities of supply chain collaboration enable the operations of the firm to adjust to the uncertain environment, hence having a positive impact on performance. Collaboration and learning also enable the development of advancements in supply chain innovation, which plays an important role in improving the efficiency of the firm in the long run. According to the findings of the study conducted by Jimenez-Jimenez et al. (2019), the activities of collaboration enable firms to leverage the investment in technology and achieve the desired innovation. Supply chain collaboration also enables the development of improvements in green innovation efficiency, as the activities of environmental collaboration play an important role in this regard (Yang & Lin, 2020).

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From a strategic management perspective, both resource-based theory and dynamic capabilities theory collectively address the construct of supply chain collaboration, with a focus on the intangible aspects involved in building a competitive advantage. Collaborations provide the ability to tap into complementary assets, share risk, and develop intangible capabilities that are difficult to imitate by competitors (Gu and Huo, 2017; Chunsheng et al., 2020). In turbulent environments, collaboration increases agility and flexibility for firms to respond better to market changes and disruptions (Feizabadi et al., 2021; Hotlan et al., 2021). It follows, therefore, that organisations that invest in strong collaborative ties are in a position to realise superior performance results in comparison to others that may have isolated or adversarial supply chain relationships.

Despite the vast theoretical and practical evidence available about collaboration, there is also evidence that indicates that the performance advantages that can be derived from collaboration can be affected by how deep the process of collaboration is (Ho et al., 2019; Hendijani & Norouzi, 2023). Just sharing information without building trust can weaken performance enhancements, causing additional costs for coordination (Ho et al., 2019; Hendijani & Norouzi, 2023). It is, therefore, important for a

company to focus on a holistic approach when pursuing supply chain collaboration for performance advantages. Based on the theoretical arguments and empirical findings reviewed above, this study proposes the following hypothesis:

H2: Supply chain collaboration has a significant effect on organizational performance.

Supply Chain Robustness and Organizational Performance

Supply chain robustness is an essential competency in business operations as it enables a company to build immunity to disruptions through its inherent supply chain structures and processes (Munir et al., 2023; Mackay et al., 2020). Supply chain robustness provides immunity for an organisation through redundancy, standardised business processes, and diversified sourcing, thus helping manage disruptions in business environments (Sindhuja, 2021; Mackay et al., 2020). Supply chain robustness plays an important role in the optimisation of efficiency, satisfaction, and performance of the organisation (Hendijani & Norouzi, 2023). In an organisation, supply chain robustness enables strategic planning for future business activities, thus reducing disruptions resulting from fluctuations in business environments (Aslam et al., 2023; Munir et al., 2023). However, despite robustness being an established concept for stability and continuity, it has also been identified as creating rigidity in business processes, which could hinder adaptability and responsiveness to unforeseen business disruptions (Mackay et al., 2020; Tetsteh et al., 2025). Organisations that excel in robust structures but lack adaptability mechanisms may be adversely affected by business environments, as rigidity in configurations may hinder radical and innovative actions (Naghshineh & Lotfi, 2019; Liu et al., 2018). Supply chain robustness, therefore, plays a dual role of being both beneficial and detrimental to organisational stability and continuity due to its rigidity over flexibility and adaptability.

From empirical findings, it is clear that robustness has a significant impact on firm performance. In the textile industry in Pakistan, Munir et al. (2023) found that companies that showed robust supply chain management were more likely to display better efficiency and better overall finance-related

performance, especially when robustness strategies were combined with overall resilience strategies. Other studies that looked at supply chains that were improved through blockchain technology found that overall technological integration improved capabilities with respect to robustness, especially with respect to more effectively resisting challenges, as well as improving overall processes with respect to increased efficiency and time optimisation (Aslam et al., 2023). Companies with robust supply chain functions performed better in their ability to withstand the effects of the COVID-19 situation compared to their counterparts, which emphasizes its overall importance in particularly challenging scenarios involving pandemics such as COVID-19 (Ruel & El Baz, 2023; Hendijani & Norouzi, 2023). Accordingly, this study proposes the following hypothesis: H3: Supply chain robustness has a significant effect on organisational performance.

Theoretical Review

This paper is hinged on the dynamic capability theory. This theory was first proposed by Teece et al. (1997). It begins with the premise that organizations exist in an ever-changing, uncertain environment in which change is constant. Organizations, according to the concept, must develop the capability to sense opportunities and threats, exploit these opportunities, and reconfigure the resources to remain competitive in the industry. One of the concepts in the theory is that quick and efficient adaptation to the environment is one of the contributors to success. The theory of dynamic capabilities applies to the study because it explains the contribution of supply chain agility to the performance of manufacturing organizations. Agile supply chains enable organizations to efficiently respond to fluctuations in demand, disruptions, and changes in the environment. By constantly adapting and reconfiguring the supply chain processes, organizations can improve efficiency, responsiveness, and competitiveness, thus enhancing performance.

III. METHODOLOGY

The study employed a survey research design to investigate the impact of supply chain resilience on the performance of Dangote Cement Plc, Lagos State, Nigeria. The study adopted the survey research

design because the design enables the casting of thorough research into the independent and dependent factors of the study among the workers at Dangote Cement Company Plc who participate in the management of the company's supply chain. First, the study reached out to the management of the company to request permission to carry out the study. The study also contacted the heads of departments of the company to request the time for carrying out the study

The target population was 430 employees in the operational, logistics, and management departments of Dangote Cement Company Plc, Lagos. A sample size of 202 was required for the population and confidence level of 95%, as indicated by the table by Krejcie and Morgan (1970). A simple random sampling technique was used, as employees directly involved with the decision and activities/operational levels in the supply chain were selected and targeted. A list of eligible staff members involved in supply chain and operational activities was obtained, and each member of staff was given a unique identification number. A computer-generated random number table was used as a basis for selecting a random sample, with every staff member having an equal, independent chance of being selected. A total of 202 subjects were proportionally selected out of the required departments.

The data were collected with the use of a structured questionnaire. The research instrument was divided into two main sections. The first part of the questions pertained to information about the respondent, while the second part focused on questions about supply chain resilience and organizational performance. All the questions were measured using a five-point Likert scale, ranging from 1, which means "strongly disagree," to 5, which means "strongly agree," in order to measure the perceptions and evaluations of the respondents about the different aspects of supply chain resilience.

The first questionnaire was reviewed by three different academics with expertise in the field of supply chain management and organizational

performance to establish the content validity of the questionnaire. The pilot study was conducted by administering the questionnaire to 30 individuals who were not the main target population of the study. The reliability of the constructs was measured by using the alpha value, which was above 0.85 for all the constructs.

The process for administration was also planned carefully. The participants knew that it was voluntary to take part in this study, were promised confidentiality, and were asked to avoid putting any identifiers on their forms. The forms had to be returned in six weeks after administering them to participants. The way in which this research study was planned guaranteed high-quality data that can easily be replicated in a similar work setting again in the future. Table 1 indicated that reliability coefficients exceed the minimum cut-off level of 0.85.

Table 1. Reliability Test Table

Variable	Number of Items	Results
Supply chain agility	5	0.970
Supply chain collaboration	5	0.891
Supply chain robustness	5	0.852

Source: Researcher's computation (2026) from SPSS 27.0

Hypothetical Model

The hypothesized relationships in this study can be represented as follows:

$$OP = \beta_0 + \beta_1 SSA + \beta_2 SSC + \beta_3 SSR + \mu$$

Where:

OP = Organizational Perf

SSA=Supply chain agility;

SSC=Supply chain collaboration;

SSR=Supply chain robustness;

β_0 = Constant term;

β_1 to β_3 = Regression parameters to be estimated

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possessed B.Sc/HND, 32.18 per cent had OND/NCE, 14.85.47 per cent had M.Sc/MBA, and 3.47 per cent were PhD degree holders, hence justifying that it was a fairly educated population. Finally, the respondents' work experience indicated that 43.07 per cent had worked for 6-10 years, 42.08 per cent had worked for less than 5 years, and 14.85 per cent had worked for 10 years and above, meaning that the majority had a moderate work tenure in the organizations.

The multicollinearity test, as shown in Table 3, implies that the independent variables of supply chain

agility, visibility, collaboration, and robustness are independent enough for regression analysis. Tolerance values ranged from 0.3128 to 0.55561, all above the critical threshold level of 0.1, while VIF values ranged from 5.362 to 8.770, below the conservative limit of 10 (Gujarati & Porter, 2009). It would, therefore, appear that multicollinearity is within acceptable limits, rendering the estimated effects of the predictors on organizational performance reliable and not distorted to a significant extent by the correlations across

Table 4 Regression Result on

Supply chain collaboration	0.542430	0.02145		25.28811	
Supply chain robustness	0.342461	0.012204		28.06137	
variables.					
Model R	R ²	Adjusted R ²		Std. Error of	Durbin Watson
				the Estimate	
0.933a	.801	.796		.404	1.614

Source: Researcher's Computation, 2026

Table 4. Model Summary on Supply Chain Resilience and Organizational Performance

Note: Predictors: (Constant), Supply chain agility, supply chain collaboration, supply chain robustness. Dependent Variable: organizational performance

The summary displayed in Table 4 showed the overall fitness of the regression equation developed to test the impact of supply chain agility, collaboration, and robustness on organizational performance. The value of the correlation coefficient $R = 0.933$ indicated that the overall independent variables have an excellent positive relationship with the dependent variable, indicating that overall organizational agility, collaboration, and robustness are well identified with the variations in their organizational performances. The value of R^2 , also known as the coefficient of determination, is 0.801, indicating that the three predictor variables in the model explain about 80.1% of the variation in the organizational performance. The adjusted value of R^2

is also high at 0.796, which takes into consideration the number of predictor variables in the model. An R^2 value is considered to be extremely good if its value is close to 1. Hence, it is amply validated that the model is explaining a large variation in the organizational performance

The standard error of estimate is 0.404, indicating how much, on average, observed data points depart from their projection points along the regression line. A low standard error indicates that observed performance values tend to be close to the predicted values. The value obtained for the Durbin-Watson STAT is 1.614, which falls between the acceptable limits of 1.5 and 2.5. The model has good explanatory power, which indicates that variables like increased supply chain flexibility, collaboration, and robustness would have a significant and positive effect on the organizational performance of Dangote Cement Company in Lagos State, Nigeria.

Table 5 ANOVA on Supply Chain Resilience and Organizational Performance

Source of Variation	Sum of Square	DF	Mean of Square	F-calculated	P-Value
Regression	236.78	4	59.195	259.627	0.0000
Residual	45.09	198	0.228	-	-
Total	281.87	202			

Source: Researcher's computation, 2026

Table 5: ANOVA for regression analysis of supply chain agility, supply chain collaboration, and supply chain robustness on organizational performance. From this table, the F-statistic of the regression model was 259.627 with a significant p-value of the critical value of 5%. This implied that the null hypothesis which stated there was no significant

relationship between supply chain resilience and organizational performance, was rejected. This indicated that supply chain resilience enhanced organizational performance in Dangote Cement Plc. The implication of this was that the combined effect of supply chain resilience was positive on organizational performance.

Test of Individual Variables of Supply Chain Resilience on the Organizational Performance

Dependent variable = Organizational Performance

Variable	Coefficient	Standard Error	T-calculated	P-value
C	2.233935	4.234611	0.527542	0.7420
SCA	1.323261	0.030627	43.20503	0.0000
SCC	2.557571	0.864278	2.959199	0.0075
SCR	0.729818	0.03858	18.91700	0.0000

** Source: Researcher's computation, 2026 * SCA= Supply Chain Agility ** SCC= Supply chain collaboration ** SCR= Supply Chain Robustness

Table 6 presents the regression results to determine the significance of each supply chain resilience variable for the selected organizational performance. Looking critically at the result in the table, it was discovered that supply chain agility was positive on the organizational performance. This assertion was hinged on the fact that the regression coefficient computed for the variable of supply chain agility of 2.23 was positive with a significant t-statistics value of 43.21. This implied that there was a significant positive effect of SCA on performance of the Dangote Cement Company Plc. as a result of this, a 1 percent increase in SCA could cause a 2.23 percent increase in the company performance. The sign of the variable of SCA was in tandem with a priori expectation for the variable. As a result of this, SCA was a determinant of organization performance since the variable was significant. Meanwhile, the p-value of the t-statistics computed for SCA of 0.0000 was less than the five percent critical value, thus, revealing that SCA was significant on the performance of Dangote Cement Company. The resultant effect of supply chain resilience that

possessed agility feature was that it enable Dangote Cement company to be able to response quickly changes in market demand or supply issues. with this agility any possible changes in the price of competitor that may affect the demand for Dangote Cement b customers is quickly addressed, thus, helping the company to maintain its market share. more so, the relationship between supply chain collaboration and organizational performance was found to be positive and significant. this inferred was premised on the fact that the regression coefficient computed for the variable of SCC of 1.32 was positive with a significant t-statistics value of 43.21. The regression value indicated that a 1 percent increase in the variable of SCC might cause a 1.32 percent in the variable of organizational performance. The sign of the variable of supply chain collaboration was in tandem with a priori expectation for the variable. As a result, SCC was a determinant of organizational performance. Furthermore, the p-value of the t-statistics computed for the variable of 0.0000 was less than the critical value of 5 percent. This implied that SCC was significant on

organizational performance. the capacity of the Dangote Cement Company Plc to be able to bring together team of independent companies and internal teams working together as partners in order to improve the process supply chain resilience may contribute significant to the 55555supply chain management as well as the organizational performance. For this to be possible, Aliyu (2026) argued that the essence of team 5work and mutual coordination between the external companies and internal team is very essential in having a workable SCC. this according to the author implied that the teams must be ready to share data, plans, and resources to manage the flow of goods from raw materials to final buyers must be shared jointly and vice-5versa. The implication of this was that everyone must be ready to shares the risks and rewa5rds to reach common goals of enhancing the company performance.

Furthermore, the effect of supply chain robustness on performance of the Dangote Cement Company was found to be positive and significant. This was because the regression coefficient computed for the variable of supply chain robustness of 0.73 was positive with a significant t-5statistics value of 18.92. The regression coefficient revealed that a 1 percent increase in the variable of SCR might cause a 0.73 percent increase in the variable of the organizational performance. As a result of this, SCR was a factor in supply chain resilience that influenced organizational performance positively. The sign of the variable of the SCR was in tandem with a priori expectation for the variable. Supply chain Robustness was a determinant of organizational performance. The p-value of the t-5statistics computed for the variable of SCR of 0.0000 was less than the critical value of percent. This revealed that SCR was significant on the performance of Dangote Plc. The capacity of supply management process to be able to absorb shocks and maintain stable operations during unexpected disruptions or uncertainties without breaking or altering core values relevance in the process might go as long way to enhance organizational performance. This according to the respondents had been the secret that had sustained Dangote Cement Company till this day.

V. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This stud had revealed that supply chain resilience enhanced organizational performance. The study concluded that supply chain agility contributed positively to organizational performance. Supply chain collaboration enhanced the performance of Dangote Cement Company positively. Supply chain robustness which was a component of supply chain resilience also influenced Dangote Plc performance positively.

Recommendations

The study may recommend that;

- Dangote Cement Company particularly the management of the company should continue to integrate easy to use supply chain agility understand all logistics department employees to influence the company performance.
- External team that want to collaborate with the company should be assessed very well in order to determine which of the team can help achieving the goal of the organization. collaboration should be effected with companies that have the same vision with the Cement Company5
- Dangote Company should source for expertise employee that help in maintaining high level of robustness and strategic value oriented influence on the company supply chain process

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