EXCHANGE RATE INSTABILITY AND MITIGATING STRATEGY IN NIGERIA'S MANUFACTURING SECTOR

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Abstract

Exchange rate instability has significant implications for firms, especially those involved in import and export activities. This study was undertaken to examine the degree of adoption and effects of hedging as a mitigating strategy against exchange rate instability and associated risks by manufacturing firms in Nigeria. A cross-sectional survey design and random sampling were adopted, and a structured questionnaire was used to elicit information from 74 firms from every industry in the manufacturing sector. Descriptive statistics and multiple regression analysis were used to establish the relationship between the variables as well as the effect of the independent variable on the dependent variable. The results indicate that manufacturing firms in Nigeria infrequently adopt hedging mitigating strategies. However, there was a positive relationship between hedging strategies adopted and performance and hedging accounted for 4.8 percent change in the manufacturing firms performance outcome. The study suggests that the frequency and scope of use of hedging strategy by Nigeria's manufacturers should be scaled up in order to significantly mitigate the negative effects of exchange rate instability or risks and fully appropriate the benefits of the strategy. Furthermore, it suggests in particular that firms engaged in importation of input resources for manufacturing should promote export of their finished products as a means of neutralizing the effects of exchange rate instability or risks.

Keywords: Exchange rate instability, risks, hedging, performance, Nigeria.

1.   Introduction
Business organizations and even nations are concerned about economic efficiency as they seek to use the least resources to accomplish their plans. Over the years therefore, the debate over the best strategy for promoting efficiency at the firm and national levels has been fierce (Landes, 1998; Krugman & Obstfeld, 2006; Cathie, 1999).

The concept of exchange rate is associated with acceptable international mode of payment to facilitate exchange of goods and services in a globalized world. Exchange rate is an important economic variable and a key determinant of

efficiency associated risks. Organizations, especially those that depend on foreign inputs for their production see the formulation of strategies for coping with exchange rate instability as a key managerial function. This is even more the case in the Nigerian manufacturing sector, which depends significantly on imported inputs in the production of goods. As Ngene, Nwele & Uduimoh (2016) point out, there is over-dependence on imports for raw materials and spare parts need in the Nigerian manufacturing industry.

Exchange rate instability may result in capital gain or losses and affects productivity, foreign direct investment, business net value and, customers' purchasing power. Bystrom (2014) observes that exchange rate movement is a critical element in the valuation of actual portfolio credit risks in the context of monetary theory as currency is the medium of exchange and pricing of goods and services. Allayannis, Ihrig, and Weston (2001), Dohring (2008), Helhel (2015), Obadan (2006), all emphasize that exchange rate fluctuation has significant implication for performance of firms. It is a key price variable in an economy and performs dual role of sustaining international competitiveness as well as serving as nominal basis for domestic prices. Countries are endowed with unequal and heterogeneous resources, which necessitate interdependence, and of course globalization, as no nation can remain in isolation. Firms are therefore concerned about exchange rate instability in their operating environment because of its effect on their strategy and performance.

Exchange rate evolution in Nigeria
Prior to 1973, Nigeria adopted a fixed exchange rate policy and managed its currency around the British pound sterling or the U.S dollar. As Opaluwa, Umeh and Ameh (2010) and Papaioannou (2001) point out, the collapse of the Bretton Woods System and the end to the US dollar peg to gold in 1973 resulted in fluctuation in exchange rates and increased volatility in the global economic environment. Subsequently, Mordi (2006) notes that Nigeria adopted diverse exchange rate policies ranging from fixed to weighted currency basket to managed floating.

Following several economic constraints imposed by the country's exchange rate strategy, the government introduced the Structural Adjustment Programme (SAP) in 1986, to generate a realistic exchange rate for the naira and restructure the production pattern (Sanni, 2006). Awosekun (1991) notes that SAP was predicated on the International Monetary Fund (IMF)/World Bank conditionality, which included, floating of the naira exchange rate and liberalization of trade. Sanusi (2004) also acknowledged the shift from a fixed exchange rate in the 1960s to a pegged regime in the 1970s to the mid-1980s, and adoption of diverse floating arrangements from 1986 when a Structural Adjustment Programme (SAP) was implemented but without commitment to

defending any specific parity. Obadan (2006) argues that before the SAP of
1986, the exchange rate policy encouraged the overvaluation of the country's
currency, discouraged non-oil exports, and promoted dependence of the
manufacturing sector on imported inputs.

Figure 1: Exchange rate instabilityin Nigeria from 1987-2019 (N/1$)

Source: *Adapted from https://data.worldbank.org/indicator/PA.NUS.FCRF*
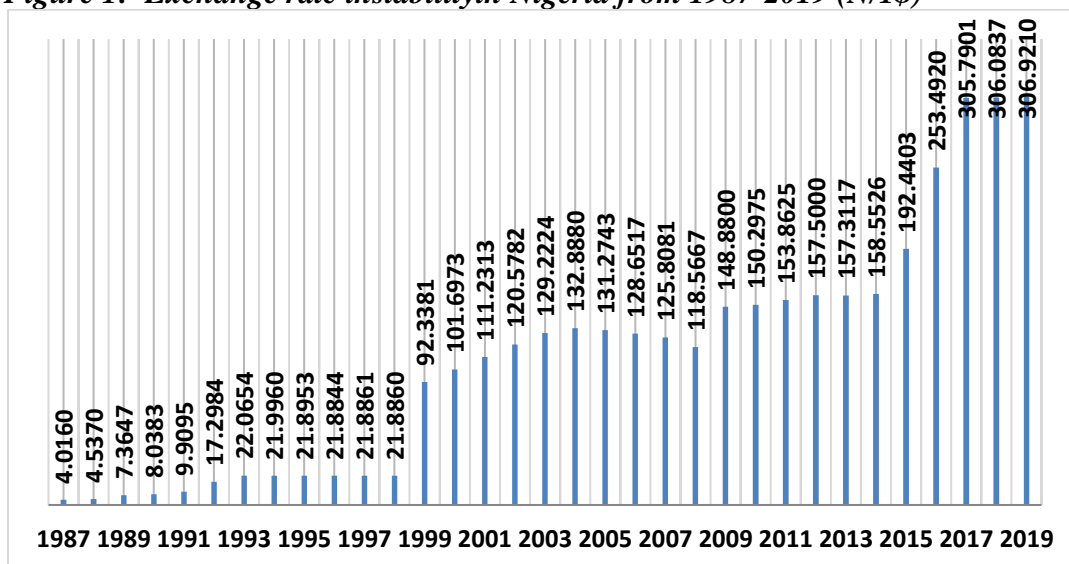
Since SAP was introduced with its attendant implication for other variables
such as inflation, unemployment, productivity, cash flow and even balance of
payments, the instability has been persistent, resulting in overall depreciation
of the exchange rate of the naira (Fakiyesi & Akani 2005).

Floating the naira implies that it will be allowed to fluctuate in relation to
other currencies on the basis of market forces. It is assumed that if a country's
currency is floated and fluctuation results in depreciation, export demand for
goods (including manufactured goods) would increase as a result of lower
prices of its goods and services relative to other currencies. However, Kandil
(2004) argue that the depreciation of a country's exchange rate leads to higher
cost of goods imported as input for domestic manufacturing and as a
corollary, higher prices of locally produced goods, which negatively affect
local and foreign demand. Chong and Tan (2008) point out that the impact of
exchange rate instability on economic fundamentals can be great if there are
no structures and tools for hedging currency risk in its market place.

Nigeria's economic managers have attempted several monetary policy
initiatives to ensure stability in the exchange rate of the naira but the outcomes
have not been positive. The World Bank report (1994) and Oladele (2015),

note that the use of mitigating instruments or strategies, such as hedging is hindered due to inadequate or frequent reversal of policy framework.

Over the years however, individual firms haveturned todiverse risk-management strategies through financial derivatives and operational hedges to deal with the adverse effects of the exchange rate instability. The strategies adopted and outcomes have not received adequate attention from scholars. The streams of study associated with exchange rate in the country have been focused on impact of exchange rates instability on economic and export growth and performance of firms without considering the mediating effect of mitigating strategies, such as hedging, when adopted (e.g., David, Umeh, & Ameh, 2010; Ishola, Oluwafunke, Victor & Asaleye, 2016; Adeniran, Yusuf, & Adeyemi, 2014).

This gap provides opportunity for impactful contribution to the business literature in the context of a developing country like Nigeria, which is the largest economy in Africa. As Meyer (2015) advises, there is need for theoretical contributions to be context based, especially from the understudied regions, which Nigeria represents. Andoh-Baidoo (2017) also argues that context based theorising would help to systematically modify extant theory and explain distinctive features. The manufacturing sector was targeted for this study, as it is a catalyst to employment generation, import substitution; export expansion as well as efficient linkage among different sectors of the economy (Opaluwa, et al. 2010). This paper therefore specifically explores in the context of Nigeria, 1) the mitigating strategies employed by manufacturing firms in coping with exchange rates instability and, 2) how the adopted strategies impact on firms performance outcome. Our study makes definitive contribution to literature by linking exchange rate instability mitigating strategies to performance outcome of firms in the Nigerian context.

The rest of the paper is structured as follows. We reviewed literature on exchange rate instability and mitigating strategies. This is followed by the method used for collection and analysis of data. Then we outlined the results followed by discussion of the findings and conclusion. We made recommendations on the basis of our findings and conclusion, and state the limitations, which provide opportunity for future research.

2. Literature Review

Literature associates exchange rate instability with the theory of Purchasing Power Parity proposed by Gustav (1922). The theory implies that goods that are identical in different countries cost the same when analysed in terms of the same currency. The theory postulates that the relative nominal exchange rate of two currencies is associated with the ratio of aggregate price levels in the two countries, consequently that one unit of currency in both countries has

equal purchasing power (Taylor & Taylor, 2004). The theory further posits that the average value of the exchange rate in the long run, between two currencies, varies on the basis of their relative purchasing power in the countries and if this does not hold, it indicates that that a country's currency is inappropriately valued (Majok, 2015; Lipsey&Christal, 2004).

The two forms of Purchasing Power Parity theories are Absolute Purchasing Power Parity theory and Relative Purchasing Power theory. The former, which is also referred to as Law of One price, posits that two countries' currencies equilibrium exchange rate is equal to the ratio of the price levels in the two countries (Majok, 2015). As a result, the prices of similar products in both countries should be equal when measured in a common currency as per the Absolute form of Purchasing Power Parity theory. Due to the limitation of unrealistic assumptions, especially the assumption that transaction costs of homogenous products should be zero, the Relative form of Purchasing Power Parity emerged (Kwasi, Nicholas, Salamat, Mahama, Oduro & Nuamah, 2012).

The Relative Purchasing Power Parity theory attempts to account for the limitations of Absolute Purchasing Power Parity as it acknowledges market imperfection. The theory defines what determines change in exchange rate overtime and not what regulates absolute level of the exchange rate (Kwasi et al, 2012). It states that the difference in the inflation rates of the two countries, over the same time period, determines the change in exchange rate (Majok, 2015). Our study assumes the Relative Purchasing Power Parity perspective as the basis for determination of the naira's value.

Exchange Rate Instability and Associated Risks
Studies on exchange rate instability are focused on countries' relative currency value variation and associated risks (e.g., Madura, 1989; Papaioannou, 2006; Dohring; 2008; Allayannis, Ihrig, & Weston, 2001). Exchange rate risk to firms deals with the consequence of unforeseen exchange rate variations on the value of a firm (Madura, 1989). It is explained as the probable direct loss due to un-hedged exposure or indirect loss in a firm's assets and liabilities, net profit, stock value and cash flows due to exchange rate instability (Papaioannou, 2006).

Types of exchange rate risks
Dohring (2008) identifies exchange rate risks in terms of transaction, translation, and wider economic risks, resulting from exchange rate instability. Transaction risk is the value variation of future cash flow obligations, such as receivables (export contract) and payables (import contract) or repatriated dividends. Translation risk is associated with value variation of assets and liabilities (balance sheet net assets) priced in foreign currency. Wider

economic risk deals with effect of the variation on future revenues (domestic sales and exports), and operating expenses (cost of domestic input and imports)or present value of future cash flows resulting from variations in both price and volume. Papaioannou (2006) Points out that identification of these currency risks facilitates the development of appropriate strategies for mitigating their effects.

Exchange rate risk mitigating strategies
Firms employ various mitigating strategies in dealing with exchange rate risks depending on the nature of risk and the situation (Shapiro, 1996), which include both financial (derivatives) and non-financial operational (production, marketing and retrenchment) hedges (Allayannis, Ihrig, &Weston, 2001; Dohring, 2008; Stanley & Block, 1980; Soenen, 1992; Miller, 1998; Kazmi, 2002.).Hedging is seen as a means of neutralizing the effects of exchange rate instability (Dohring, 2008) or ultimately minimizing cash flow and accounting earnings uncertainties that result from operational activities and characteristics of firms (Papaioannou, 2001). Adequacy of reserves is cited as one of the key objectives of hedging (Anifowoshe, 1997). The proficiency of firms in managing the exchange rate risks is critical to performance of firms that are engaged in import or export of goods and services whether for consumption or manufacturing (Abor, 2005).

Financial hedging is carried out through financial instruments, including foreign currency debt or exchange rate derivatives. Dohring (2008) notes that standard derivative instruments are available as nonexchange-traded over-the-counter (OTC) and exchange-traded products. OTC instruments consist of swaps, forwards, and options while exchange-trades deal with futures and options. Other writers also identify different types of financial hedges such as spot, forward rates, currency swaps, futures, and options (Papaiannou, 2001; Salvatore, 2013) and payment netting (reinvoicing center), prepayment, foreign currency borrowing, leading and lagging, local currency payment, and money market (Ito, Koibuchi, Sato and Shimizi, 2015; Abor, 2005; Bodnar, 2007; Dong, Kouvelis & Su, 2014; Dohring, 2008; Rashid, 2016).

Operational hedging is geographic diversification of production or manufacturing, sourcing and sales, to match currency, revenues and expenditure, and involves higher sunk costs than financial hedges. However, it is commonly adopted to deal with long-term economic risk exposure (Soenen, 1992; Dohring, 2008).Operational hedging is seen as very important and relevant to the long-term survival of firms, but initial studies focused mainly on financial hedging while neglecting the effect of strategic operational move by competitors (Kent, 1998).Some scholars (e.g., Chowdhry & Howe, 1999; Logue, 1995) point out that exposure due to operation cannot be managed

effectively with financial hedges and suggest that firms adopt long-term strategic adjustments in the management of long-term operating exposure.

Allayannis, Ihrig, and Weston (2013) point out that geographic spread involving the siting of subsidiaries across various countries does mitigate exchange-rate exposure and advise that firm use financial hedging alongside operational hedging. They identify four proxies for a firm's operational hedging as i) the number of countries of operation, ii) the number of broad regions of operation, iii) the geographic spread of subsidiaries across countries, and iv) geographic spread of subsidiaries across regions. Saunders and Cornett (2008) note that diversification of operation across many assets and liability markets can potentially reduce the risk of portfolio returns and cost of funds.

Stanley and Block (1980), Soenen (1992) and (Bodnar, 2007) identified three main types of operational hedging strategies as marketing, production and retrenchment.

Firms operationalize market hedging by pulling out of unprofitable markets as real exchange rate changes, then forcefully pursue increase in market share or move into new markets as the real exchange rate devalues. Olukoshi (1999) reports that manufacturers in Kano, Nigeria, were compelled to find new ways of selling their products due to collapse of consumer purchasing power precipitated by exchange rate devaluation among other factors. However, adoption of such strategic options is contingent upon a number of factors, including, the fixed costs associated with aggressively pursuing increase in market share (Papaioannou, 2006).Market segmentation provides the basis for determining market mix over time but this is applicable in the medium to long-term approach to reacting to short-term exchange rate exposure. Short-term exchange rate exposure requires adoption of pricing and promotional strategies or policies (Bodnar, 2007).

Gordon & Gebhard (1999) explain that production-hedging strategies include diversifying operations, sources of inputs and plant location, pointing out that one of the ways firms deal with the impact of exchange rate instability is to diversify into activities which provide offsetting exchange-rate exposures. The essence of diversifying the production mix is to ensure that the effect of exchange rate risk is neutralized by linking the cost closely to the foreign competitors. Ding et al (2007) suggest that flexibility in operation of global production facilities is an effective long-term strategy for managing exchange rate instability. Stanley and Block (1980) observe that plant location and marketing activities were the major non-financial hedging strategies being adopted by US multinationals while Dohring (2008) states that international

diversification of input sourcing, production and sales are the major operating strategies.

The retrenchment strategy includes divestment and liquidation. Under this strategy, exchange rate risk management involves liquidation or sale of part of a business or a SBU. It may involve out rightly shutting down a firm and selling its assets as a defensive strategy in reaction to adverse effect of exchange rate instability. It is popular among developing countries, aimed at dealing with exchange rate risks without recourse to the standard hedging strategies (Mumoki, 2009; Mawanza, 2016; Abor, 2005).

Model of the study
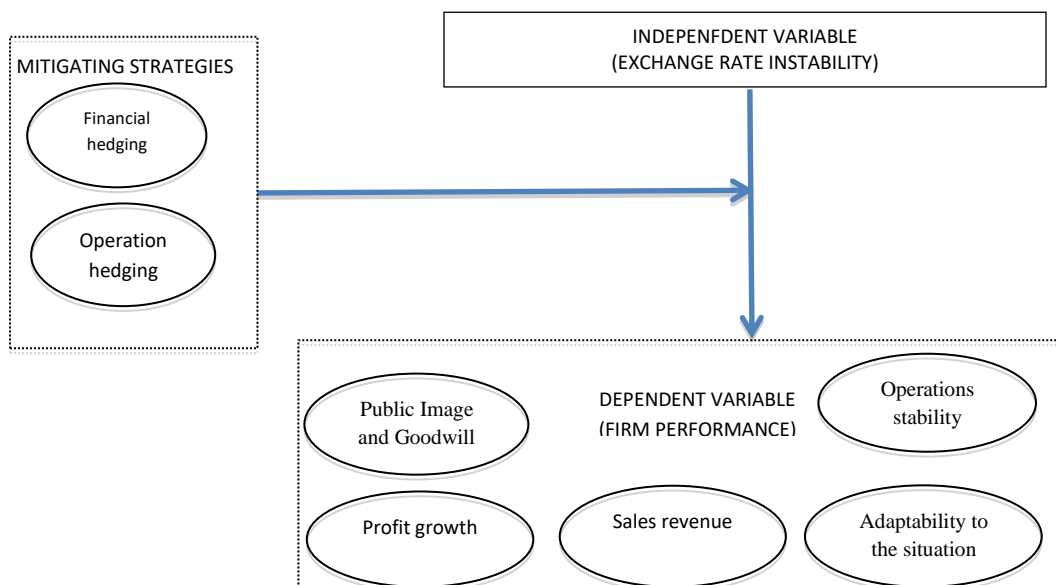
The conceptual model represents the mediating role of hedging strategies between exchange rate instability and firms' performance. The exchange rate instability is assumed to have negative effects on firms' performance. The model assumes that these effects can be mitigated with financial and operational hedging strategies.

The basic mathematical expression of the model is as follows:

$$Y = \beta 0 + \beta 1 X1 + \beta 2 X2 + U$$

Where Y   = Performance
       $\beta 0$ = Constant / intercept
       X1 = Operational hedging
       X2 = Financial hedging
       U   = Error term (other factors that may affect the dependent variable or Performance).

3.   Research Methods

A cross sectional survey design was considered appropriate and adopted to elicit pertinent information concerning strategies adopted, which may not be possible with other designs. There are 10 subsectors in the manufacturing sector (Manufacturers Association of Nigeria, 2014), and 98 industries having 1,844 firms (Manufacturers Association of Nigeria, 2014; Nigerian Industrial Directory, 2014; National Bureau of Statistics, 2014).We considered the firms as our unit of measurement and used stratified sampling based on proportion to ensure appropriate representation of firms from each subsector as well as industry in the sample. The adequacy of the sample size was determined by the Yamane (1967) formula,

$$= \frac{N}{1+N\,(e)^2},$$

where n = sample size, N= population size and e = error margin (0.1 applied). This yielded a sample of 95 firms, which were then randomly selected from the industries on proportional basis.

The data collection instrument was a questionnaire, structured as follows. Section A identifies the activities that expose the firms to exchange rate risks, section B deals with mitigating strategies available to firms, section C is designed to obtain information on commonly used strategies, and D elicits information on efficacy of adopted strategies with respect to the firms' performance.

The measurement on adoption of mitigating strategies was based on a 5-point scale; ranging from never (1), hardly (2), occasional (3), frequent (4), to very frequent (5). Performance measurement was based on a 5-point scale, ranging from very low (1), low (2), medium (3), high (4), to very high (5). The reliability test yielded Cronbach's alpha values of 0.913 and 0.849 for sections on adoption of hedging strategies and performance respectively. These values are within the acceptable limit (Nunnally, 1978). Descriptive (mean and standard deviation) and inferential statistical (multiple regression) measures were used to assess the effect of the independent variable on the dependent variable in order to advance a theoretical concept.

4. Results
Table 1: Response rate (according to manufacturing sub-sector and firms)

Sub-sector	Industries	Firms	Number of Firms Surveyed	Total Questionnaire Returned	Percentage of Returns to Firms Surveyed
Food, Beverage and Tobacco	24	308	23	19	20.00%
Textile, Apparel and Footwear	14	103	13	3	3.16%
Wood and Wood Products, including furniture, mattress and office stationery	8	74	8	3	3.16%
Pulp, Paper and Paper Product	6	123	6	5	5.26%
Chemical and Pharmaceutical Products	10	379	10	14	14.74%
Non-Metallic Products	7	73	6	3	3.16%
Plastic and Rubber Products	9	308	9	9	9.47%
Electrical and Electronics	2	101	2	2	2.11%
Basic Metal, Iron and Steel	10	222	10	11	11.58%
Motor Vehicles and Assembly	8	153	8	5	5.26%
Total	**98**	**1844**	**95**	**74**	**77.89%**

Source: Survey Data, 2017.

Table 1 indicates that all subsectors of the manufacturing industry in Nigeria are included in the samples to make the study robust and enhance generalisation.

Table 2: Analysis of ownership and import / export orientation

Variable	Label	Frequencies	Percentage (%)
Ownership	Wholly owned by Nigerians	30	40.5
	Wholly owned by non-Nigerians	24	32.4
	Jointly owned by Nigerians and Non-Nigerians	20	27
Frequency of Import(Average)	None	0	0
	Minimum of four times in a month	35	47.3
	Twice in a month	13	17.6
	Once in a month	10	13.5
	Once in a quarter	8	10.8
	Twice in a year	3	4.1
	Once in a year	5	6.8
Frequency of Export(Average)	None	47	63.5
	Minimum of four times in a month	8	10.8
	Twice in a month	2	2.7
	Once in a month	6	8.1
	Once in a quarter	4	5.4
	Twice in a year	3	4.1
	Once in a year	4	5.4

Source: Survey data, 2017.

Table 2 shows ownership structure and frequency of import and export. The sample contains the three basic categories of ownership, namely, wholly Nigerian, wholly foreign, and jointly owned by Nigerians and non-Nigerians. All the firms undertake import of input for manufacturing in varying degree. However, 64 percent of the firms do not export finished goods.

Table 3: Level of adoption of hedging mitigating strategies in Nigeria manufacturing industry

Hedging strategy	N	Never	Hardly	Occasionally	Frequent	Very frequent	Mean	Std. Dev.
Financial	74	30	20	12	9	3	2.12	
Operational	74	20	19	16	16	3	2.52	
Financial + Operational	74	25	19.5	14	12.5	3	2.31	0.59

Table 3 shows a low level of adoption of hedging strategy by Nigerian firms. The mean level of 2.12 for adoption of financial hedging strategy, for a 5-point scale, ranging from 1 (never), 3 (occasionally) to 5 (very frequent), indicates that Nigerian firms hardly adopt financial hedging. Similarly, the mean of 2.52 indicates that the firms tend to occasionally adopt operational hedging. The combined mean of 2.31 indicates that manufacturing industry in Nigeria hardly adopt hedging mitigating strategies. However, comparatively, the firms marginally adopt operational hedging more than financial hedging strategy in mitigating their exchange rate risks.

Table 4: Effect of mitigating strategy on firms' performance

No of Companies	Type of Strategy	Degree of adoption of strategy (Mean)	Effect of adopted strategy on firms' Performance (mean)	Std Deviation
6	Financial hedging	3.43	3.41	
33	Operational hedging	3.53	3.25	
39	Financial hedging + Operational hedging	3.52	3.27	0.57

Tables 5a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.220[a]	.048	.023	.5664090

a. Predictors: (Constant), Financial and Operational hedging

Tables 5b: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.602	1	.602	1.875	.179[b]
	Residual	11.870	37	.321		
	Total	12.472	38			

a. Dependent Variable: Firms' performance
b. Predictors: (Constant), Financial and Operational hedging

Table 5c: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.131	.838		2.544	.015	.434	3.829
	Hedging	.324	.237	.220	1.369	.179	-.156	.804

a. Dependent Variable: Firms' performance

Table 4 indicates the results of 6 firms, which adopted financial hedging, and 33 firms, which opted for operational hedging strategies. These 39 firms were used for analysis because they responded to the questions on effect of mitigating strategies on their performance. The firms did not make their financial results available but responded to a 5-point scale, designed to elicit responses on the degree of positive effect of the hedging strategy on their performance. The mean degree of adoption of the combined hedging strategy (financial and operation hedging) is 3.52, which implies that these firms, at least, occasionally adopted hedging strategy to mitigate exchange rate risks. The mean (3.27) of the combined effect of adopted mitigating (hedging) strategies on firms' performance indicates medium positive effect.

Tables 5aand 5c indicate the following: There is a low positive correlation between the hedging strategies (financial and operational) and dependent variable (firms' performance), with $R^2 = 0.048$,which implies that 4.8 percent of the changes in firms' performance is attributable to the combined effect of the hedging strategies adopted. Furthermore, the Beta value (B=0.22) indicates that a unit change in the independent variable (hedging strategy) will lead to 0.22 unit change in the dependent variable (firms' performance). However, Table 5b indicate slack of statistical significance at 5%.

5.   Discussion and conclusion
The manufacturing sector is critical to the competitiveness of a country's economy. As Enekwe, Ordu, and Nwoha (2013) point out, a country's manufacturing sector provides opportunity for promoting productivity in

relation to import substitution and export growth, generating foreign exchange earning capacity, employment as well as enhancing efficient linkage among different sectors.

This study explored in the context of Nigeria, the mitigating strategies employed by manufacturing firms in coping with exchange rates instability and the implications for their performance. Our results indicate that Nigeria firms hardly adopt hedging as a mitigating strategy in response to exchange rate instability or risks, despite the indications (by the firms' response in this study) that adoption of hedging strategy had, at least, marginal positive effect on their performance. In comparison with the adoption of hedging strategies by manufacturers in advanced economies, the frequency and scope of use of hedging strategies by Nigerian manufacturers are not sufficient to significantly mitigate the effect of exchange rate instability.

Our findings tend to indicate consistency with conventional wisdom and empirical literature which reveal that hedging is effective in reducing exposure to exchange rate instability or risk and its negative implications, including minimizing cash flow and accounting earnings uncertainties (e.g., Dohring, 2008; Papaioannou, 2001; Ito, Koibuchi, Sato & Shimizu, 2015; Bae, Kwon & Park, 2018). However, it is novel finding in the context of Nigeria that exchange rate mitigating strategies are hardly adopted but when adopted have positive association with firms' performance, which previous studies in the country failed to examine (e.g., David, Umeh, & Ameh, 2010; Ishola, Oluwafunke, Victor & Asaleye, 2016; Adeniran, Yusuf, & Adeyemi, 2014).

6. Recommendations

As revealed in our study findings, adoption of hedging as a mitigating strategy has positive effects on firms' performance. Our findings suggest the following recommendations:

- Firms, especially those engaged in import of input resources, which are subject to the vagaries of exchange rate instability, should adopt both financial and operational hedging strategies to mitigate the negative effects of the instability, in order to enhance their financial performance and business continuity. In particular, the dominant practice of following the prevailing exchange rate by Nigeria manufacturers (as indicated by the low level of adoption of hedging strategies)should be reversed and adoption of operational hedging strategies, such as international allocation of production costs (diversifying the sources of input and Plant location in different countries),and financial hedging, such as currency forward, Future contract, prepayment, domestic currency invoicing for international trade and insurance against exchange rate instability, which have proven successful in their operations, should be scaled up.

- The frequency and scope of use of hedging strategies by Nigerian manufacturers should be increased in order to significantly mitigate the negative effects of exchange rate instability or risks.
- Although the entire firms surveyed are engaged in importation of input resources for manufacturing, not all are engaged in export of their finished products. Engaging in export of finished products is a means of neutralizing effects of exchange rate instability or risks.

7.   Limitations and future research direction
We acknowledge the following limitations, which future studies should overcome:
- The study findings on firms' performance were based on survey which is subject to respondents' bias, it would be worthwhile to obtain financial statements of these firms as basis for firms performance analysis.
- Though, the study reveals that hedging has positive effect on firms' performance, the predictive ability of the individual strategies is low. This is partly due to Nigerian manufacturers using a number of strategies based on convenience and management philosophy, which make their responses to the research instrument not to be really unidirectional.

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