

## **The Advantages and Disadvantages of Mobile Money on the Profitability of the Ghanaian Banking Industry**

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### **Abstract**

*Over the years, the evolution of and use of mobile phones and other mobile devices such as tablets has offered society the opportunity to access financial services such as mobile money.*

*Mobile money allows one to transfer money or make payments with their mobile phone, in the comfort of their location and in a simple, fast, convenient and affordable way.*

*This research sought to determine the effect of the evolution of mobile money services on traditional banking in Ghana.*

*The article showed that mobile money is a viable tool for financial inclusion, it has improved efficiency of transactions, it has initiated some changes in traditional banking and has a generally positive impact on traditional banking in Ghana.*

**Keywords:** *Mobile Phone, Mobile Money Transfer, Financial Inclusion, Mobile Money Subscribers, Ghanaian Economy, Threats, Business Activity, Payment Systems.*

### **Introduction**

Sending or receiving money transfer is an essential activity in the daily lives of Ghanaians. However, money transfer requires an effective, affordable and reliable money transfer service which ensures that money can be deposited in one location and withdrawn in another in both urban and rural areas. Over the years, the cost of money transfer transactions performed through bank and non-bank transfer platforms has been quite expensive, especially for small amounts for both local and international transfers (Kirui, Okello, & Nyikal, 2012).

Unfortunately, the informal systems of money transfer such as individuals carrying cash in hand or sending money through local transport services to and from particular destinations makes it susceptible to highway robbery and theft. Money sent through friends and relatives sometimes never reaches its destination if squandered by the person who is supposed to deliver it. Also, money sent through courier companies as letters or parcels are liable to getting stolen, misplaced or even delivered to the wrong address (Muisyo, Alala, & Musiega, 2014).

Other challenges associated with bank and non- bank transfer platforms, include joining long queues, delays, branch network failures, insolvency of bank and transfer company branches, unreliable communication channels, among many others.

This situation has changed dramatically in the last few years with the introduction of mobile phone-based money transfer (MMT) services (Mutinda, 2014).

Garcia, (2017) defines mobile money as an electronic wallet service, available in many countries, that lets users store, send and receive money using their mobile phone. This safe and easy electronic payments platform makes Mobile Money a popular alternative to bank accounts. It can be used on both smartphones and basic feature phones. MTN Ghana advertises that mobile money is a fast, simple, convenient, secure and affordable way of transferring money, making payments and doing other transactions using a mobile phone.

Allotey (2016) reported that much has been speculated with regards to the benefits of mobile money in Ghana's economy. Since its inception in 2009, the debate has been whether it poses a threat of business competition or is rather a symbiotic platform for the banking industry.

Upon carrying out this study, the researcher seeks to establish whether the relationship between mobile money operations and the banking industry is one that is beneficial to each other or whether the operations of mobile money have a negative effect on the growth of the banking industry.

## **Problem statement**

MTN mobile money has achieved huge successes in Ghana owing to its wide range of socio-economic benefits, with a customer base growing at 83.05% to 13.1 million in 2015 and raking GH¢35.4 billion transactional value, according to Bank of Ghana, person-to-person transactions contribute more than 85% of total revenue generated from mobile financial services in the country (Web manager, 2016). Abbey (2016) reported that, according to a Bank of Ghana report on the mobile money sector, between 2012 and first quarter 2016, registered mobile money subscribers increased from 3.8 million to 14.6 million, while active subscribers shot up from 345,434 to 5.3 million within the period.

However, despite the advantageous nature of mobile money and how successful it has become in recent years, key stakeholders of the banking industry are of the view that, the growth of mobile money services threatens banks as well as microfinance firms. They anticipate that mobile money has potential of turning mobile network operators into pseudo banks that perform functions and provide services which are exclusive to traditional banking. Representatives of MNOs argue that, the growth of mobile money rather complements the business of traditional banks and non-bank financial institutions because it provides tools or solutions which enhance the services provided by the banking industry (Kunateh, 2015).

This study focuses on investigating the actual effect of mobile money operations on traditional banking. From this study, the researcher will ascertain whether mobile money is a rising competitor of traditional banking in the midst of an already highly competitive banking sector or an opportunity for banks to enhance their services and to reach out to the huge percentage of unbanked Ghanaians.

## **The banking industry in Ghana**

### **Definition of banking**

According to Hassen (2016), “banking is a business activity of accepting and safeguarding money owned by other individuals and entities, and then lending out this money in order to earn a profit”.

Boakye-Yiadom (2015) defines banks as financial intermediaries that accept deposits from surplus spending units and channel these in the form of loan products to deficit spending units in the economy. Amadeo (2016) further explains that, banking is one of the key drivers of a country’s economy. Banks provides a safety for saving excess cash called deposits. Banks lend up to 90% of the deposit received as loans. They pay less interest rate on the deposits received and charge high interest rates on loans. Banking forms part of the national payment system of a country (The World Bank, 2011).

### **National payment system**

Lamb (2017) defines a national payment system as a configuration of institutions supported by an infrastructure of technology-driven processes and practices to facilitate commercial and financial transfers between buyers and sellers such that, a country's payment system reflects its banking and financial history and the development of supporting communications and technology platforms.

UNECA-UNCC (2011) indicate that payment systems reduce the cost and delays of exchanging goods and services and the risk of theft, counterfeit currency and lost interests thus, supporting the growth of transactions. The development of the payment system is closely related with the movement of goods, services, capital and people.

### **The Ghanaian payment system**

The stakeholders of Ghana’s payment system are the Central bank of Ghana, the commercial banks, service providers and users of the payment system. Each stakeholder plays an important role in the system. The central bank occupies an important and unique position in the payment system as an overseer, regulator and also a participant of the system. The commercial banks participate in the system by making and receiving payments and doing same on behalf of their customers. The service providers are the printers of payment instruments and telecommunication companies who provide the infrastructural arrangements for the payment system. Notwithstanding the unique role of each stakeholder, all of them are users of the payment system, including the banking public (BOG, 2011).

### **Evolution of banking in Ghana**

(Boakye-Yiadom 2015) narrated that, in 1957, after independence, the Bank of Ghana was established to take control over the management of the country's currency. By 1974, many state-owned banks and Development Financial Institutions (DFI) were established to provide services which weren't being provided by the commercial banks. Examples of DFIs included the Agricultural Development Bank, Bank for Housing and Construction, National Investment Bank, Merchant Bank, and the Social Security Bank. They made profits through deposits, support from government and foreign loans. Osakunor (2009) emphasizes that, this improvement in the banking industry and the passing of the banking law in 1989 (PNDC Law 225) enabled locally incorporated banks to operate.

### **Competition in the banking industry**

Akuffo-Duah, (2011) shows that, in 2004, a new banking Act was introduced. It involved the elimination of secondary reserves and adjustments in the minimum capital which was increased from GHS 60 million in 2007 and to 100 million Ghana Cedis in 2013 which resulted in mergers and acquisitions of some banks. It also led to the influx of foreign banks, especially banks from Nigeria.

Boakye –Yiadom, (2015) reported that there are currently seven Nigerian banks operating in Ghana representing about 26% of the total number of banks in the country. This has produced intense competition in Ghana's banking industry, with respect to size of deposits and the size of market share of the various banks. There are 27 universal banks operating in the country with 16 foreign-owned and 11 Ghanaian-own, with 6 banks holding more than half of the total assets of the sector. Also, competition in the banking industry has brought about technological product or service innovations such as the introduction of automated teller machines (ATMs), e-banking, telephone banking, SMS banking etc. These technological innovations have contributed to improving services offered by banks in the country.

### **The mobile money industry in Ghana**

#### **The evolution of mobile money in Ghana**

Ayeebor (2016) shows that mobile money businesses have begun to transform the traditional ways of transacting business and transmitting money. People are now walking with their money digitally.

It is said that many Africans do not own bank accounts. Due to this economic menace, cellular or mobile network operators developed an idea which will enable their subscribers to access a platform on their mobile phones that can easily operate like a bank account known as mobile money (Appiah-Danquah, 2014).

Monks (2017) reported that in 2007, a mobile money service named M-Pesa was launched in Kenya by Vodafone's local mobile network operator called Safaricom as a simple method of texting small payments between users. Today, there are about 30 million M-Pesa users in 10 countries and it offers a range of services which include international transfers, loans, and health provision. M-Pesa processed about 6 billion transactions in 2016 at a peak rate of 529 per second. After the success story of M-Pesa in Kenya, several mobile network operators in Africa started adopting this into their services (Appiah-Danquah, 2014).

Mobile money was first introduced in Ghana in 2009 by MTN Ghana Limited. Mobile money is now operated by four out of the six telecommunication companies (telcos) in Ghana (Quist, 2015).

Abbey (2016) reported that the penetration of mobile money in the Ghanaian economy has increased significantly in the last 4 years, since its inception in 2009. In 2016, mobile money transactions 35.4 billion Ghana Cedis; representing an increment of more than 216 percent compared to the total transaction of more than 260 million in 2015. This also represents an increase of over twenty percent (20%) of mobile money penetration in Ghana. Konutsey, (2016) shows that, the World Bank Findex data mentions Ghana as one of 13 economies which had mobile financial services (MFS) penetration above 10% in 2014. However, Blay (2016) argues that according to stakeholders in the telecom and finance industries, though there is significant increment in mobile money transactions, more unbanked Ghanaians ought to be offered financial inclusion considering the fact that Ghana's mobile money penetration of 20% is low compared to mobile money penetration in East African countries.

## **Benefits of mobile money in Ghana**

### **Financial inclusion**

Abbey (2016) has deduced that the surge in mobile money usage shows that, the operation of mobile money by telcos plays an important role in achieving the Bank of Ghana's cashless economy agenda. It also ensures that millions of Ghanaians are offered financial inclusion. Also, stakeholders of the mobile money industry are of the view that the growth of mobile money will allow millions of Ghanaians, who are excluded from the formal financial system to perform financial transactions securely and reliably and at a relatively cheap cost. Selvakumar, Mathan and Sathyalakshmi (2015) define financial inclusion or inclusive financing as the delivery of financial services at affordable costs to sections of disadvantaged and low-income segments of society, in contrast to financial exclusion where those services are not available or affordable.

Konutsey, (2016) is of the view that, mobile money is a timely technology that promises to be the key anchor towards attaining financial inclusion around the world. Ghana can boast of four telcos who provide mobile money services in Ghana with a mobile phone penetration of 115%. In the last five years, the involvement of Ghanaian adults in banking increased only marginally from 34% to 36% while access to mobile money increased from zero to 29%. As at November 2015, an average of 24million individual monthly transactions was performed through 44, 000 registered mobile money agents at a transaction value of 3.4 billion Ghana Cedis. According to the World Bank, 13% of adult Ghanaians were reported to having access to a mobile account, as compared to the Sub Saharan Africa average of 11.5% as at 2014" (World Bank, 2014; cited in Konutsey, 2016).

### **Convenience**

Oluniyi (2009) indicates that, through the invention of mobile money, subscribers enjoy the convenience of having instant access to their money any day of the week and anytime of the day in the comfort of their place of dwelling without the need to visit the bank to join long queues to withdraw or deposit their money.

Mustapha (2016) throws light on the fact that, in Ghana most urban dwellers often send money to members of their extended family living in rural areas. Unquestionably, mobile money has helped people living in urban areas to easily transfer funds friends and relatives with ease in rural areas. Money transfer reduces the transaction costs of financial services for the poor, especially those in rural areas where bank branches may seldom exist or only exist in capital towns. Mobile money saves the cost of travel and time spent visiting the nearest town to access financial services.

Appiah – Danquah, (2014) shows that mobile money offers the ability and the flexibility to top up airtime, pay for utility bills, goods and services, purchase insurance premiums, shop online, pay of salaries etc. with one's mobile phone.

### **Employment opportunity**

Mustapha (2016) revealed that even those who do not own a mobile phone can transfer or receive money by patronizing the services of the authorized mobile money merchants or agents nationwide.

Lal and Sachdev (2015) show that, beyond financial inclusivity, mobile money stimulates economic growth as and serves an avenue for reducing unemployment by offering individuals the opportunity to work with service providers as registered merchants or agents for income generation.

### **Investment opportunity**

Ghana News Agency, (2016) reported that, in 2016, the Bank of Ghana approved an innovative micro investment scheme that would enable mobile money holders to invest in Treasury bills of value as low as GHs5.00 (Five Ghana Cedis which is equivalent \$1.31). This product is not limited to bank account holders; it is for holders of electronic money on the mobile money platform who could initiate the transaction on a phone.

(Donovan, 2012) confirmed that Mobile money is a cheaper way of extending traditional banking to the unbanked the mobile phone; which is a device they are already familiar with.

## **Possible threats of mobile money on the profitability of the banking industry in Ghana**

### **Pseudo banking**

Kunateh (2015) reported that, some stakeholders of the banking industry are of the view that, that the growth of mobile money services threatens microfinance firms and the banks as well.

Ablordepey, (2016) reported that, the fast penetration of mobile money service is threatening the use of banks as the choice for transferring small amounts of money within the country. This is due to fact that, according to the Bank of Ghana, the total value and volume of mobile money transactions surpassed all other non-cash transactions in the year 2016, except cheques; with total float balances as at June, 2016 reaching GH¢680 million (\$172 million), compared to about GH¢341 around that same time in 2015. The convenience, ease of setting up mobile money agents and the ability of the mobile phone to adapt to various systems (device agnostic) is fuelling the threat they pose to the banks.

Blay (2015) also reported that the value of mobile money transactions at the end of year 2015 was more than a third of the total deposit liabilities of the 28 banks in Ghana at the said time.

About 56 percent of banks are of the view that mobile money presents threats to the traditional ways in which the industry operates, even if these threats do not measure up to the opportunity.

### **Interference of the payment system**

Ghana News Agency (2016) reported that, mobile money was significantly threatening the payment solutions offered by banks, particularly the bill payment and point of sale (POS) payment services. Mobile money is now used to pay for utility bills, used in store purchases and even in historically cash-based transactions such as payments for goods in local markets. Bank executives have expressed concern that if current mobile money trends continue, banks will soon command a smaller portion of the payments system in the country compared to mobile money operators.

### **Deposit mobilization**

Ablordepey (2016) reported that, the ability to deposit funds into one's mobile money wallet, make withdrawals and transfers, undoubtedly turned mobile money wallets into current accounts resulting in raising the issue that mobile money is a threat their various current account products as it has diverted deposits from the traditional banking system to the various mobile money operators.

#### **2.4.4 Innovative Services**

Also, expanding product and service innovations of mobile money makes it appeal more to the general public. Mobile service started with airtime purchases and transfer of small amounts of domestic remittances. With time, the service has expanded to cover bill payments, point of sale payments (POS), fund transfers in larger amounts, receipt of deposits by some savings and loans companies, purchase of insurance premiums and mobile money credit facilities.

Blay (2015) discussed that another threat envisaged by bankers is the competition created by mobile money through offering relatively cheaper or no charges on services such as payment of bills or services offered in restaurants and items purchased in shops compared with the usage of credit or debit cards for the same services for which the customer incur substantive costs. As a result, bankers are predicting that telcos will at that point become direct competitors to banking industry instead of serving as partners and service providers to the industry.

## **Significant contribution of mobile money to the growth of the banking industry in Ghana**

### **Enhancement of the multiplier effect**

Konutsey (2015) explains that, with so much hard currency in circulation, Ghana is at a low advantage of benefiting from the multiplier effect of money. The multiplier effect of money and its benefits to an economy simply refers to the phenomenon that money is better traded when it is held as deposits in bank accounts rather than as currency bills in the hands of the citizenry. It is the money used to create more money and is calculated by dividing total bank deposits by the reserve requirement of the bank (Investopedia, 2017).

Konutsey (2015) further explains that, money is traded as loans and overdrafts to businesses and individuals. Upon the disbursement of a loan, the loan (money) changes hands from person to person.

The gains of the money (loan) to the economy are much enhanced in an economy where the money circulates within the banking system than where in an economy it used to transact business as physical currency bills. In simple terms, where the money (loan) is credited third party's bank account in another bank, it) becomes 'new money', so to speak, a fresh deposit in the banking system. If transactions circulate within the banking system, the money goes through multipliers of new money creation and the cycle continues. By this process, some nations are able to increase the money supply of their economies alongside reducing lending rates. In an opposite scenario of the multiplier effect, the public hoards more money in currency bills thereby reducing bank reserves and the supply of money.

One key feature of the multiplier effect is that, it manifests better within an economy where the banks are willing to lend the deposits they have mobilized than to trade in exorbitant government bonds and treasury bills. Unfortunately, this is not the case in Ghana as banks in the country invest in government shares and bonds and are willing to take very little risk with regards to lending. Hence, there is low supply of money in the economy and lending rates are considerably high. It is thus obvious that, Ghana's ability to ignite the multiplier effect in the nation's economy is poor. This throws light on the fact that, with the increasing magnitude of the total individual monthly transactions performed yearly in the mobile money industry, the industry has the potential to grow Ghana's economy by improving the multiplier effect of Ghana.

### **Enhancement of mobilization of bank deposits**

Allotey (2016) revealed that, currently, banks in Ghana have in their circulation, over six hundred million Ghana Cedis worth mobile money deposits; representing about 30% of total banks deposits. This will not have been possible, but for mobile money transactions and the activities of mobile money providers or operators. A relevant question, thus, arises: Is Mobile money trying to access or win deposits that the banks are fighting for or does mobile money add to the banking industry's deposit mobilisation efforts? Mobile money does not have the capacity to take over deposits from banks, but it has the ability to mop up funds sitting with the reported 70% of Ghana's population which is unbanked and make them available to the Banks. Mobile money inevitably provides a reliable, secure, convenient and cost efficient means for banks to reach millions of Ghanaians who do not own traditional bank accounts. (Allotey, 2016)

### **Enhancement of the activities of the activities of traditional banking**

Kunateh (2015) customers are now able to receive their loan disbursements into their Mobile Money wallets wherever they are and are able to make loan repayments without visiting banking halls to join long queues to just to receive disbursements.

### **An avenue for achieving a cashless society**

Dowuona (2016) explains that, since Ghana does not yet have a clearly defined national cashless society strategic plan, there is no doubt that mobile money can serve as an avenue for achieving a cashless economy. A consistent and multiplier effect is one of the many benefits of a cashless economy.

### **Conclusion**

Mobile money has numerous socio – economic benefits; it is used to send and receive money, top up airtime, pay utility bills, buy life insurance, pay for airline tickets, pay insurance premiums as well as pay for goods and services physically and online. Mobile money is supported by both out-moded and modern makes of phones or devices because it is designed such that, the mobile money- enabled SIM though inserted in the phone, is independent of the mobile phone. Mobile money is also safe and secure, fast, simple and does not require one to be literate to be able to perform transactions. Its transaction charges are affordable and one does not need to own a bank account to be able to access it. It can also be linked to one's existing traditional bank account when the need arises (Klutse, 2015).

Saliu (2015) indicates that in Ghana, mobile money is operated by Telecommunication Network Operators (MNOs). Four out of the six MNOs in Ghana offer mobile money services.

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