



Impact of cashless policy on the economic growth of Nigeria

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Abstract

More than nine years after introduction of the cashless policy by Central Bank of Nigeria in December 2011, it is pragmatic to study the impact of the policy on the economy and growth the country. Cashless policy is a government policy aimed at restricting individuals and corporate organisations from moving excessive cash for transactions. The Central Bank of Nigeria introduced the policy to reduce cash-based transactions and at reducing the quantity of physical cash circulating in the economy to encourage adaptation to electronic-based transactions. This study is to ascertain the extent to which this policy has been able to achieve its established goals and the corresponding impact on Nigerian economic growth. To determine what the direction of growth, to objectively assess if the cashless policy delivers impact or no impact on reducing cash related crime and corruption. This study utilizes secondary data obtained from the Central Bank of Nigeria Statistical Bulletin, Nigerian Stock Exchange Fact book, Securities and Exchange Commission database and from the relevant literatures to conduct a key performance analysis to identify major impacts of the cashless policy on the indicators of these goals of the apex bank from the time of the effective implementation of the cashless policy. This is based on the available data and findings from 2013 to 2019. It reviewed the Gross Domestic Product to determine if there are sufficient evidence to support the policy contribution to the economic growth of Nigeria and finally, impact analysis which takes into consideration changes and the social adjustments to the cashless policy since the commencement of the programme.

Keywords: growth, cashless, policy, Nigeria, impact, economic, GDP, CBN, NBS

Introduction

Cashless policy is a government policy aimed at restricting individuals and corporate organisations from moving excessive cash for transactions. Any nation that its government achieves this feat is termed a cashless economy. Cashless economy represents a system whereby goods and services are paid for without the actual exchange of physical cash (notes and coins). Payments are preferably through bank cards, money transfers over the internet or mobile phone.

The Central Bank of Nigeria (CBN) introduced the policy to reduce cash-based transactions and at reducing the quantity of physical cash circulating in the economy to encourage adaptation to electronic-based transactions. Secondary reasons for the policy were to drive development and modernization of the payment system. To reduce the cost of banking services (including cost of handling cash), push for financial inclusion by providing more efficient transaction options with inclusive outlook. And to improve the effectiveness of monetary policy in managing inflation and driving economic growth. (CBN, 2012) Besides these core objectives, the policy was expected to moderate some of the negative consequences associated with the high usage of physical cash in an evolving economy, including: steep cost of handling cash along the value chain, high risks associated to using cash such as counterfeiting, and financial loss occasioned by fire or flooding incidents. Before the policy, CBN analysis showed that only 10% of daily banking transactions were above 150 thousand naira, and that modest percentage accounted for majority of the high value

transactions. This implied that, “the entire banking population subsidizes the costs that about 10 percent of the population incur, in terms of high cash usage leading to the high subsidy.” CBN projected that the cashless policy will help manage the informal economy and increase the effectiveness of Nigerian monetary policy. In managing inflation and encouraging economic growth, whilst controlling corruptions, money laundering and other cash related fraudulent activities and perhaps excessive mutilation of notes. Electronic Payments has much demand for identity management leading to apathy with compliance. In January 2012, the cashless policy pilot was typically initiated in Lagos State. It was subsequently commenced in Abia, Anambra, Kano, Ogun, Rivers and the Federal Capital Territory (FCT) on 1st July, 2013, effective implementation of the policy nationwide commenced on July 1st, 2014. Strategically, high bank charges were deployed to discourage complex transactions in high volumes of cash from March 30th, 2012, in Lagos State. Interestingly, the cash-policy applied to all accounts with explicit exception to Government revenue generation accounts, Mortgage Institutions, Microfinance Banks and Embassies. Though the cashless policy was first introduced in 1996, a number of factors including digitisation and inertia hampered its implementation. The 2012 policy was principally to facilitate phased take-off and subsequent nation-wide compliance. The express purpose of this comparative study is to contribute meaningfully to the number of studies documented on cashless policy and implication for economic growth. To ascertain the extent to

which this policy has been able to achieve its established goals. And the corresponding impact on Nigerian economic growth. Precisely, the paper carefully identifies the various arguments in related literatures to analyse the policy contribution to economic growth of Nigerian economy. The key questions core to the review is: to establish the fundamental relationship between cashless policy implementation and economic growth in Nigeria. To determine what the direction of growth is, if any and objectively assess if the cashless policy delivers impact or no impact on reducing cash related crime and corruption. To review the extent to which the policy implementation effected economic growth, especially employment and the informal sector. The assumption and the opinions are expressed through the use of secondary information obtained, mostly from Central Bank of Nigeria's official reports, and other internet materials, presentations and current data from the Nigerian Bureau of statistics.

Theoretical Framework and Review of related literature

A cashless society describes an economic state whereby financial transactions are not conducted with money in the form of physical banknotes or coins, but rather through the transfer of digital information between the transacting parties (Fletcher, 2016) ^[21]. Cashless society is as old as human society based on use of barter and other means of exchange, and cashless transactions. It has also become widespread in modern times with the aid of digitalisation and access to mobile devices.

This concept has been discussed widely, particularly because the world is experiencing rapid and increasing use of digital methods of exchanging money in commerce, investment and daily life in many parts of the world, and transactions which would have been historically undertaken with cash are often now undertaken electronically (Fletcher, 2016) ^[21].

The Nigerian economy was cash based economy until 1996 when the Central Bank of Nigeria started to experiment on cashless systems; the cash based method of operation over the decades led to financial and other economic impropriety CBN Report (2012) including high way robberies and attacks on bullion vans while transporting cash. To experiment on the cashless policy the Central Bank of Nigeria in 1996 introduced first, the electronic payment scheme under the auspices of Africa Development Consulting Group (ADCG), the scheme started with six and gradually increased to nineteen banks. In that same year, the defunct Allstate Trust Bank PLC, introduced closed system electronic package called ESCA Smart card. In 1997, "Diamond pay card", was launched by Diamond Bank, one year later in February 1998, the scheme was further enhanced when a consortium of 19 banks floated a smart card company called Value Card Nigeria PLC, with the mandate to produce and manage the distribution of cards issued by member banks of the consortium (Hilili, 2005) ^[25]. While cashless policy is a government policy aimed at restricting individuals and corporate organisations from moving excess cash for transactions rather with an option of electronic payment devices. According to Woodford (2003) ^[46], the concept of cashless economy does not mean an outright elimination of cash transactions in the economic setting but one in which cash-based transactions is kept to the barest minimum, cashless economy is defined as one in which there are assumed to be no transactions frictions that

can be reduced through the use of money balances, and that accordingly provide a reason for holding such balances even when they earn rate of return. The following among others enhances 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 (Acha, 2008a) ^[2]. Mallat & Tuunainen (2008) ^[31], examined the adoption of mobile payment systems by merchants and found that main purpose of mobile payment adoption is to increase sales and reduce the costs of payment processing and showed a positive influence on business sales growth, recognising its challenges such as: complexity of the systems, slow acceptability, lack of critical mass and lack of standardization. Cheng *et al.* (2011) risk perception of the E-Payment Systems using adult consumers in Malaysia and found that e-payment systems impact negatively on firm's sales growth; also their study further found that E-payment system has positive influence on consumers purchase intentions.

Forecasting the success potential of this policy, Ejiro (2012) stated that "in the long run sustainability of the policy will be a function of the endorsement of, and compliance by end-users." According to Central Bank of Nigeria (Central Bank of Nigeria, 2011) the policy is expected to reduce cost incurred in maintaining cash-based economy by 90% upon its full implementation.

The cashless initiative is an alternative to cash transactions through electronic means using information and communications technology (ICT). Ndifon and Okpa (2014) maintain that the future of all business, particularly those in the service industry lies in information technology. This technology as far as cashless policy is concerned is not only in the use of computers. Information technology for banks takes different forms; computerization of customers' accounts, account information storage and retrieval; deposit and withdrawal through Automated Teller Machines (ATMs); and networking to facilitate access to accounts from any branch of the bank, bio-metrics, use of mobile phones to consummate transactions, the internet, and websites.

Tunji (2013) ^[43], examined the effect of cashless policy in Nigeria and his study found that cashless banking had positive and significant effect on national development; also his study revealed that cashless policy has positive impact on employment regime in Nigeria supported by (Akhalmeh & Ohiokha, 2012 and Okoye, 2012) ^[10, 11]. This position may be to promote the policy being the same year the phased implementation commenced but not necessarily based on any comparative analysis. Odior & Banuso (2013) ^[35], looked at the challenges, benefits and prospects of cashless policy and their study found that some of the challenges that has the capacity to hamper the success of cashless policy are lack of electricity power supply and poor information technology infrastructure to mention but a few. On the other hand, their study revealed that cashless policy will promote economic growth and provide banks with more liquidity for lending to needy sectors and contribute to eliminating corruption if the right infrastructure and trust is instituted. This study is still relevant, though lack of electricity still consists a challenge, the desire to communicate seems to contribute to increase in use of mobile phones which provided substitute for expensive information and technology equipment. Muiyiwa *et al.*

(2013) ^[33]. in their own contribution, found that the introduction of cashless policy will contribute in reducing robbery incidences; attraction of more foreign direct investment and creation of employment. This postulation could be described more as predictive, than analytical; deducing from the date, it was also not supported by sufficient data. Oyewole *et al.* (2013) ^[36]. added to the studies by examining electronic payment systems and its impact on economic growth in Nigeria, and their study found that e-payment systems have a positive impact on economic growth in terms of real GDP per capita as well as trade per capita, more so, it was revealed that the introduction of ATMs in financial transaction impacts directly on economic growth, while other forms of e-payment channels showed a negative impact on economic development. Abiodun *et al.* (2013) ^[1]. flagged the concern that banking sector policies are effectively implemented in Nigeria, therefore the expected achievement of the cashless system may be difficult to actualize; it added that the financial infrastructure presently available in the banking sector is not strong enough to drive the cashless system initiatives. Postulating that the lack of these structures are potential barriers to the actualization of the cashless system. Addressing the assumptions that cashless policy will manage corruption, Ayoola (2013) ^[14]. posits that cashless policy can only reduce what he described as petty corruption among the public holders of trust; his finding and conclusion are however not convincing, because he did not statistically justify how 100 respondents selected is the true representative of over 20 million holders of public trust in Nigeria however his concerns are valid based on the fact that the CBN policy exempted government revenue account. Newstead (2012) ^[34]. examined the influence of cashless payment on economic growth and found a positive association between cashless payment volumes and economic growth. Specifically, it was found that cashless transactions were growing twice as fast in developing economies as compared across the world. This assertion by Newstead was not supported with appropriate statistical figures, showing the pace of cashless growth in the developing economies as compared to figures of cashless growth in the developed economies.

Almost all the literature reviewed thus far, asserts that cashless policy could lead to economic growth among other assumptions. It is therefore imperative to define economic growth but interestingly, literatures available on Economic growth, do not seem to agree on related definition of economic growth. Investopedia... defined growth as the process by which a nation's wealth increases over time, although the term is often used in discussions of short-term economic performance, in the context of economic theory, it generally refers to an increase in wealth over an extended period. Growth can best be described as a process of transformation. Whether one examines an economy that is already modern and industrialized or an economy at an earlier stage of development, one finds that the process of growth is uneven and unbalanced" (Cornwall; Britannica). Going by these definitions, ten years is an extended period of time to assess economic growth. Ross (2019) maintained that the productive capacity of an economy does not grow because more money move around, an economy becomes more productive because resources are used more efficiently. In other words, economic growth needs to somehow, measure the

relationship between total resource inputs and total economic outputs. For instance, reduced unemployment does not always equal positive economic growth' that is increased employment in a war situation will not lead to economic growth.

Gross domestic product is proffered as the best way to measure economic growth. It takes into account the country's entire economic output. It includes all goods and services that businesses in the country produce for sale. Not minding, whether they are sold domestically or overseas. GDP tends to measure final production. It includes exports because they are produced in the country and Imports are subtracted from economic growth.

The most accurate measurement of growth is real GDP. It removes the effects of inflation. The GDP growth rate uses real GDP (Ganti, 2020) ^[22].

The major innovation introduced by (Solow, 1956) ^[22]. was to allow for factor substitutability so that stable equilibrium growth could be obtained. This model is consistent with a number of stylized facts related to economic growth such as the relative constancy over time of the capital-output ratio and factor income shares. In order to have steady state growth, exogenous technological change was introduced. A problem from the standpoint of policymaking in developing countries is that policies have no effect on growth in the steady state of the Solow model. For example, there is evidence of a positive correlation across countries between investment rates and growth, but in the Solow model this would affect the long-run level of output but not the growth rate.

This article however, deliberates on the cashless policy and its impact in the economic growth of Nigeria.

3. Methodology

This study adopted both descriptive and explanatory research design. First, the study described the policy performance and growth analysis.

This study utilizes secondary data obtained from the Central Bank of Nigeria Statistical Bulletin, Nigerian Stock Exchange Fact book, Securities and Exchange Commission database and from the relevant literatures (books, journals, previous research papers and electronic sites). Data analysis has been defined as those techniques whereby the investigator extracts from the data, information that was apparent before and which would enable a summary description of the subject studies to be made.

Firstly, conduct a key performance and situational analysis to identify major impacts of the cashless policy on the indicators or expectations of the central bank of Nigeria as at the time of the effective implementation of the cashless policy. This will be based on the available data and findings from 2013 to 2019. The second step is Review the Gross Domestic Product (GDP) is determine if there sufficient evidence to support the policy contribution to the economic growth of Nigeria. Finally, impact analysis will take into consideration changes and the social adjustments to the cashless policy since the commencement of the programme.

Key Performance and situational analysis

Consumer confidence

Consumer confidence was one of the factors that hampered the quick take-off of the cashless policy spanning across 1996 to 2011, as baseline, the value of electronic card (e-card) transactions rose by 32.8 per cent to N1, 014.71 billion

in the first half of 2012 from N764.14 billion in the first half of 2011, while the volume increased from 167,962,665 in the first half of 2011 to 185,078,223 in the period under review. Data on various e-payment channels for the period under review indicated that Automated Teller Machine (ATM) remained the most patronized, accounting for 96.4 per cent, followed by mobile payments with 1.3 per cent and POS terminals, 1.2 per cent. The web (internet) was the least patronized, accounting for only 1.1 per cent of total e-payment transactions. In value terms, ATM accounted for 90.8 per cent; POS, 2.5 per cent; the web (Internet), 4.9 per cent; while mobile payments accounted for 1.8 per cent. According the CBN 2018 Annual Financial inclusion report, the volume and value of payment on different channels (comprising ATM, PoS, Mobile and Internet) rose by 25.3 and 15.0 per cent to 1,282.1 million and N10, 503.8 billion, respectively, compared with 1,023.6million and N9, 134.0 billion in the preceding year. The Rise in payment transactions was attributed to increased consumer confidence and awareness in the use of the e-payment channels. (CBN, 2019 Annual Report)

Economic Growth (GDP)

The Bank retained the various restrictive monetary policy measures adopted during the second half of 2011 to achieve the objectives of monetary policy consistent with the real Gross Domestic Product (GDP) growth target of 7.33 per cent for 2012 and single digit inflation rate but ended at 12.9 inflation rate in 2012. According to the 2019, Quarter 4 CBN Economic Report, Productivity in the real sector was expected

to be supported by government spending on infrastructure and CBN interventions in growth-stimulating sectors. Specifically, the renewed focus of the CBN in improving credit delivery to the agricultural and manufacturing sub-sectors as well as Micro, Small and Medium Enterprises (MSMEs), would moderate unemployment and sustain the growth trajectory. In addition, the FGN border protection policy was expected to encourage and stimulate domestic production, and subsequently create employment opportunities. However, headwinds that could undermine these expectations include: underutilisation in the labour market due to weak aggregate demand; a build-up in inflationary pressures resulting from the VAT increase and border protection. Specifically, headline inflation was expected to accelerate to 12.68 per cent in the first quarter of 2020.

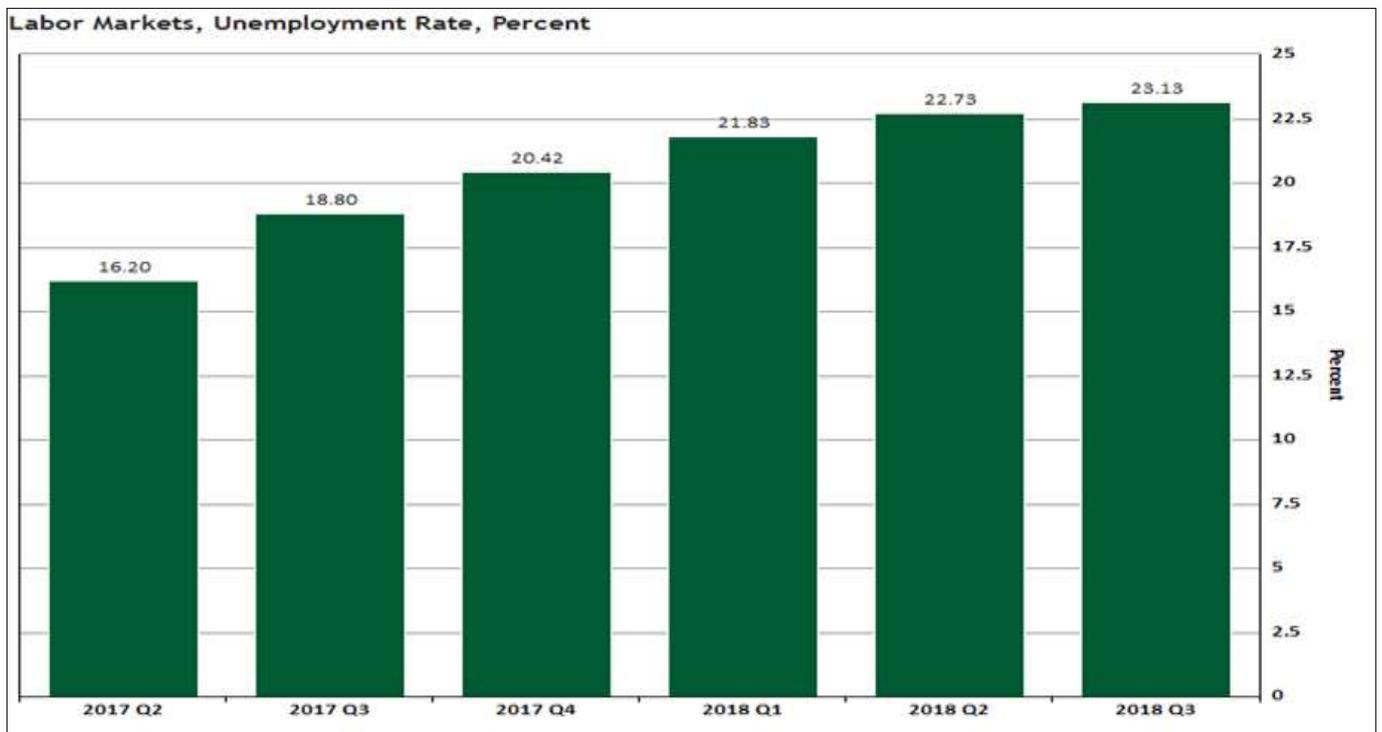
Impact Analysis

Table 1: Employment/Unemployment

Unemployment	23.1 %
Underemployment	20.21 %
Youth Unemployment/Underemployment	55.4 %

NBS 2018 Quarter 3 Report

According to (OECD, 2005) ^[37]... anything that increases the quantity or quality of factors of production or that improves the technology available to the economy contributes to economic growth. Labour (employment) is one of the major factors of production. Here we want to test if the introduction of cashless policy which is technology based contributed to economic growth.



Source: NBS 2018 Labour Markets, unemployment rates, percent

Fig 1

According to the graph above, one can clearly see that the unemployment rate has been increasing steadily. Unfortunately, there is no available data that could provide baseline. Even where one exists, population is not static and

a number of other factors needs to be considered. The total population in Nigeria is divided into labor force (currently active) and non labor force (not currently active). The labor force population covers all persons aged 15 to 64 years who

are willing and able to work regardless of whether they have a job or not. The definition of unemployment, therefore, covers persons (aged 15–64) who during the reference period were currently available for work, actively seeking for work but were without work. The non-labor force includes population below 15 or older than 64, as well as those within the economically active population i.e. 15–64, who are unable to work, not actively seeking for work or choose not to work and/or are not available for work. A person is regarded as employed if he/she is engaged in the production of goods and services, thereby contributing to the Gross Domestic Product (GDP) in a legitimate manner, which is a component of the national accounts and receives any form or amount of compensation for that activity. Accordingly, it does not consider the employed persons satisfaction with the work, meets with his or her qualification or whether his compensation is suitable/satisfactory. There is no universal standard definition of unemployment as various countries adopt definitions to suit their local priorities. However, all countries, use the International Labor Organization (ILO) definition, or a variant of it to compute its unemployment estimates. The ILO definition covers persons aged 15–64 who during the reference period (which is usually the week preceding the time the survey is administered) were available for work, actively seeking work, but unable to find work. The Nigerian National Bureau of Statistics, like most countries in the world, uses a variant of the ILO definition. The unemployment rate is the proportion of those in the labor force (not in the entire economic active population, nor the entire Nigerian population), who were actively looking for work but could not find work for at least 20 hours during the reference period. Accordingly, you are unemployed if you did absolutely nothing at all, or did something but for less than 20 hours during the reference week. Cashless policy seems to have endangered the small and medium business by opening spaces for influx of foreign finished goods such as furniture, clothing and housewares. Discouraging entrepreneurship and export. Tunji (2013) ^[43]. in his study found that cashless banking had positive and significant effect on national development; also his study revealed that cashless policy has positive impact on employment regime in Nigeria was also supported by (Akhalmeh & Ohiokha, 2012 and Okoye, 2012) ^[10, 11]. However, this study did not find sufficient evidence and data to support their premise rather, the empirical evidence provided so far shows that both unemployment and underemployment has not been sufficiently impacted by the cashless policy.

Crime and Corruption

Though there is no baseline information under this category to support trend analysis from 2013 to 2020 or a comparative analysis that will help determine rate of crime over an extended period of time. Information available for 2016 and 2017 presents a Crime Statistics on reported offences reflected that a total of 125,790 cases were reported in 2016. Offence against property has the highest number of cases reported with 65,397 of such cases reported. Likewise in 2017 Crime Statistics on reported offences reflected that a total of 134,663 cases were reported. Again offence against property had the highest number of cases reported with 68,579 of such cases reported. Signify additional 3182 reported case on offence

against property. Evidently it was reported that robbers devised strategies including snatching of purses, compulsion as well as kidnapping to exert funds from people. In 2017 alone, 1134 kidnap cases were reported. This shows in simple terms that though cash related crime such as high-way robbery decreased. Crime took another dimension. According to NBS reports 2016 report is the first comprehensive nationwide household survey on corruption to be conducted in Nigeria and in Africa at large. Almost a third of Nigerian adults (32.3 per cent) who had contact with a public official between June 2015 and May 2016 had to pay, or were requested to pay, a bribe to that public official. The report states that “The magnitude of public sector bribery in Nigeria becomes even more palpable when factoring in the frequency of those payments, as the majority of those who paid a bribe to a public official did so more than once over the course of the year. According to the survey, bribe-payers in Nigeria pay an average of some six bribes in one year, or roughly one bribe every two months”. It further revealed that “roughly 400 billion Nigerian Naira is spent on bribes each year, taking into account the fact that nine out of every ten bribes paid to public officials in Nigeria are paid in cash and the size of the payments made, it is estimated that the total amount of bribes paid to public officials in Nigeria in the 12 months prior to the survey was around 400 billion Nigerian Naira (NGN), the equivalent of \$4.6 billion in purchasing power parity (PPP). This sum is equivalent to 39 per cent of the combined federal and state education budgets in 2016”. Based on this survey and evidences available in public domain in May, 2020. It is only logical to infer that the cashless policy has so far not been able to abate crime and corruption in Nigeria being one of the objective for making the cashless policy.

Conclusion

The cashless economy is assumed to be more convenient method of payment, and a method of reducing crimes such as burglary, robbery and money laundering among other crimes. It also a way of ensuring money is constantly in circulations to promote small and medium scale entrepreneurship through soft loans. Nigeria had before the policy lost significant amounts of cash to fire and flooding due to cash stockpiling at homes and markets. There is no sufficient data to support the extent to which the cashless policy has helped reduce corruption even with the introduction of the Treasury Single Account (TSA). The cashless system has been adjudged convenient and flexible to use by few that understands how it works, it has created skilled job and business opportunities for technology based businesses. The cashless policy should also be encouraged as it will promote the wide application of technology-enhanced business such as e-business and related web, internet and mobile phone/communication based businesses. However, this benefits is to a limited number of the population, as the vast majority of the populace are not endowed with such skills of using technological applications for business, or are not in a position to acquire such skills. This still puts to question on if the aim of achieving financial inclusion has been achieved. Despite these setbacks, the e-business community and other virtual platforms of transaction has undoubtedly received a boost with the introduction of the cashless policy, However, the extent to which it has impacted on the Nigerian economic growth is still in doubt. Likewise it may have created new

opportunities for cyber and electronic based crimes. There is also no evidence that the Cashless policy reduced inflation. Inflation rate as reduced from 12.23% in 2012, to 8.5% in 2013, recorded an all-time low of 8.05% in 2014 but has been growing steadily in the upward direction to 13.39% in 2020. Though this is as a result of multiple economic factors, the extent to which the policy has helped to stabilise the inflation may be insignificant. This study observed the cashless policy has further jeopardised the small and medium business by opening spaces for influx of foreign goods. This is facilitated by the ease of online payments which means that small scale shipping of goods from countries like China and Turkey thereby militating the production of locally made goods that would have helped increase opportunities for the teeming unemployed youths.

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