

## **The Cashless Policy in Nigeria: Prospects and Challenges**

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### **Abstract**

*In Nigeria as it is in many developing countries, cash is the main mode of payment. This makes the country to be heavily cash-based economy. However, the cost of cash to Nigeria financial system is high and increasing. It is in this regard that the Central Bank of Nigeria (CBN) introduced the cashless policy with the objective of promoting the use of electronic payment channels instead of cash. This study seeks to point out the prospects and challenges of such policy, in a developing economy like Nigeria. The study presented useful recommendations for policy makers. In conclusion, the study posits that the move towards a cashless Nigeria brings with it numerous benefits but there is still the need to create more awareness to entice the numerous unbanked Nigerians into the banking system.*

### **1. Introduction**

One of the prerequisite for the development of national economy according to Ajayi and Ojo (2006) is to encourage a payment system that is secure, convenient, and affordable. In this regard, developed countries of the world, to a large extent, are moving away from paper payment instruments toward electronic ones, especially payment cards (Humphrey, D. B. 2004). In these countries, for instance, it is possible to pay for a vending machine snack by simply dialing a number on one's phone bill.

In recent times, the mobile phone is increasingly used to purchase digital contents (e.g. ringtones, music or games, tickets, parking fees and transport fees) just by flashing the mobile phone in front of the scanner at either 'manned' or unmanned point of sales (POS). In Nigeria, as it is in many developing countries, cash is the main mode of payment and a large percentage of the populations are unbanked (Ajayi and Ojo (2006). This makes the country to be heavily cash-based economy.

Argument in favour of cash-based transactions abounds in the literature. A study conducted in UK in march 2010 (the future of cash in UK) argued that cash differs from other payment instruments in the following regards; it circulates, it is always valuable, it provides full and final settlement of a transaction, it allows for anonymity, once issued, the circulation of cash is uncontrolled, it is regarded as public good by its users. However, the cost of cash to Nigeria financial system is high and increasing; the cost was very close to fifty billion naira in 2008 (CBN, 2012).

Recently, it has been revealed by the CBN that the direct cost of cash is estimated to reach a staggering sum of one hundred and ninety two billion naira in 2012. Other challenges resulting from high-cash usage among others include; robberies and cash-related crime, revenue leakage arising from too much of cash handling, inefficient treasury management due to nature of cash processing, high subsidy, high informal sector etc.

Against these backdrops, the CBN introduced the cashless policy in April 2011 with the objective of promoting the use of electronic payment channels instead of cash. Presently, the CBN is conducting a pilot scheme of the cashless policy in Lagos, which commenced in January 1<sup>st</sup> 2012. So far, implementation of the policy in Lagos has not gained expected traction. Hence a rollout across the country has been substituted with phased implementation in Port Harcourt, Kano, Aba and the Federal capital territory (CBN 2012). This study therefore aims at two major objectives, first to look into the prospects of cashless policy in Nigeria and second its challenges. The study proceeds as follows. Section 2 offers an overview of cashless policy and some stylized facts on non-cash payment in Nigeria. In sections 3, a brief review of literature is undertaken. The study expatiated on the prospects of the cashless policy in Nigeria in section 4. Section 5 discusses the challenges of the policy. Recommendation for policy makers and conclusions are presented in section 6.

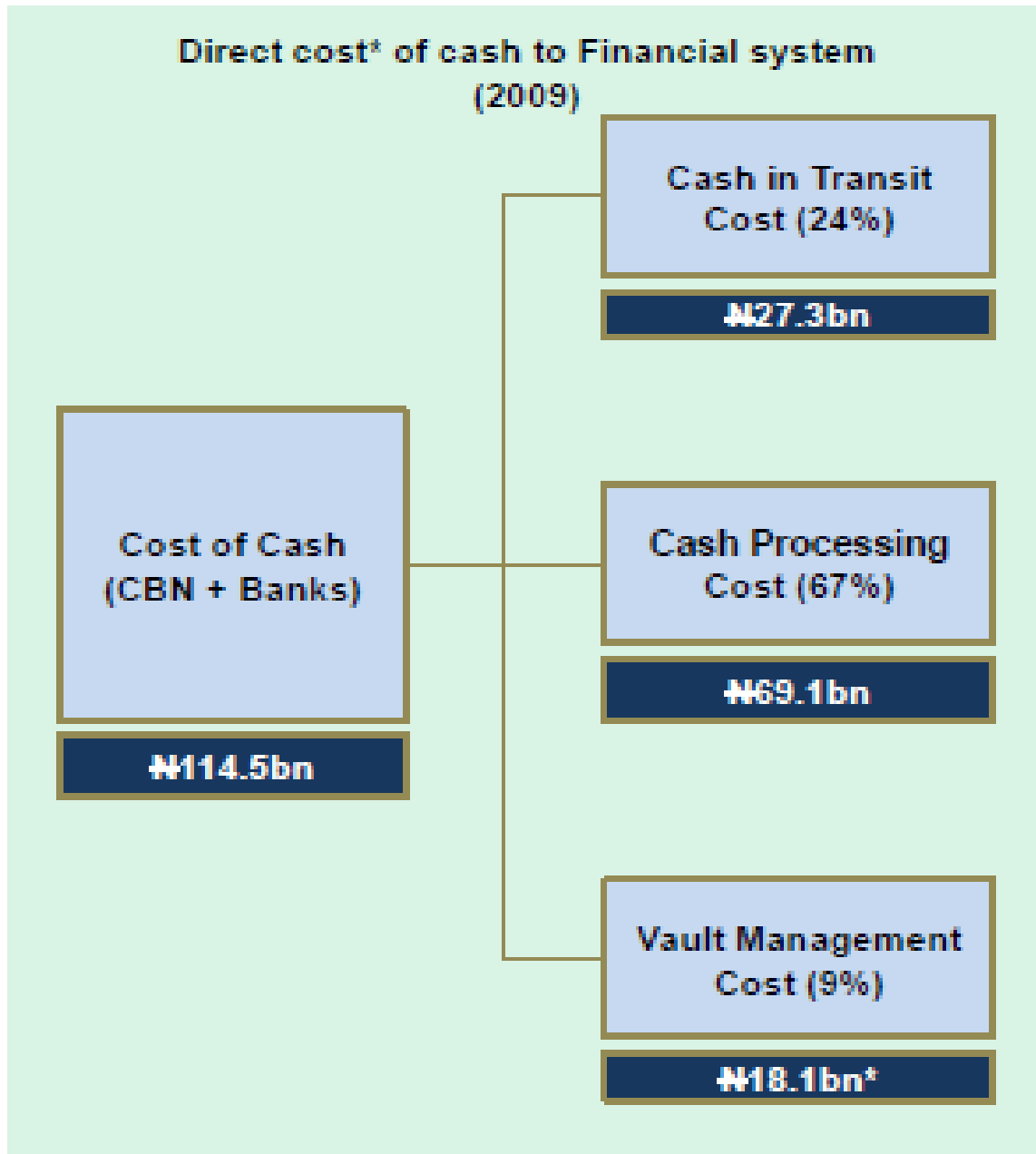
## **2.0 Overview of Cashless Policy**

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, D. G., R. W. Swartz, and A. L. 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 (e.g. Dollar, euro) remains a national affair and is provided by the state. The followings among others enhance the functioning of cashless economy; e-finance, e-banking, e-money, e-brokering, e-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.

The card based payment system has several players. On the 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 are 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 totaled 260 billion in 2009 ( world payments report 2011), 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 (world payments report 2011).

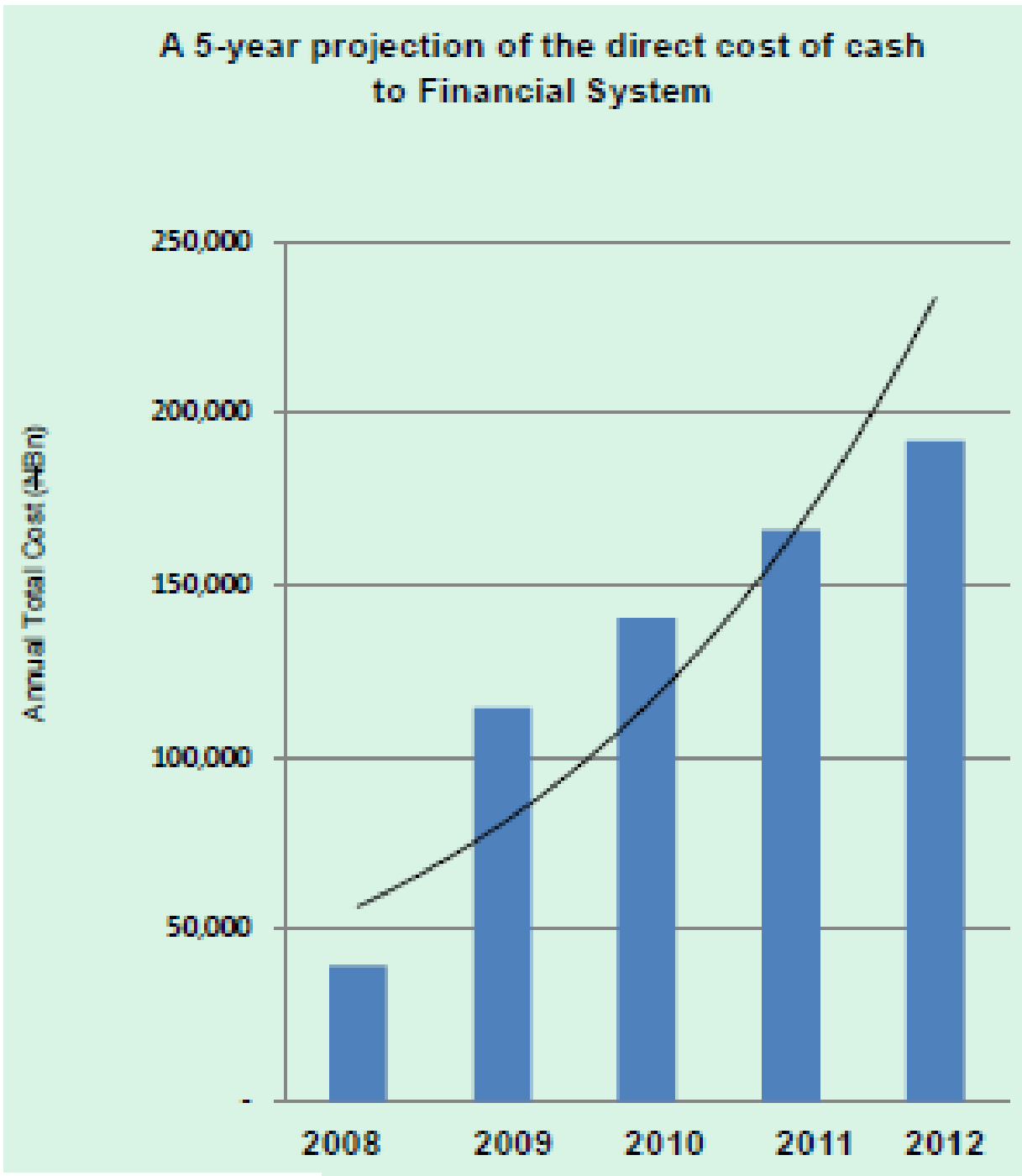
However, the global use of cash payment is still endemic, especially for low-value retail transactions. But while cash may be convenient, it makes taxation less transparent, and it is costly to distribute, manage, handle and process. It therefore follows that; cash as a mode of payment is an expensive 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 too 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. For instance an overview of central bank of Nigeria policies on cash management in Nigeria's financial system is high and increasing; direct cost of cash is estimated to reach one hundred and ninety two billion naira in 2012 (CBN 2011). See the figure below;

**Figure1: Direct cost of cash to financial system in Nigeria**



Source: Central Bank of Nigeria Annual Report 2011

**Figure 2: Direct Cost of Cash to Financial System in Nigeria**

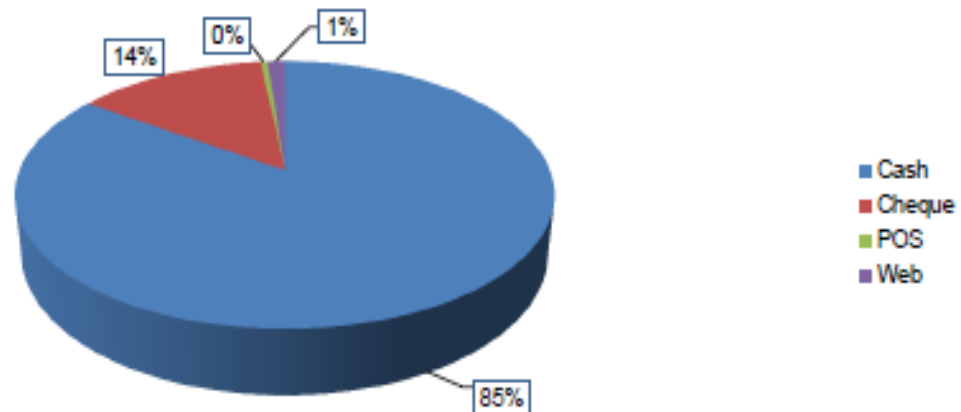


Source: Central Bank of Nigeria Annual Report 2011

As it is now , cash transactions in Nigeria represent over ninety –nine percent of customer activities in Nigerian banks today , see the table below;

**Table1: Payment Channels in Nigeria in 2011**

Payment Channel	Transaction Volume
<i>ATM Withdrawals</i>	<i>109,592,646</i>
<i>OTC Cash Withdrawals</i>	<i>72,499,812*</i>
Cheques	29,159,960
POS	1,059,069
Web	2,703,516



Source: Central Bank of Nigeria Annual Report 2011

The new cash policy was introduced for a number of key reasons, including:

1. To drive development and modernization of our payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies by the year 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.

In addition, the cash 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:** 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 the case of fire and flooding incidents.
- **High subsidy:** CBN analysis showed that only 10percent of daily banking transactions are above 150k, but the 10percent account for majority of the high value transactions. This suggests that the entire banking population subsidizes the costs that the tiny minority 10percent 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.

## 2.1 Stylized facts

Nigeria is largely a cash-based economy with large percentage of funds residing outside the banking sector (66%) as against the developed world where the money in circulation is for example 4 percent in US and 9 percent in U.K. (Ovia 2002). The cash-based economy is characterized by the psychology to physically hold and touch cash ;(a culture informed by ignorance, illiteracy, and lack of security consciousness and appreciation of the merit of digital payment ). The currency in circulation in Nigeria (CIC) at end of December 2011 stood at N1,565.76 billion, representing an increase of 13.6 per cent over the level in 2010.The growth in CIC reflected the high dominance of cash in the economy as well as an increase in economic activities. The denominational breakdown of the currency in circulation between 2007 and 2011 as well as currency in circulation are as shown below:

**Table3: Currency in Circulation in Nigeria 2007-2011**

	2007		2008		2009		2010		2011	
	Volume (million)	Value (₦ billion)	Volume (million)	Value (₦ billion)	Volume (million)	Value (₦ billion)	Volume (million)	Value (₦ billion)	Volume (million)	Value (₦ billion)
<b>Coins</b>										
₦2	81.9	0.16	104.5	0.21	114.5	228.9	107.83	0.22	107.87	0.22
₦ 1	615.4	0.62	532.2	0.53	490.6	490.65	530.11	0.53	581.23	0.58
50k	738.3	0.37	463.1	0.23	454.5	227.26	434.48	0.22	529.72	0.26
25k	19	0.01	240.6	0.06	212	53	196.53	0.049	339.12	0.08
10k	2.2	0.0002	235.1	0.02	228.3	228.82	212.82	0.021	302.89	0.03
1k	0	0	51.2	0.0005	57.4	0.57	48.74	0.0048	12.75	0.08
<b>Sub Total</b>	<b>1,456.80</b>	<b>1.15</b>	<b>1,629.70</b>	<b>1.06</b>	<b>1,557.30</b>	<b>1,023.20</b>	<b>1,530.51</b>	<b>1.04</b>	<b>1,873.58</b>	<b>1.26</b>
<b>Notes</b>										
₦1000	264.4	264.4	572.9	572.91	584.4	584.39	663.76	663.7	959.45	959.45
₦500	707.2	353.6	801.9	400.93	852.8	426.4	1,027.78	513.89	726.22	363.10
₦200	1,256.00	251.3	571.6	114.32	491.9	98.38	501.27	100.25	621.75	124.31
₦100	494.9	49.5	323.6	32.36	350	35	341.12	34.11	507.90	50.77
₦50	351.3	17.6	228	11.4	344.9	17.25	782.27	39.11	777.94	38.89
₦20	823	16.5	827.3	16.55	769.5	15.39	752.65	15.1	788.67	15.77
₦10	355.9	3.6	283.2	2.83	285.5	2.85	680.61	6.81	789.13	7.89
₦5	579	2.9	533.1	2.67	720.5	3.6	837.93	4.19	865.38	4.33
<b>Sub-Total</b>	<b>4,831.70</b>	<b>959.4</b>	<b>4,141.60</b>	<b>1,153.97</b>	<b>4,399.50</b>	<b>1,183.27</b>	<b>5,587.39</b>	<b>1,377.16</b>	<b>6,036.43</b>	<b>1,564.50</b>
<b>Total</b>	<b>6,288.50</b>	<b>960.55</b>	<b>5,768.30</b>	<b>1,155.03</b>	<b>5,956.80</b>	<b>1,184.30</b>	<b>7,117.90</b>	<b>1,378.20</b>	<b>7,910.01</b>	<b>1,565.76</b>

Source: Central Bank of Nigeria Annual Report 2011

**Figure 4: The Trend of Currencies in Nigeria**



Source: Central Bank of Nigeria Annual Report 2011

Cash is an integral element that fuels that several vices in Nigeria. This is as illustrated below;

**Figure 5: Vices Associated With Cash Transaction in Nigeria**



**Source:** Central Bank of Nigeria Annual Report 2011

From the foregoing, an alternative payment channels will have considerable positive consequences on the Nigeria economy. To this end, the Nigerian financial system is witnessing a redirection, with the Central Bank of Nigeria's (CBN) latest effort called the Cashless policy initiative, which commenced with Lagos on January 1, 2012, as a pilot scheme.

Today, Nigeria electronic payment (e-payment) landscape is on a new threshold with banks, switching and transaction companies, vendors of Automated Teller Machine (ATMs), Point of sale (POS) and third party companies all jostling to expand the scope of market. For instance according to CBN reports; The volume and value of electronic card (e-card) transactions has increased significantly from 195,525,568 and N1,072.9 billion in 2010 to 355,252,401 and N1,671.4 billion, in 2011 reflecting an increase of 81.5 and 55.8 per cent, respectively. The increase was attributed to enhanced public confidence in electronic card payments

In addition, data on various e-payment channels from another CBN reports indicated that ATMs remained the most patronized, accounting for 97.8 per cent, followed by web payments, 1.0 per cent, Point-of-Sale (POS) terminals, and mobile payments, 0.6 per cent each. Similarly, in value terms, ATMs accounted for 93.4 per cent, web 3.5 per cent, POS 1.9 per cent and mobile payments, 1.2 per cent.

The number of ATMs stood at 9,640, while the volume and value of transactions amounted to 347,569,999 and N1,561.75 billion, at end-December 2011, respectively. These figures reflected increases of 86.7 and 63.7 per cent respectively over the volume and value of 186,153,142 and N954.04 billion, at end-December 2010. The volume and value of mobile payments increased by 215.6 and 185.8 per cent from 1,156,553 and N6.7 billion to 3,649,374 and N19.0 billion, respectively, at end-December 2011. The table below shows the market share in the e-payment market in Nigeria between 2008 to 2011

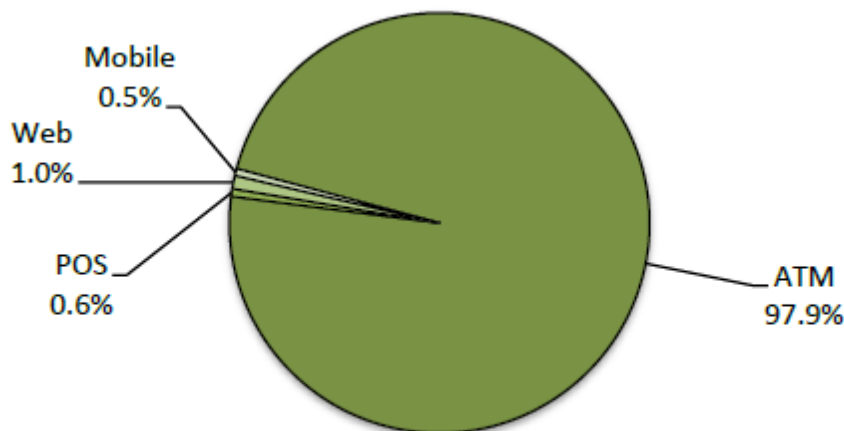
**Table 5: Market Share in the e-Payment Market in Nigeria**

<b>Table 5: Market Share in the e-Payment Market in 2008 - 2011</b>								
e-Payment	Volume (Millions)				Value (N ' Billion)			
Segment	2008	2009	2010	2011	2008	2009	2010	2011
ATM	60.1	109.6	186.2	347.6	399.7	548.6	954.0	1561.8
% of Total	91.0	95.3	95.1	97.9	9.5	85.0	88.9	93.4
Web (internet)	1.6	2.7	7.2	3.6	25.1	84.2	99.5	58.0
% of Total	2.4	2.3	3.7	1.0	5.7	13.1	9.3	3.5
POS	1.2	0.9	1.1	2.1	16.1	11.0	12.7	31.0
% of Total	1.8	0.8	0.6	0.6	3.7	1.7	1.2	1.9
Mobile	3.2	1.8	1.2	1.9	0.7	1.3	6.7	20.5
% of Total	4.8	1.6	0.6	0.5	0.1	0.2	0.6	1.2
<b>TOTAL</b>	<b>66.1</b>	<b>115.0</b>	<b>195.7</b>	<b>355.2</b>	<b>441.6</b>	<b>645.1</b>	<b>1072.9</b>	<b>1671.4</b>

Source: Central Bank of Nigeria Annual Report 2011

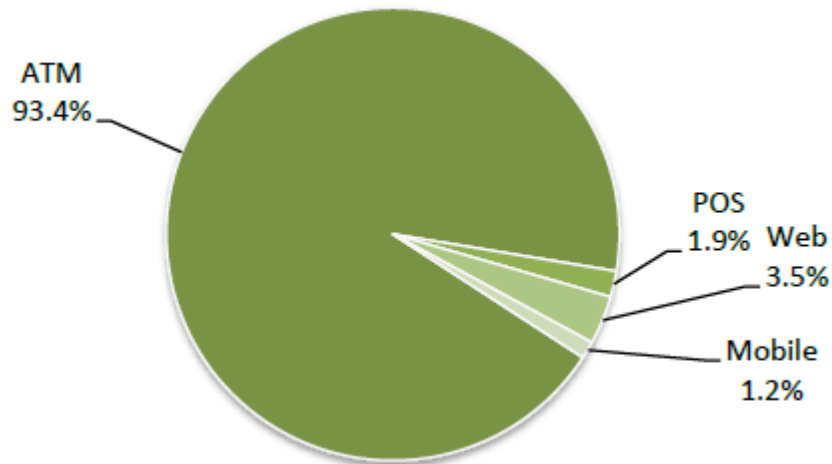
The figures below reveal the volume of electronic card-based transactions as well as the value of such in 2011, the year the cashless policy initiative was conceived;

**Fig.6: Volume of Electronic Card-Based Transactions in Nigeria in 2011**



Source: Central Bank of Nigeria Annual Report 2011



**Fig.7: Value of Electronic Card-Based Transactions in Nigeria in 2011**

**Source:** Central Bank of Nigeria Annual Report 2011

The descriptive analyses above show that Nigeria has been using electronic payment systems for many years now, and as such the country payment system is rapidly transiting to more and more IT based systems. Increased non-cash payments have implications that are not small. The payment system is a significant national infrastructure and is critical to the growth of the national economy just like telecommunication, electrical power, and transportation infrastructures are. Furthermore, an electronic payment system has the ability to track individual spending; to facilitate the design of products by the banks. This information is also useful to the government when making economic decisions. It logically follows therefore that efficient payment system is a prerequisite for the development of the national economy. A research work carried out by Visa Canada Association in collaboration with Global Insight (A leading economic and financial consulting firm) revealed that electronic payments provide transactional efficiency to consumers, merchants, banks and the economy. Electronic payments have contributed \$C 107 billion to the Canadian economy since 1983 and represents nearly 25% of the \$C 437 billion cumulative growth in the Canadian economy over the same period. Automating and streamlining electronic payments made from self-serve channels such as ATMs, branch office terminals and point-of-sale (POS) systems can reduce paper-based errors and costs.

An efficient payments system will depend less on cash, and has great potential to grow the national economy. According to (Cobb, 2005), efficient safe and convenient electronic payments carry with them a significant range of macro-economic benefits. "The impact of introducing electronic payments is akin to using the gears on a bicycle. Add an efficient electronic payments system to an economy, and you kick it into a higher gear. Add better-controlled consumer and business credit, and you notch up economic velocity even further."(Cobb, 2005). In Nigeria, moving from a society where 66% of cash is held outside of the banks to a cashless society is a big change. It is therefore an enormous challenge for the government, financial institutions, individuals and other stakeholders responsible to make the system achieve its economic benefits.

### **3. Brief Literature Review**

Literature on the cashless policies is rather scarce, but recently the topic has gained more attention both by central banks and academic researchers. In this section, this study review some existing studies as follows; Electronic Payments as argued by (Cobb, 2005) have a significant number of economic benefits apart from their convenience and safety. These benefits when maximized can go a long way in contributing immensely to economic development of a nation Automated electronic payments help deepen bank deposits thereby increasing funds available for commercial loans – a driver of all of overall economic activity. According to (Cobb, 2005), efficient safe and convenient electronic payments carry with them a significant range of macro-economic benefits. "The impact of introducing electronic payments is akin to using the gears on a bicycle. Add an efficient electronic payments system to an economy, and you kick it into a higher gear. Add better-controlled consumer and business credit, and you notch up economic velocity even further."(Cobb, 2005)

“While the high level of cash transactions creates an opportunity for the electronic payment industry, it also imposes a cost on local economies. Cash has to be minted, securely transported, counted and reconciled, kept secure and maintained for re-use time and time again. The per-payment cost is high, and will always remain high whereas the costs of electronic system are fixed. Once the infrastructure has been built, the costs per-transaction is very low” (Cobb, 2005).

When cardholders use their cards at the point of sale they are helping to keep money in the banking system. EPS can help displace shadow economies, bring hidden transactions into the banking system and increase transparency, confidence and participation in the financial system. (Cobb, 2005).

As also mentioned by Al Shaikh, 2005, there is a correlation between increase in point of sales volumes and rise in demand deposits. “Automated electronic payments act as a gateway into the banking sector and as a powerful engine for growth. Such payments draw cash out of circulation and into the bank accounts, providing low cost funds that can be used to support bank lending for investment – a driver of overall economic activity. The process creates greater transparency and accountability, leading to greater efficiency and better economic performance” (Al Shaikh, 2005).

In a similar narrative by Hord, 2005 electronic payment is very convenient for the consumer. In most cases, you only need to enter your account information -- such as your credit card number and shipping address -- once. The information is then stored in a database on the retailer's Web server. When you come back to the Web site, you just log in with your username and password. “Completing a transaction is as simple as clicking your mouse: All you have to do is confirm your purchase and you're done” (Hord, 2005).

Hord (2005) further emphasizes the fact that electronic payment lowers costs for businesses. The more payments that is processed electronically, the less money is spent on paper and postage. Offering electronic payment can also help businesses improve customer retention. “A customer is more likely to return to the same e-commerce site where his or her information has already been entered and stored” (Hord, 2005)

More than two thirds of all non-cash transactions payments in the United States are made electronically, with the biggest increase in electronic payments occurring between 2003 and 2006 according to US central bank. The central bank's non-cash payments study found that about 19 billion more electronic payments were made in 2006 than 2003. In assessing the role of central bank in a cashless society, Claudia and De Grauwe (2001) stressed that central banks gradually lose their monopoly position in the provision of liquidity combined with its subsequent small size which makes it hard to control the short-term interest rates. On the contrary, Marco and Bandiera (2004) argue that increased usage of cashless banking instruments strengthens monetary policy effectiveness and that the current level of e-money usage does not pose a threat to the stability of the financial system. However, it does conclude that central banks can lose control over monetary policy if the government does not run a responsible fiscal policy

Recent empirical studies such as Kriwoluzky and Stoltenberg (2010) attempted to estimate the cashless and monetary economy in US by employing Bayesian estimation techniques. The data set, which was split into two parts, ranged from first quarter 1964 to third quarter 2009, as done in Lubik and Schorheide (2004); Clarida et al (2000). Whilst treating GDP deflator, output per capita and real wages as observable, its findings suggest that interest rate policy was passive in the monetary but active in the cashless economy. According to Gali and Gambetti (2009), volatilities in output and inflation declined due to observed loss in the predictive power of money in a monetary economy. A similar conclusion was also reached by Stock and Watson (2002) , Kim and Nelson (1999) for most developed economies.

Cross country studies such as Humphrey et. al. (1996) analyzed patterns in the use of cash and other e-payment instruments in 14 developed countries, including the US. Whilst treating payment instruments as if they were traditional goods, the authors construct measures of the cost (analogous to prices) of various payment methods in order to study whether differences in cashless instrument usage across countries can be explained by differences in the relative prices of such instruments. The result showed that such price differences failed to determine the usage of e-banking instruments. In other words, the —convenience of using a particular instrument—a factor that is not measured --- may outweigh the price differences that users face (Carrow and Staten, 2000).

The introduction and increased use of electronic transfer systems has led to the predictions of a cashless society (Humphrey et al., 1996; Humphrey and Berger, 1990; Olney, 1999). The demise of cash and the emergence of a cashless society pose benefits as well as problems for a society.

#### ***4. Prospects of Cashless Policy in Nigeria***

For centuries, cash has served the primary role in day-to-day commerce, helping ordinary people trade their labor and products for the goods and services they need without cumbersome negotiations over bartering or exchanges. Yet slowly but surely, alternatives to cash have taken root and grown. The introduction and increased use of electronic transfer systems has led to the predictions of a cashless society (Humphrey et al., 1996; Humphrey and Berger, 1990; Olney, 1999). The demise of cash and the emergence of a cashless society pose a lot of benefits for the society,

These benefits are as highlighted below:

- **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.
- a secure cashless system can guarantee anonymity of legitimate users but also provides traceability about illegally issued cash or laundered money
- Cashless policy can help deepen bank deposits thereby increasing funds available for commercial
- The policy can also help trace double spending, and double spending protects content by exposing the double spender's identity, digital cash is a fool proof way of guarding against illegal redistribution of intellectual property and materials.
- Cashless policy can help displace shadow economies, bring hidden transactions into the banking system and increase transparency, confidence and participation in the financial system.
- Automated electronic payments, which is an integral part of cashless policy ,acts as a gateway into the banking sector and as a powerful engine for growth. Such payments draw cash out of circulation and into the bank accounts, providing low cost funds that can be used to support bank lending for investment – a driver of overall economic activity. The process creates greater transparency and accountability, leading to greater efficiency and better economic performance
- Promote Financial Inclusion by making it easier and more affordable for the unbanked and under-banked to access financial services.
- Reduce the over reliance on cash for transactions
- Encourage Financial Deepening and promote savings
- Reduce risks in Payments and Settlements

#### ***5. Challenges of Cashless Policy in Nigeria***

Cashless policy, despites its numerous benefits comes with its own challenges even in the developed world. This section looks at some these challenges with specific focus on Nigeria;

- Behavioural constraints: The fact that Nigeria is cash-based, people are accustomed to using cash for most of their transactions.
- Banks attitudes: Some banks in Nigeria are very conservative; they use very few innovative products and marketing techniques.
- Lack of confidence: the security issue is one of the major challenges in the development of-cashless policy in Nigeria.
- Low level of internet penetration and poorly developed telecommunication impede smooth development and improvement in e-payments and e-commerce.
- Lack of suitable legal and regulatory framework for e-payments: Nigerian current laws do not accommodate electronic contracts and signatures.
- Inadequate banking system
- Political and economic instabilities in neighbouring countries: Political instabilities inevitably disturb smooth operations of business and free flow of goods and services.

- High rates of illiteracy: low literacy rate is a serious impediment for adoption of e-payments as it hinders the accessibility of banking services. For citizens to fully enjoy the benefits of e-payments, they should not only know how to read and write but also possess basic ICT literacy.
- High cost of Internet: The cost of Internet access relative to per capita income is a critical factor. Compared to developed countries, there are higher costs of entry into the e-payments and e-commerce market. These include high start-up investments costs, high costs of computers and telecommunication and licensing requirements.
- Frequent power interruption: Lack of reliable power supply is a key challenge for smoothly running e-payments and e-banking
- Resistance to changes in technology among customers and staff due to:
  1. Lack of awareness on the benefits of new technologies
  2. Fear of risk
  3. Lack of trained personnel in key organisations
  4. Tendency to be content with the existing structures.
  5. People may be resistant to new payment mechanism.

## ***6. Recommendation for Policy Makers and Conclusion***

Presently, Nigeria occupies an unenviable position among countries in Africa with the largest number of people with no access to financial services. Although the Central Bank of Nigeria (CBN) in its recent exposure draft on financial inclusion strategy, put the number of adults in the country excluded from financial services as at 2010 at 46.3 percent,

This study has investigated the challenges of implementing electronic cashless policy in Nigeria. Despite the numerous benefits that this policy brings to the nation, banks and individuals, it also has its own challenges. The challenges as discussed in this study can be categorised as follows; Security, Infrastructure, Legal & Regulatory issues as well as Socio-Cultural issues. Payment systems in Nigeria during the past few years have undergone significant progress, but some transactions are still cash-based. Nevertheless, Nigeria has the basic infrastructure to implement the policy.

There is therefore the need to create more awareness to entice the unbanked people into the banking system. Larger percentage of the Nigerian population is unbanked and going cashless will automatically get more people into the banking system. Most Nigerians are not aware of the benefits of electronic payments and are therefore slow to adopt it. The banks must also be educated to promote e-payments; training programs for senior management of the banks and all other cadre. It is also further recommended that strategic segments of the economy be the subject of focus first especially the unbanked segment. In that way the vision of reducing the unbanked will be done gradually and systematically.

The cashless policy, if well implemented, will help achieve the CBN's objective of expanding, deepening and modernising the payment system in Nigeria and also galvanise the CBN in ensuring that Nigeria ranks among the top 20 economies of the world in line with the nation's vision 2020 aspirations. The policy will also to 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 the mobile payment services. Nigerians, firms, banks and other stakeholders are therefore urged to support this initiative.

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