

The Role of Supply Chain Control in Organizational Performance of Commercial Banks

Mpuon J. Akam

Etim G. Sunday

Effa G. Assam

Eko H. Anna

Department of Marketing,

Faculty of Management Science

University of Calabar

Calabar – Nigeria.

Corresponding Author: mpuonjoseph@yahoo.com

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Abstract

Few studies have empirically investigated the performance improvement of supply chain control and organizational performance of commercial banks in a non - western context with specific reference to the banking industry. This study closes this gap by empirically exploring the relationship between supply chain control and organizational performance of commercial banks. To achieve this purpose, three hypotheses were developed as a guide to review related literature. The population of this study consists of registered commercial banks in Nigeria and data for the study were collected using questionnaire. Five Hundred and Forty Six (546) copies of the questionnaire were distributed to management staff of commercial banks in Nigeria. The study adopted inferential /descriptive statistical techniques and OLS estimated technique correlation. The findings from the study revealed that supply chain control has a positive significant relationship with organizational performance of commercial banks. Based on the above findings, we recommended that managers should evaluate and regulate organizational activities so as to bring performance in line with expectations.

Key words: supply chain, control, commercial banks, organizational performance

INTRODUCTION

Banks in the face of increase competition are currently facing enormous challenges in term of fraud control, customer satisfaction and how to increase their profit margin which have made survival increasingly difficult. Ugwoke (2010) noted that the role of supply chain control for the successful survival of commercial banks is extremely important that modern commercial banks need to go with a new supply chain control management order which will help in fraud prevention, increased profit margin, offer the customer satisfaction and make better organizational performance. It is evident that today, customers have increasingly become so enlightened and aware of their importance that ignoring them in search for competitive advantage can be suicidal for banks.

Most commercial banks encounter some problems in the establishment and implementation of fraud control and prevention systems which emanate from poor infrastructure, lack of finance, unskilled manpower and complexity of operation Ojuri (2007) as cited in Ugwoke (2010). Hayes (2019) opined that banks encounter the problems of low profit margin, increased fraud activities, high cost of acquisition and maintenance of systems. Akpan (2015) also submitted that commercial banks suffered from the problems of complex program application, network and power disruption, and shortage of skilled personnel to operate the complex system. Indeed, studies have attributed these problems to the none –adoption and implementation of appropriate supply chain control mechanism (SCCMs) by bank managers (Fritsch, 2015, Hayes, 2019, Amue and Ozuru, 2014). While (Ambe, 2012, Ebrahim and Mahmoud, 2014) has suggested that organizations may build and sustain strategic competitive advantage by adopting sound supply chain control mechanism (SCCMs), no empirical research exist to show how it may enhance performance improvement of commercial banks in a non –western context. This study therefore sought to close this gap.

LITERATURE REVIEW

The review of related literature is inevitable for any study in order to create ideas pertinent to the problem formulated. Literature review is seen throughout diverse academic sphere which enable the researchers to choose different approaches to help them effectively and

efficiently organize their work. The review of literature in this study will actually centre

on three major areas, conceptual review, theoretical review and empirical review.

Conceptual Review

The Concept of Supply Chain Control

The successful management of supply operations to maximize customer value and achieve a sustainable competitive advantage is known as supply chain control. It reflects a deliberate effort by supply chain companies to effectively and efficiently organize and harmonize all supply chain operations in the interest of supply chain actors. In the view of (Akpan, 2015) Supply chain excellence does not happen by accident as firms with outstanding supply chains control mechanism have made it a part of their strategy which they understand that for a firm to be a business leader in supply chain management, the must be a good control system to give feedback on part-time performance activities within the chain. According to (Akpan, 2015) Supply chain control will help to reduce conflict and enhances corporation among members thereby reducing fraud and increased profit margin of organization. Akpan (2015) argued that Supply chain control help to break the cycle of inefficiency that limits profits growth and return in investment. Also noting that companies that view themselves as dynamic and global see control system to be an effective and efficient mechanism for coordination and management of supply chain.

According to (Inyang, 2004, Etuk, 2008) controlling means the evaluation of the work accomplished against plans or standards to determine if it is being carried out as planned, making adjustments or corrections when necessary should new developments or unforeseen circumstance require it so that the objective or goal is achieved in the most efficient manner. Controlling also involves measuring, retaining, and correcting performance to accomplish an objective as was planned. An organization and its suppliers are interdependent and mutually beneficial relationship enhances the ability of both parties to create value (Kachru, 2010).

Fritsch (2015) argued that Supply chain control will guarantee cost and process transparency,

holistic and continual monitoring of all partners involved in the supply chain network. Hayes (2019) submitted that Supply chain control is based on a coordinated target system (delivery service, costs and assets), an integrated infrastructure and a consistent performance indicator system for measuring process performance and achievement of organizational goals and objectives.

While (Amue and Ozuru 2014) noted that Supply chain control allows supply chain managers to identify organizational faults and fractures along the value chain at an early stage which add value to products or services by constant monitoring of partners performance considering the value chain, the structure of the supply chain in term of production, logistics strategy and conditions on the sales and procurement markets. They further argued that supply chain control also take into consideration the service level (reliability delivery), which measure compliance with the agreed requirements for delivery and makes a significant contribution to customers satisfaction, prevention of fraud and increased profit margin of supply chain actors based on the scope of supply chain management.

Concept of Organizational performance

According to Shafique-ur et al (2019) organizational performance is a vital indicator of any organization success or failure in the market. Organization performance is measured in term of both quantitative as well as qualitative term, and it is achieved by the efforts of individual employee and departments (Zehire et al, 2016) as cited by Shafique-ur et al (2019). The success of an organization is based on their performance that is how well an organization achieves its objectives (Raneree and Al. Youha, 2019). Organizational performance means the effectiveness of an organization in the environment of their desired goals. Meanwhile, organizational performance is a factor that measures how well an organization attains its desire goals. Organizational performance plays a vital role in the existence of any kind of organizations such as profit-making organizations and non-profit making organizations. (Abu-Jarad et al, 2010) as cited by Shafiques-ur et al (2017).The dimensions of organizational performance used in this study are; fraud prevention, customer's satisfaction and increase profit margin.

Fraud prevention is an organizational metrics because it facilitate in the enhancement of overall economic performance and firm economic productivity. It also aids in the reduction of fraud risk both internally and externally. Achaka (2004) defined fraud as an action of dishonesty, deceit false claim, unlawful possession and services thereby causing the other party to at disadvantage. Frauds can occur to individuals and also to business organizations including commercial banks.

Fraudulent activities that occur in business environments are called corporate frauds. Corporate frauds are criminal activities in business organizations targeted to diminish by misappropriation, misrepresentation and manipulation of the assets, revenues and profits of organization (Abiola, 2009, Adestoso and Akinselure, 2015). Ochejele (2004) as cited by Ugwoke (2010) stated that corporate frauds is a deliberate step taken by one or more individuals who may be internal or external to a business organization, to deceive or mislead the organization with the objective of taking an unfair advantage of money, good and services. Common corporate frauds are embezzlement, payment against unclear and unauthorized lending which are frauds committed by the person in management, the employees of a business organization and people external to the organization (Kechinde et al.,2016).

Also, (Husna and Rika, 2016) argued that Profit margin management is proposed to be a solution to elude or anticipate the increase or decrease in profit for consistent and proportional implementation of net income management which will lead to future positive effect toward the company and bankruptcy avoidances in contrast if a company's credit policy is not highlighted and consistently manage the probability of future bankruptcy is high. Cloonan (2011) opined that a company's stock price in large part is driven by the company's ability to generate earnings. While (Amadeo, 2019, Scott, 2019) added that it is useful for investors to analyze the profitability of a company before investing in it and one way to do this is by calculating and tracking various profit margins which reflect how efficiently a company uses its resources .According to (Catherine, 2016) a business's exist to make a profit and profit margin can be achieved through different measures, which include raising prices and reducing costs.

Meanwhile research findings indicate that effective supply chain control and management lead to increased customer satisfaction and improved organizational performance (Haifa and Bach, 2014). Satisfaction is the consumer's assessment of a product or service in terms of the extent to which that product or service has met his/her needs expectation (Samaan, 2015). Haifa and Bach (2014) argued that customer satisfaction focuses on the quality of service or products that are offered by the manager regarding the price, warranty service, features and performances. According to Novella (2012) cited in Haifa and Bach (2014) customer satisfaction is deteriorated by poor service, product dissatisfaction, better prices from other cooperation and other reasons. Customer satisfaction is a measure of how the products and service provided by a company meet or exceed customer expectation (Fornell, 1992) cited in Samaan (2015).

Theoretical Review

According to Inanyang (2004) a theory provides the starting point for expressing propositions about behaviour and performance. Koontz et al., (1972) propounded the theory of staff discipline and control. This theory is concerned with how the employees of organization are ready to comply with rules and regulations governing the conduct of the organization. The theory is interested in the ability of the employees to remain within the bounds of the rules defined by the organization. It measures how the employees comply with the rules of the organization. The control instrument is concerned with the ability of the organization to pursue and attain its intended objective using its control mechanisms. Similarly; Mintzberg (1983) developed the theory of trusted control. In this theory, trusted managers retain control power because they are socially responsive and exercise power responsibility. In order to implement an effective and efficient system of trusted control within organization, motivational power must be used to make employees adhere to ethical standard in their daily lives. Furthermore, motivational power helps them to regain a sense of purpose and mission, and make them emotionally attached to the organization.

The reason for combining theories and models is that theories can clarify the interconnection between concepts, and models can help in understanding supply chain control operating nature.

Empirical Review

Fritch (2015) study shows that supply chain control facilitates supply chain operations and also bring about improvement in the process of managing inventory efficiency performance, profit margin, customer satisfaction and profitability from the initial procurement. The study noted that supply chain control helps in the planning, execution, control and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand and measuring performance globally .

The study of Hayes (2019) shows that supply chain control oversees each touch point of a company's product or service, from initial creation to the final sales. Findings from the study revealed that supply chain control monitor many places along the supply chain that can add value through efficiencies or lose value through increased expenses. The study findings shows that proper supply chain control can increase revenues, decrease costs and impact a company's bottom line.

Abiola (2009) study on assessment of fraud management in Nigeria commercial banks, going by data collected on securities in the study area, 75% agreed that banks with security lapses in the management control and negligent customer is always bound to be a victim of fraud . The study confirms that lack of fraud detection devices in banks operations can be part of the causes of frequent fraud in the industry. The study further revealed that greed rather than poor salaries is what makes people to commit fraud and that poor salary is not an excuse to commit fraud. This leads to the acceptance of the null hypotheses that states that, poor salaries and inadequate working conditions cannot induce bank staff to commit fraud. However, if a man earns so little he is likely to commit fraud to meet his ever increasing needs hence, poor salaries and poor working conditions may be an inducement to commit fraud.

Ugwoke (2010) study which was on corporate fraud control and prevention systems in commercial banks in Enugu State, findings shows that management of the commercial banks encountered many problems in the establishment and utilization of the corporate fraud control and prevention systems. The problems restricted the full utilization and the effectiveness of the

systems. However, many strategies could be adopted to enhance the effective utilization of the system. Some of the strategies includes; specialized training, seminars and workshops for both the staff and management of the commercial bank.

The findings from the study of Scott (2019) shows that reducing the cost of goods sold improves gross profit margin, if sales revenue remains consistent. Likewise, decrease in fixed expenses adds to bottom line profit and increased net profit margin. A company facing profitability challenges may look at reducing administrative expenses such as accounting or human resources staff, because these departments typically don't add revenue to the business.

Coonan (2019) findings revealed that profit margins tell us how effective management is at turning sales into profits and whether the company is favourably positioned to whether a downturn or withstand competition. The findings show that supply chain control determines the success or failure of the company's profitability. Strong sales growth is meaningless if management allows costs and expenses to grow disproportionately.

The study of Samaan (2015) on the relationship between customer satisfaction and customer

loyalty in the banking sector in Syria revealed that customer expectation is of the greatest influences on customer satisfaction, than the customer loyalty with banks services. Data analysis suggests that if a bank wants to benefit from customer loyalty and the related positive outcome (increased positive word of mouth and attraction of new customers), there is a need to pay a special emphasis in increasing customer's perceived price.

Haifa and Bach (2014) findings on customer satisfaction shows a generated model that conceptualizes product pricing, trust, product quality, and services the driving forces for customer satisfaction. The purpose of the model is to offer a simplistic overview of the assessment of the customers' satisfaction.

The above studies correlate with our studies to show the causal relationship between strategic implementation of supply chain control activities with respect to fraud prevention, customer satisfaction and increase in profit margin. Upon these promises, this study sought to discuss this lacuna using a broader approach.

Conceptual Framework and Hypotheses

Figure 1 shows the conceptual framework develop to be examine in this analysis while the theory of staff discipline and control is used as the anchored theory, other theories are integrated to establish the structure of the work.

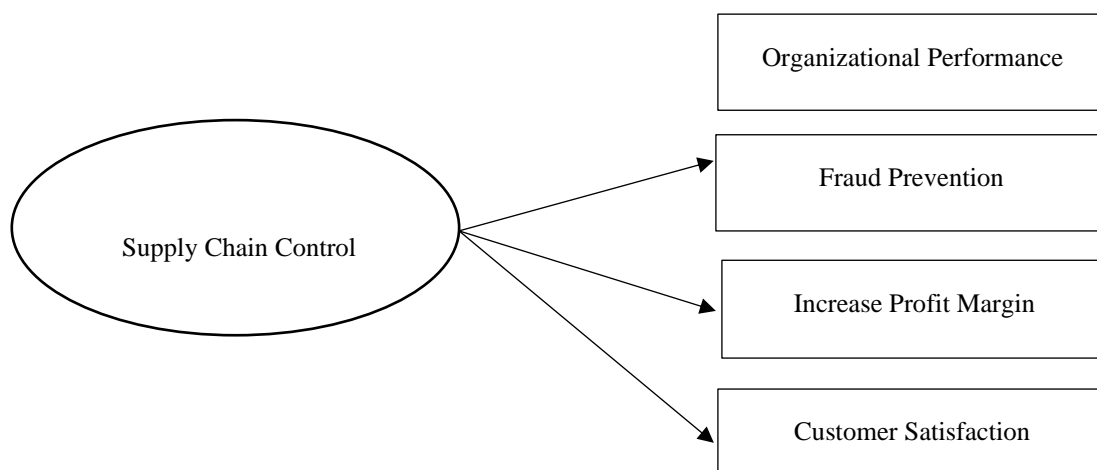


Figure 1: Conceptual Framework
 Source: Researcher review of related lectures

Supply chain control as an independent variable in this study refers to the process of establishing goals and objectives by determining the resources and strategies needed as value – added mechanism across organizational boundaries to meet the real needs of the end customer. It is a tremendous asset for companies because it can reduce costs, improve customer’s satisfaction, increase profit margin, and offer a better return on investment Nwanro (2013). Today, as value driven companies are growing in numbers, they are moving from competing on price to providing quality service and convenience. As value players gain share, at varying speeds across economies, they change the nature of competition by transforming consumer attitudes about trade-offs between price and quality Kachru (2010). Today, quality is considered an ‘order qualifying’ and not an “order winning” attribute of the product or service (Kachru, 2010). In order to be competitive, work needs to be done, customers need to get served, and day-to-day problems need to be addressed which is possible through supply chain control as a value creation mechanism (Hayes, 2019). Typical, supply chain control attempts to centrally harmonize or link the production, shipment, and distribution of a product by making sure the supply chain companies are able to cut excess cost and deliver products to the consumer faster. This is done by keeping tighter control of internal inventories, internal production, distribution, sales, and the inventories of companies (Hayes, 2019). Based on the above argument, the following hypotheses are initiated for verification.

H₀₁: There is a significant relationship between supply chain control and fraud prevention

H₀₂: There is a significant relationship between supply chain control and customer satisfaction.

H₀₃: There is a significant relationship between supply chain control and increase in profit margin.

H₁ to H₃ conceptualizes Supply chain control on the idea that nearly every product that comes to market results from the effort of various organizations that make up a supply chain. Therefore, Control help to harmonize all the interest of the partners in the chain and through control, the supply chain manager tries to minimize shortages and keep costs down (Hayes, 2019). Even though supply chain management is

the planning , execution, control, and monitoring of supply chain activities with the objective of creating net value, without effective and efficient or strong control in supply chain it could not be possible to build a competitive infrastructure, leveraging worldwide logistic, synchronizing supply with demand and measuring performance globally.

METHODOLOGY

The study adopted a quantitative cross-sectional survey of 22 commercial banks in Nigerian banking industry using judgment sampling techniques which is based on the researchers experience and knowledge about the sample units as to the fact that surveying them will be instrumental to the generation of relevant data for the achievement of the research objectives. This design was selected because the researchers made no effort to control extraneous variables as obtainable in experimental research. The sampling structure of the study included all commercial banks in Nigerian banking industry quoted in Nigeria’s stock exchange or registered with Nigeria’s Corporate Affairs Commission formed in 1990 on the basis of Allied Matt No 1 1990 as amended. The sample size composed 600 employees of commercial bank workers explicitly selected from the 22 commercial banks survey in all the branches.

The instrument tagged Supply Chain control and organizational Performance (SCCOP) was used in data collection. Primary data were collected using questionnaire from management staff of commercial banks. The instrument was divided into three sections, Section A, B and C. Section A comprises five items on the demographics of the respondents (gender, age, educational qualifications, marital status and years of experience). Section B comprised of 10 items on the independent variable (supply chain control). Section C comprises of 15 items on the dependent variables (organizational performance). Organizational performance was measured in terms of fraud prevention, customer satisfaction and increase profit margin. All items on the instrument excluding the demographics of the respondents were rated on five points scale of strongly agree, agree, disagree, strongly disagree and neutral which were scored 4,3,2,1 and 0 respectively. The instrument was validated by

two experts in Marketing, and one expert in Test and Measurements both from the University of Calabar, Calabar. The reliability of the instrument was determined using Cronbach Alpha method of reliability testing. The instrument was administered to 20 employees of commercial bank workers in Nigerian banking industry who are part of the main population but do not take part in the main study and results yielded reliability coefficients of 0.748, for supply chain

To collect the appropriate data, a hybrid of site visit and structured questionnaire was used. A total of 600 questionnaires were given to the employees of the purposely selected commercial banks. The definition of the questionnaire to be administered was built on the basis of the quality of the research hypotheses. The questionnaires were checked at the firms on the informant to ensure material consistency, accuracy and ease of use. The respondents were drawn from different banks in Nigeria by their classification/explicit obligations. The study purpose was clarified to the respondents and they were also given written guarantee of anonymity and confidentiality of answers (in the form of cover letters).

control, and 0.759, 0.782, 0.756 for fraud prevention, customer satisfaction and increase profit margin respectively. While the entire scale yielded reliability coefficient of 0.732, based on these reliability coefficients the instrument was adjudged reliable. Frequency, percentage and simple regression were used to analyze the data and analysis of the data was facilitated using the Statistical Package for Social Sciences (SPSS version 23).

The data was obtained in the two steps. First, the group's business development managers were interviewed structurally because their impression correctly defined the firm position based on their higher level and deep knowledge of the firm which was used to elicit the global views of the senior management and core issues with respect to supply chain control and organizational performance. Following regular visits and reminders (using telephone calls and text messages) to participants at organizational level such as; accountants, cashier's, general managers and marketing managers. 546 completed questionnaires, showing a response rate of 91% were retrieved. 54 questionnaires showing a response rate of 9% were considered unsuitable for inclusion in the analysis after testing for completeness of the responses, resulting in a modified sample size of 546. The summary of reliability coefficients is presented in table

Table 3.1 Summary of Cronbach's Alpha Reliability Results

| Variables | N | K | SD | Reliability coefficient |
|------------------------|----|----|------|-------------------------|
| Supply chain control | 20 | 10 | 3.21 | .748 |
| Fraud prevention | 20 | 5 | 3.57 | .759 |
| Customer satisfaction | 20 | 5 | 2.39 | .782 |
| Increase profit margin | 20 | 5 | 3.56 | .756 |
| Entire scale | 20 | 35 | 9.61 | .732 |

n- Number of respondents, k = number of items.

DATA PRESENTATION AND FINDINGS

This section represents the results of data analysis using frequency, percentage, mean, standard deviation and regression analysis. The demographics of the respondents were analyzed

using frequency and simple percentages while hypotheses were tested using regression analysis.

Data on the research variables, supply chain control, fraud prevention, customer satisfaction and increase in profit margin as obtained is reported in this section.

Table 4.1: Demographics of the Respondents

| Demographics Variables | No. Of Respondents | Percentage (%) |
|---|--------------------|----------------|
| Gender | | |
| Male | 284 | 52.0 |
| Female | 262 | 47.9 |
| Age (years) | | |
| 26-30 | 102 | 18.6 |
| 31-40 | 140 | 22.9 |
| 41-45 | 121 | 22.2 |
| 46-50 | 92 | 12.5 |
| 51 and above | 91 | 16.6 |
| Qualification | | |
| PhD | 98 | 17.9 |
| M.Sc | 132 | 24.2 |
| B.Sc / HND | 210 | 38.5 |
| OND | 106 | 19.4 |
| Marital Status | | |
| Married | 302 | 55.3 |
| Single | 244 | 44.7 |
| How long have you been working with the company | | |
| Less than 5 years | 97 | 17.7 |
| 6-10 years | 198 | 36.3 |
| 11-15 years | 109 | 19.9 |
| 16-20 years | 90 | 16.5 |
| 20 and above years | 52 | 9.5 |

Source: Field survey (2020)

Result in Table 4.1 presents the demographics of the respondents. The result shows that 52.% of the respondents were male and 47.9% were female. In terms of their age distribution, 18.6% of the respondents were between age brackets 26-30 years, 22.9% were between age categories, 31-40 years while 22.2%, 12.5% and 16.6% of the respondents were between age groups 41-45 years, 46-50 years and 51 and above years

respectively. In terms of education qualification, 17.9% was those with Ph.D while 24.2%, 38.5%, 19.4% were Msc, B.Sc and OND respectively. Result also shows that 55.3% were married and 44.7% were single with 17.7% of the respondents having less than 5 years of working experience while 36.3%, 19.9%, 16.5% and 9.5% of the respondent had 6-10 years, 11-15 years, 16-20 years and 20 and above years of working experience respectively.

Table 4.2: Descriptive statistics for the scores obtained on the research variables

| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | Kurtosis | | |
|------------------------|-----------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Supply chain control | 546 | 10.00 | 39.00 | 15.8333 | 4.77186 | 1.823 | .343 | 6.039 | .674 |
| Fraud prevention | 546 | 5.00 | 19.00 | 9.6667 | 4.73786 | 1.837 | .343 | 5.712 | .674 |
| Customer Satisfaction | 546 | 5.00 | 20.00 | 9.3333 | 4.20461 | 1.481 | .343 | 3.295 | .674 |
| Increase profit margin | 546 | 5.00 | 22.00 | 9.6458 | 4.23866 | 1.505 | .343 | 2.161 | .674 |

Source: Researchers Computation with SPSS 23

Result of the descriptive statistics for the research variables is presented in Table 4.2. The descriptive statistics include the minimum, maximum, mean and standard deviation, skewness and kurtosis. The result shows that the mean score of 15.8333, 9.6667, 9.3333 and 9.6458 with standard deviations of 4.77, 4.74, 4.20 and 4.24 for supply chain control, fraud prevention, customer satisfaction, and increase profit margin respectively. The kurtosis of 6.04, 5.71, 3.30 and 2.16 were obtained for supply chain control, fraud prevention, customer satisfaction and

increase in profit margin respectively and skewness of 1.82, 1.84, 1.48 and 1.51 were obtained respectively. The skewness obtained were all greater than 0 meaning that the variables were all skewed to the right with kurtosis obtained for supply chain control, fraud prevention and customer satisfaction were greater than that of the normal distribution while that increase in profit margin was less than that of the normal distribution. The normality of the scores obtained on each of the variables using the Shapiro-Wilks test is presented in Table

Table 4.3: Summary of Normality Test using Shapiro-Wilk test for the Research Variables

| | Shapiro-Wilk | | |
|------------------------|--------------|-----|---------|
| | Statistic | Df | P-value |
| Supply chain control | 0.932 | 546 | 0.000 |
| Fraud prevention | 0.935 | 546 | 0.000 |
| Customers Satisfaction | 0.981 | 546 | 0.000 |
| Increase profit margin | 0.928 | 546 | 0.000 |

Source: Author's computation (2020) using SPSS version 23

Result presented in Table 4.3 reveals that supply chain control (P-value = 0.000), fraud prevention (P-value = 0.000), Customers Satisfaction (P-value = 0.000) and increase profit margin (P-value = 0.000) have their P-values less than 0.05 (P < 0.05). This indicates that among the

research variables, all the research variables were not normally distributed. Since regression analysis is run on the assumption of normality, it was necessary to log transform the data (log10) to make them normal.

Test of Hypotheses 1

H₁: There is a significant relationship between supply chain control and fraud prevention.

Table 4.4: Model summary for the regression relationship between supply chain control fraud prevention

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|------|----------|-------------------|----------------------------|---------------|
| | .439 | .183 | .176 | 2.90968 | 1.644 |

Source: Researchers Computation with SPSS 23.

Result in Table 4.4 shows r-square of 0.183 which means that 18.3 percent of the variation in fraud prevention was accounted for by supply chain control. This result also signifies that if there is any improvement in supply chain control, there will be a corresponding improvement in fraud prevention. The Durbin Watson value of

1.644 was obtained indicating that there is no evidence of autocorrelation. This is because The Durbin Watson value of 1.644 is greater than 1 but less than 3.00 which indicate that the error terms are not correlated as suggested by Field (Field, 2009). The result of the Analysis of Variance for the regression is shown in Table 4.5.

Table 4.5: ANOVA Result for the relationship between supply chain control and fraud prevention

| Source of variation | Sum of Squares | Df | Mean Square | F-calc. | F-crit. | p-value |
|---------------------|----------------|----|-------------|---------|---------|---------|
| Regression | 93.221 | 1 | 93.221 | 12.011 | 4.03 | 0.002 |
| Residual | 389.446 | 46 | 8.466 | | | |
| Total | 482.667 | 47 | | | | |

*Significant at $p < 0.05$. Source: Researchers Computation with SPSS 23.

From Table 4.5, the F-critical of 12.011 was obtained with a p-value of 0.002 while the F-critical of 4.06 at the 0.05 level of significance. The result reveals that the F-calculated (12.011) is greater than the F-critical (4.06) at the 0.05 level of significances which means that there is a

significant linear relationship between supply chain control and fraud prevention. This result also implies that if there is improvement in supply chain control, there will be a reduction in corporate fraud. The estimate of the parameters of the regression model is shown in Table 4.6.

Table 4.6: Parameters estimates of the regression model for hypothesis 1

| | Unstandardized Coefficients | | Standardized Coefficients | t-calc. | P-value |
|----------------------|-----------------------------|------------|---------------------------|---------|---------|
| | B | Std. Error | Beta | | |
| Constant | 3.268 | 1.612 | | 1.965 | .055 |
| Supply chain control | .373 | .123 | .339 | 3.318 | .002 |

*Significant at 5 % ($p < 0.05$), t-critical = 2.01. Source: Researchers Computation with SPSS 23

Table 4.6 presents the regression coefficient for the model parameters. Result shows that supply chain control ($\beta = 0.439$, S.E = 0.123, t-calc. = 3.318, t-crit. = 2.01, $p = 0.002$, $p < 0.05$) has a significant positive relationship with fraud prevention. The standardized beta coefficient of 0.339 was obtained which indicates that if other variables are held constant, for every 1 unit improvement in supply chain control, fraud

prevention will be improved by 0.339. Result also shows that t-calculated (3.218) is greater than the t-critical (2.01) at the 0.05 level of significance. Hence, the alternate hypothesis stated above is accepted therefore, there is a significant relationship between supply chain control and fraud prevention. This implies that supply chain control enhances fraud prevention.

Hypothesis 2

H₂: there is a significant relationship between supply chain control and customer satisfaction.

Table 4.7: Model summary for the regression relationship between supply chain control and customer satisfaction

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|------|----------|-------------------|----------------------------|---------------|
| | .309 | .095 | .075 | 3.11392 | 1.783 |

Source: Researchers Computation with SPSS 23

Result in Table 4.7 shows r- square of 0.075 which means that 7.5 percent of the variation in customer satisfaction was accounted for by supply chain control. This result also signifies that if there is any improvement in supply chain control, there will be a corresponding improvement in customer's satisfaction. The Durbin Watson value of 1.783 was obtained

indicating that there is no evidence of autocorrelation. This is because The Durbin Watson value of 1.783 is greater than 1 but less than 3.00 which indicate that the error terms are not correlated as suggested by Field (Field, 2009). The result of the Analysis of Variance for the regression is shown in Table 4.8.

Table 4.8: ANOVA Result showing relationship between supply chain control and customer satisfaction

| Source of variation | Sum of Squares | Df | Mean Square | F-calc. | F-crit. | p-value |
|---------------------|----------------|----|-------------|---------|---------|---------|
| Regression | 46.941 | 1 | 46.941 | 4.741 | 4.03 | 0.033 |
| Residual | 446.038 | 46 | 9.696 | | | |
| Total | 492.979 | 47 | | | | |

*significant at $p < 0.05$. Source: Researchers Computation with SPSS 23.

From Table 4.8, the F-critical of 4.941 was obtained with a p-value of 0.033 while the F-critical of 4.05 at the 0.05 level of significance. The result reveals that the F-calculated (4.741) is greater than the F-critical (4.03) at the 0.05 level of significances which means that there is a

significant linear relationship between supply chain control and customer satisfaction. This result also implies that application of supply chain control will bring about rapid improvement in customer service. The estimate of the parameters of the regression model is shown in Table 4.9.

Table 4.9: Parameters estimates of the regression model for the relationship between supply chain control and customer satisfaction

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|----------------------|-----------------------------|------------|---------------------------|---------|---------|
| | B | Std. Error | Beta | t-calc. | P-value |
| Constant | 4.981 | 1.725 | | 2.887 | .006 |
| Supply chain control | .265 | .122 | .305 | 2.300 | .033 |

*significant at 5 % ($p < 0.05$), t-critical = 2.01. Source: Researchers Computation with SPSS 23.

Table 4.9 presents the regression coefficient for the model parameters. Result shows that supply chain control ($\beta = 0.305$, S.E = 0.122, t-calc. = 2.300, t-crit. = 2.01, $p = 0.033$, $p < 0.05$) has significant positive relationship with customer satisfaction. The standardized beta coefficient of 0.305 was obtained which indicates that if other variables are held constant, for every 1 unit improvement in supply chain control, customer satisfaction will improve by 0.305. Result also shows that t-calculated (2.30) is greater than the t-critical (2.01) at the 0.05 level of significance. Hence, the alternate hypothesis stated above is accepted. Therefore, there is a significant relationship between supply chain control and

customer satisfaction. This implies that supply chain control enhances customer satisfaction.

Hypothesis 3

H₃: There is a significant relationship between supply chain control and increase in profit margin.

Table 4.10: Model summary for the regression relationship between supply chain control and increase in profit margin

| Model | R | R Square | Adjusted Square | R Std. Error of the Estimate | Durbin-Watson |
|-------|------|----------|-----------------|------------------------------|---------------|
| | .354 | .225 | .106 | 3.22234 | 1.648 |

Source: Researchers Computation with SPSS 23

Result in Table 4.10 shows r- square of 0.225 which means that 22.5 percent of the variation in the increase in profit margin was accounted for by supply chain control. This result also signifies that if there is any improvement in supply chain control, there will be a corresponding increase in profit

margin. The Durbin Watson value of 1.648 was obtained indicating that there is no evidence of autocorrelation. This is because The Durbin Watson value of 1.648 is greater than 1 but less than 3.00 which indicate that the error terms are not correlated as suggested by Field (Field, 2009). The result of the Analysis of Variance for the regression is shown in Table 4.10

Table 4.11: ANOVA Result showing relationship between supply chain control and increase in profit margin

| Source of variation | Sum of Squares | Df | Mean Square | F-calc. | F-crit. | p-value |
|---------------------|----------------|----|-------------|---------|---------|---------|
| Regression | 68.275 | 1 | 68.275 | 6.474 | 4.03 | 0.014 |
| Residual | 477.641 | 46 | 10.384 | | | |
| Total | 545.917 | 47 | | | | |

*significant at $p < 0.05$. Source: Researchers Computation with SPSS 23.

From Table 4.11, the F-critical of 6.474 was obtained with a p-value of 0.014 while the F- critical of 4.05 at the 0.05 level of significance. The result reveals that the F-calculated (6.474) is greater than the F-critical (4.03) at the 0.05 level of significances which means that there is a significant linear

relationship between supply chain control and increase profit margin. This result also implies that the application of supply chain control will lead to increase in profit margin. The estimate of the parameters of the regression model is shown in Table 4.11.

Table 4.12: Parameters estimates of the regression model for the relationship between supply chain control and increase in profit margin

| | Unstandardized Coefficients | | Standardized Coefficients | t-calc. | P-value |
|----------------------|-----------------------------|------------|---------------------------|---------|---------|
| | B | Std. Error | Beta | | |
| Constant | 3.788 | 1.785 | | 2.123 | .039 |
| Supply chain control | .320 | .135 | .394 | 2.464 | .014 |

*significant at 5% ($p < 0.05$), t-critical = 2.01. Source: Researchers Computation with SPSS 23.

Table 4.12 presents the regression coefficient for the model parameters. Result shows that supply chain control ($\beta = 0.394$, S.E = 0.135, t-calc. = 2.464, t-crit. = 2.01, $p = 0.014$, $p < 0.05$) has significant

positive relationship with increased in profit margin. The standardized beta coefficient of 0.394 was obtained which indicates that if other variables are held constant, for every 1 unit improvement in supply chain control, the will be increase in profit

margin by 0.394. Result also shows that t-calculated (2.564) is greater than the t-critical (2.01) at the 0.05 level of significance. Hence, the alternate hypothesis stated above is accepted. Therefore, there is a significant relationship between supply chain control and increase in profit margin.

Discussion of findings

The result of hypothesis one showed that there is a significant positive relationship between supply chain control and fraud prevention. The will be reduction in fraudulent corporate fraud activities in an organization when an awareness for proper implementation of supply chain control mechanism is created. These assertions are supported by the study of (Fritsch, 2015) that supply chain control facilitates operations that monitors fraud prevention and a significant relationship exist between supply chain control and fraud prevention.

The result of hypothesis two tests (H_{02}) shows that supply chain control has a significant positive relationship with customer's satisfaction. This is in line with the study of (Haifa and Bach 2015) which implies that supply chain control is the driving force for customer's satisfaction through effective service provision, high production quality and mutual trust. The application of supply chain control will bring about rapid development in customer service

The result of the test of hypothesis three (H_{03}) shows that supply chain control has a significant positive relationship with increase in profit margin. This result also implies that better control mechanism will lead to increase profit margin in line with the study of (Hayes, 2019) that state that supply chain control decreases expenses and increase profit margin by implementing adequate control measures.

Theoretical, Managerial and Research Implications

This study, therefore, uses simple linear regression, analysis of variance (ANOVA) to show statistical correlations between supply control and organizational performance of commercial banks. The study verified the results of previous

researchers such as (Fritsch , 2015, Hayes, 2019, Haifa and Bach, 2014, Ugwoke, 2010, Abiola, 2009, Scott, 2019) that supply chain control has too much effect on organizational performance in terms of fraud prevention , customer satisfaction and increase in profit margin . Therefore, this study is in conjunction with the theory of staff discipline and control and the theory of trusted control.

While the theoretical limitations of this hybrid strategy to supply chain managers are that we cannot depend on one conceptual interpretation when evaluating phenomena in supply chain management. We need to acknowledge many concepts to have a more details view of supply chain management and how these concepts should support one another. Regardless of the specific scenario, one theory may be selected as the predominant explanation theory and either matched by several other theoretical perspectives. The two theories chosen in this article are back by scientific proof mainly provided by the literature, in both general and to some degree within the supply chain management.

CONCLUSION AND RECOMMENDATIONS

The point of departure for our survey concerns was perhaps the attempt to analyze three research hypotheses on how organizations can prevent fraud, how their products can satisfy their customers and how to increase their profit margin to maintain a sustainable competitive advantage in line with our proposed theories. These issues are relevant as many decisions makers in business practice as well as in academia discuss these issues more frequently than thinking about new possible interpretation of the phenomenon of inter-organizational management of the transition flows between product and consumption.

We have made a coherent argument focused on behavioural theories to address our inquiries, which can be seen as an effort to minimize the distance between research and practice and established conceptual definitions and explanations. Furthermore, we have established a basic conceptual framework that incorporates the managerial supply chain management (SCM) domain with two different organizational theories

to describe our three hypotheses, and we have used our framework to analyze three different supply chain management problematic areas; Fraud prevention, customer satisfaction and increase in profit margin.

Our recommendation is that Supply managers should put in place supply chain control measures that will create an enabling environment for partners in the chain for value creation through collaboration, information sharing and cooperation to reduced conflict and fraud, improved on customer satisfaction and strives to increase organizations profit margin. Finally, we recommend that future researchers should replicated this study in other countries and industries focusing on the determinants of supply chain control mechanisms.

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