

Cryptocurrency and the Nigerian Economy

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ABSTRACT

In this paper, we discuss the impact of cryptocurrency on some selected sectors of the Nigerian economy. The cultural presence and persistent market of bitcoin's prompt researchers and policymakers to ask questions on how cryptocurrencies would impact on the economy, most especially on the monetary policy. There has been debate whether it would positively and/or negatively affect the economy. We give our opinion on how cryptocurrencies might impact on some selected sectors of an economy, most especially in the case of Nigeria.

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Introduction

The global financial system is no doubt embracing the current transition from physical currency to almost virtual currencies through the medium of technology. This wave has ushered in the birth of crypto currencies. There have been many attempts at creating a digital currency during the 90s tech boom, with systems like Flooz, Beenz and Digi Cash emerging on the market but inevitably failing. In early 2009, an anonymous programmer or a group of programmers under an alias Satoshi Nakamoto introduced Bitcoin which is a form of crypto-currency. This virtual currency has been defined in a number of related forms. Crypto-currency has been defined as a digital record-keeping device that uses balances to keep track of the obligations from trading and that is publicly known to all traders. Some of the forms of crypto currencies include Bitcoin (BTC), Litecoin (LTC), Ethereum (ETH), Ripple (XRP), Bitcoin Cash, Neo, Iota, Dash, Qtum, Monero and Ethereum Classic. A cryptocurrency system is defined by two parameters: money growth rate $\mu \geq 0$ and transaction fee charge at a rate $\tau \geq 0$. Since the creation of Bitcoin in 2009, numerous private cryptocurrencies have been introduced but Bitcoin has been widely adjudged as the most successful one. Since the advent of crypto-currency, it has been getting a lot of media attention, and its total market value has reached 128.78 billion USD in 2019. It operates based on a technology called "Blockchain". Crypto currencies are largely designed to operate without sovereign regulation and are protected from being discovered by government authorities for supervision. More importantly, many central banks started recently to explore the adoption of cryptocurrency and blockchain technologies for retail and large-value payments. For example, the People's Bank of China aims to develop a nationwide digital currency based on blockchain technology; the Bank of Canada and Monetary Authority of Singapore are studying its usage for interbank payment systems.

Cryptocurrency and the Nigeria Economy

The birth of cryptocurrency as a virtual currency has been generating waving reactions in the global economy even in a developing country like Nigeria. In the light of this outbreak, there has been

a lot of positive and negative discourse on the value of crypto currencies on the Nigerian economy. Relatively, the Nigeria government through its regulatory agencies such as the Central Bank of Nigeria (CBN) and the Securities and Exchange Commission (SEC) has attempted to place a ban on crypto currency, although its legal status remains ambiguous unlike in countries like Morocco and Algeria where there is a clear ban on trading in Bitcoins such that a breach attracts heavy fines. The warnings are largely designed to educate the citizenry about the difference between actual currencies; which are issued and guaranteed by the state, and crypto currencies; which are not. Following the moves taken by the CBN and SEC, Nigerian lawmakers have also urged the regulatory authorities to speed up efforts in introducing a legal framework for crypto currencies in the country.

Impact on Monetary Policy

At the moment, cryptocurrencies operate alongside official currencies. The current volumes are small and do not challenge the position of official money as the main currency. But as algorithms improve to limit the volatility of cryptocurrencies, their popularity and use tends to increase. This would lead to a coexistence with other official currencies. The fundamental question here is, could the central bank lose its grip on the economy as a result? The interaction between cryptocurrencies and central bank monetary policy is treated in detail by Fernandes-Villa Verde and Sanches (2018). Their theoretical model predicts that the coexistence of central bank and private money depends on the type of monetary policy the former follows. In particular, privately-issued currencies would be used if the official currencies do not ensure price stability, but would lose their value as a medium of exchange when the central bank credibly guarantees the real value of money balances. The ramifications are two-fold. First, the coexistence of government money and cryptocurrencies that are valued as mediums of exchange is not a theoretical impossibility. Second, the central banks have the advantage by choosing a specific type of monetary policy they can prevent cryptocurrencies from being valued as a medium of exchange (but they could still be valued for other reasons, for instance as a pure speculative asset). From

this perspective, rather than posing a threat, the coexistence of government money and cryptocurrencies can have a positive effect by acting as a disciplining device on central banks. Currency competition can succeed in calming inflation and preventing the sort of manipulation of interest rates and prices to which government have historically been prone. This is a partial vindication of Hayek (1976), who argued in favour of breaking the state monopoly on money as a way to ensure the stability of the official currency. Nevertheless, from a more practical standpoint, central banks could face some risks from the emergence of cryptocurrencies as relevant mediums of exchange with stable purchasing power due to its high level of volatility.

Impact of Fiscal Policy

The relationship between cryptocurrency and fiscal policy can be asymmetric. In an economy with an underdeveloped financial market, the activity of cryptocurrency may be difficult to regulate and as such may provide the platform for investors both individuals and corporate bodies to evade tax thereby resulting in low income generation for government relative to the level of activities in the market which could affect the budgetary plans of the government. This situation could impede the fiscal objectives of government thereby affecting the fiscal macroeconomic objectives. Also, in an economy with a highly developed financial market, the proper coordination of cryptocurrency could result into an increase in revenue generation through tax which would enhance the budgetary plans of government. This situation could help enhance the fiscal objectives of government thereby enhancing the fiscal macroeconomic objectives and stabilizing the economy.

Impact on Agricultural Sector

Farmers have always been eager adopters of technologies that is efficient and deliver real value. Blockchain technology has big potential to solve significant problems in agriculture. The challenge for blockchain, and agtech at large, is connecting the technology to viable business models and compelling use cases. Blockchains have huge potential to create and improve access to finance in the agricultural sector, thereby addressing the problem of food scarcity and enhancing food security.

Impact on Education Sector

Conclusively, the complexity of cryptocurrency as a virtual currency coupled with the technical slang and the need for digital education strengthens the impact of cryptocurrency on education. Consequently, the whole concept of the virtual currency may appear too ambiguous. However, education could help bridge the gap and boost cryptocurrency adoption. Hence, cryptocurrency and education can therefore be “Siamese Twins” as their connectivity and interrelatedness can help contribute towards achieving the objective of financial inclusion, thereby driving the economic growth path towards an upward trajectory [1&2].

References

1. Bech M, R Garratt (2017) ‘Central Bank Cryptocurrencies’, BIS Quarterly Review September 2017, Bank for International Settlements.
2. BIS (2018) Cryptocurrencies: looking beyond the hype, BIS Annual Economic Report, Bank for International Settlements.

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