Managing Social Change: The Case of Central Bank of Nigeria's 'Cashless' Policy

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Abstract

The objective of this study is to review the recently introduced cashless policy in Nigeria and in particular, assess peoples' behaviours and attitudes towards the policy in Lagos where it is operational. It is found that while 92% of the sample is aware of the cashless policy, only 58% actually understands it; that most of the respondents use ATMs and that they do so because of convenience and safety while those who avoid the cashless channels do so because of fraud and operational lapses. As an interim verdict, 72% of the respondents believe that the cashless policy is necessary; only 40% believe that the CBN approach to its implementation is the best but only 36% believe that the policy will succeed. The 64% who believe that the policy would fail justify their doomful predictions on the power supply situation, poor implementation and non availability of cashless channels in the rural areas. The study recommends that the CBN builds on the shortcomings as revealed in the study to fine-tune the policy going forward while banks should improve their cashless channel operations and be willing to share the gains of cashlessness with their customers.

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Key words: Cashless, Cashlite, policy, Channels.

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1 Introduction

Cashless banking is unequivocally the most recurrent phrase in the Nigerian banking and socio-economic lexicon in the past year and even more popular in media attention than the Boko-Haram insurgency. The reasons for its introduction have been articulated by the masterminds as: 'getting costs reduced by 30% in three years through enforcement of 4-pronged initiatives: reduction in cash management cost, enhancement of electronic payment systems, IT and centralized back-office system'; reduce cost to serve by 30%, increase access, convenience and service level across the industry, modernize the industry, enable greater financial inclusion and integration of financial services into the economy, with its attendant positive impact on economic development [Sanusi, 2011]. He further averred that only a few customers would be affected since cash transactions represent 99% of customer activity in banks, about 86% of in-branch cash withdrawals are less than N100,000 in value while less than 10% are more than N100,000. Other factors that propelled the policy included the increment in currency in circulation[20.36% in 2009 and 16% in 2010], increased cost of cash management by the banking sector,

improvement by the federal government in electronic payments, growing acceptance of ATM, increasing GSM penetration, commitment by the banking community to support seamless electronic payment. He also averred that the policy will reduce cost of accessing banking services, enhance quality of banking services, stem cash related crimes and that those who wanted extraordinary cash services should pay for them. The CBN also promised to carry out awareness and enlightenment campaigns and engage stakeholders in two-way conversations

After a series of changes-all of which are indicators that CBN did not do its homework properly initially and that it was responsive to public opinions- the policy took off in Lagos on first April, 2012. Some of the modifications included the change in the takeoff date of January [Lagos] and June [nationwide]; excluding Port Harcourt, Aba, FCT and Kano from the pilot phase; changing the cash withdrawal/lodgment thresholds [N150,000 to N500,000 for individuals & N1m to N3m for corporate entities]; the punishment for withdrawal or depositing, which the CBN diplomatically termed transaction charge which was reduced from 10% to 3% [for individuals] and 20% to 5% for corporate organizations. Cash transit services were limited to duly licensed organizations [and penalty for violation was N1m per cash movement against the affected bank] while third party over the counter cheques can not be honoured above N150,000 and excluding Ministries, Departments and Agencies[MDAs], embassies and development partners. Non exclusivity policy was also imposed on all cards used in Nigeria. The questions and challenges envisaged included the state of technology and infrastructure, illiteracy and low level of bank penetration [about 30%] and the cash-centeredness of Nigeria and Nigerians. Eventually, after these changes, awareness building and preparations by banks and other stakeholders, the policy commenced.

The objectives of this study are to undertake a review of the CBN cash-lite policy[cashless policy], to ascertain the extent of awareness and understanding of the policy by Nigerians, the acceptance of the policy as enunciated, the change of attitude and behavior since the awareness and policy started and the general perception about the policy. The study is divided into five sections: introduction, literature review, methodology, data presentation, analyses and discussions and conclusion.

2 Literature and Conceptual Review

The Cashless policy has been in operation in Nigeria for the past three months[April-June, 2012] but the awareness building and policy proclamations about it had been on for the past 18 months. The CBN restates the justifications for it as follows:

- 1. To drive development and modernization of the Nigerian payment system in line with vision 2020. An efficient and modern payment system is positively correlated with economic development, and is a key enabler for economic growth.
- 2. To reduce the cost of banking services (including cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach.
- 3. To improve the effectiveness of monetary policy in managing inflation and driving economic growth.
- 4. To curb some of the negative consequences associated with the high usage of physical cash in the economy, including:
 - **High cost of cash:** There is a high cost of cash along the value chain from the CBN & the banks, to corporations and traders; everyone bears the high costs associated with volume cash handling.
 - **High risk of using cash:** Cash encourages robberies and other cash-related crimes. It also can lead to financial loss in cases of fire and flooding incidents.
 - **High subsidy:** CBN analysis showed that only 10% of daily banking transactions are above N150,000 but the 10% account for majority of the high value transactions. This suggests that the entire banking population subsidizes the costs that the tiny minority10% incur in terms of high cash usage.
 - **Informal Economy:** High cash usage results in a lot of money outside the formal economy, thus limiting the effectiveness of monetary policy in managing inflation and encouraging economic growth.
 - **Inefficiency & Corruption:** High cash usage enables corruption, leakages and money laundering, amongst other cash-related fraudulent activities.
- 5. To harness the various benefits from an increased utilization of e-payment systems. These include:
 - For Consumers: Increased convenience; more service options; reduced risk of cash-related crimes; cheaper access to (out-of-branch) banking services and access to credit.
 - For Corporations: Faster access to capital; reduced revenue leakage; and reduced cash handling costs.
 - For Government: Increased tax collections; greater financial inclusion; increased economic development. Increased tax collections; greater financial inclusion; increased economic development.

The CBN further declared that only 8% of cash transactions in 2010 was above N150000; that it did not limit cash withdrawal but made it more expensive, that the banking industry [including CBN] spends about N200bn annually managing cash and that there were other complementary policies including improving the safety and density of ATM and promoting the POS mechanism[Sanusi, 2011b]. Other justifications include the high percentage of space, employees and other resources deployed to cash management [about 30%] and the fact that about 10% of customers that withdraw more than N150000 account for about 70% of branch cash value, thus imposing cost on other customers. There are also the issues of unacceptably higher cash in circulation, and low penetration of

alternative payment systems [13/100000 in Nigeria, 1063 in S/Africa 463 in Uganda and 2061 in Singapore] [Nwodo, 2011].

The policy is also expected to help the CBN in achieving its objective of expanding, deepening and modernizing the payment system in Nigeria; break the traditional barriers hindering financial inclusion for millions of Nigerians and bring low cost secure and convenient financial services to urban, semi-urban and rural areas across the country especially through mobile payment services, create an environment for more effective monetary policy implementation and curb the menace of inflation[Sanusi, 2012]

There is no doubt that going cashless is and will continue to be beneficial. Swartz, Hahn & Layne-Farrar[2004] undertook a case-study based cost benefit analyses and declared unequivocally that the shift towards a cashless society improves economic welfare, though with the caveat that the benefit is not equal for all the parties. But going cashless will not automatically generate all the enumerated benefits. In the first instance, it is theoretically and practically impossible to have a cashless society [Muo, 2011:13] and as Mike Lee, the CEO, World ATM Association, who is critical stakeholder in this cashless debate has argued , 'the cashless society is about as a real possibility as a paperless office'[Lee, 2008]. We are using the concept in its Nigerian and everyday meaning because its monetary and macroeconomic interpretations and implications are quite different.

Babarox [2007] and [Laidler 2005] view a cashless economy as one where monetary assets play no essential roles in the order of things Costa & Grauwe [2001:1] define a cashless society as one in which there are no note and coins issued by the Central Bank and where money used is provided by private financial institutions. Even when the central bank operates like other banks and produces its own currencies, such would just be one of the currencies available but the unit of account[Naira, Dollar] remains a national affair, provided by the state. In fact, in a pure cashless society, the central bank cannot even impose reserve requirements! Under cashless banking, the central bank becomes smaller than the big financial players, loses its traditional instruments of monetary policy, depends on the government for sustenance and policy effectiveness and directs its attention towards e-money supervision. This implies that there are little or no roles for money and monetary policy [Zhu & Maenner,2009]

Furthermore, even in those societies that have adopted cashless programmes decades ago, cash transactions still constitute a very large proportion of expenditure with card sales rising from an average of 19% in 1995 to only 47% in 2003 [Gittins, 2004:1] and cash payments averaging 40% Australia and up to food in 56% for and conveniences[Australian Retailers Association, 2011] while it is still a major source of payment in Japan as at 2008[AGIS Consulting, 2008]. As at 2007, up to 1.4trn pounds were moved daily in Britain and in the countries that constitute the former USSR, cash is the king both in volume and value[Lee, 2008] and \$1.3trn was expended on petty items in 2007[Economist, February, 2008]

The fact remains that it will not be easy to remove cash because of 'human habits and traditional attachments to the idea of money' [Reagans, 2007]; because it has been around for several centuries and survived several major onslaughts like cheques [Netherlands, 15th Century] and Dinner charge cards in the 1950s. Factors that encourage the continuous usage of cash include its user friendliness[accounting for 65% of global payments in 2007], convenience, expansion in informal economy where Nigeria, Bolivia, Peru and Georgia are world champions-58-68%], small purchases[VISA reports that about 70% of

all items worth \$1-10 are cash paid], cheap, risk-free, anonymity and certainty of acceptance [Lee,2008]

Even though there was a general feeling that the cashless policy was a positive step, there were several fears and challenges envisaged about it. One was the outrageous charges imposed on customers who were merely asking for their money and in an era in which banks already showed oppressive tendencies towards their customers, what the CBN had done appeared to be an endorsement of the KITA [kick in the arse] tactics of the banks. It is also common knowledge that change is not usually legislated [Muo, 2011:13]. There were also fears about the high level of cash-centered operations, lack of trust, poor banking penetration and culture, defective infrastructure including electricity and payment systems, peoples poor experiences with the ATMs and the non challant attitude of banks, unwillingness of the banks to share any expected gains with customers and the issues of security, fraud and identity theft.

A case in point was the impact of the policy on the marketing communication industry because of the 'age long tradition of 'on the spot cash payments' during activations and other related projects' with various consultants and service providers in projects that involve various cash-in- hand activities like ushers, models, make-up artists, comedians, musicians, security, DJs, cameramen, photographers and transporters. A firsthand account was given by Segun Adeoye:[2012:47]

We were just 3 staff that went to 14 cities for MTN during world cup. Others were ad hoc staff and they acted more like mercenaries. In each city we spent 3 days and we withdrew more than 3m to make various payments. Nobody was willing to collect any cheque because they could not trust people who were just transiting. Even radio stations that were to hype the events insisted on cash payments or they wait till the cheque cleared. Since we wanted to hype the thing that night, we had to pay cash. Even if we wanted to pay cheques, no director or accountant went with us; we were only given signed cheques to make withdrawals'.

Asked why the firm did not make payments from Lagos before the trip he explained that *in events, companies want to minimize cost and check any damage as soon as they occur.* Sometimes the HQ can direct that the plans be changed. In Yola, we had to change the venue.. we even had to reduce the number of radio stations.. imagine if we had paid everything and just landed with our allowances? For long distance activations, sometimes decisions change within hours [Uskuma & Otalor, 2012:47]

The Association of Food Beverage & Tobacco Manufacturers also articulated their fears about the policy and the adverse impact on their members' businesses. They identified the seven key challenges as: concern over POS terminal charges, fear of overloading the e-payment channels, low level of awareness, possible insecurity, change- resistance by the public, inadequate preparation by the authorities, especially the banks, poor IT connectivity and lack of adequate IT infrastructure. They then gave an example that one of the members has 200 registered distributors and that if one sold 20000 cartons at N1500 each in a month, that distributor would incur an extra cost of N375000 monthly from the 1.25% POS charges by going cashless. They also complained that in case of failed transactions with no receipt issued, the customer is debited and the seller will not release the goods because his account is not credited and it could take up to 5 days to reverse and resolve [Businessday, 2012,1].

The CBN tried to address some of these challenges by altering the charges, threshold amounts, take-off dates and the scope of the trial cities and period. They also licensed 14 mobile operators, insisted that all POS machines must have two SIMs and Service level agreement with GLO/MTN to ensure 99.9 % availability. The POS machines have 24-hour battery lives and are rechargeable like phones and this can be done by any type of generator or even car batteries. The number of POS machines have also increased tremendously with up to 10000 available in Lagos area as at June, 2012 according to the head of shared services, CBN [Umeano, 2012]and this is graphically displayed in figure 1. There was also a migration from magnetic strip to chip and pin which reportedly reduced ATM fraud by 90%, establishment of ATM fraud committee while pictures of transactions are now automatically captured

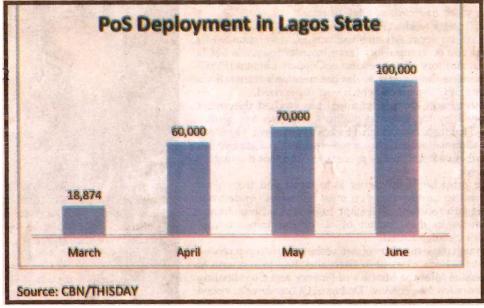


Figure 1: Trend in POS Deployment in Lagos between March and June, 2012 Source:Thisday, 25th June, 2012, p27

3 Methodology

The population was infinite, consisting of all account holders in Lagos where the pilot phase of the cashless policy was in operation. The study area was Akoka, Oshodi-Isolo and the Central Business District areas of Lagos. A sample of 200 was selected for the study. A questionnaire was used as an instrument for data gathering and these were distributed and collected in June, 2012. It was divided into two sections: section one related to the personal details of the respondents while section two contained questions relevant to the research. The questions were structured though some were open-ended to allow the respondents the freedom to express themselves. Because the subject matter was still fresh and esoteric to many, time was taken to explain the concepts and terms used in the questionnaire to the respondents. The duly completed and returned questionnaires were analysed with SPSS software.

4 Data Presentation, Analyses and Discussions

4.1 Response Rate & Personal Data of Respondents

130 questionnaires were correctly filled and retrieved [65%] and the personal details of the respondents are displayed in Table1.

Frequency		Percentage
Gender		
Male	83	63.8
Female	47	36.2
Occupational Status		
Private Sector Employee	47	35.3
Public Sector Employee	29	21.8
Petty Trader	16	12.0
Self Employed	33	24.8
Student	8	6.0
Profession		
Bankers	57	42.9
Marketers/Traders	28	21.1
Engineers	19	14.3
Civil Servant	16	12.0
Students	9	6.8
Medical Doctors	4	3.0
Educational Background		
WASC/OND/NCE	28	21.5
B.Sc/HND	74	56.9
Masters/PhD	23	17.7
Professionals	5	3.8

Table 1: Personal	data o	of the	respondents
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Source: Field Survey, 2012

This table shows that eighty three (63.8%) of the respondents were males, while fortyseven (36.2%) of the respondents were females. Occupationally, private sector employees account for 35.3% of the respondents; self employed-24.8%; public sector 21.8%; petty traders-12% and students, 6%. Majority of the respondents were bankers (42.9%) while others were marketers/traders [21.1%), engineers (14.3%) and medical doctors (3%) respectively. Majority of the respondents had first degrees or equivalent (56.9%). Thus, most of the respondents were educated, public/private sector employees and traders/marketers.

4.2 Awareness and Understanding of Cashless policy

We wanted to ascertain the extent to which Lagosians were aware of the policy and it was revealed that 92% of the respondents were aware of the policy but unfortunately, only 58% fully understood what the policy was all about. [see Table 2]

4.3 Attitude, Accessibility and Usage of Cashlite channels

The study further sought to establish the attitude of the respondents towards the cashlite channels, their accessibility to these channels [availability] and the ones they actually use. 17% of the respondents had a highly positive attitude towards these channels; 44% were just positive, 3% were neutral and negative. Most of the respondents[92%] had access to and actually do use ATMs with high regularity of 12%, regular usage of 43% and occasional/rare usage of 35% and about 10% who do not even use it at all [See Table2]. 50% of the respondents also averred that they had increased their usage of ATMs since the cashless awareness building began in January, 2011. Of course this stands to reason, not because the respondents and indeed Nigerians love the ATMs: the banks had forced their customers to use ATMs by raising the minimum amount they could pay over the counter [in most places, N100000 and above] or imposing charges for direct cash withdrawals. The respondents usage of ATMs[92%] is in line with the national position of 97% volume and 93% value as at December 2011[CBN, 2012]

Frequency		Percentage	
Awareness of Cash-lite Policy			
Yes	120	92.3	
No	10	7.7	
Understanding of Cash-lite Policy			
Yes	76	58.5	
A little bit	41	31.5	
No	13	10	
Accessibility to Cash-lite Channels Op	tions		
ATMs	119	91.5	
Payment Cards (Visa Payment)	4	3.1	
POS- Access Device	2	1.5	
Internet Banking	1	0.8	
Direct Debit	2	1.5	
Direct Credit	2	1.5	
Which of these Cash-lite Channels do	you use		
ATMs	120	92.3	
Payment Cards (Visa Payment)	3	2.3	
POS- Access Device	2	1.5	
Internet Banking	1	0.8	
Direct Debit	2	1.5	
Direct Credit	2	1.5	
Attitude towards Cashlite Channels			
Highly Positive	23	17.7	
Positive	58	44.6	
Neutral	38	29.2	
Negative	8	6.2	
Highly Negative	3	2.3	
How often do you use these channels			
Highly Regularly	16	12.3	
Regularly	56	43.1	
Occasionally	35	26.9	
Rarely	11	8.5	
Not at all	12	9.2	
Improvement in usage and attitude sir	ce awareness building started		
Yes	64	49.2	
Unsure	30	23.1	
No	36	27.7	

Table 2: Awareness, attitude and channels of cash-lite policy

Source: Field Survey, 2012

Those who patronize cashless-channels and who should be change champions and advocates for the policy were asked to state the reasons for patronising these channels [Table 3]. Top on their response was convenience - 43% [convenient and fast transaction, 24/7 availability and removing the burden of carrying cash] followed by security - 31% [robbery and security]

Table 3: Reasons for the use of c	ashlite chann	els	
Frequency Perce			
To reduce the rate of robbery at the bank	89	18.1	
For more convenient and fast transaction	81	16.5	
Friendly use	59	12	
Security	67	13.6	
Readily available for customers 24hrs	61	12.4	
Remove the burden of carrying huge amount of mone	ey 73	14.8	
For other purposes such as payment of bill and rechar	ge 62	12.6	
Total	492	100	

Source: Field Survey, 2012

Those who avoid these cashlite channels also gave their own reasons top of which was fraud -48% [fraudulent operations and account safety], operational issues-30% [rigidity, compatibility, denomination of cash dispensed, low coverage] and network problems [17%]; see Table 4

	Frequency	Percentage
Network problem	39	17.6
Fraudulent	47	21.3
For account safety	59	26.7
Very rigid	19	8.6
Low coverage	9	4.1
Compatibility problems	31	14.0
Incomplete denomination of money	16	7.7
Total	221	100

Table 4: Reasons for avoiding cashlite channels

4.4 Interim Verdict on the Cashless policy

Based on the awareness building, implementation so far and their understanding of the policy, respondents were asked to pass a verdict on the policy and this is shown in Table 5. 70% of them believe that the cashless policy is necessary but only 40% believes that the CBN approach to its implementation [coercion based and legislated change] is the best. 25% is not so sure while 34% is certain that the CBN is adopting the wrong approach. This is in tandem with the general flow of public opinion on the debate; most people believe that the policy is right but very few believe that levying draconian charges on people to withdraw their own money in an environment like ours and without any inducements to go cashless will work. To conclude the verdict, only 36% believed that the policy would work! It appears that the only people not bothered about the approach were

the bankers who would win, head or tail. One of the bankers was quoted to have said: 'we have not experienced any change in the mode of transactions by customers. In any case, banks have nothing to lose if they don't comply; we will rather gain from the charges' [Iyatse, 2012:3]

	Frequency	Percentage
Necessity of Cash-lite p	oolicy	
Yes	92	70.8
Unsure	22	16.9
No	16	12.3
CBN approach to its im	plementation is the best	
Yes	53	40.8
Unsure	33	25.4
No	44	33.8
Cash-lite project will su	Icceed	
Yes, it will	47	36.2
It may	73	56.2
It will not	10	7.7

Table 5: Necessity, implementation and probability of success

Source: Field Survey, 2012

To mine the views of those who were convinced that the policy would fail and to assist policy modifications, they were asked to justify their predictions. They based their pessimism on epileptic power supply [19%], poor implementation [13%], illiteracy [12%], lack of those channels in rural areas[12%] among others. [See Table 4]. These and similar reasons were behind the suit against the policy by 11 riverine communities in Delta State - Akpaka, Ogdigbe, Madagho, Ijala, Kantu, Omadino, Ogheye, Dfege, Ajuadaibo, Obaghoro and Ikoghoro. Part of their grouse was that the charge was excessive, punitive and a breach of their fundamental human rights. CBN also argued that nobody had been expressively or impliedly deprived of the right to own or use money deposited in any bank. Justice B. B. Aliyu held that they were not bound to patronize any bank but once they chose to do so, they must abide by extant rules and that the policy does not contravene the fundamental rights of the applicants under section 44[1] of the Nigerian constitution[Chiejina, 2012:12].

Table 6: Reasons	for Predictin	g the Failure of	Cashless Policy

	Frequency	Percentage
Poor advocacy and enlightenment	21	6.8
Corruption in the system	27	8.8
Variation in perception among users and professionals	35	11.4
Level of illiteracy	39	12.4
Poor implementation	41	13.4
Political instability	23	7.5
Unavailability in rural areas	38	12.4
Poverty	27	8.8
Epileptic power supply	57	18.6
Total	307	100

4.5 The Role of Banks

The cashless policy is a banks affair and indeed, it can be argued that the CBN has taken up this fight on behalf of banks. We sought to ascertain from the respondents whether there are ways in which banks are hindering the policy or specific steps they should take to facilitate its successful implementation. They believe that banks are hindering the policy in four principal ways: ATM shortages [22%] poor awareness and sensitization [16%], poor knowledge of the policy [15%] and poor relationship among bankers. [see table5]

	Frequency	Percentage
Frequent Shortage of money on ATM machines	87	22.0
Poor awareness and sensitization	62	15.7
Credit delay in the bank	29	7.3
Corruption on the part of bankers	43	10.9
Over dependence of Banks on CBN	13	3.3
Shortage of banks in rural areas	37	9.3
Inadequate knowledge of cashlite policy by bank stat	ff 59	14.9
Defilement of CBN policy by banks	19	4.8
Poor relationship among banks	47	11.9
Total	396	100

Table 7: How Banks Discourage the cashlite policy

In Table 8, we show the views and suggestions of respondents on how the banks should facilitate and encourage the cashless policy of which they are the chief direct beneficiaries. These include prompt servicing of the alternative payment channels - 40% [prompt servicing of channels and more functional equipments] more awareness and ensuring that individuals are not allowed to open multiple accounts.

	Frequency	Percentage
Prompt servicing of cashlite channels	47	23.7
Create more awareness and sensitization	28	14.1
Provision of more functional equipment	31	15.7
Reduction of service charge with inter banks	21	10.6
Transfer and payment		
Report of offenders to EFCC	9	4.5
Rejection of an individual opening numerous account	s 13	6.6
Compliance to CBN policy	23	11.6
Introduction of bank products to enhance the policy	26	13.1
Total	198	100

Table 8: Facilitating cashlite policy by banks

5 Conclusion

The cashless policy is already in its pilot phase and while three months is a short period to assess a policy, this study has laid the foundation for its further fine-tuning while it is still in its pilot phase and before it goes national. It is instructive that respondents believe that banks are stumbling blocks to the policy especially in the way they manage their alternative channels. The indications also emerged as to why people do not patronize

alternative channels and even why ATM is the dominant channel. Other suggestions on what the various stakeholders can do to improve the policy are also contained herein and this is the beauty of this probably first empirical study on cashless banking in Nigeria. It is also obvious that the CBN and other relevant authorities are in for more 'stress' in this policy because from the responses, Lagosians are not excited about the programme and there are likely be some short-cuts being adopted by the customers and their bankers. All said and done, the CBN must address the peoples' fears and challenges' as a way of driving the programme forward

The banks, beyond improving their cashless channel operations, should also share the gains of these programmes with their customers in the form of lower charges and other enticements. The 'free ATM every time in every bank' introduced by Diamond bank and the 'pay as you go ATM package' introduced by UBA are steps in the right direction but these are still tokenistic.

Going forward, further studies should be spread nationwide and some models of social change should be adopted to analyse the policy and recommend specific policy options. It is also important to establish the shortcuts which people use to avoid the sledgehammer inherent in the cashless policy, especially, the charges and the cash thresholds.

References

- [1] S.Adeoye, quoted in N. Usukuma, & H. Otalor [2012] Cashless Nigeria: How would it affect brand activities: *Guardian*, 2012, March 10th p47
- [2] AGIS Consulting, The future of cash; quoted in Lee, 2008
- [3] Australian Retailers Association, Annual retail survey, 2011
- [4] N. Barbaroux, Wicksell & Woodford: a cashless economy or a moneyless economy/ History of Economic Society, 2007 Annual Conference, Fairfex, Virginia
- [5] [BusinessDay Cashlite Lagos: manufacturers press CBN for Infrastructure audit before implementation .2012, March 12th p1
- [6] N. Chiejina, Court rules in favour of cashless policy. *The nation*, 2012, June, 29th p12
- [7] Central Bank of Nigeria, *Annual Reports for the year ended December*, 2011. Abuja, CBN, 2012
- [8] C. Costa, and De Paul Grauwe .Monetary policy in a cashless society. SUREF Meeting, Brussels, 2001, 25-27th October
- [9] R. Gittins, The lure of cashless economy Sydney Morning Herald, 2004, 21st July, p1
- [10] G. Iyatse, Poor e-payment systems threatens cashlite policy. *Guardian*, 2012March 12th p3
- [11] S. Laidler, *Theoretical fundamentals of monetary policy*". Bank of Finland Conference on Open Market Operations, 2005
- [12] M. Lee, *The long term future of cash.* ATM, Debit and Prepaid Forum, Sheraton Whitehorse Pass, Chandler AZ, 2008
- [13] Ik. Muo,Towards A cashless Society: A Common sense, Cash-back strategy BusinessDay, 2011 August 30 p13
- [14] C. Nwodo, Still on the cash limit Thisday, 201127th July back age
- [15] K. Regan, [2007] The new cashless economy. E-Commerce Times, 2007, 24th March http://www.ecommercetimes.com/story/546466/html
- [16] L.S. Sanusi. Presentation before the Nigerian House of Representatives, 2011a July

- [17] L.S. Sanusi, Press Conference, 2011b, 24th May
- [18] L. S. Sanusi, *Cashless policy in Nigeria: Issues, challenges and prospects.*17th CBN seminar for journalists, Akure, 2012, July 21st
- [19] D.D.G Swartz, R.W, Hahn, and F.A. Layne *The economics of a cashless society: An analyses of cost and benefit of payment instruments*". AEI-Brookings Joint Center for Regulatory Studies, 2004
- [20] C. Umeano, Press Conference, 2012, June 8th;
- [21] N. Usukuma, &H. Otalor, "Cashless Nigeria: How would it affect brand activities", *Guardian*, 2012, March 10th p47
- [22] T. Zhu, and E. Maenner, [2009]. *Noncash payment methods in a cashless society*. Mimeograph, 2009, August.