



AN EMPIRICAL EVALUATION OF STUDENTS' WILLINGNESS TO ADOPT CASHLESS ECONOMY IN NIGERIA

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Abstract: A cashless economy is an environment in which money is spent without being physically carried from one person to the other. This makes financial transactions possible through intelligent electronic devices such as Computers, Personal Data Assistants (PDAs), Mobile Phones), Point of Sales Terminals (PoS), Automated Teller Machines (ATMs), and Debit Cards etc. This research focuses on empirically evaluating students' willingness to adopt the so much talked about cashless economy in Nigeria, which is perceived as a way of fast-tracking the Nigerian economy so as to be among the first 20 world economies come 2020. The study used structured questionnaire as a means of data collection and the collected data were analyzed using simple percentage procedure. The results indicate that: 92.2% of the students are already aware of the policy and majority agree that the policy will help fight against corruption/money laundering and reduce the risk of carrying cash and can also foster economic growth. However, an average of 59.08% of the students agreed that problems of cyber fraud, limited point of sales, operational inefficiency of the existing cashless payment systems and inadequacy of needed ICT based infrastructure can hinder the implementation of cashless economy policy which indicates their reluctance towards adopting the policy despite its perceived benefits.

Keywords: Cashless, ICT, ATM, PoS

1. INTRODUCTION

Recently, the Nigerian financial sector has witnessed an outcry for a shift from cash-based economy to cashless economy. This is fast becoming a major concern for governments, Non-Governmental Organizations (NGOs) and companies focused on expanding financial access to the underserved (Adekoya, 2012). Recent statistics show that nearly 2.5 billion people (almost half the world's adult population) do not have access to formal financial services (Obi, 2011). Without the operation of basic payments and savings accounts, money is often kept in cash at homes and then moved around from person to person, drastically increasing the risk of theft or loss. Even a task as simple as paying bills in person and via cash can be unsafe, costly and time consuming. The implications of this financial exclusion are significant and far-reaching, reinforcing the cycle of poverty and slowing economic progress (Lebona, 2011).

According to the Central Bank of Nigeria (CBN), the new cash policy was introduced for a number of key reasons, which include; Driving the development and modernization of our payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies in the world by the year 2020. An efficient and modern payment system is positively correlated with economic development, and is a key enabler for economic growth. Reducing the cost of banking services (including cost of credit) and driving financial inclusion by providing more efficient transaction options and greater reach and to improve the effectiveness of monetary policy in managing inflation and driving economic growth. In addition, the cashless policy aims to curb some of the negative consequences associated with the high usage of physical cash in the economy, including: high cost of cash: high risk of using cash, high subsidy, informal economy and inefficiency and corruption (Central Bank of Nigeria Website, 2011).

The influence of Information Technology (IT) on the successful implementation of cashless economy cannot be overemphasized. According to Dugeri (2013), a cashless economy is an environment in which money is spent without being physically carried from one person to the other. The first issue in the cashless economy is the issue of electronic purse. This is electronic information that is transmitted to a device which reveals the information about how much a person has stored in the bank and how much he can spend (Obi, 2011). The move to use electronic cash, commonly referred to as "cashless" however, has its own challenges, which in Nigeria, appear to be made more noticeable by the perennial problem of inadequate physical and social infrastructure. The introduction of the policy in Nigeria therefore brings up issues that touch on security, privacy, crime and computerization (Dugeri, 2013). Societal acceptance of the policy is therefore critical to its sustenance or the tendency to rebel against it by the common man on the street becomes imminent. However, as the financial institutions have implemented such things as debit cards, credit cards, internet banking, etc. (Okonji, 2012). This has slowly brought society into the acceptance zone whereby another step could be taken. Without society being able to understand the pros and cons of electronic cash, the full benefit of the cashless society may never be realised (Dugeri, 2013). Against this backdrop, the study aims to investigate and analyse the willingness of students to adopt cashless economic policy recently introduced in Nigeria. In order to

achieve this, this study is divided into five sections. Following this introduction, Section 2, examines existing literature on cashless economy, Section 3, presents the methodology employed in collecting and analysing data, Section 4, presents an analysis of the collected data; and Section 5, deals with the conclusion and recommendations drawn up from the study.

2. REVIEW OF RELEVANT LITERATURE

Overview of Cashless Economy

Money is often described as having three functions: (i) a unit of account function, (ii) a medium-of-exchange function, and (iii) a store-of-value function. In a cashless economy, the third is not operative and probably, neither is the second. Cashless economy does not refer to an outright absence of cash transactions in the economic setting but one in which the amount of cash-based transactions are kept to the barest minimum. It is an economic system in which transactions are not done predominantly in exchange for actual cash (Daniel, Swartz and Fermar, 2004).

A cashless society possesses the following characteristics. All the money used is issued by private financial institutions (banks, and possibly other firms). It is conceivable that the central bank continues to operate like other banks, issuing its own deposits that could be used as money in the same way as other bank deposits are. However, in that case the central bank has no monopoly in the issue of money. In a cashless society the unit of account (for example, dollar, euro) remains a national affair and is provided by the state. The followings among others enhance the functioning of cashless economy; electronic finance, electronic banking, electronic money, electronic brokering, electronic exchanges etc. In a modern economy, the use of noncash payment methods such as cards (credit and debit) dominates the use of cash in payments (Yaqub, Bello, Adenuga and Ogundeji, 2013).

The card based payment system has several players. On one hand, are the providers of the card based payment system, first of which is the card companies like MasterCard and Visa who provide their payment network for the system to function. The second set of providers is the banks that act as acquirers for merchants and issuers for cardholders and reach the card payment services to the ultimate users. For these two parties, the card payment system is an income generating initiative and they are motivated to run the system as they are able to generate adequate profits out of their operations. On the other side of the system are the users, both merchants and cardholders. The benefits these two players derive from the system are manifold the convenience of electronic transactions, the ease of credit availability, increased sales, increased purchasing power, to list a few. Since they are the end users of the convenience the card payment system generates, they are the ones who bear the cost of the system. Apart from these four players there is the regulator of the payment system, usually the central bank of the country. The card based payment system cannot function in absence of any of its players.

The global volume of non-cash transactions totalled 260 billion in 2009 (Yaqub, et al, 2013), after sustained average annual gains of 6.8% since 2001. The outright

volume of these payments only remains heavily concentrated in developed markets. Developing countries are just improving their payments infrastructures, enabling wider adoption and greater usage of non-cash means and channels. They also tend to be open to innovations that can broaden their still-nascent base of users (Yaqub, et al, 2013).

However, the global use of cash payment is still widespread, especially for low-value retail transactions. But while cash may be convenient, it makes taxation less transparent, and it is costly to distribute, manage, handle and process. It therefore follows that; cash as a mode of payment is an expensive proposition for any government. As a result, many governments are seeking to reduce these costs and encourage the use of non-cash payment means. The Nigerian economy is heavily cash oriented in its transaction of goods and services and this is not in line with global trend, considering Nigeria's ambition to be amongst the top 20 economies of the world by the year 2020.

The alternative means of payment are as follows:

1. **Cheques;** there is an expected surge in the use of cheques. However, encashment of third-party cheques across the counter is prohibited and all cheques drawn in favour of any beneficiary other than the account owner must be presented through CBN clearing house. Sequence to that, the value on cheques must not exceed N10million.

2. **Bank drafts and other bank instruments:** bank drafts will become the toast of many merchants for big ticket transactions not more than N10million. This is because bank draft unlike personal cheques in normal Nigerian parlance, cannot bounce except if they are fraudulent. However, they cannot be paid across the counter and will still be subject to the three days clearing rule of CBN for cheques.

3. **Automated Teller Machines (ATM):** ATM will be used much frequently for making variety of online payments such as utility bills, T.V subscriptions, GSM recharges, etc. Customers are advised to keep their ATM cards (Debit and Credit) safe and never to divulge their PINs.

4. **The Nigerian Interbank Settlement Scheme (NIBSS) Funds Transfers:** The Nigerian Interbank Settlement Scheme is an online platform where banks exchange value thereby enabling the performance of interbank transfers such as National Electronic Fund Transfer (NEFT) and Nigeria Inter-Bank Settlement System (NIBSS) instant transfer of funds between banks for single or multiple beneficiaries for individual amounts not exceeding N10million. NEFT transfers, once effected works with the next available clearing session of CBN and is received in the beneficiary's account the same day or next working day, but NIBSS instant payments are immediate.

5. **Real Time Gross Settlements (RTGS):** Real Time Gross Settlements is used to transfer sums above N10million in favour of a single beneficiary. It is used for big ticket transactions which must have been effected before noon for most banks if the funds are to reach the recipient bank the same day.

6. **Mobile Money:** this is a product that enables users to conduct funds transfers, make payments or receive balance enquiries on their mobile phones.

7. **E-transfers:** refers to electronic transfers which can be affected via the internet on PCs, laptops and other devices. Bank customers who have subscribed to internet banking can do basic banking transactions via the web.

8. **Point of Sale (POS) Terminal:** POS terminals are deployed to merchant locations where users swipe their electronic cards through them in order to make payment for purchases or services instead of using raw cash. As the POS terminals are online real-time, the customers bank account is debited immediately for value of purchases made or services enjoyed (Okoye, 2013).

Introduction of Cashless Economic Policy in Nigeria

At the dawn of January 1, 2012, the pilot scheme of mobile money, one of the financial services introduced by the Central Bank of Nigeria, via a CBN circular Ref. No. COD/DIR/GEN/CIT/05/031 dated 20th April, 2011, to achieve a cashless economy took off in Lagos, the commercial nerve centre of the country. Other financial services under this payment platform are consumer accounts information and updates, alerts, which have been in existence but not widely subscribed to by account holders. Payment of bills, person-to-person transactions and remittances in different forms also form part of the cashless economy drive. With the introduction of the mobile payment, Nigeria is only keying into a fast evolving global payment system. The mobile money platform is a technology driven payment system that will open up several other business opportunities in the economy (Dugeri, 2013).

Essentially, mobile money payment system allows users make payments with their GSM phones. It is a savings and transfer system that turns GSM phones into a savings account platform, allowing the owner save money in it and from which withdrawals or transfers could be made. Under the payment system, customers could do their normal basic financial transactions on a daily basis by making payments for goods and services or by engaging in person-to-person transfer directly on their GSM phones. For instance, the system also allows for payment to be made through a mobile phone after purchases have been made at a supermarket or shopping mall. The shop owner in turn, receives instant payment electronically. Through the system, users can also pay utility bills, school fees, flight and hotel bookings, and house rents, among other transactions, using a mobile phone device. One important thing about mobile money is the fact that it thrives on agency network, thereby taking traditional banking and its cumbersome processes in the cities to the streets in sub-urban areas where accredited mobile money agents also operate (Dugeri, 2013).

The cashless Nigerian society, when fully implemented, is expected to have the following benefits:

- Reduction in money laundering
- Check on terrorist financing

- Effectiveness of the monetary policy
- Creation of more employment opportunities in the financial sector
- Provision of evidence against bribe givers and takers, especially the civil servants and politicians.
- Growth in the real sector of the economy. This is because credit will be available for investors (Lebona, 2011).

According to the nation’s apex bank, CBN, the new cashless policy is introduced into the Nigerian economy for the following reasons:

- To drive development and modernisation of Nigeria’s payment system in line with Vision 2020 goal of being amongst the top 20 economies by 2010.
- To reduce the cost of banking services (including cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach.
- To improve the effectiveness of monetary policy in managing inflation and driving economic growth.
- In addition, the policy aims to curb some of the negative consequences of high usage of cash, including high cost of handling (estimated to be about N192 billion per annum), high risk of usage and high subsidy.

However, as full implementation of penalty charges on deposit and withdrawal limits takes off, the various e-channels and applications like Automated Teller Machines (ATM), Point-of-Sale (PoS) terminals and mobile banking platforms that are supposed to facilitate electronic transactions have remained largely deficient. There are still fears that ATMs and PoSs are yet to attain the desired efficiency to drive a cashless economy, maintain a working network and constant connectivity (Nwanze, 2012). This development is indeed worrisome, considering the centrality of these electronic banking platforms to the cashless economy drive of the CBN and business owners.

3. METHODOLOGY

In this study, the research design used is the descriptive survey method. The population of this study is the entire students of Osun State Polytechnic, Iree. A sample size of 1200 made up of 200 students from each of the six faculties of the institution was selected using the convenience sampling procedure. The sample includes both full-time and part-time students since they are the ones that can respond to determine the reliability of the numeracy of potential adopters knowing fully that an average Nigerian student can use mobile phones. The method used in collecting data for this study is structured questionnaire. 1200 copies of the questionnaire were personally administered out of which 1080 copies were retrieved in usable form. This represents a response rate of 90%. The responses from the respondents were collated and analysed using the simple mathematical percentage procedure.

4. DATA ANALYSIS

The responses to the questions in the questionnaire provided the basis for the following analysis. Table 1, below presents responses to posers such as the respondents’

awareness and preference for the cashless economy and its introduction in Nigeria.

Table 1: Knowledge of Cashless Economy to students

| | | Frequency | Percent |
|--|-------------------|-------------|------------|
| I have heard about Nigerian’s Cashless Economy? | Strongly Agree | 432 | 40 |
| | Agree | 564 | 52.2 |
| | Undecided | 36 | 3.3 |
| | Disagree | 36 | 3.3 |
| | Strongly Disagree | 12 | 1.1 |
| | Total | 1080 | 100 |
| Cashless Economy should be introduced in Nigeria | Strongly Agree | 360 | 33.3 |
| | Agree | 300 | 27.8 |
| | Undecided | 180 | 16.7 |
| | Disagree | 132 | 12.2 |
| | Strongly Disagree | 48 | 4.4 |
| | Missing | 60 | 5.6 |
| | Total | 1080 | 100 |

Source: Field Survey

Table 1 above shows that there is a high degree of awareness among the students populace about cashless economy. 92.2% of the respondents are aware of cashless economy in Nigeria. The reason for this high rate of awareness may not be unconnected with the nature of the sample selected. The study considered academic community which means, by all standards they are expected to be fairly aware of the happenings in the society. Few respondents however show a strong dislike for the cashless economy. While 61.1% of the respondents prefer that cashless economy should be introduced in Nigeria. The following reasons might have accounted for the low enthusiasm about its immediate introduction: the lack of preparedness for the system, the nation having other problems to solve now, freedom to use cash to any amount, inadequate technology, and that the flow of money will be hampered. Table 2 below presents the perceptions of benefits of the cashless economy by the respondents.

Table 2: Perceived Benefits of Cashless Economy

| | | Frequency | Percent |
|---------------------------------------|-------------------|-------------|------------|
| It would reduce risk of carrying cash | Strongly Agree | 456 | 42.2 |
| | Agree | 444 | 41.1 |
| | Undecided | 60 | 5.6 |
| | Disagree | 72 | 6.7 |
| | Strongly Disagree | 48 | 4.4 |
| | Total | 1080 | 100 |
| It would prevent money laundering. | Strongly Agree | 276 | 25.6 |
| | Agree | 336 | 31.1 |
| | Undecided | 216 | 20 |
| | Disagree | 108 | 10 |
| | Strongly Disagree | 132 | 12.2 |
| | Missing | 12 | 1.1 |
| | Total | 1080 | 100 |
| It can reduce corruption | Strongly Agree | 180 | 16.7 |
| | Agree | 276 | 25.6 |
| | Undecided | 228 | 21.1 |
| | Disagree | 240 | 22.2 |
| | Strongly Disagree | 144 | 13.3 |
| | Missing | 12 | 1.1 |
| | Total | 1080 | 100 |

| | | | |
|----------------------------------|-------------------|-------------|------------|
| It can stimulate economic growth | Strongly Agree | 264 | 24.4 |
| | Agree | 396 | 36.7 |
| | Undecided | 252 | 23.3 |
| | Disagree | 108 | 10 |
| | Strongly Disagree | 36 | 3.3 |
| | Missing | 24 | 2.2 |
| | Total | 1080 | 100 |

Source: Field Survey

Table 2 shows that the most anticipated benefit of the cashless economy to students in Nigeria is its ability to reduce the risk of carrying cash around. 83.3% of the respondents believe that the most significant benefit of the cashless economy is reducing the risk of carrying cash as that is easily amenable to armed robbery, theft and misplacement. In the same spirit, 56.7% of the respondents believe that the cashless economy will help fight against money laundering as the money flowing through the system can easily be traced and followed. 42.3% of the respondents believe that the

cashless economy has something to contribute towards reducing corruption. This is because as significant amount of cash cannot change hands any more people will be forced to do things the proper way. Another envisaged benefit of the cashless economy is that it will stimulate economic growth as monies hitherto hidden in other illegitimate areas will now be freed up. 61.1% of the respondents believe that with the immergence of cashless economy, economic growth would be experienced. This is in line with the assertion that an efficient and modern payment system is positively correlated with the economic development and serves as a key enabler for economic growth (Maitanmi, Awodele, Ogbonna & Osundina, 2013). From the regulatory angle, this policy will also create an environment for more effective monetary policy implementation, create a more stable pricing system and curb the menace of inflation which is a determinant to the growth and development of any economy. Table 3 below presents responses to the question on the envisaged problems with the cashless economy.

Table 3: Perceived Problems of Cashless Economy

| | | Frequency | Percent |
|---|-------------------|-------------|------------|
| Limited point of sale | Strongly Agree | 240 | 22.2 |
| | Agree | 456 | 42.2 |
| | Undecided | 216 | 20 |
| | Disagree | 132 | 12.2 |
| | Strongly Disagree | 24 | 2.2 |
| | Missing | 12 | 1.1 |
| | Total | 1080 | 100 |
| Increase in ATM snatchers | Strongly Agree | 348 | 32.2 |
| | Agree | 324 | 30 |
| | Undecided | 180 | 16.7 |
| | Disagree | 180 | 16.7 |
| | Strongly Disagree | 24 | 2.2 |
| | Missing | 24 | 2.2 |
| | Total | 1080 | 100 |
| Increase in Internet fraud | Strongly Agree | 288 | 26.7 |
| | Agree | 372 | 34.4 |
| | Undecided | 240 | 22.2 |
| | Disagree | 132 | 12.2 |
| | Strongly Disagree | 48 | 4.4 |
| | Missing | 0 | 0 |
| | Total | 1080 | 100 |
| Existing cashless payment systems are inefficient | Strongly Agree | 204 | 18.9 |
| | Agree | 360 | 33.3 |
| | Undecided | 108 | 10 |
| | Disagree | 348 | 32.2 |
| | Strongly Disagree | 60 | 5.6 |
| | Missing | 0 | 0 |
| | Total | 1080 | 100 |
| Inadequacy of needed ICT infrastructure | Strongly Agree | 240 | 22.2 |
| | Agree | 360 | 33.3 |
| | Undecided | 60 | 5.6 |
| | Disagree | 300 | 27.8 |
| | Strongly Disagree | 120 | 11.1 |
| | Missing | 0 | 0 |
| | Total | 1080 | 100 |

Source: Field survey

Table 3 above shows that there are some problems which the respondents are envisaging to come with the cashless economy which may be informing their apparent unwillingness and lack of enthusiasm about the cashless economy. Limited points of sale came first as seen above, 64.4% believe that the limited points of sale

will hinder the free implementation of cashless economy. The researchers strongly believe this point to be true, except the government expedite actions on improving the existing infrastructure of the point of sale to as many registered shop owners as possible otherwise, there would be a challenge. 62.2% of the respondents believe that

ATM snatchers will be on the rise because physical cash may not be readily available as usual. Internet fraud is one of the major problems to be tackled in the cashless economy as 61.1% of the respondents see exposure to fraudulent activities as a big problem to the actualization of cashless economy. Another major problem envisaged is the fact that the existing cashless payment channels are not very efficient as attested to by 52.2% of the respondents. Finally, 55.5% of the respondents believed that there is no adequate provision of ICT infrastructure to support the successful implementation of cashless economy.

5. CONCLUSION AND RECOMMENDATIONS

Based on the above stated analysis, much has already been done on the issue of awareness of cashless economy and that a sizeable proportion of the students are actually awaiting the introduction of the cashless economy. Also, most of the students actually agree with the government on the usefulness of the cashless economy. It is agreed that the cashless system will be helpful in the fight against corruption and money laundering. One most significant contribution of the cashless economy is that it is expected to reduce the risk associated with carrying cash. Since most transactions will now be settled electronically, people will have less need to move around with cash and therefore, loss of cash, theft and armed robbery will drastically reduce. One major problem in the working of the cashless economy is internet related fraud. Nigeria is a major focal point of electronic fraud and this can only be expected to increase as we march into the cashless economy. A country as large as Nigeria should have a signed law preventing cybercrime. The existing cashless payment systems already in use are yet to be highly efficient which has to do with the inadequacy of supporting infrastructure especially those that are ICT based. It is concluded that despite the fact that the students are aware of the cashless economy policy and its benefits, some of which include; increased economic growth, greater financial inclusion, faster access to capital; reduce risk of cash related crimes among others, a greater percentage of the student populace are sceptical about adopting the cashless economic policy due to the believe that the currently available cashless payment systems are not yet highly efficient and that the necessary ICT based infrastructures that will be needed to drive its implementation are presently inadequate. Since it is imperative for Nigeria to move in the same direction with the world by moving from cash-based to cashless economy. The following measures are recommended to achieve smooth implementation of the cashless system in Nigeria, and to make people willingly adopt it:

1. There is the need to intensify the public enlightenment programme about the cashless system so that everybody will be acquainted with the system before its full implementation.
2. Concerted efforts should be made by researchers and ICT practitioners to design an internet security framework to check internet fraud so that the public can be assured and protected against cyber-attack and fraud.

3. There should be a careful study of the system to determine the number of point of sales terminals that will ensure its smooth running in Nigeria so as to prevent unnecessary friction in the implementation of cashless policy.
4. There should be adequate legislation on all aspects of the operations of the cashless system so that both the operators of the system and the public can be adequately protected.
5. There should be improvement in the provision of ICT infrastructure required to effectively drive the cashless system and improve the operational efficiency of cashless payment systems.

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