



EFFECT OF CBN POLICY TO CHANGE OF NAIRA NOTE ON PADDY RICE PRICING IN GUMA LOCAL GOVERNMENT AREA, BENUE STATE, NIGERIA.

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ABSTRACT

This study was carried out to analyze the effect of CBN policy (change of naira note) December 15, 2022 on paddy rice pricing in Guma Local Government Area, Benue state. Specific Objective was to access perception of policy implementation by the respondents, access pricing of rice during this period, access quantity of rice sales and access gross margin before and during the period of policy. Multistage sampling and simple random sampling techniques was used to select 100 paddy rice marketers in the study area. Descriptive statistic and Gross margin were used to analyze the data for this study. The result showed that almost all (99%) of the respondents were aware of policy and agreed that the policy implementation was not favourable as it mostly (98%) affected buying and selling of the paddy rice. Majority (98%) of the respondents experienced reduced pricing of paddy rice as the mean price of paddy rice fell from ₦34,650 to ₦22,300 during the period of policy implementation. The result further showed that the mean quantity of paddy rice sold reduced from 62 bags per month to 23bags per month during the period of policy. The results also showed that most (94%) of the respondents had their mean monthly gross margin reduced from ₦193,550 to ₦59920. The null hypothesis was rejected, as there was a significant difference in the mean gross margin before the CBN policy and during CBN policy at t value ($< 8.75 < 0.00$) which was significant at 1% probability. The study concludes that, the implementation of Naira change policy was not favorable as it affected buying and selling of the paddy rice, it therefore recommends that policies on change of Naira or currency should be critically studied by experts before initiating and /or implementing such policies, to avoid untold hardship for the citizens.

Keywords: Policy, Effect, Paddy Rice, Pricing

INTRODUCTION

The relative flexibility of agricultural commodity prices means these prices tends to respond more quickly to changes in macroeconomic policy (Saghaian, Reed and Marchant, 2002) as cited by Jason Henderson(2018). Given the interrelationship between interest rates and exchange rate, understanding the direct and indirect impacts through exchange rates. Changes in monetary policy, specifically shifts in interest rate and money supply, affect agricultural commodity prices by affecting demand for storable commodities. Jeffery, (2006) identifies several channels by which higher interest ratesand a smaller supply of money reduces the demand of storable commodities and viceversa. Higher interest rates reduce the incentive to carry inventories by increasing the value of current cash holding. Money policy has real and nominal effect on the overall economic activities and hence agricultural sector only in the short run and medium run but has no significance on long run. This assertion is further buttressed by the fact that the fundamental forces that shape outcome and, hence forces that determine the behavior of prices and output in agricultural sector are believed to be consequences of non-monetary conditions. However, the monetary authority can influence outcomes in the agricultural sector by maintaining low or steady inflation rate and low interest rate. Previous studies have identified the credit channel as the major source through which monetary policy can impact on the agricultural sector. However, in recent times, monetary policy appears to have failed in directing creditto agricultural sector. The monetary authority deliberate endeavor might be define as monetary policy to manage the money supply and credit conditions to achieve certain economic objectives (Olagungu *et al* 2022). Monetary policy as defined by many authors is concerned with discretionary controlof money supply by monetary authorities (Central Bank and Central Government) with a view



of achieving stated or desired economic objectives. It has been established empirically in the Nigerian economy that some relationship exists between the stock of money and economic growth or economic activity. The Central Bank of Nigeria (CBN) since its establishment has continued to play the traditional role of regulating the stock of money in the economy through the use of monetary policy that is usually targeted towards the achievement of financial goal (Ayodeji and Oluwale 2018). Thus, Central Bank most times undertake both contractionary and expansionary measures in tackling the problems of fluctuation experienced in the economy. One of the macroeconomic policy's key goals is to accelerate growth centers that will enable the provision of products and services that will promote residents well-being (CBN, 2014) as cited by Ogundipe et al (2017). The real sector of the economy ~~not~~ possible to produce goods and services. One of the macroeconomic tool is ~~to~~ monetary policy (the other being fiscal policy) has been used to stimulates economies to attain microeconomic goals. The monetary authority's deliberate endeavor might be defined as monetary policy to manage the money supply and credit conditions to achieve certain broad economic objective which might be mutually exclusive (Falade and Folorunsho, 2015) as cited by Ogundipe et al. (2017). In other words, monetary policy deals with the actions taken to regulate the supply of money, cost, and availability of credit in the economy by monetary authorities or the Central Bank (Ogundipe et al., 2017).

Rice, wheat, and maize are three of the world's most significant food crop, accounting for more than half of all calories consumed globally (Makama et al., 2017). Rice is viewed as a "strategic" commodity in many countries, both developed and developing, and is subject to a range of government controls and interventions (FAO 2017). The importance of rice sales cannot be overemphasized. Currently, price instability is the most serious problem in Nigeria agricultural sector. Research has shown that changes in real interest rate and money supply influences commodity prices. Rice prices changes from time to time because supply and demand, the factors which determine price change with respect to each other. In Nigeria, the government's participation in economic activity has yielded mixed result in terms of economic performance. Because the economy has expanded in actual output in some years while decreasing in others, the overall impression of the country's development effort is bad (Udeaja, and Udoh 2014). Nigeria's monetary and fiscal policies aim to boost GDP, and growth rate, reduce inflation and unemployment, improve the balance of payment, build financial savings and foreign reserves, and maintain a stable Naira exchange rate. Until recently, the policy instrument used to achieve these aims were woefully inadequate, with Nigeria relying too heavily on fiscal policy rather than monetary policy to achieve its objectives (Ogah et al., 2021). The change of naira note policy by Central Bank of Nigeria (CBN) has been a topic of concern in agricultural sector, particularly in the pricing of rice. There is a need to investigate the effect of this policy on rice pricing, as it may have significant implication for farmers, traders, and consumers. The research therefore seek to, determine the impact of CBN policy on rice pricing in Guma local Government Area, Benue State Nigeria. The specific objectives were to assess the:

- i. perception of policy implementation by respondents.
- ii. pricing of rice during this period.
- iii. quantity of rice sold and
- iv. the gross margin before and during the period.

MATERIALS AND METHODS

The Study Area

The study was carried out in Guma Local Government Area created out of former Makurdi Local Government Area in 1987 by the then regime of Col. Fidelis A. Makka. The Local Government is name after 'River Guma' in Benue State. Guma Local Government Area in Benue State, Nigeria, is located roughly between latitude 7° 32' and 8° 51' North and longitude 8° 35' and 9° 22' East. By 2006 census, the local government had a total population of 191,599 people with landmass of 240,000 square kilometer. The Local Government Area, experiences a tropical savanna climate with distinct wet and dry seasons, characterized by temperatures ranging from 25°C to 31°C and an average annual rainfall of around 1,850mm. farmers cultivate a variety of crops, with notable production of yams,



cassava, maize, rice, soybeans, and groundnuts, with Guma being known for producing a large portion of the country's yellow melon (egusi). The major towns are Gbagimba, Daudu, Torkula, Kase-yough, Agasha, Abinsi.

Sampling Technique and Sampling Size

The population for this study consisted paddy rice marketers in Guma Local Government Area of Benue State. A multistage random sampling techniques was used to select sample size for the study. The first stage, was a purposive selection of two major markets (Gbagimba and Daudu) in the study area. The second stage was a simple random selection of fifty (50) paddy rice marketers from each market to generate a sample size of one hundred (100) respondents for the study.

Data Collection

Primary data was used for the study. The primary data was collected by use of a structured questionnaire consisting of various items based on the research objectives formulated to guide the study.

Method of Data Analysis

The data generated for the study was analyzed using descriptive (such as frequency distribution, percentages and mean) and Gross Margin. Descriptive statistics was used to achieve objective (i), (ii) and (iii) . Objective (iv) was achieved using Gross Margin. T test was used to test hypothesis.

Model Specification

Gross Margin Analysis

Gross Margin is expressed as follows:

$$GM = TR - TVC$$

Where, GM = Gross Margin,

TR = Total Revenue i.e. price per 100kg bag of rice multiplied by number of bags sold,

TVC = Total Variable Cost.

Gross Margin is used when fixed cost is negligible.

T-Test

$$t = \frac{\bar{X}_{after} - \bar{X}_{before}}{\frac{s}{\sqrt{n}}}$$

Where:

\bar{X}_{after} = Mean gross margin after the policy

\bar{X}_{before} = Mean gross margin before the policy

s = Standard Deviation of the Differences

n = Number of respondents

U-test was used to test the hypothesis. The T-test can be used as part of the model specification process for assessing the significance difference between Gross margin before and after the change of naira notes.

RESULTS AND DISCUSSION

Respondent's Perception of the Policy Implementation

Table 1 shows the perception of the policy by the respondents. The result showed that most (99%) of the respondents were aware of policy and all (100%) of the respondent did not like the policy. The policy change was shown to mostly (98%) affect buying and selling of the paddy rice due to low demand (73%), low supply (27%) of paddy rice and low cash (49%). This implies that CBN policy change affected exchange transactions between the farmers and buyers. This result contradicts the study of Andy *et al* (2014) titled Cashless policy, user's perception and retail marketing performance which revealed that, the measures of cashless system had positive influence on the measures of retail marketing performance while consumers perceive that the new system will be disadvantageous to them in the short run but beneficial in the long run.



Table 1: Perception of Policy Implementation

Description	Frequency	Persentages
Awareness		
Yes	99	99
No	1	1
Likeness of policy		
No	100	100
Effect of Buying and selling		
Yes	98	98
No	2	2
Various forms of Effect		
Low Profit	15	15
Low Demand	73	73
Loss of Money	16	16
Low Supply	27	27
Low Cash	49	49

Source: Field Survey, 2023

Pricing of Paddy Rice during the Period of CBN Policy

Table 2 shows the descriptive statistics for change in pricing of paddy rice. The result revealed all (100%) of the respondents agreed to a change in the pricing of paddy rice following the introduction of the new naira note with, almost all (98%) of the respondents acceptig that, the change in naira note reduced the pricing of paddy rice.

Pricing of paddy rice per bag before and after the period of naira change showed a mean price of ₦34,650 per bag before the policy and a mean price of ₦22,300 after the policy. factors that influenced the pricing of paddy rice during the policy change of naira was shown to be mostly low cash (98%) , followed by low demand (48%) then, low supply (37%). This implies that the low cash in circulation was the major reason for poor pricing of paddy rice due to low demand and hence low supply which resulted from lack of access to new naira notes. This is in line with studies by Tijjani and Ahmed (2004) on Price analysis of paddy rice in Monday-market, Borno state, Nigeria (2009 to 2021) who reported that price series had a positive linear trend with R^2 value of 0.91. Furthermore, the GSI peaks in August (105.3) andOctober prior to largest harvest period. Price declines in November through December and January. The Grand Seasonality Index (GSI) become lowest in March (94.7) when all harvests enter market. The gross storage margin, which is the percentage increase in price from March to August, was 11.19% per season. The study forecasted that price of rice will keep on increasing throughout the period under review.



Table 2: Pricing of paddy Rice during the period of CBN policy

Description	frequency	Percentage	Mean
CHAGE IN PRICE			
Yes	100	100	
Forms of price change			
Reduced price	98	98	
Increased price	2	2	
Price before policy			34650
≤ 3000	26	26	
≥ 3000	74	74	
Price after policy			22300
≤ 3000	91	91	
≥ 3000	1	1	
Factors influencing paddy rice pricing			
High supply	2	2	
Low supply	37	37	
High demand	0	0	
Low demand	48	48	
Low cash flow	98	98	

Source: Field Survey, 2023

Quantity of Paddy Rice Sold during the Period of Policy

Table 3 shows the quantity of paddy rice sold during the period of policy. The result showed that most (91%) of the respondents were affected in the quantity of paddy rice sold during the CBN policy of naira change. The result further showed that majority (89%) of the respondents experienced reduced quantity of paddy rice sold. Result further revealed that, the mean quantity of paddy rice sold reduced from 62 bags per month before the policy to a mean quantity of 23bags per month during the period of policy. This implies that the number of bags of paddy rice sold before the policy was more than the number of bags sold during the policy implementation. Josephine (2004) in a market survey on Paddy rice price drops on reopened Nigeria-Niger border showed that Prices of paddy have declined from a record high of N625,000 per metric ton on average in February to N425,000 in April, The decline has also led to a decrease in the prices of locally-milled parboiled rice varieties as a 50kg bag now sells for N70,000 as against N80,000 it sold two months ago, indicating a 12.5 percent decrease over the period hence, a drop in paddy rice sales by farmers due to low demand.

Table 3: Quantity of paddy rice sold during the period of Policy

Description	Frequency	Percentage (%)	Mean
Policy Affected Quantity			
Yes	91	91.00	
No	9	9.00	
Change of quantity			
Reduced volume	89	89.00	
Increased volume	11	11.00	
Quantity sold before the policy			62.8
< 50	63	63.00	
>51	37	37.00	
Quantity sold during the policy			23.63
< 50	84	84.00	
>51	16	16.00	
Challenges of exchange			
Old notes rejection	6	6.00	
Bank network	12	12.00	
High charges	63	63.00	
No account	33	33.00	
No cash	29	29.00	

Source: Field Survey, 2023



Gross Margin Before and during the Period of CBN Policy

Table 4. below shows the gross margin before and during the period of CBN policy. Analysis revealed that most (94%) of the respondents had changes in their business's profit margin before and during the period of naira change policy; Result on change in profit margin showed that, most (94%) of the respondents had their profit margin reduced during the naira change policy. The mean monthly profit made from sale of paddy rice by respondents before the policy was ₦193,550 while mean profit made during the policy was ₦59,920. The null hypothesis which states that the change of naira note CBN policy has no effect on gross margin of respondents was rejected, since there was a significant difference in the mean gross margin before the CBN policy and during CBN policy at t value ($< 8.75 < 0.00$) which was significant at 1% probability. This finding contradicts that of Dayyabu *et al* (2001) on gross margin analysis of marketing paddy rice (*oryza sativa*) in selected markets in bauchi state, nigeria who revealed a monthly profit of ₦25,902.6

Table 4: Gross margin before and during the period of naira change policy

Description	Frequency	Percentage (%)	Mean
Noticed change in profit			
Yes	94	94.00	
No	6	6.00	
Change in profit			
Reduced profit margin	94	94.00	
Increased profit margin	6	6.00	
Gross margin before policy			193550
<100000	47	47.00	
100001-500000	43	43.00	
>500000	10	10.00	
Gross margin after policy			59920
<100000	77	77.00	
100001-500000	23	23.00	
T value	(< 8.75 < 0.00)		

Source: Field Survey, 2023

CONCLUSION AND RECOMMENDATION

The study concludes that, the implementation of Naira change policy was not favorable as it affected buying and selling of the paddy rice; Pricing of paddy rice per bag fell from ₦34,650 to ₦22,300 during the policy due low demand and low supply of paddy rice and low cash; the quantity of paddy rice sold reduced from 62 bags per month before the policy to 23bags per month during the period of policy; The monthly gross margin reduced from ₦193,550 to ₦59,920 during the period of policy implementation.

The study recommends that

- 1) policies on change of Naira or currency should be critically studied by experts before initiating and/or implementing such policies, to avoid untold hardship for the citizens.
- 2) Policies on change of naira note should be objective to the benefit of citizens and not for personal interest

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