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Effects of Scarcity of Cash/Money on Household Food Consumption in Ondo Metropolis

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Abstract

This study investigates the effects of scarcity of cash on household food consumption in Ondo metropolis. The multistage sampling procedure was used to select 156 respondents for the study while the structured questionnaire was used to elicit information from the respondents. Data elicited were analysed using descriptive statistic such as frequency distribution counts, mean and standard deviation and percentages. The tobit model was used to analyse factors influencing the amount of cash accessed from the agency bankers in the study area. Results showed that, 61.5% were male with mean age of 47.6 ± 5.7 years, and 56.4% were married with household size of 8.0 ± 3 members. The mean amount collected from POS was $N6666.00 \pm N2364.00$ and 47.4% take a meal per day while 69.2% accounted for carbohydrate food. Inadequate food at

home, hunger, health challenges and food insecurity are the major effect of scarcity of cash. The results of the tobit model showed that age, marital status, household size, dependent ratio and access to information are the factors influencing the amount of money accessed from the POS or agency bankers during the scarcity of cash in the study area. It is observed that scarcity of cash has brought about untold hardship on the people such as starvation and hunger, deteriorating health challenges, low productivity and death. Based on the findings, it is recommended that policy of access to cash by the people should be reviewed, adequate information about government policy and programmes should be encouraged and cash limit to the people should be discouraged.

Keywords: Cashless Policy, Agency Banking, Barter, Pattern of Consumption

Introduction

The recent scarcity of cash or money in the economy or Nigeria has created an untold hardship in the life of the people with attendant serious problems in our society. Money is a potent weapon of liberation from poverty, squalor and economic imbroglia. With the progress of civilization, increase in population and multiplication of wants, money was introduced as a medium of exchange to overcome the various defects and inconveniences of the barter system and this gave rise to monetized economy (Jhingan, 2010) ^[11] and subsequently, it was assumed that barter trade have waned or gone into extinction with the advancement of monetized economies (Adejebi *et al.*, 2008). However, in spite of benefits associated with the use of money in monetized economy, the recent cashless policy by the apex bank in the country through the currency redesign, indirectly resurfaced trade by barter or using money to buy money in our society a modified form of barter trade. This activity was occasioned by the currency redesign occasioned by the apex bank (CBN, 2022). It was observed that in the time of scarcity more and more entrepreneurs or agency bankers (POS) were taking up exchange of money for money a form of indirect or modified barter trade as part of their business strategy (Dada, 2022) ^[7]. The POS or agency banking constituted the only source of money available to the common man during the period of scarcity in the country. This was reported or found to be more lucrative all over the place, across the length and breadth of the country. Money is a major means of exchange of goods and services in any given economy.

The Central Bank of Nigeria (CBN) announced that the bank would release re-designed naira notes by December 15, 2022, while existing notes would cease to be regarded as legal tender by January 31, 2023. Through with this policy, the apex bank aims to control the money supply, and inflation, as well as, curb counterfeit currency. The currency redesign is an activity of a sovereign nation to either change or modify the existing currency in a country. Currency redesign can be done for several reasons such as; improving the security features of the new currency, reducing the money supply or in circulation, reducing inflation, investigating incomes from nefarious sources and many other economic indicators that affect the financial status of a

nation (Ndukwe, 2023) ^[14]. Other scholars, Attanasio *et al.* (2013) ^[4], explained that monetary policy is a vital tool which could be used to achieve currency management, price stability, and strengthen the growth of investment, curb kidnapping, banditry and insecurity in the country. Moreover, studies show that currency redesign is a good approach to manage the money in circulation (International Monetary Fund, 2022). It is also hoped to minimize the influence of money on the country's electoral process thereby discouraging vote-buying and inducement of electoral officers. However, despite the envisaged benefits of this policy the effects or the untold hardship on the household and the society is unimaginable. Many homes and households become impoverished and exchanged the items they have for few amount of money in most rural and urban markets.

Food is widely accepted as a basic necessity of life and human survival. This is importance at the household level and obvious that food is a basic means of sustenance. Adequate intake of quality food is a key requirement for healthy and productive life which indicates food security status of a household. However, during the cashless policy so many homes or households lack access to quality foods due to poor or lack of purchasing power or means of acquisition of the food. The food access or security of average household waned during the cashless policy. Moreover, the food consumption patterns of virtually all households were terribly affected this results in difficulty of household in gaining access to food in sufficient quantity and quality for all household members to enjoy a healthy and active life (Dubihlela and Sekhampu, 2014) ^[8]. Hence, this is contrary to the convention of the Food and Agricultural Organisation (2001) that gave the call that no child, woman and man should go to bed hungry. But this is rampant and pervaded the society in the era of currency redesign or cashless policy. Better or good food consumption pattern is an indication of well-being of households, however, the scarcity of cash has dealt a serious blow on many households thus altering their consumption pattern.

Households food consumption pattern is a way of eating in the household. Households tend to follow certain eating patterns depending on the economic status, income or availability of money, environment, social class and among others which ultimately affect the eating habits (Akinbode, 2015) ^[3]. However, to maintain healthy diets or balanced food consumption pattern, individual should eat variety and balance of foods from all food groups. Moderate consumption of all food items is very important. However, this entailed choosing a number of different foods within any given food group, rather than eating a stereotype form of food or the same old type of food day after day. Food consumption pattern has been observed to be influenced by socio-economic factors including age, gender, income, occupation, family or household size, purchasing power, type of employment, among others. Adequate food consumption patterns play an important role in household wellbeing and development. Good food consumption pattern ensures household capacity to embark on livelihood activities for the sustainability of the home. It is observed that adequate food consumption patterns constitute a vital instrument for achieving other good living and development in the households. Better food consumption pattern could be antidote to child mortality, sickness, diseases and

improvements in maternal health and building immunity against disease.

Food consumption patterns of poor households have been crucial for economists and policy-makers in developing countries as they involved various empirical results (Bayu *et al.*, 2021). Studies revealed that, food consumption patterns in Vietnam are affected by income and prices, as expected, and socioeconomic and geographic factors (Vu, 2020) ^[15]. Burger *et al.* (2017) ^[6] found substantial variation in the price and income elasticities across the income distribution. Fujii (2013) ^[10] suggested that the pattern of food consumption among poor households was different because socioeconomic conditions and household location influenced it. Le (2008) ^[13] showed that rice was a major commodity for poor households in Vietnam, as indicated by the high expenditure share of rice in poor households, with portions decreasing as household income level increases. Poor food consumption patterns affect not just the health and nutritional status, hunger, malnutrition but also the capacity of the households to perform viable economic activities that will produce enough food for sustainable income and food security (Ajala and Meludu, 2006) ^[2]. The scarcity of cash in the households could also has effect on food availability and food consumption pattern in the households (Bayu *et al.*, 2021). The economic policy of the Central Bank of Nigeria (CBN, 2022) in recent times has brought back to our society the long-forgotten era of batter trade with a modification of using money to exchange for money in our society. This has resulted in serious hardship on the households in term of living standard, food consumption, and attendance to health challenges, meeting the needs of the family and other welfare needs in the home. Critical among these problems is the effects of the scarcity of cash on households' food consumption and welfare of the family. Despite that this policy is aimed at strengthened the economy, improving security of banknotes, mitigating counterfeiting, preserving the collective national heritage, controlling currency in circulation, and reducing the overall cost of currency management (Ayyash and Sek, 2020) ^[5]. Findings of this study will help to provide information to policy maker and other stakeholder in the formulation of policy that will help to improve food consumption pattern of the households. Moreover, it will also help to improve the health status and the nutritional quality of the home.

Objectives of the Study

The main objective of this study is to investigate the effects of scarcity of cash on the food consumption of the family or households, while the specific objectives are to:

1. Examine the socio-economic characteristics of the respondents
2. Identify the food consumption pattern of the households during the cashless period;
3. Identify the effects of the cashless policy on the food consumption pattern of the family.
4. Identify the constraints facing the family in accessing cash or money for the home needs.
5. Determine factors influencing respondents access to cash during the scarcity of cash or cashless period.

Research Methodology

The study was conducted in Ondo metropolis in Ondo-West Local Government Area of Ondo State. A multistage sampling technique was used to select sample for the study.

Stage one comprised random selection of areas or quarters of the Ondo metropolis (Yaba area, Odojomu area, Sabo area, Ayeyemi area, Lipakala area, Valentino area, Agbogboke area and Itan-nla area). Stage two consisted of random selection of households from the different areas or quarters in the metropolis. The final stage comprised of the random selection of household heads from the selected quarters in the metropolis. A total of one hundred and fifty-six (156) respondents were selected for the study. The primary data for this study were collected using structured questionnaire. The analytical tools for the study included; descriptive statistics such as frequency distribution, mean, standard deviation, and percentages. The tobit regressions analysis was used to determine factors influencing access to cash in the study area. The linear regression model is explicitly expressed by (Gujarati and Porter, 2009) as;

$$Y_i = \beta_0 + X_i\beta_i + e_i \tag{1}$$

Where;

- Y_i = amount charge/pay in exchange for a given amount of money
- X_1 = Age (years);
- X_2 = Gender (1 = male; 0 = otherwise);
- X_3 = Completed years of education (years);
- X_4 = Marital status (1 if married; 0 otherwise);
- X_5 = Household size (numbers);
- X_6 = Dependent ratio (numbers working/number non-working);
- X_7 = Access to information (1 = yes; 0 = otherwise);
- X_8 = Occupation (1= government workers; 0 = otherwise);
- X_9 = Availability of cash at POS point (₦);
- X_{10} = Income (N)
- X_{11} = Amount demanded (₦);
- X_{12} = Location (1 = urban area; 0 = otherwise);
- X_{13} = Distance (km);
- e = Error term

Results and Discussion

The result on Table 1 shows the distribution of respondents by gender, age, marital status, household size, occupation, education, and distance to POS and amount collected from POS in the study area. The result reveals that 61.5% of the respondents were male while 38.5% were female. This implies that majority of the respondents were male this may not be unconnected with the need to cater for the family in the period of the crises. On age, 41.0% were between 41 – 50 years, while 21.2%, 12.2%, 19.2% and 6.4% were between 51 – 60 years, greater than 60 years, 31 – 40 years and less than 31 years, respectively. The mean age of respondents was 47.6±5.7 years. This result shows that it is the economic active age groups that are out for means of survival for the family. On the marital status of respondents, it was observed that, 56.4% of the respondents were married while 16.7%, 15.4% and 11.5% were widowed, divorced and single, respectively in the study area. This implies that majority (56.4%) of the respondents were married which is agreement the fact being married conferred the responsibility of the family on the individual. Household size reveals that, 30.8% were had less than 5

members, while 48.7%, 14.1% and 6.4% had between 5 – 8 members, 9 – 12 members and greater than 12 members, respectively in the metropolis. The mean household size of respondents was 6.0±3.0 members which is more than the national household size of 5 members (Kimaro *et al.*, 2015) [12]. The occupation of respondents indicates that, 33.3% were into civil service work and 26.9% engage in petty trading while 25.6% and 19.2%, respectively were into farming and artisans in the study area. This implies that the cashless or scarcity of funds affect different people in various occupations. This is not unconnected with the fact that money is the engine upon which all activities thrive. The educational attainment of respondents shows that, majority of the respondents (52.6%) had primary education. Further, 20.5%, 18.6% and 8.3% had secondary education, and no formal education however, only 8.3% of the respondents had tertiary education in the study area.

Table 1: Distribution of respondents by socio-economic characteristics n =156

Variables	Frequency	Percentage	Mean/SD
Gender			
Female	60	38.5	
Male	96	61.5	
Age			
< 31	10	6.4	
31 – 40	30	19.2	
41 – 50	64	41.0	47.6±5.7
51 – 60	33	21.2	
>60	19	12.2	
Marital Status			
Single	18	11.5	
Married	88	56.4	
Widowed	26	16.7	
Divorced	24	15.4	
Household Size			
<5	48	30.8	
5 – 8	76	48.7	
9 – 12	22	14.1	8.0±3.0
>12	10	6.4	
Occupation			
Petty Trading	42	26.9	
Farming	40	25.6	
Civil Service work	52	33.3	
Artisans	30	19.2	
Education			
No formal education	29	18.6	
Primary education	82	52.6	
Secondary education	32	20.5	
Tertiary education	13	8.3	
Distance to POS			
< 5	23	14.7	
5 – 10	40	25.6	15.8±6.4
11 – 15	72	46.2	
>15	21	13.5	
Amount Collected			
<5, 000.00	93	59.6	6660.00±2364.00
5, 000.00 – 10, 000.00	40	25.6	
>10, 000.00	23	14.8	

Source: Field Survey, 2023

The importance of education during the crisis cannot be overemphasized since could give out forms to be completed by his clients. The study reveals that respondents had to travel through some kilometers of road to locate Point of Sale (POS) agents for money in the study area. The mean minimum distance covered by respondents was 15.8±6.4

kilometres. On amount of money usually given out to respondents, the study reveals that, majority of the respondents (59.6%) are give less than #5000.00 only. Moreover, 25.6% and 14.8% received between #5000.00 - #10000.00 and greater than #10000.00, respectively. The mean amount received by respondents during the cashless policy was about #6505.00± 2364.50. This shows that the amount received during the period of cash crisis was very small compared to the financial need of the people.

On number of meals taken per day, (Table 2), 47.4% states that they eat once daily due to scarcity of cash while, 43.7%, 5.1% and 3.8% of the respondents eat twice, three and more than three times daily. This was attributed to the insufficient cash in the households. The result indicates that majority (47.4%) could only afford a daily meal in the family once. This may not be unconnected with the strategy to guide against food shortage in the family or households which could portend problems for the family. Moreover, the effects of scarcity of cash on the households food consumption pattern shows that, (Table 2) it could result into inadequate food at home as accounted for b 41.0% of the respondents. 25.6% reveals that cash scarcity in the household could lead to malnutrition and hunger (16.0%). Further, 11.5% and 5.9% indicates that scarcity of cash may result in deteriorating health challenges and food insecurity. This is in line with the submission by Bayu *et al.* (2021) that access to good consumption of food promotes healthy living and boost immunity to diseases. Constraints encountered by respondents during the scarcity of cash in the country includes, rationing of cash which accounted for 37.2% while suffering/delay in cash disbursement and unnecessary queuing by people for money accounted for 28.2% and 13.5%, respectively in the study area. Moreover, fighting/quarreling, unorganized arrangement and time wastage are represented by 6.4%, 7.75 and 7.1%, respectively. This implies that households were subjected into serious hardship before they could access cash either from the banks or any agency banking point (POS) during the scarcity.

Table 2: Distribution of respondents by number of meals taken per day, effects of scarcity of cash on food consumption and constraints encountered during scarcity n = 156

Variables	Frequency	Percentage (%)
Numbers of meals per day		
Once daily	74	47.4
Twice times daily	68	43.7
Three times daily	8	5.1
More than three times	6	3.8
Types of food consumed		
Carbohydrate	108	69.2
Carbohydrate and Protein	41	26.3
Fruits	7	4.5
Effects of scarcity of cash		
Inadequate food at home	64	41.0
Hunger	25	16.0
Malnutrition	40	25.6
Health Challenges	18	11.5
Food Insecurity	9	5.9
Constraints facing respondents		
Rationing of cash	58	37.2
Suffering/Delay in cash disbursement	44	28.2
Unnecessary Queuing by people	21	13.5
Fighting/Quarreling	10	6.4
Unorganised arrangements	12	7.7

Time wastage	11	7.1
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Source: Field Survey, 2023

The result of the Tobit regression (Table) the sigma (δ) is 1.3284 with likelihood ratio chi-square test of 62.01 and P-value of 0.0000. The Pseudo R² of 0.47854 and log likelihood was -147.39784. This implies that the model is fit and the factors hypothesized as joint predictors of amount of cash accessed from the POS during scarcity of cash in the study area by respondents in Ondo metropolis. The data was censored from above, for amount of cash accessed that is greater or equal to N10, 000 (\geq N10000). This implies that all value of the dependent variable (amount accessed) that were N10, 000 and above were really censored at N10, 000. Thirteen variables which were hypothesized to influence the amount of cash accessed, the result shows that seven variables; age, marital status, household size, dependent ratio, access to information, amount of cash demanded, and location were the significant variables influencing the numbers of cash accessed from the POS in the study area. Age has a negative coefficient and significant relationship with respect to amount of cash accessed. This means that an additional year to the age of respondents would lead to a decrease in the chances in the amount of cash accessed by 0.0846 at 5% level of significance. This may be linked with the fact that aged people may not have the strength to queue and endure for a longer period.

Table 3: Tobit analysis of factors influencing the amount of cash accessed

Variables	Coefficient	P>/t/	Marginal effect
Age (yrs)	-0.5979(0.2751)	0.030	-0.0846
Gender	-0.1426(0.270)	0.597	0.1463
Education	0.1604(0.1948)	0.410	-0.0202
Marital status	1.4503(0.4399)	0.001	0.2052
Household size	3.7903(0.8397)	0.000	0.5365
Dependent ratio	0.5144(0.2454)	0.036	0.0728
Access to information	1.1942(0.3574)	0.001	0.1690
Occupation	-0.2886(0.3032)	0.341	-0.0408
Income	0.4384(0.2722)	0.107	0.0620
Amount demanded	-0.6819(0.2874)	0.018	-0.0965
Availability of cash	0.4009(0.4267)	0.347	0.0567
Location	1.006(0.3485)	0.004	0.1423
Distance	0.1546(0.2557)	0.546	0.0218
Constant	-15.3392(5.3980)	0.004	
Observation	156		
Log likelihood	147.39784		
LR Chi ²	62.01		
Prob>Chi ²	0.0000		
Pseudo R ²	0.47854		

Source: Author's Computation, 2023

Marital status shows positive significant relationship with the amount of cash accessed from the POS in the study area. This indicates that being married could increase the access to cash in the study area. This may not be unconnected with the determination to be patient irrespective of the numbers of hours on the queue to access cash. Household size and dependent ratio show positive coefficients and significant relationship to the amount of cash accessed in the study area by 0.5365 and 0.0728 at 1% and 5% respectively. This implies that an increase in the household size and in dependent ratio increases the amount of cash accessed. This may be linked with the need to take care of the family and to sacrifice whatever time it will take in order to be able to

access the cash. Access to information shows positive and significant coefficient in relation to the amount of cash accessed in Ondo metropolis. This implies that access to information increases access to cash. This may not be unconnected with the fact the information about the location of POS, commission charge and other services would help respondents in visiting the place in the study area. The result on amount of cash demanded shows negative and significant coefficient at 5% level of significance in relation to the amount of cash accessed in the study area. This implies that as the amount of cash demanded increases, access to cash decreases by -0.0965. This may not be unconnected with the rationing approach adopted by the POS agents and the need to cater for more people at that critical period in the study area. The location of the POS was positive and statistically significant at 1% in relation to the amount of cash accessed in the study area. This implies that being in the urban centres increases the amount of cash accessed from the agency bankers. This is due to the fact that there are more agency bankers (POS) that are accessible and with flexible commission compared to the rural areas.

Conclusion and Recommendations

The scarcity of money in circulation in Nigeria has created an untold hardship on the the people with attendant serious problems particularly in Ondo metropolis. Money is an instrument of economic progress and development. Despite the benefits associated with the use of money the recent cashless policy by the apex bank in the country through the currency redesign, indirectly resurfaced trade by barter or using money to buy money in our society a modified form of barter trade. It was observed that in the time of scarcity the exchange of money for money an indirect or modified barter trade became the other of the day with the attendant problems of food scarcity, hunger, starvation, deteriorating health challenges and ultimately death. The scarcity of money has resulted in the slowdown of economic growth and development and food insecurity at home, malnutrition and productivity ebb low in the family. It is recommended that that policy of access to cash by the people should be reviewed, adequate information about government policy and programmes should be encouraged and cash limit to the people by financial institutions should be discouraged and adequate monetary measures should be put in place against subsequent economic policies.

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