OPPORTUNITIES FOR INCREASING ACCESS TO DIGITAL FINANCE IN NIGERIA

MasterCard | MasterCard Center for Inclusive Growth

GRAMEEN FOUNDATION

Acknowledgements

This report was prepared by the Arrakis Group for Grameen Foundation.

CONTENTS

LIST OF FIGURES

I. OVERVIEW

Nigeria represents a very large market which constitutes a great opportunity for digital financial services: of the 88 million adults in Nigeria, 57 million are only informally served or financially excluded altogether (EFInA, 2012.) Nigeria is also a very complex market as evidenced by the low Mobile Money penetration despite the existence of over 20 service providers.

This report reviews the supply and demand side constraints which are hindering the adoption of traditional financial services by the mass market. It then provides an in-depth analysis of the agency banking landscape and reviews barriers to adoption, such as the regulatory context, technical and infrastructure challenges, lack of agent networks and mobile and language literacy among the target demographic.

II. SOCIO DEMOGRAPHIC OVERVIEW OF NIGERIA

Nigeria is the most populous country in Africa and the seventh most populous country in the world, with 175 million inhabitants (Economist Intelligence Unit, 2014) from over 250 different ethnic groups (Otite, 1990). Democracy was restored with the election of Obasanjo in 1999 after over 3 decades of post-independence military rule marked by violent coups, civil war, secessionist movements, tribalism and religious persecution (BBC, 2013). The general elections of April 2007 marked the first civilian-to-civilian transfer of power in the country's history. Today Nigeria is a constitutional republic comprising of 37 states and 774 Local Government Areas (LGAs), the multiplicity of which reflect the challenges of governing such a large, diverse populace (Igbuzor, 2011). Nigeria continues to experience longstanding ethnic and religious tensions, particularly in the North of the country.

The government continues face the challenge of reforming a petroleum-based economy, whose revenues have been mismanaged and expended on institutionalizing democracy (KPMG, 2013). Nigeria is Africa’s biggest oil exporter and the continent’s second-largest economy. The oil and gas sector accounts for more than 95% of total exports revenue (OPEC, 2013) and 15% - 35% of its GDP depending on market fluctuations (NBS, 2013). The economy has grown steadily over the last few years (6.5% in 2013), driven largely by the non-oil sector (FSDH, 2014). Agriculture is the largest contributor to GDP (40%), followed by wholesale and retail (20%), telecommunications (7%), manufacturing (4%) and finance (3%) (NBS, 2013). Lack of infrastructure (particularly roads and power) and slow implementation of economic reforms are key impediments to growth (KPMG, 2012).

Nigeria has a very young population, with over half of the country’s 87.9 million adults aged 18 - 33 years old (EFINA, 2013: 8). The incidence of poverty and income inequality in Nigeria has increased since 2003; 69% of the population, 121 million people, is classified as poor[1] (NBS, 2010). Half of all adults earn less than the national minimum wage ($110[2] or N18,000) per month (EFInA, 2013: 8) and over one third considers their household income source “very unstable”

---

[1] Relative poverty headcount; defined by reference to the living standards of majority in a given society. Households with expenditure greater than two-thirds of the Total Household Per Capita expenditure are non-poor whereas those below it are poor. NBS adopts this measurement for monitoring poverty trends.
[2] www.oanda.com, 28th August 2013

(NLSS, 2009: 35). The top 10% of income earners was responsible for almost half of total consumption expenditure and the top 40% was responsible for 80% of total consumption expenditure in 2010, pointing to the extreme income inequalities in the country (NBS, 2012). Nigeria's rapid population growth rate (3.2% according to 2006 census) is expected to confound the country's already youthful age profile and lead to ever higher unemployment rates (KPMG, 2013: 2).

Half of Nigeria's population lives in urban areas (National Census, 2011) and this is growing by up to 4.3% annually (2010 - 2015 estimate from CIA Factbook, 2011; Ogun, 2010: 3); the growth rate of the urban population has exceeded that of the country's population as a whole. While poverty remains a primarily rural phenomenon, the incidence of urban poverty is increasing and has become a national concern as urbanization continues at a rapid rate (Guardian, 2011). Up to 18 million people live in more than 200 slums in Lagos state alone (Guardian 2011) and over half of urban dwellers live in absolute poverty (NBS, 2012).

Figure 1: Poverty Rates for Food, Absolute, Relative and Dollar / day Measures (2010)

Poverty Indicator	Urban	Rural
Food poverty	27%	48%
Absolute poverty[3]	52%	66%
Relative poverty	62%	73%
Dollar per day[4]	52%	66%

Source: NBS (2012)

At the time of the 2006 census, at least 24 cities in Nigeria were estimated to have more than 100,000 inhabitants and at least 9 had a population of over 1 million (Census, 2006); these figures are likely to have increased in the intervening years.

Approximately 54% of Nigerians are Christian, who live predominantly in the South of the country; 44% are Muslim and live mostly in the North (DHS, 2008; Mancini, 2009). Poverty incidence is highest in the three Northern regions where approximately 75% of people are considered to be poor and poverty rates have either grown or reduced at very slow rates over recent years (Omonona, 2010).

The map on the next page shows Nigeria's major towns and population distribution.

[3] Defined in terms of minimum needed to afford basic standards of food, clothing, healthcare and shelter. Considers both food expenditure and non- food expenditure using the per capita expenditure approach.
[4] Based on adjusted PPP, World Bank's Purchasing Power Parity (PPP) index, which defines poverty as the proportion of those living on less than US$1 per day poverty line.

Figure 2: Nigeria Map Showing Population Density (2007)

Source: Best Country Reports (2007)

Figure 3: Cities with Population over 1 Million in Nigeria (2006)

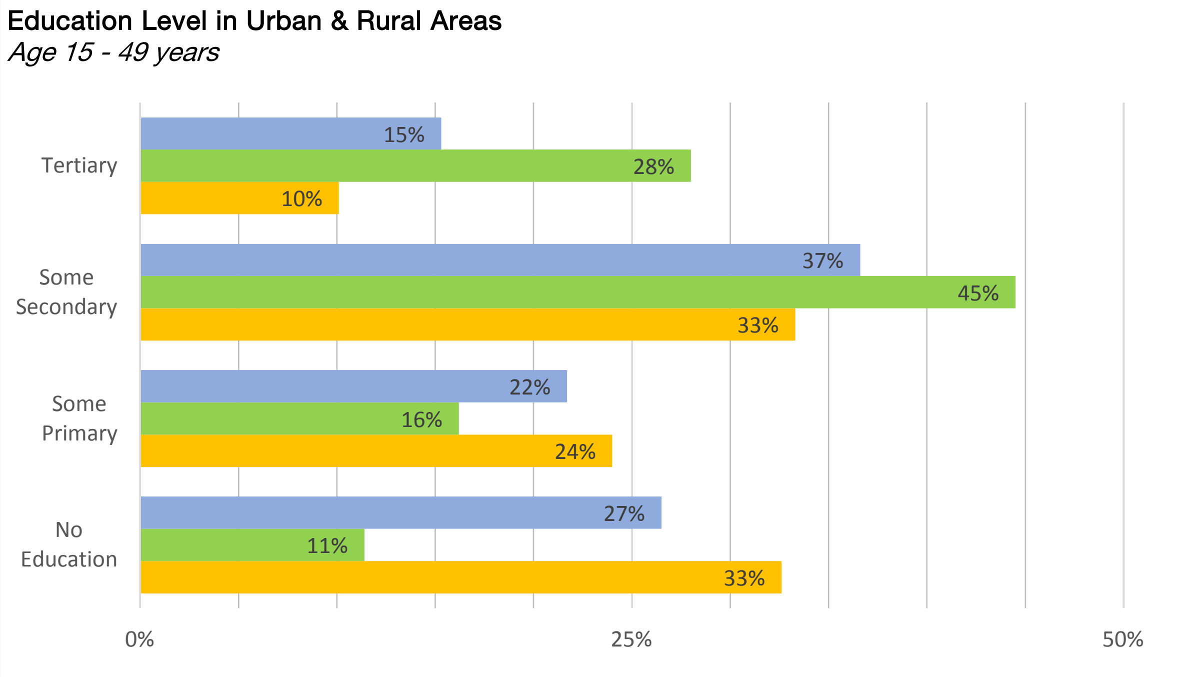
City	Population
Lagos	11,203,000
Kano	3,304,000
Ibadan	2,762,000
Abuja (capital)	1,857,000
Kaduna	1,519,000
Port Harcourt	1,382,592
Benin	1,147,188
Maiduguri	1,100,000
Jos	1,000,000

Source: National Census (2006)

In rural areas, 40% of people are employed in farming (EFInA, 2013: 6; DHS 2011: 41). Populations in the lowest two quintiles are extremely dependent on agriculture, with 41% of all employed women and 74% of all employed men in these groups generating their primary income from farming (DHS, 2008: 42). As illustrated by its contribution to GDP, Nigeria has a thriving wholesale and retail sector, and traders represent the largest proportion (33%) of the adult population in both urban and rural areas (EFInA, 2013: 10).

Education levels are quite low, over one quarter of the adult population has received no formal education. This is even more pronounced in rural areas where almost one third of adults have received no education.

Figure 4: Level of Education – Total, Urban and Rural Population (2008)



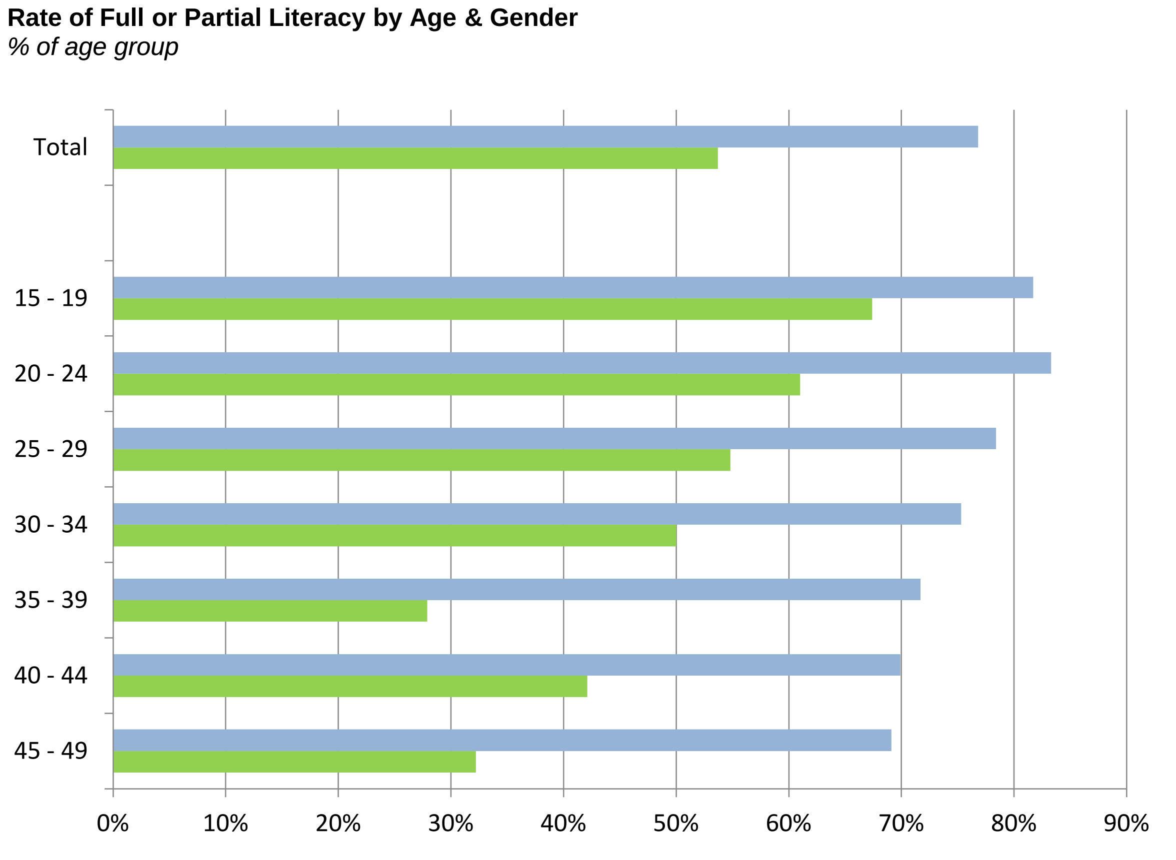
Source: Adapted from DHS (2008): pp. 25

The younger adult population (aged 18 – 33) has relatively higher levels of education; 63% have attended secondary education or higher compared with 35% for those over 34 years. Despite higher levels of education, young adults are the most vulnerable in terms of income; 63% of them earn less than the minimum wage and their average earnings are 30% less than for the rest of the adult population[5] (EFInA, 2013:10). Furthermore, 23% of this age group report that they are mainly dependent on family and friends for income and just 10% of them are employed in the formal sector (Ibid).

The national adult literacy rate is 65% but there are large inequalities between men and women, rural and urban areas and also age groups. Just over 75% of all men yet only 50% of all women have some degree of literacy. Literacy rates are much higher among younger women, ranging from 67% for women age 15-19 to 32% for women between 45 and 49 years.

[5] Average earnings for 18 – 33 year olds is N13,965 per month, versus N19,741 for adults in other age groups (EFInA, 2013: 10).

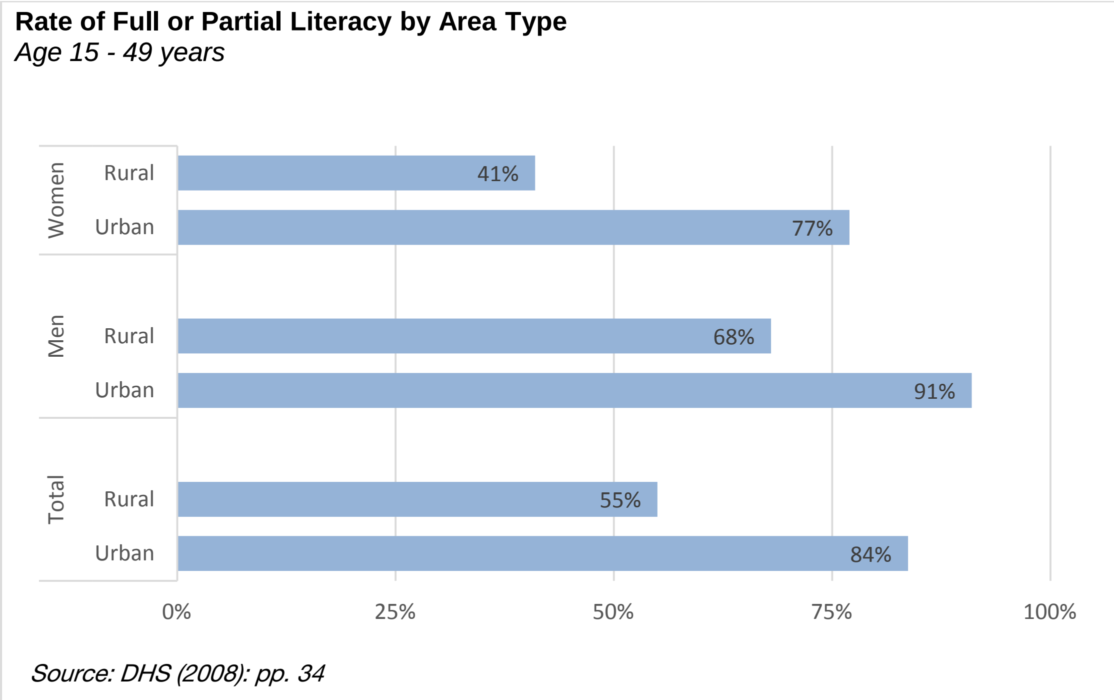
Figure 5: Rate of Full or Partial Literacy by Age & Gender (2008)



Source: Adapted from DHS (2008): pp. 25

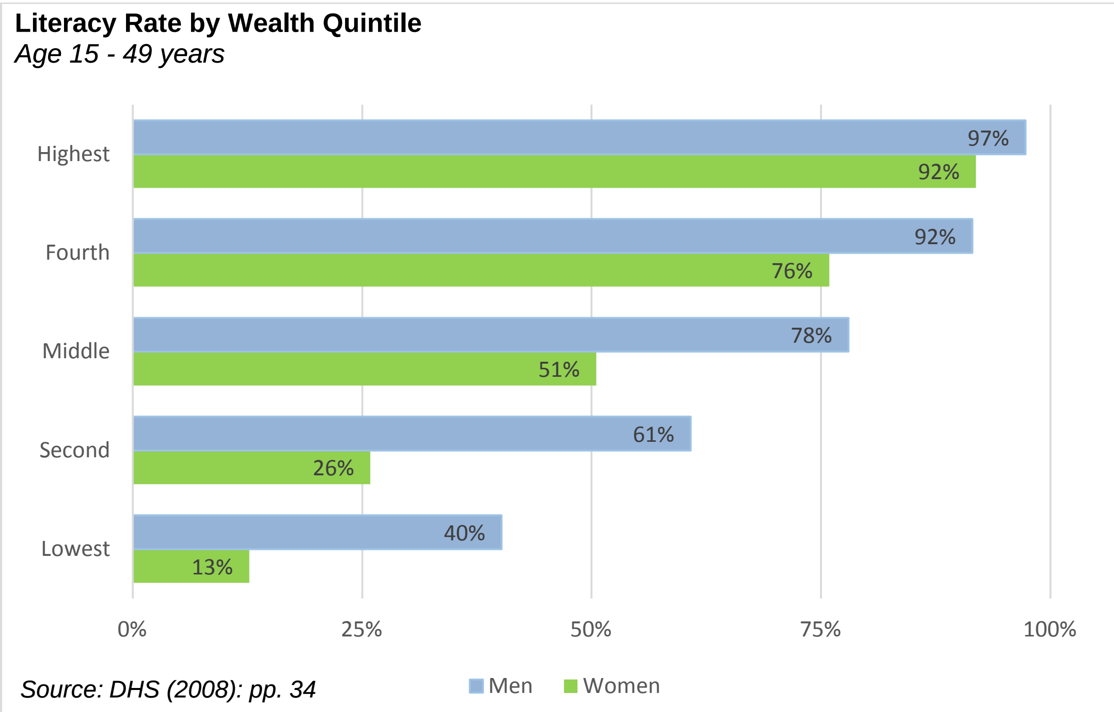
Urban women are almost twice as likely to be literate as rural women (77% and 41% respectively) and there is a similar but less extreme inequality between urban and rural men.

Figure 6: Rate of Full or Partial Literacy by Area Type (Age 15-49 yrs) (2008)



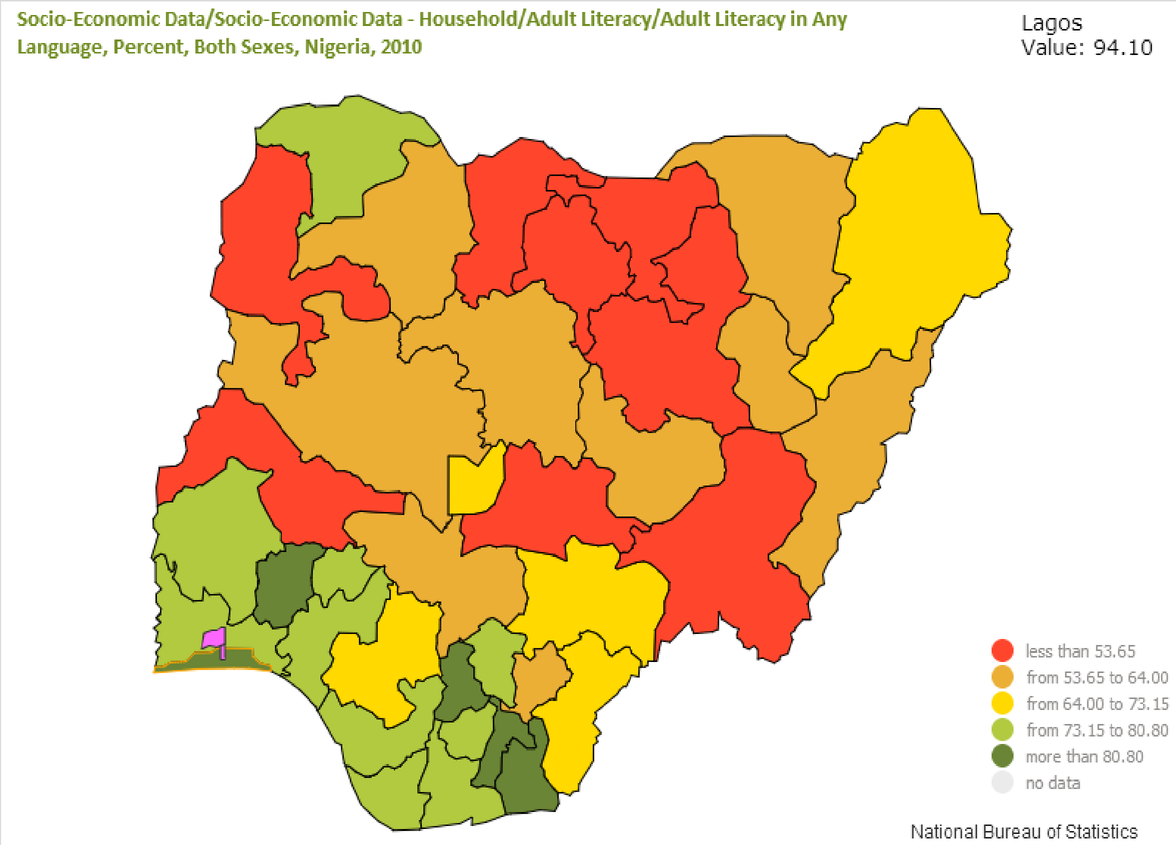
The disparity between wealth quintiles and men and women within wealth quintiles is the most striking; literacy rates for the lowest quintile are just 13% for women and 40% for men.

Figure 7: Rate of Full or Partial Literacy by Wealth Quintile (Age 15-49 yrs) (2008)



Literacy levels in any language are lower in Northern states, as shown by the following map.

Figure 8: Adult Literacy in Any Language by State (%) (2010)



Source: Nigeria Bureau of Statistics (NBS) Statistical Data Portal (2010)

These factors will be important to take into consideration as products and services are developed to promote financial inclusion. The uptake and usage of digital financial services (including mobile-based products) which rely on even minimal reading / writing ability for product education or navigation, is usually highly correlated with literacy and education levels (Intermedia 2012: 6; Intermedia 2013: 45). Users with low literacy tend to adopt later in product maturity (IFC, 2013) or rely on intermediaries to navigate the services for them (Medhi et al, 2009).

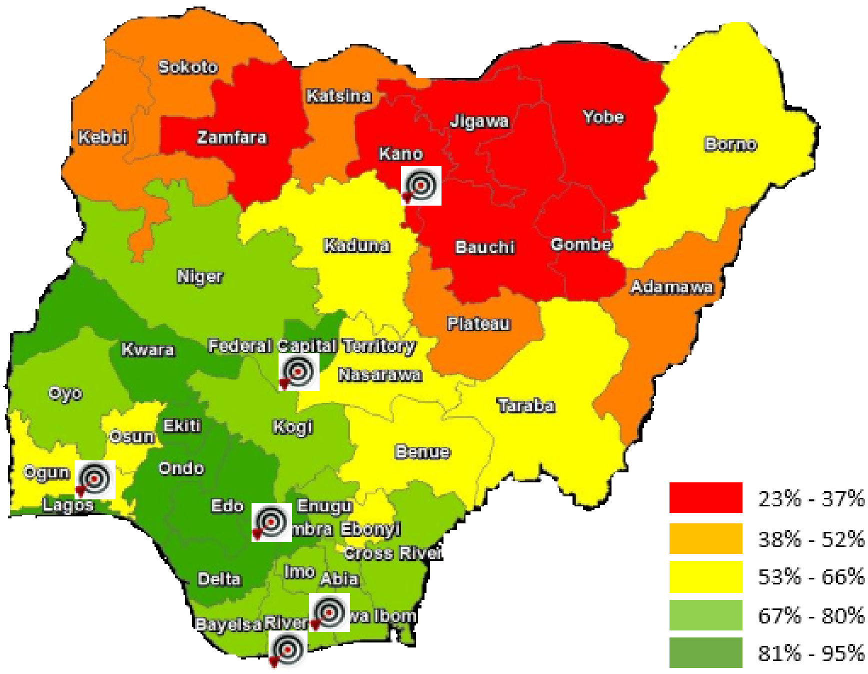
Nigeria suffers from a severe undersupply of electricity, low electrification and power shortages. Despite increasing demand there has been a steady decline in the power generation and distribution system over the past 5 years. There have been several complete blackouts in recent years caused by the collapse of the national grid and supply is erratic in most areas, including major cities. It is estimated that only around 10% of rural households have *access* to electricity. Provision is better in urban areas, where an estimated 40% of the population is connected to the national grid in their household (KPMG, 2013). Outside the main urban centers domestic energy consumption is met by a combination of wood and charcoal and candles and kerosene lamps are the main sources of lighting. In urban centers even small businesses typically have their own diesel generators to meet demand for electricity, albeit at a high cost. This issue will be important to consider as most digital payment solutions rely on electricity for powering devices.

III. MOBILE LANDSCAPE AND ACCESS

Nigeria is one of the largest and fastest growing telecommunications markets in Africa, following liberalization of the market in 2000 (Lange, 2013); the number of mobile subscriptions has doubled in the last five years as services become more affordable and network coverage expands. Today, there are just over 120 million active subscriber lines in Nigeria (NCC, 2014a), indicating a mobile penetration of around 71%, or 137% when considering only the adult population. However, as in many African markets, "multi-simming", the practice of subscribing to more than one provider to avoid network outages and benefit from promotions, is very common, bringing actual mobile phone ownership to 64% of the adult population (EFInA, 2013). Much of the remaining addressable market is in the country's rural areas where network rollouts and operations are expensive. In these areas the mobile ownership is 56% compared to 85% in urban areas. *Access to* rather than *ownership of* mobile phones is higher, with 83% of all households nationwide owning at least one phone (EFInA, 2013). Mobile device downtime owing to irregular power supply is common, especially in rural areas (Asangansi et al, 2013; Muhammad 2012).

Coverage data is not readily available but MTN claims to provide network to 88.8% of Nigeria's landmass and 86.2% of its population (MTN 2013a). Those excluded from coverage are mostly in the northern regions, as indicated by the figure below which shows mobile phone ownership by state.

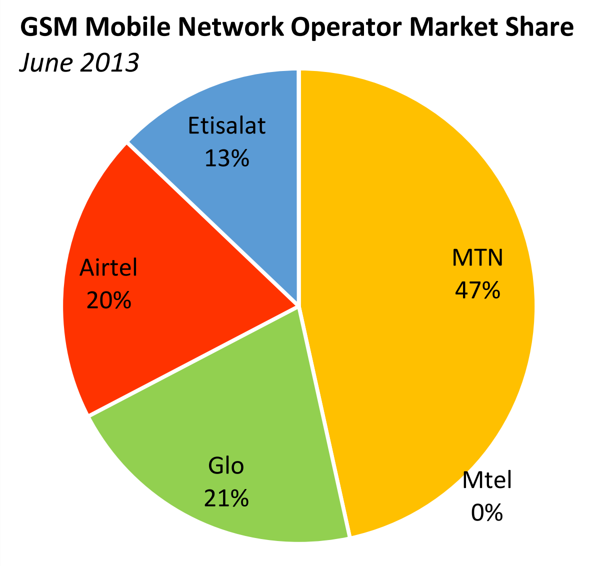
Figure 9: Mobile Phone Ownership (%) by State (2012)



Source: EFInA 2013a: 2

Nigeria's market is served by four GSM operators and one CDMA provider. CDMA accounts for just 2% of active mobile subscriptions (NCC, 2014a). MTN dominates the market with 46% market share, as shown in the figure below.

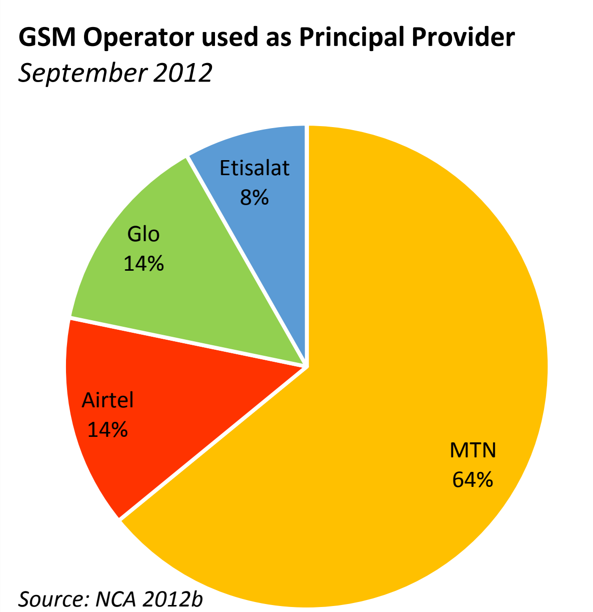
Figure 10: GSM Mobile Network Operator Market Share (June 2013)



Source: NCC 2014b

Figure 11 shows the networks that customers use as their principal provider, indicating an even greater dominance of MTN.

Figure 11: GSM Mobile Network Operator Market Share (June 2013)



Source: NCA 2012b

Nigeria's telecommunications sector is considered by some commentators to be somewhat oligopolistic (Mawoli, 2009; NCC 2012a); just 4 GSM operators serve a market with almost 90 million adults. The two leading operators control almost 70% of the market and the top three operators have almost 90% of market share. In September 2012 the telecommunications regulator, the Nigerian Communications Commission (NCC), declared that the mobile voice market is "not effectively competitive" owing to the dominance of MTN and its 300% price differential between on and off net calls (NCC, 2012a). The NCC also determined MTN and Glo to be jointly dominating for upstream infrastructure and broadband, stultifying competition for fixed data services. The NCC mandated several remedial interventions in April 2013, including the collapse of on and off net retail tariffs (NCC, 2013; Guardian 2013a). Along with Mobile Number Portability (MNP), implemented in April 2013, this step is expected to reduce costs and increase price transparency for consumers. MNP uptake has been quite low to date, with just 22,000 ports after the first 4 months of existence, but this appears to be largely owing to technical issues (Guardian, 2013b). Typically MNP increases quality of service and deepens competition since subscribers are able to retain their phone number when changing mobile network, one aspect which is usually a barrier to changing service provider.

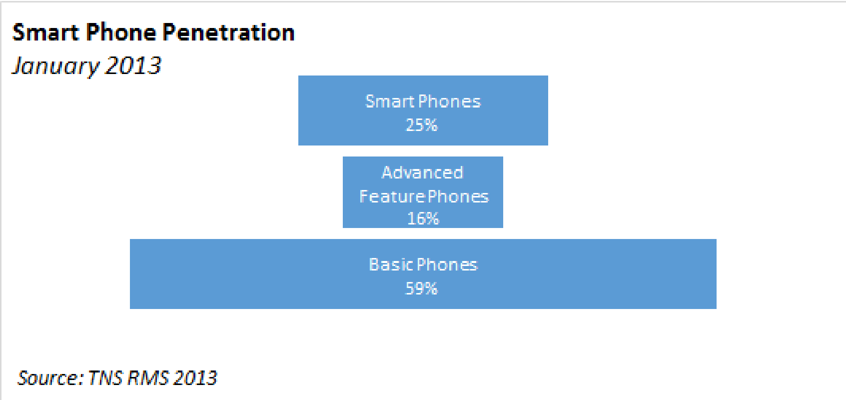
Quality of service is notoriously low in Nigeria, with frequent network outages and dropped calls (NCC, 2012b: 9). In response, NCC has taken corrective action such as a fine levied on all four operators in late 2012 for failing to meet mandated service standards; Etisalat and MTN were fined over $2 million each (Vanguard, 2012). Operators, however, blame power shortages and hardware sabotage for poor network quality and claim that they are investing in infrastructure upgrades to overcome some of these challenges and to improve service quality in an attempt to mitigate against expected increased subscriber churn in wake of MNP (BMI, 2013). MTN rolled out 450 new 2G sites and added 259 co-located 3G sites in Q1 this year and is embarking on a $3 billion capital expenditure program to both improve existing services and expand coverage into currently underserved areas (Bloomberg 2013a; ITU, 2013); Glo announced in April 2013 that they are investing $1.25 billion to upgrade and expand its network in partnership with LTE and Huawei (Bloomberg, 2013a); Etisalat invested $400 million in infrastructure in 2012 and Airtel has invested $1.2 billion in infrastructure in the last 3 years. In total, $7 billion of investment has been made by the telecommunications sector the last 3 years, indicating that mobile network operators (MNOs) are serious about increasing their penetration in the Nigerian market and have a strong capacity to mobilize capital for this purpose.

Customers regularly complain about unauthorized deductions of airtime; 75% of customers think charges are not aligned with prices advertised (NCA, 2012b). This is a significant factor in the consideration of airtime-based charges for value added services.

The market weighted blended Average Revenue per User (ARPU) fell by 10.2% to $5.77 (N949) in 2012. ARPU is expected to continue to fall by around 8% per year to reach $4.70 (N769) in 2016 owing to a weakening subscriber mix caused by the absorption of lower income groups into the customer base as penetration increases (BMI, 2013). Falling ARPU and increased operational costs owing to expansion into rural areas is forcing networks to streamline their operations and develop new revenue streams such as mobile broadband, mobile financial services and other Value Added Services (VAS) (National Mirror, 2013; KPMG 2014). When applied to individual subscribers rather than mobile SIMs (to account for multi-simming practices), the ARPU is approximately $7.90, giving a more accurate portrayal of average customer spend on airtime. However, since this is based on a blended average it includes postpaid customers who usually spend significantly higher amounts than prepaid consumers, who make up the vast majority of subscribers. Average spend on airtime is therefore likely to be much less than this amount – perhaps around $5 (author's estimation) – among prepaid consumers, particularly those in lower wealth quintiles.

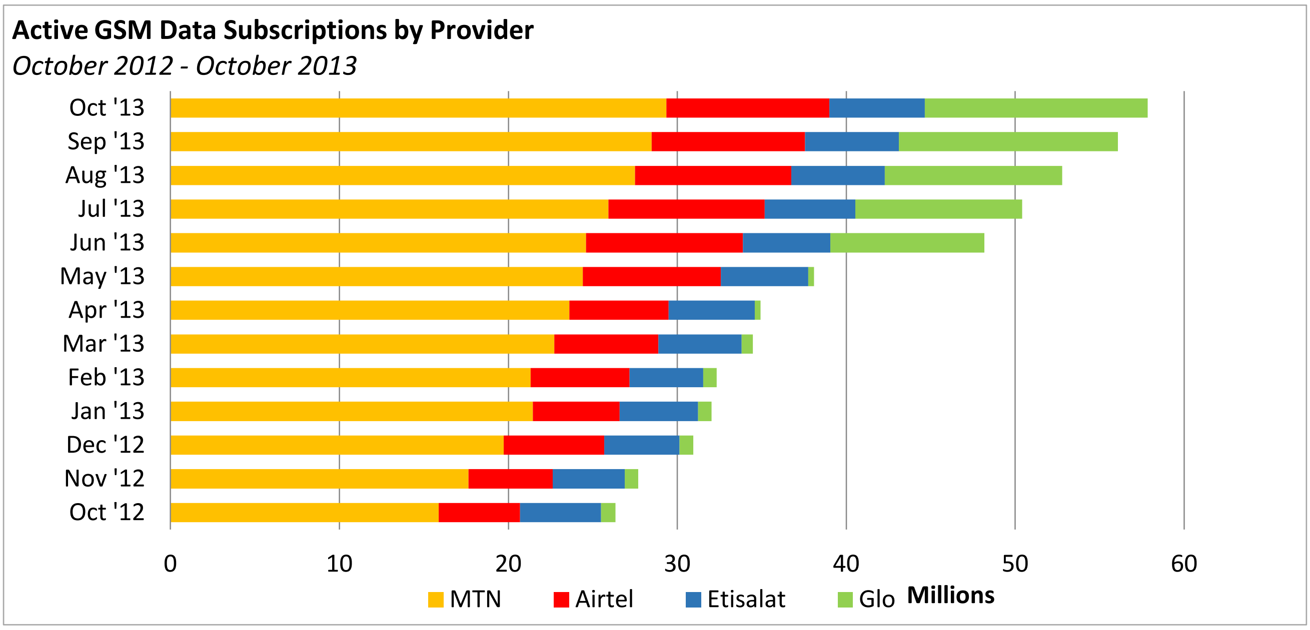
Owing to the increasing affordability of smart phones and mobile data, penetration of advanced mobile devices is on the rise; smart phones and feature phones account for 41% of handsets.

Figure 12: Smart Phone Penetration (January 2013)[6]



In accordance with the growth in smart phone penetration, mobile internet subscriptions doubled in one year to reach almost 60 million active connections in October 2013, suggesting that half of all active subscriber lines are consuming mobile data[7].

Figure 13: Active Mobile Data Subscriptions by Provider (October 2013)



Source: NCC (2014c)

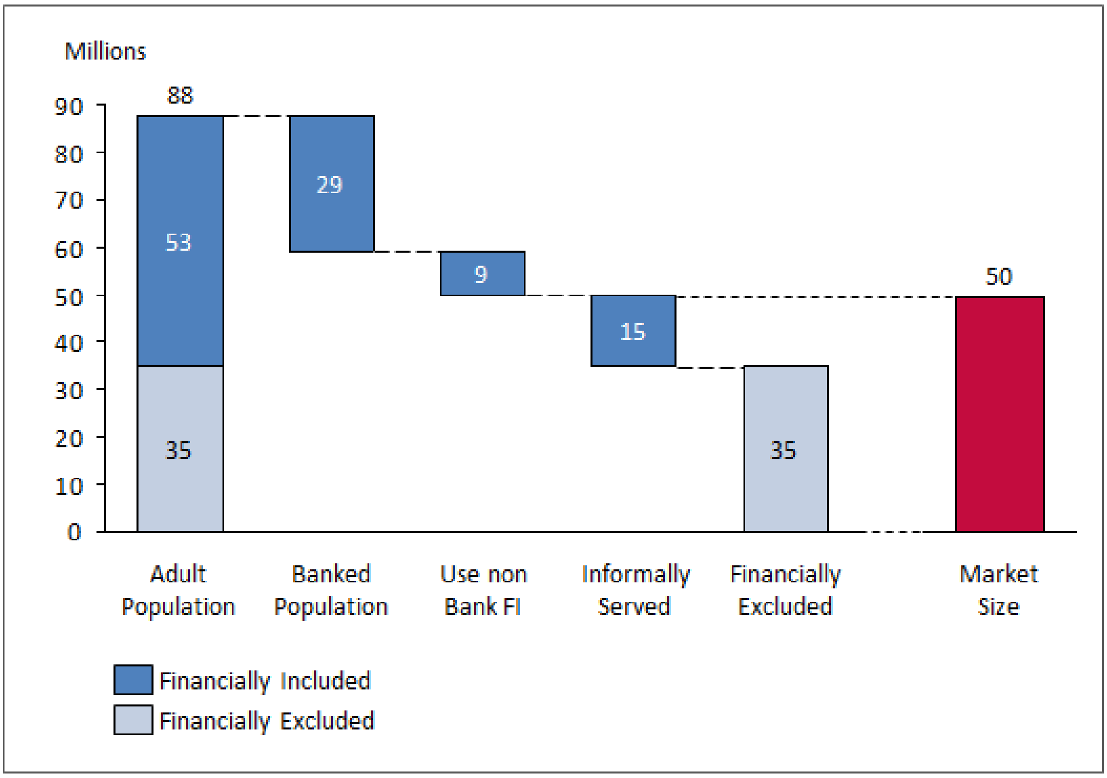
[6] Basic Phones: can only voice call & SMS. Feature Phones: moderately-priced multipurpose devices which can call, SMS, access the internet & run some apps but with less advanced computing capability and connectivity than a smart phone. Smart Phones: device with advanced computing capabilities.
[7] Seems unrealistically high and is perhaps inflated by internet bundle purchases that go unused, often because the subscriber does not have a data enabled handset. In some markets this occurs when telco freelance agents register subscribers for services they do not need without them knowing it in order to earn commissions (Author's suggestion, based on telco experience in Ghana)

IV. FINANCIAL SERVICES LANDSCAPE

A. Current Level of Financial Inclusion

Almost 60% of Nigerian adults – 50 million people – do not have access to formal regulated financial services. A significant proportion (28%) of those who are considered financially included are served by the informal sector (savings clubs, money lenders, etc.)[8].

Figure 14: Market Sizing: Opportunity for Financial Inclusion (2012)



Source: Adapted from EFInA (2012a)

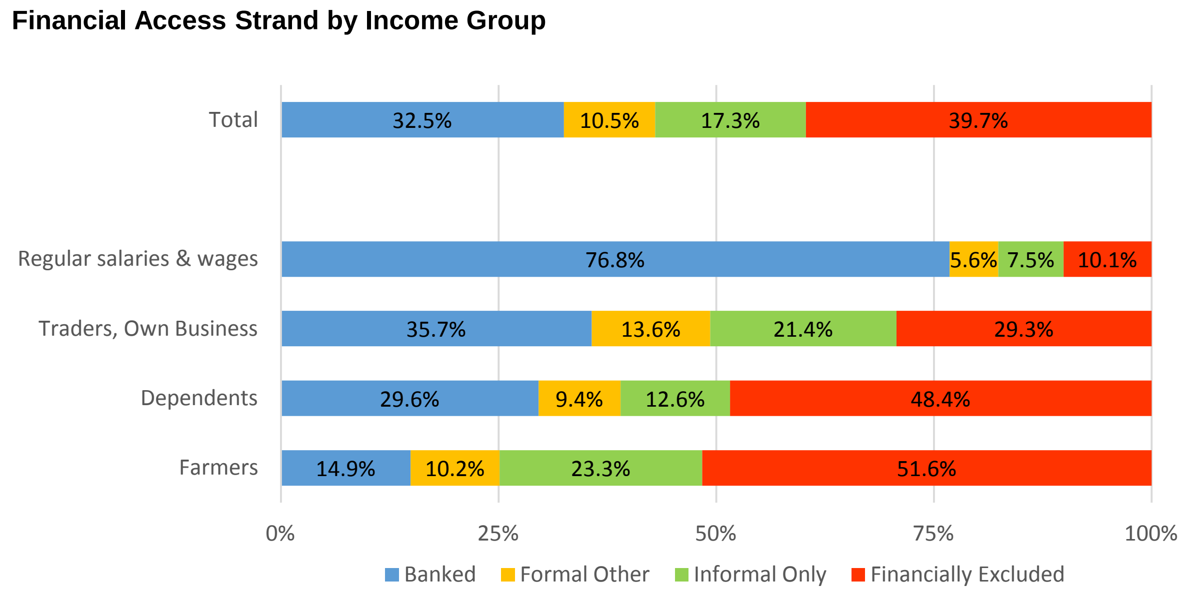
The vast majority of the financially excluded population lives in rural areas; over 76% of the rural population is unbanked. Lower income groups and those with the least stable forms of income (traders, farmers and dependents) are the most financially excluded, as shown in Figure 15:

- **Traders:** half of the country's traders, who make up the largest proportion of the adult population (33% of rural and urban adults), are financially excluded. This represents **29 million** relatively liquid and mobile adults who do not have access to formal financial services.
- **Farmers:** three-quarters of farmers - **12 million people** - lack access to formal financial services.
- **Dependents:** half of all adults who do not earn an income themselves and who are dependent on others for their financial needs are financially excluded. This could represent an opportunity for domestic remittances.
- **Salaried people:** individuals with a regular income are best served by financial service providers; only 10% of them remain excluded.

---

[8] For financial inclusion definitions see Figure 18

Figure 15: Financial Access Strand by Income Group (2012)

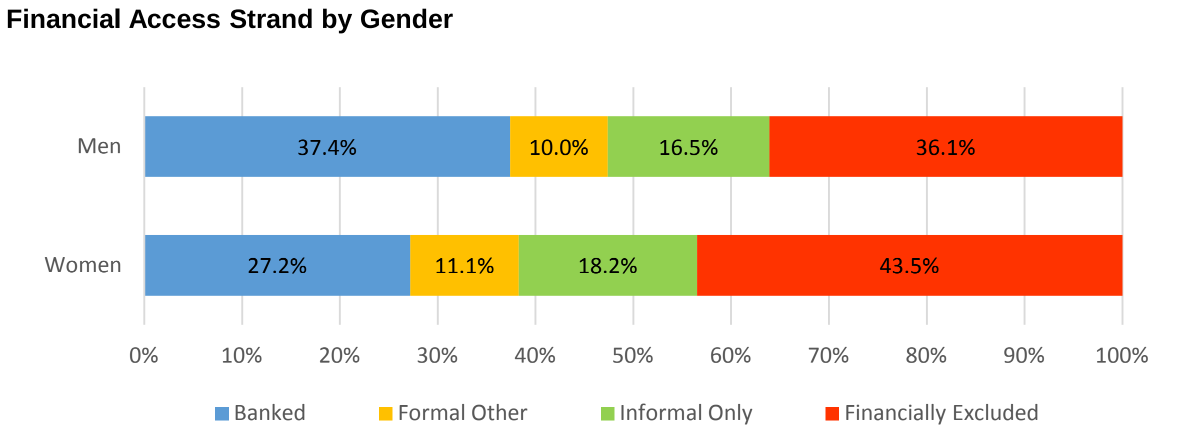


Source: Adapted from EFInA, 2013: 16

In terms of age group, young adults remain underserved by financial service providers; 55% of 18 – 33 year olds, who make up half of the country's adults, are financially excluded. This represents 24 million relatively literate and educated, financially vulnerable, emerging consumers who do not have access to financial services (EFInA 2013; 19).

Women lag significantly in financial inclusion and are more likely to be reliant on informal services for their financial management.

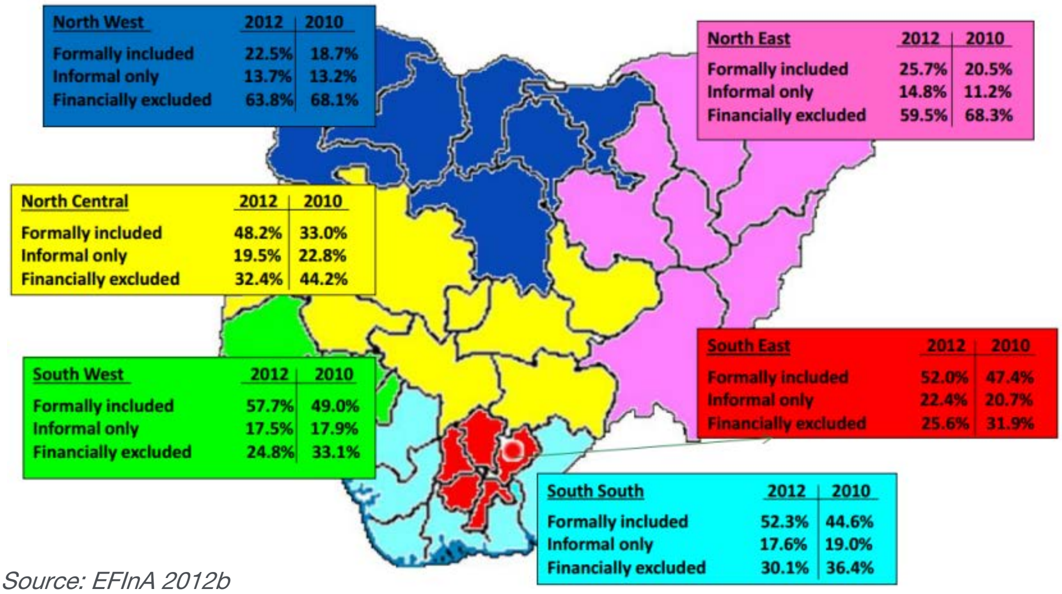
Figure 16: Financial Access Strand by Gender (2012)



Source: EFInA, 2013

Geographically, the North West and North East regions have the largest percentage of financially excluded and the South West has the highest formally included.

Figure 17: Financial Access by Nigerian State (2012)



Source: EFInA 2012b

Figure 18: Financial Inclusion Definitions

Definitions of Categories Used to Assess Financial Inclusion

This report's analysis considers that financial inclusion refers to having access to formal, regulated financial products or services. The following categories are used when assessing financial inclusion:

- **Financially Excluded:** individuals who do not use any financial services or products and transact using cash. All financial transactions, including saving and borrowing, happen within the household or network for family and friends.
- **Informally Served:** individuals who do not use financial products or services from formal, regulated financial institutions. They use informal services such as e-susu / daily contributions[9], savings clubs, village or community associations, cooperatives or informal money lenders.
- **Customers of Non-Bank Financial Institutions:** individuals who are served by formal, regulated service providers which are not banks, such as microfinance banks, insurance companies, pension schemes, mobile money providers, money transfer services (e.g. Western Union).
- **Banked Population:** individuals who have a deposit money bank (DMB) account or service (e.g. ATM card, credit card, savings account, current account, fixed deposit account, overdraft, mortgage, bank loan or any other product offered by a bank). Such individuals may use other informal services as well but for purposes of this analysis their defining feature is that they use DMB services.

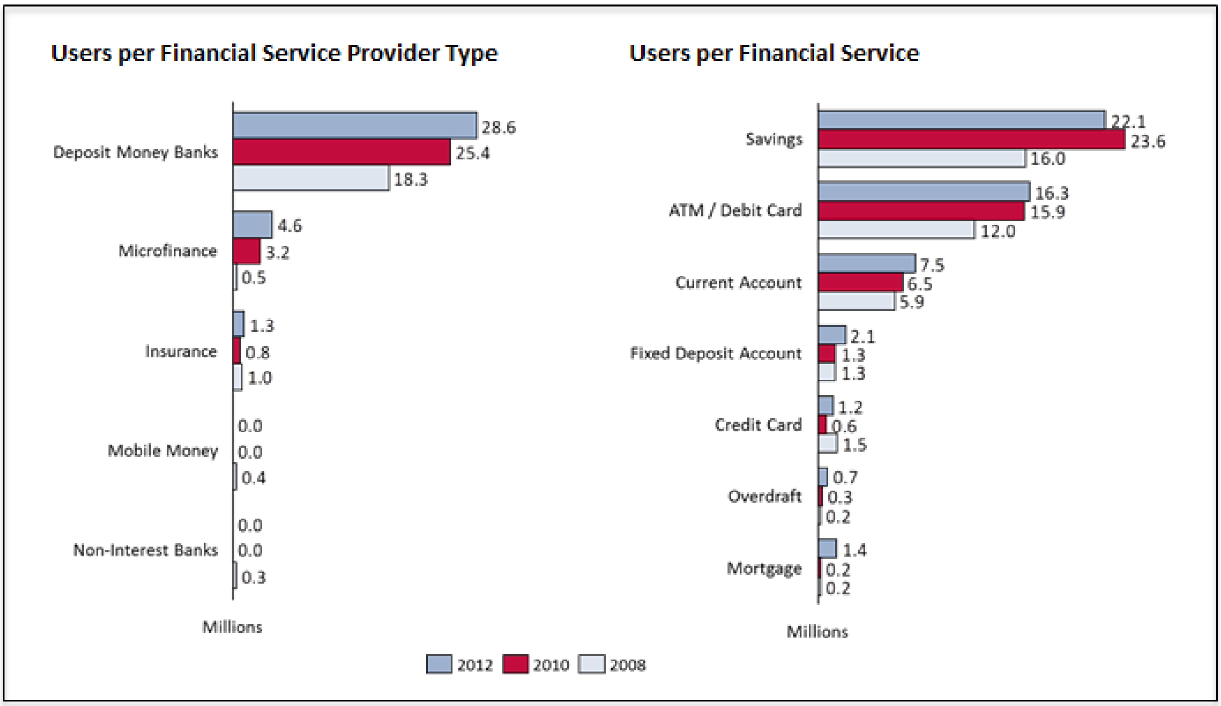
In the analysis presented here, these four strands are mutually exclusive.

[9] Meaning "small small" in the Akan language, this is one of the oldest financial practices in West Africa. A customer makes a fixed amount daily contribution (set by them) to an esusu collector for a period of 31 days. The collector pays the month's accumulated savings to the customer at the end of the month and retains one day's contribution as commission for the service. Esusu collectors visit savers' homes on a daily basis to collect contributions and they typically have a small office or kiosk in the local community, often a marketplace. Savings with esusus are often targeted at a specific objective, such as school fees or rent. The system relies heavily on trust and personal relationships, although it is not uncommon for esusus to abscond with contributions.

B. Demand Side Financial Sector Analysis

Uptake of financial services has increased since 2008, particularly in the formal banking and microfinance sectors; with the most significant rise being for savings and debit cards. Savings and ATM debit cards drive the formal financial sector while Mobile Money and insurance penetration remains extremely low.

Figure 19: Financial Services Uptake (2008 – 2012)



Source: Adapted from EFInA 2013: 20 - 21

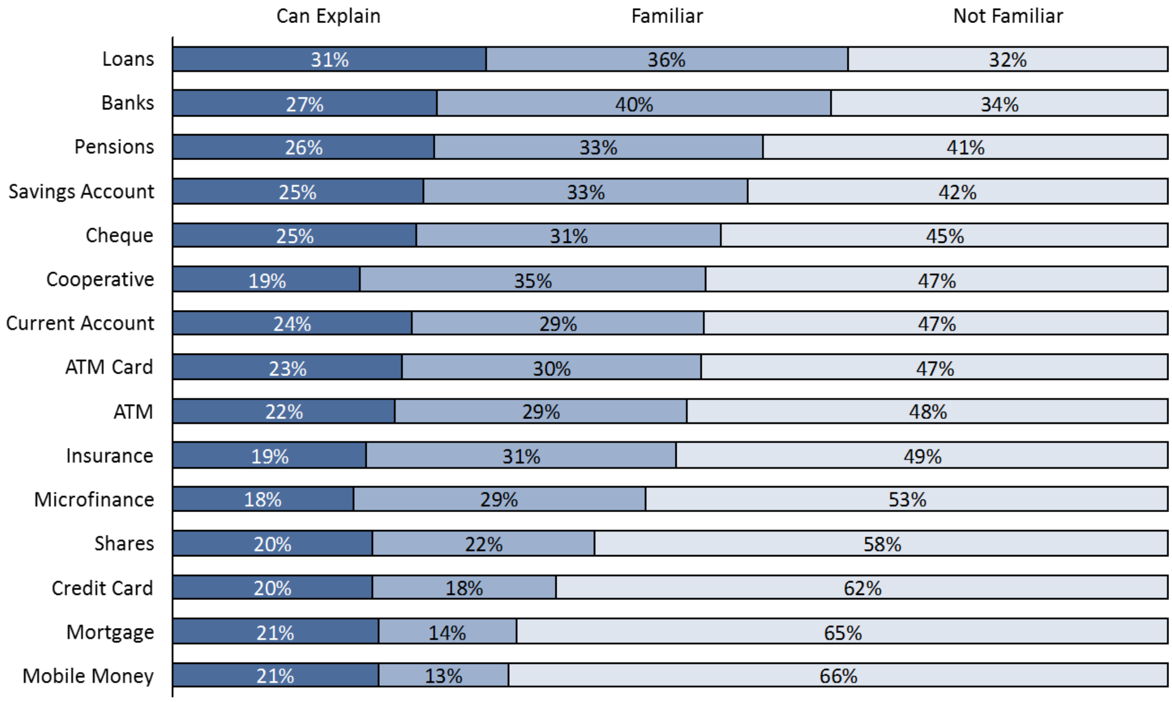
Access Challenges

Some barriers to access exist across all financial sectors, as follows:

i. Low Understanding of Financial Products

Many Nigerians are not familiar with the concepts of Mobile Money, mortgages, non-interest banking, credit cards, microfinance and other financial services. This may be attributed to the fact that over 80% of people report that family and friends (who may also be uninformed) are their main sources of financial information and advice. Just 20% of people obtain advice from formal financial institutions. Such low levels of awareness are likely to hinder uptake and so the required investment in customer education should not be underestimated. However, higher awareness alone cannot lead to uptake; 50% of the population is familiar with the concept of insurance and yet less than 1.5% has insurance cover, evidencing the fact that a holistic approach, considering all aspects such as access points, product design as well as education, is required to effectively drive adoption.

Figure 20: Understanding of Financial Services Terms & Products (2012)



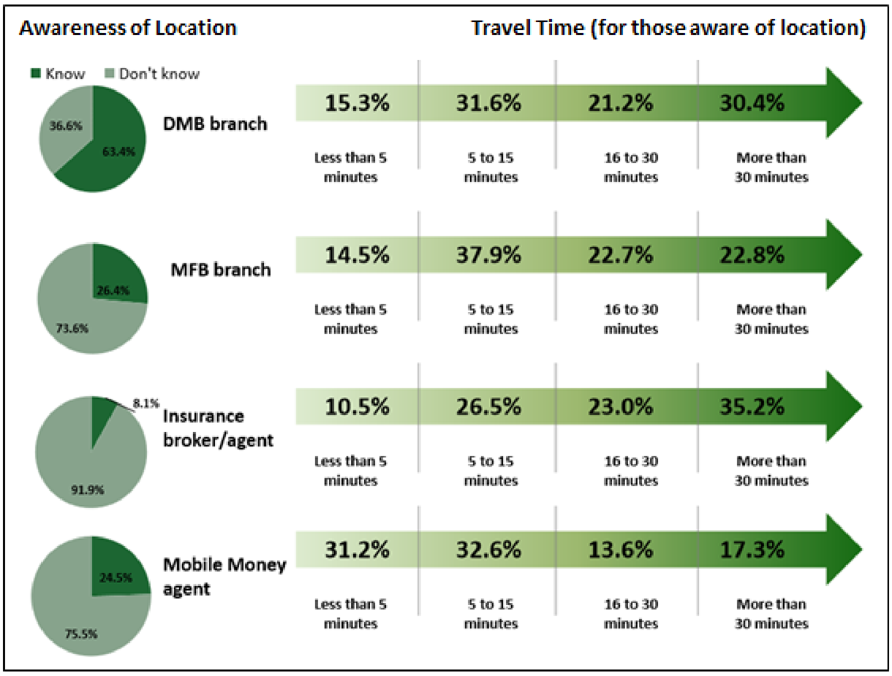
Source: Adapted from EFInA 2013: 45

ii. Lack of Awareness of Access Points

As will be explored later in this chapter, access to financial service provider locations is an important driver for product adoption. Therefore, awareness of and proximity to these access points is crucial.

However, as shown in Figure 21, with the exception of banks, awareness of financial service provider locations is very low, posing a significant barrier to access. For many potential clients who are aware of their closest service provider location, it is over 30 minutes away which is likely not convenient enough to promote adoption.

Figure 21: Financial Services Uptake (2008 – 2012)

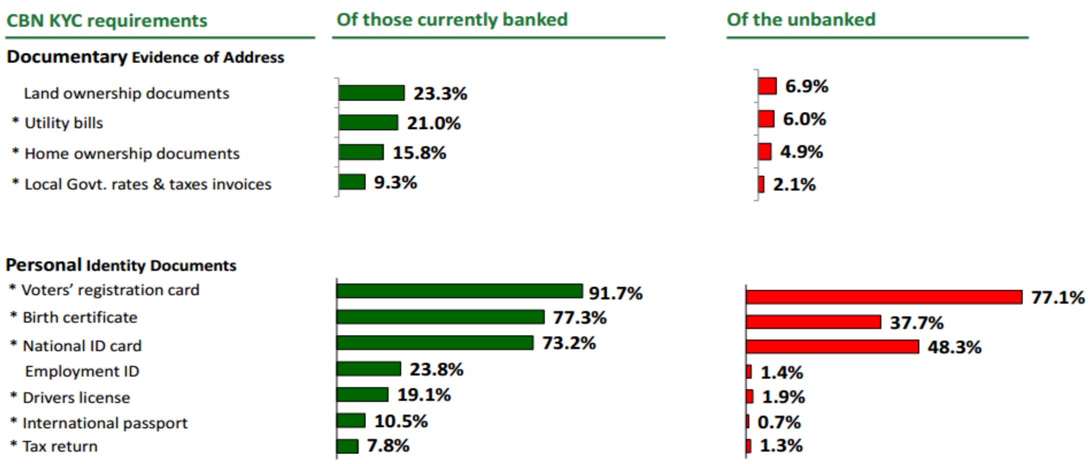


Source: Adapted from EFInA 2013: 20 - 21

iii. Know Your Customer (KYC) Regulations

Only 7% of the unbanked population has proof of address and 77% has any proof of identification. Therefore, under regulations that existed before 2013, 93% of the unbanked population would not qualify for full KYC and 23% of the unbanked would not be able to open a bank account at all.

Figure 22: KYC Documentation Ownership (2012)



Source: EFInA 2013: 44

However, in January 2013 the Central Bank of Nigeria (CBN) introduced regulations permitting tiered KYC for Mobile Money and Branchless Banking services, including very low KYC accounts, as illustrated in Figure 23. This tiered system makes it much simpler to provide services to those who were previously excluded owing to lack of documentation. It also facilitates easy registration and trial, since many registrations are ad hoc and people do not carry their ID. The most common form of ID, as shown in Figure 22, is the Voter ID card. Since 2015 is an election year voter ID cards will be reissued soon, even further reducing the challenge of identification. Documentation is no longer likely to be a barrier to access.

Figure 23: Tiered KYC Requirements and Limits (2013)

Requirements	Tier 1	Tier 2	Tier 3
Documentation	Passport photo Unverified personal info (name, date of birth, address, phone number)	Passport photo Verified personal info (name, date of birth, phone number) Unverified address	Passport photo Verified personal info (name, date of birth, phone no., address) & background checks
Transaction Limits	N20,000	N40,000	No limit
Cumulative Value Limit	N200,000	N400,000	No limit

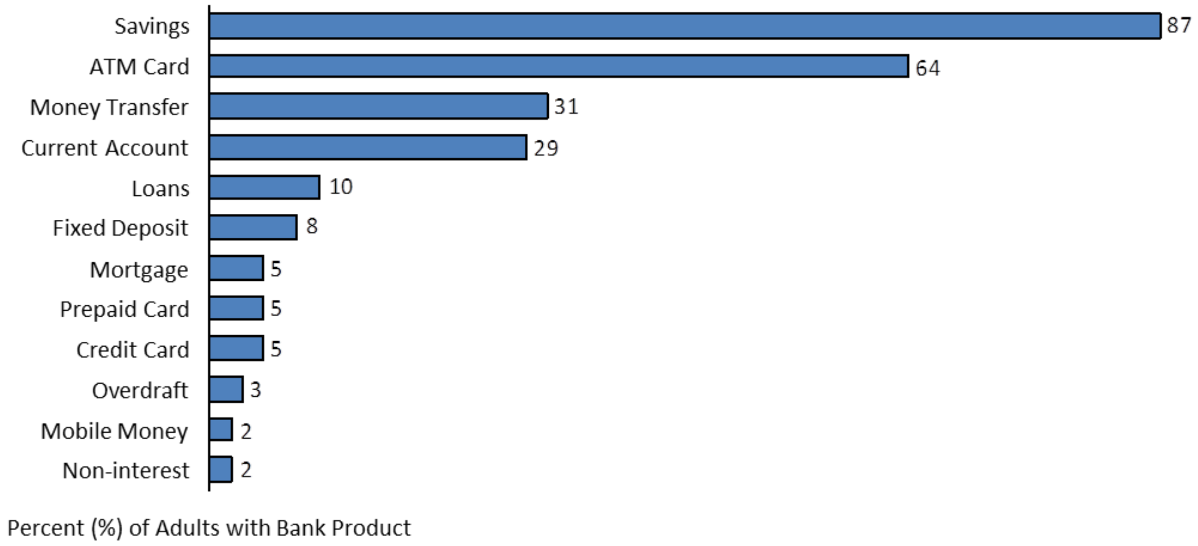
Source: CBN 2014

Financial Service Provider Uptake

i. Deposit Money Banks (DMBs)

29% of the adult population has a bank product and 33% have access to banking products, in some cases indirectly – for instance via an intermediary. Savings are a significant driver for the uptake of banking products, with 87% of the banked population having savings accounts.

Figure 24: Uptake of Deposit Money Bank Products (% of banked adults) (2012)



Source: EFInA 2013: 23

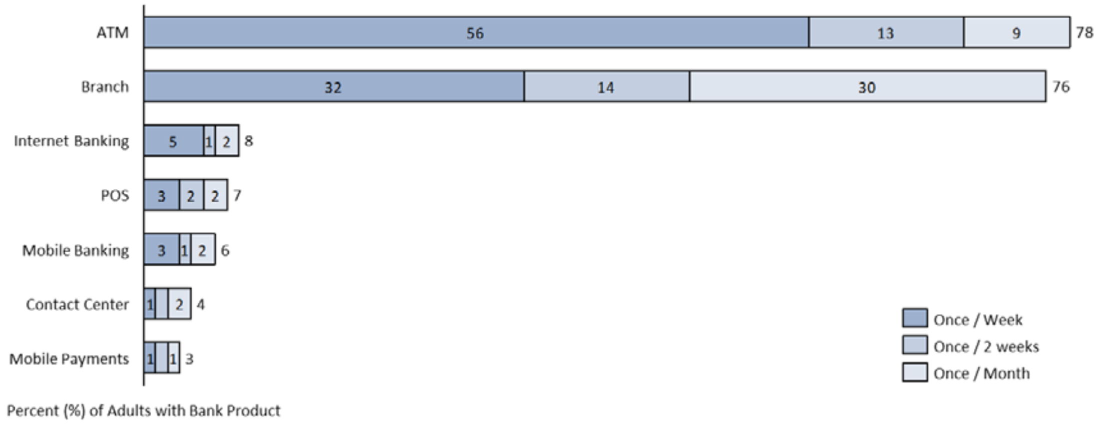
Although banked users have access to digital financial services, their bank product usage is very much oriented around cash-based transactions; cash deposits and withdrawals are far and away the most common transaction type (with 91% and 84% of banked customers engaging in these transactions at least once per month) and ATM cards are the second most prevalent bank product.

Figure 25: Frequency of Banking Transactions per Month (% of banked adults) (2012)

Source: Adapted from EFInA 2013: 25

Traditional banking channels, ATMs and bank branches, remain the most prominent; almost 80% of customers interact with these channels at least once per month compared with just 3% of customers using mobile payments with this frequency.

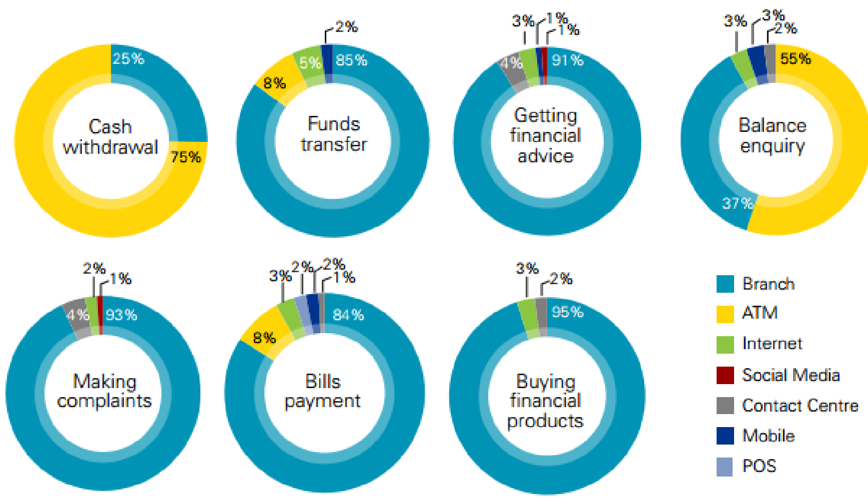
Figure 26: Frequency of Banking Channel Use (% of banked adults) (2013)



Source: Adapted from KPMG 2013: 18

Even transactions which could be performed via electronic means easily with a bank account, such as funds transfer and bill payment, primarily happen in the banking hall, with the exception of balance enquiry and cash withdrawal which customers prefer to do at ATMs. The branch is not only the preferred transactional channel but also the favored sales channel; more than 90% of customers would like to seek financial advice and enroll for new products at the branch. The fact that the branch is preferred to this extent may be explained by the fact that customer satisfaction with the branch experience still exceeds electronic channels by a large margin, despite high customer dissatisfaction with queuing time at banks. It may also point to even banked customers' preference for a face-to-face interaction for such activities. We would expect to see an even stronger inclination towards in-person interaction among the non-banked population. These points indicate the importance of the intermediary in financial transactions and the central role of the agent network in deepening financial inclusion and the need for high quality customer education regarding the potential for digital financial services to reduce dependence on brick-and-mortar and intermediary based transactions.

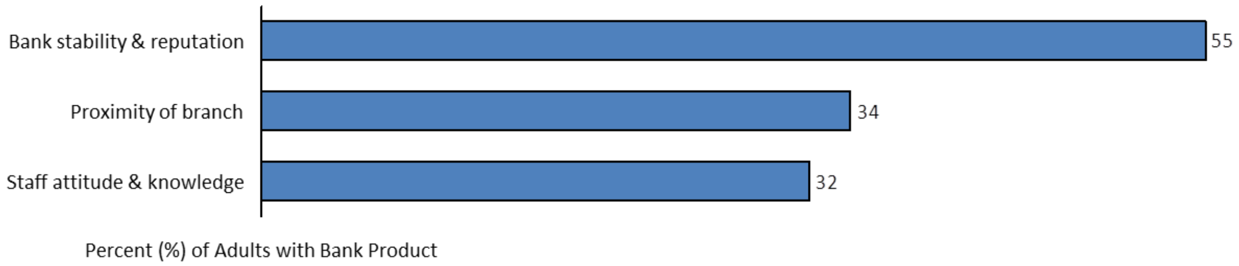
Figure 27: Frequency of Banking Channel Use (% of banked adults) (2013)



Source: KPMG 2013: 16

In choosing a bank, bank stability and reputation, proximity to the bank and customer service are the most significant drivers. This illustrates the importance of brand value in promoting financial services, which is likely to present a challenge for new players in the market. The prominence of branch proximity and customer service in provider selection again points to the central role of the agent network in expanding the reach of digital financial services.

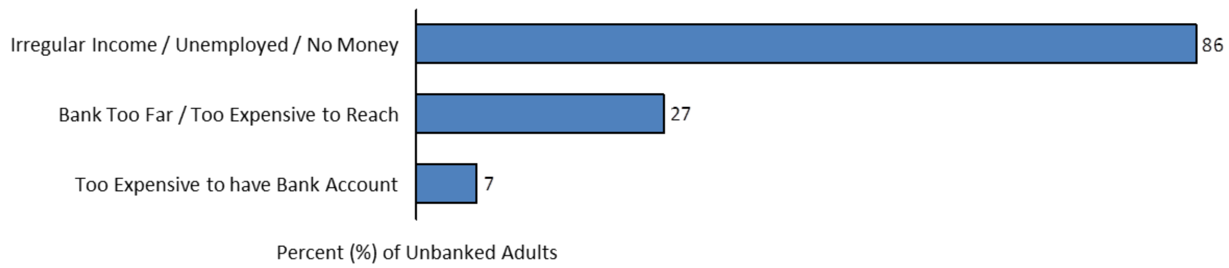
Figure 28: Top Criteria for Selecting Main Deposit Money Bank (% of banked adults) (2012)



Source: Adapted from EFInA 2013: 25

Among the unbanked population, the main barriers cited for not having a bank account were lack of income, bank proximity and an understanding that fees associated with having a bank account are too high. The perception that financial services require money above and beyond what people already have is common and points to lack of perceived relevance to people's existing practices and needs. Development of relevant services which are appropriately aligned with irregular and low incomes, as well as education about how these are suitable for people's financial management, is required (Osborn, 2013).

Figure 29: Barriers to Accessing Deposit Money Banks (% of unbanked adults) (2012)



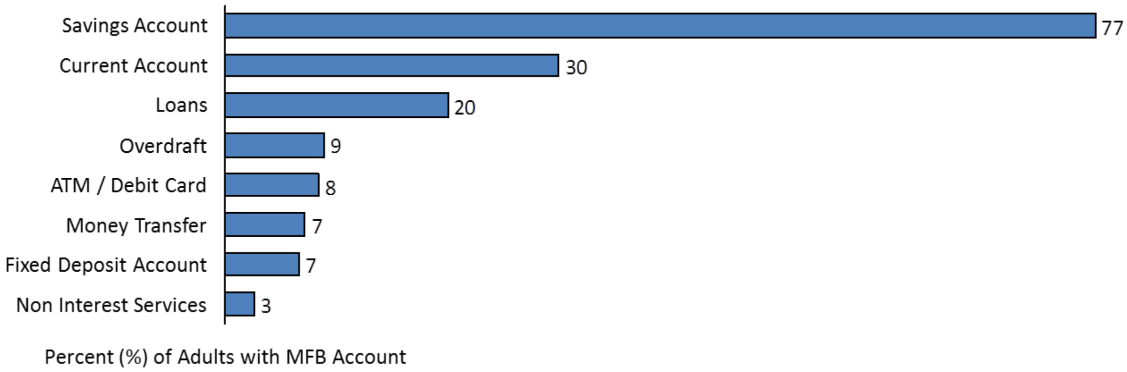
Source: Adapted from EFInA 2013: 25

Despite the barriers to access, 84% of people who have never had a bank account say that they would like to have one, indicating that there is no cultural or social aversion to the idea of being banked.

ii. Microfinance Banks

Despite attempts by the regulator to stimulate growth of this sector, usage of microfinance banks (MFBs) remains low; just 5.2% of the Nigeria adult population has a MFB account. Similarly to banked customers, MFB clients have a strong savings culture; almost 80% have savings accounts.

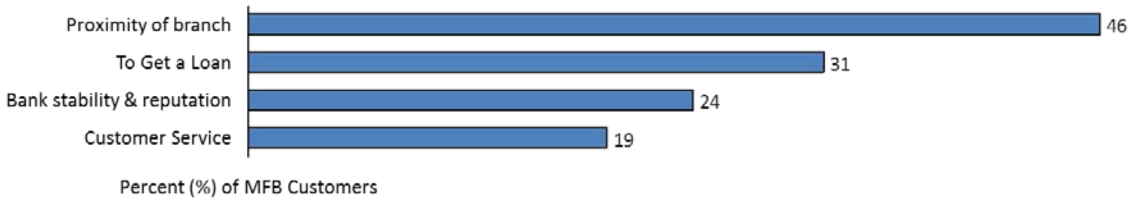
Figure 30: Uptake of MFB Products (% of MFB customers) (2012)



Source: Adapted from EFInA 2013: 25

Drivers for choosing a MFB are also similar to considerations for customers of DMBs; proximity is the primary driver and stability / reputation and customer service are key factors. Access to credit was also a significant driver; 31% of customers indicate that they selected a MFB as they thought it more likely that they would provide credit than a DMB.

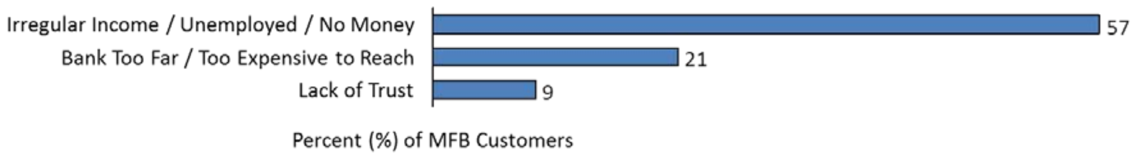
Figure 31: Top Criteria for Selecting MFB (% of MFB customers) (2012)



Source: Adapted from EFInA 2013: 30

Barriers to accessing MFBs were also similar to DMBs. Over half of those without MFB accounts stating that they did not have enough money or sufficiently regular income to be able to be able to become MFB customers, indicating the need for products with fee structures that more appropriately align with the income profile of the financially excluded and a communications strategy that makes this known to target beneficiaries. Lack of proximity was a barrier for 20% of non MFB clients indicating that agency banking or other distribution methods may be required to increase the penetration of MFBs. Lack of trust was an issue for 10% of potential customers.

Figure 32: Barriers to Accessing MFBs (% of MFB customers) (2012)



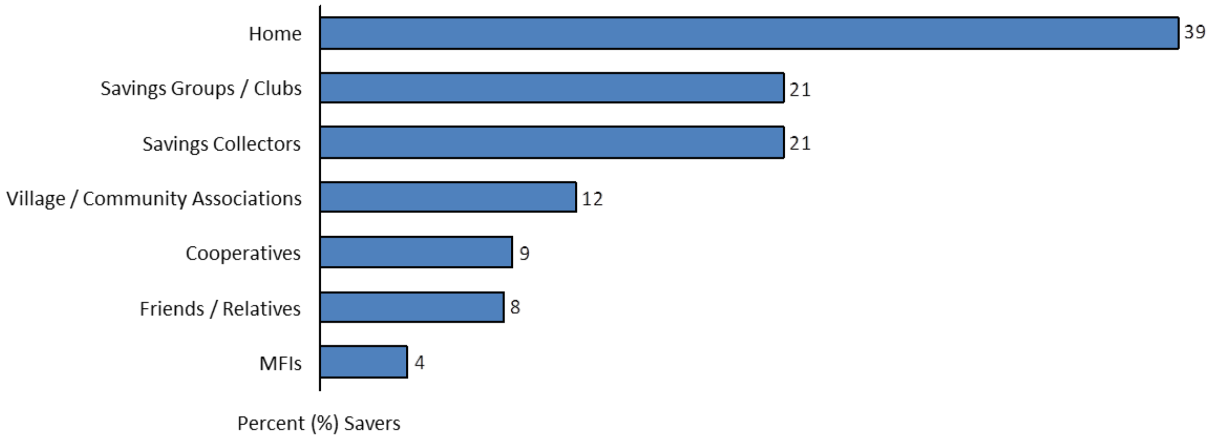
Source: Adapted from EFInA 2013: 31

Financial Services Practices & Use Cases

i. Savings

Nigeria has a strong savings culture; almost two-thirds of the adult population report to save. As seen in the previous section, savings drive the formal financial sector, constituting the most popular financial service among the deposit money and microfinance banks. Informal saving is also common, with one-third of all adults saving informally (EFInA 2013: 32). The 27.5 million people who save informally generally keep savings at home or with various types of group savings schemes. Formalizing these mechanisms could present an opportunity for financial institutions and savers alike.

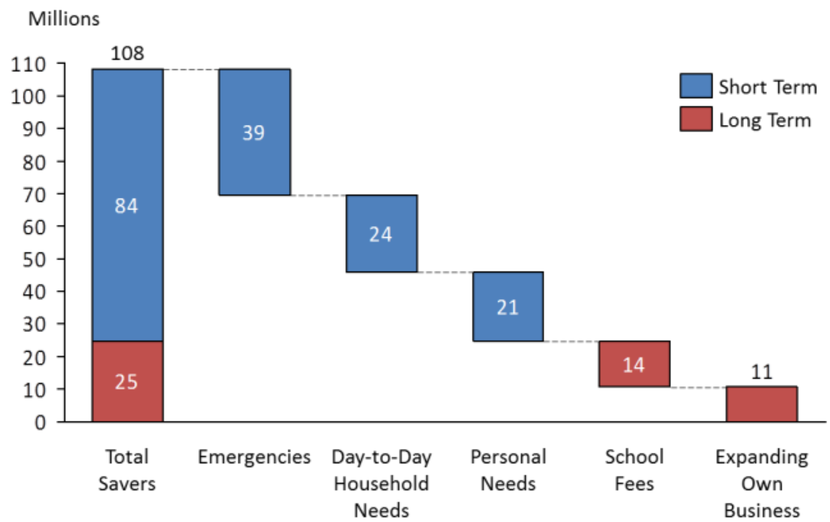
Figure 33: Informal Saving Mechanisms (% of Savers) (2012)



Source: EFInA 2013: 34

Savings behavior across the informal and formal sectors is largely driven by short term objectives, especially emergencies. Over 60% of the population would like to have more information about how to save more effectively, including for their old age, indicating a high readiness for savings products.

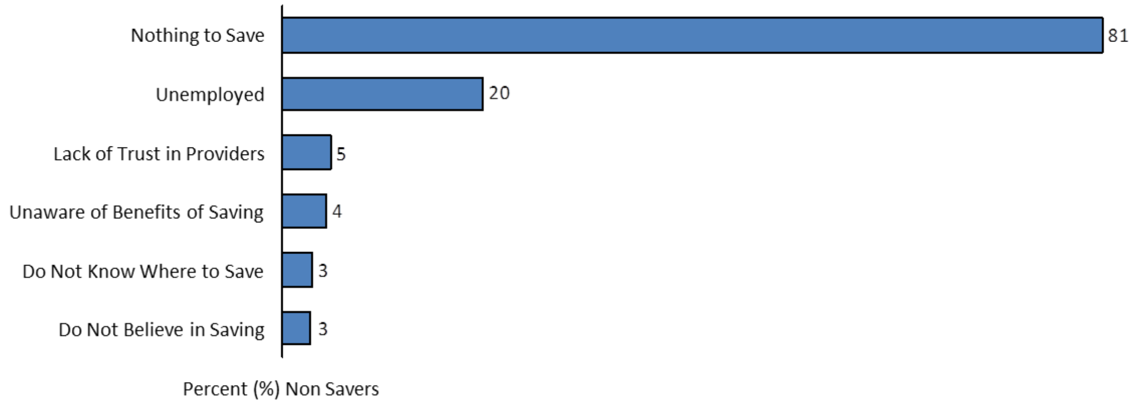
Figure 34: Reasons for Saving (% of Savers) (2012)



Source: Adapted from EFInA 2013: 33

Among those who do not save, the overwhelmingly significant barrier to saving is lack of money; access and product features are not a barrier. This suggests that for some sections of the population, better supply of financial services will not be a driver for promoting uptake.

Figure 35: Barriers to Saving (% of Non-Savers) (2012)

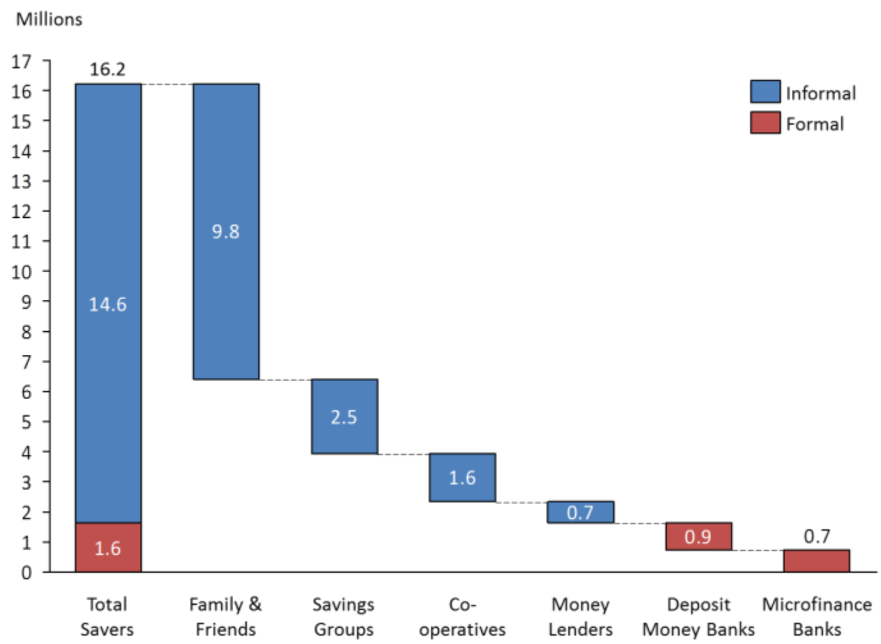


Source: EFInA 2013: 34

ii. Loans and Credit

Borrowing is prevalent, with almost 20% of adults reporting to have borrowed money in the last 12 months. Credit is mostly provided by the informal sector to date; around only 10% of all borrowers received their loans from a deposit money or microfinance bank. Making more loans available via the formal sector presents a substantial business opportunity for lending institutions and also a an opportunity to increase consumer protection by providing services in a regulated environment with limit and transparency controls around aspects such as interest rates and payback periods.

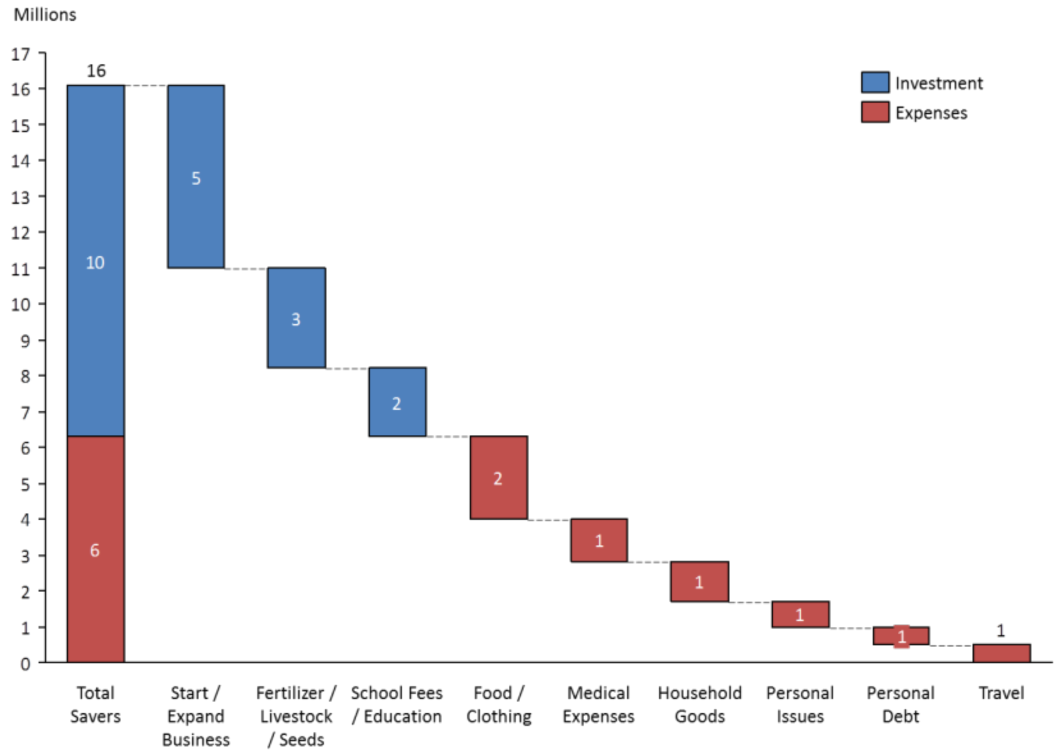
Figure 36: Sources of Loans and Credit (Millions of Borrowers) (2012)



Source: Adapted from EFInA 2013: 35

Borrowing, for the most part, is for productive investments which may increase income over time; 8 million people borrowed to invest in a business or purchase agricultural stock or inputs. Some borrowing is to cover everyday expenses which is likely required with short notice and is therefore perhaps a driver for people seeking credit from informal institutions.

Figure 37: Reasons for Taking a Loan (Millions of Borrowers) (2012)

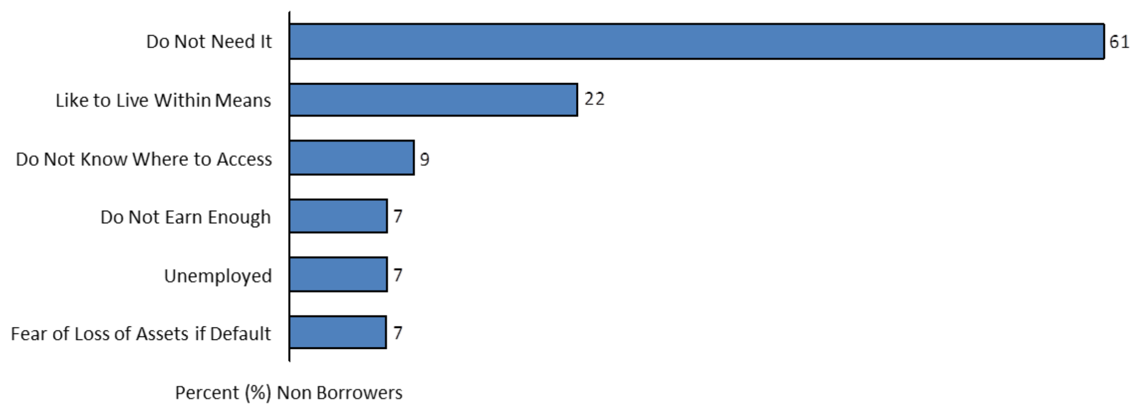


Source: Adapted from EFInA 2013: 36

In selecting lenders, most people (60%) considered speed of access to the loan as the most significant factor, followed by repayment period (33%), flexibility of repayments (25%) and interest rate (21%).

Product design and access were not the most significant barriers to taking a loan. Those who had not taken a loan had not done so because they had no perceived need or like to live within their means.

Figure 38: Barriers to Accessing Credit (% of Non-Borrowers) (2012)

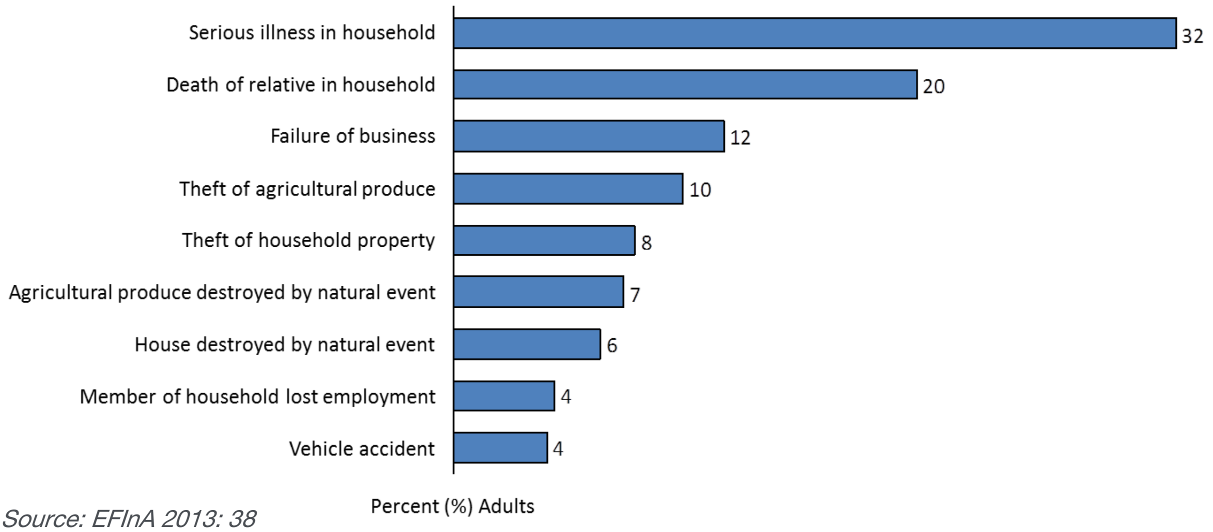


Source: Adapted from EFInA 2013: 36

iii. Insurance

Illness and death of a family member are, by far, the most prevalent financial risk events for Nigerian households. 32% of adults experienced serious illness in the household and 20% experienced death of a relative in the household in the last 12 months.

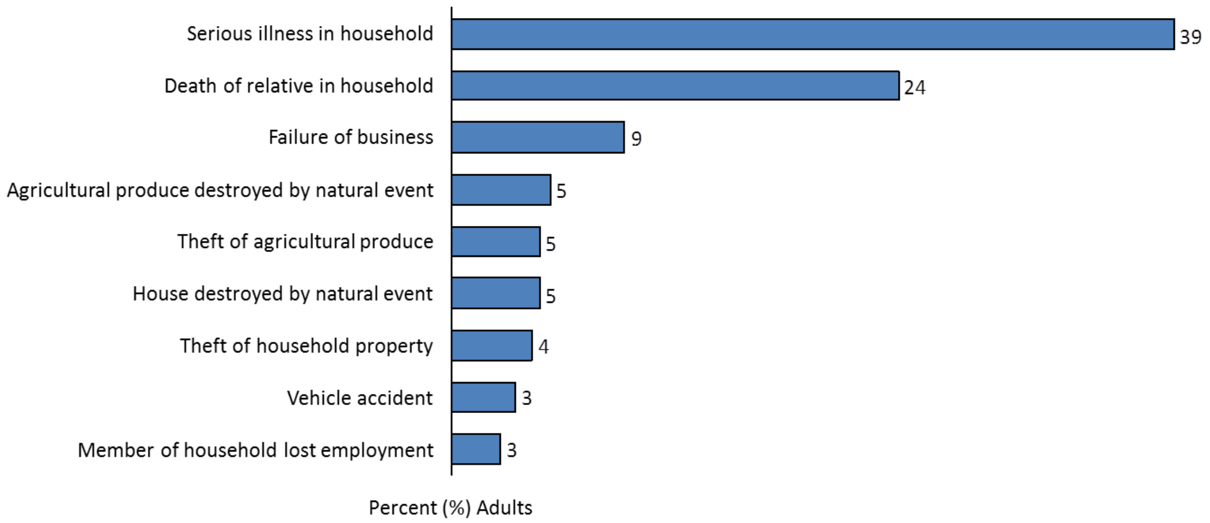
Figure 39: Risk Prevalence (2012)



Source: EFInA 2013: 38

Not only are illness and death the most common risk events, but they are also those with the most significant impact on household finances. Despite the fact that the vast majority - 67% - of those who save, do so for emergencies including illness and death (EFInA 2013b: 33), savings alone are insufficient to mitigate the impact of such events on household finances.

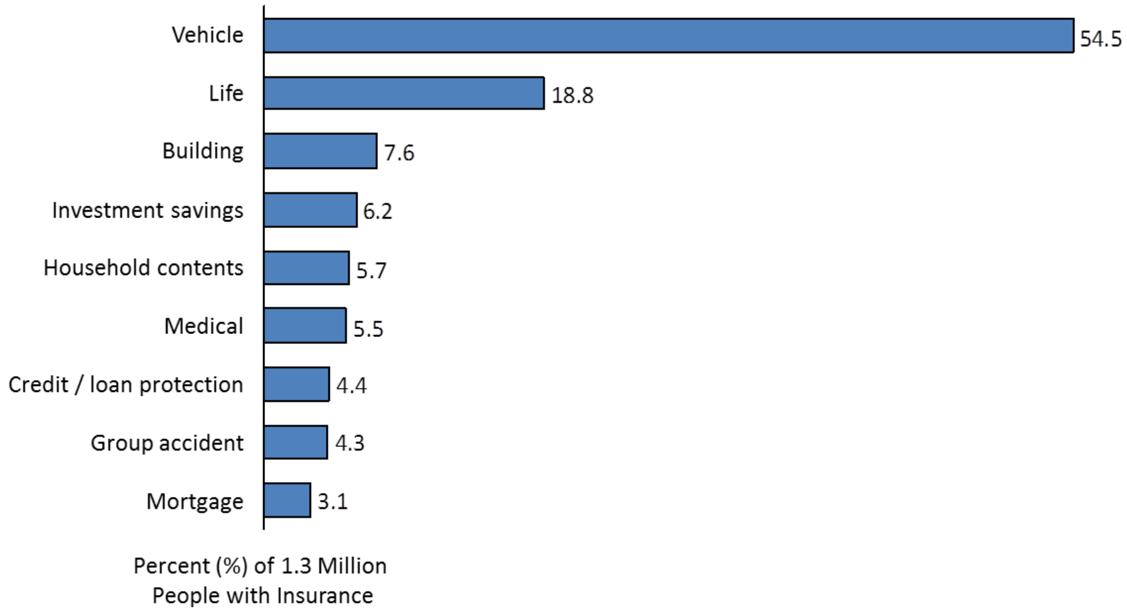
Figure 40: Risks with Greatest Impact on Household Finances (2012)



Source: EFInA 2013: 39

Although illness and death pose the biggest financial threats to Nigerians, life and medical insurance have very low adoption rates. Just 1.5% of the adult population has any insurance at all and more than half of this is for vehicle insurance. Less than 0.1% of the population (71,500 people) has medical insurance. Less than 3% of the population (244,000 people) has life insurance.

Figure 41: Insurance Penetration by Product (% of 1.3 million insured people) (2012)

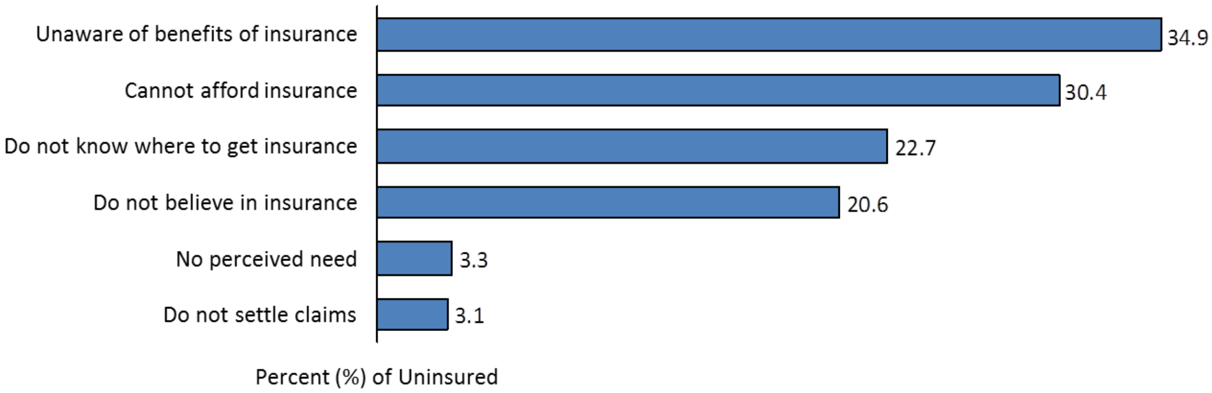


Source: EFInA 2013: 39

The biggest barriers to insurance adoption are lack of awareness and understanding (34.9%), perceived affordability (30.4%) and not knowing where to purchase insurance (22.7%). In rural areas, many people have not even heard of the concept of insurance (NAICOM & GIZ). There is also a high level of distrust for insurers, in part due to bad experiences with claims settlement (EFInA 2012b: A2ii), which may arise because of the existence of fake insurance companies who sell only insurance certificates required only to avoid fines (for instance for motor insurance) but who will not pay out any claims (CENFRI, 2011: 6).

Availability of affordable and relevant insurance is also a significant barrier. The insurance industry predominantly focuses on corporate clients and has been quite slow to innovate and expand to meet the needs of the mass market. Most premiums are collected on an annual basis, which may make them inaccessible to lower income groups with irregular incomes. Insurers have a preference for collection of premiums by direct debit, limiting their reach to banked populations (CENFRI, 2011: 6).

Figure 42: Barriers to Insurance Adoption (2012)

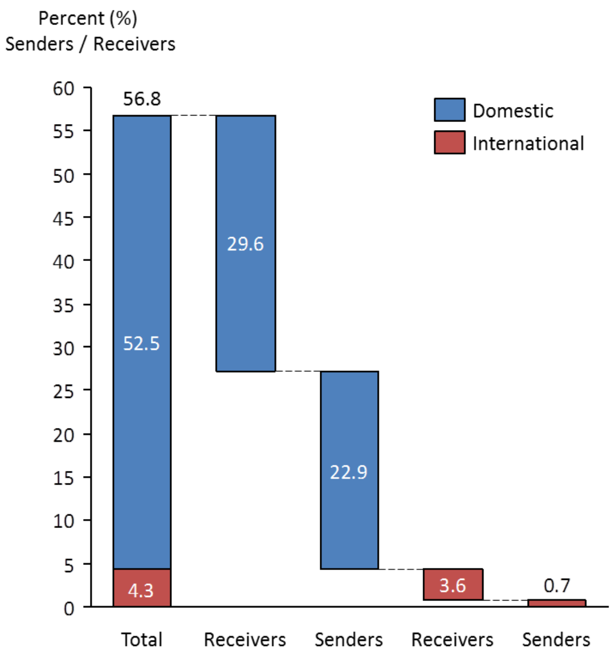


Source: EFInA 2013: 40

iv. Remittances

There is a large domestic remittance market in Nigeria; 40% of the adult population sent money and 30% received money in the last 12 months. People usually send money informally via local buses or with relatives or friends. Some bus companies have somewhat formalized this service, setting up transfer offices at ticket terminals. Sending money informally or semi-formally via the bus networks is expensive, with fees typically around 10% - 15% of the transfer value (Primary Research, 2013). Formalizing this service and charging lower fees would be both a good business opportunity and offer a cost saving for target beneficiaries.

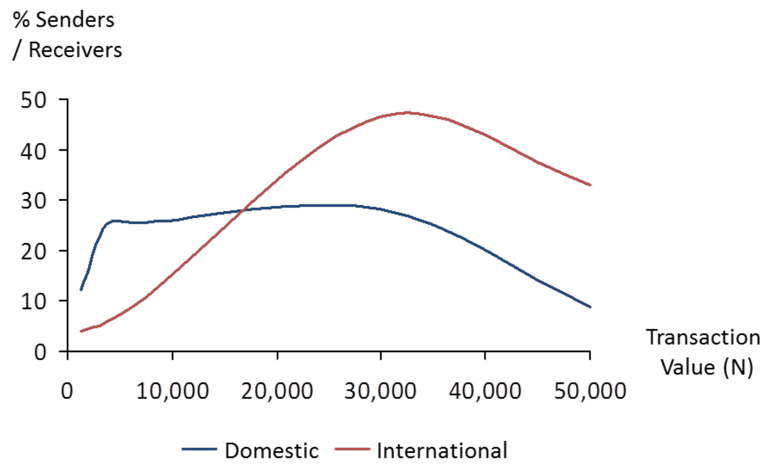
Figure 43: Population Doing Domestic and International Remittances (2012)



Source: EFInA 2013: 42

Those receiving or sending money internationally were far fewer although the transaction sizes for international transfers are larger.

Figure 44: Transaction Size for Domestic and International Remittances (2012)



Source: EFInA 2013: 42

C. Supply Side Financial Sector Analysis

History & Overview

Inclusive financial sector development contributes to poverty alleviation by (i) driving macroeconomic growth which indirectly reduces poverty and inequality and (ii) providing access to affordable and appropriate financial services to enable low income groups to improve their financial stability and reduce their vulnerability. This chapter briefly reviews the supply side of Nigeria's traditional, formal financial sector with a specific focus on characteristics that relate to access and financial inclusion. An in-depth supply-side review of Agency Banking will be handled separately in Chapter V.

The Nigerian financial sector has undergone drastic reforms in the last decade. Until 2006 the banking sector was highly fragmented; 89 DMBs were in operation, each with expensive head offices, separate technology investments, high fixed costs and operating expenses and few branches centered around commercial centers. The industry's overall costs were high and many of the banks were small, weak and vulnerable with persistent illiquidity, poor asset quality and generally unviable operations. Government and parastatals accounted for 20% - 50% of total DMB deposits, making them highly vulnerable to fluctuations of the global oil market and encouraging a focus on Forex and Treasury bill trading, providing little real benefit to the general economy (Siddiqi, 2005).

The industry underwent a process of consolidation from 2006, reducing the number of DMBs to 24 by 2007, as a result of the CBN raising the minimum capital requirement to N25 billion (US$ 204 million). This consolidation process and other reforms insulated Nigeria's banking industry somewhat from the recent global economic crisis. However, declining oil prices, the resulting depreciation of the Naira and the dwindling domestic stock market mounted pressure on the banking system. (EFInA 2010: v). In 2008 and 2009 CBN conducted a $4 billion CBN bailout to boost liquidity and prevent systemic crisis (KPMG 2013) as these implications of the global financial crisis pushed the industry to near collapse (Bloomberg, 2013b). While the process of reform and investment created more stable financial institutions, access to finance actually worsened as DMBs took a ‘flight to safety’ by drastically cutting down lending to the private sector, especially individuals and small enterprises, in preference for government lending. Additionally, the sheer size of Nigerian oil economy has provided easy business for DMBs and is one of the reasons why the banking sector has been reluctant to take financial services down market (EFINA, 2010: 8).

The year 2012 was the first since the crisis that no bank recorded pre-tax losses and most saw robust profits, largely driven by high Treasury Bill yields. GT, Zenith, Access and FBN were the most profitable banks in 2012 (Augusto & Co, 2013). 2013 was a very profitable year for the industry but banks are already having to contend with a lower yield environment and increasing pressure on fee income as CBN implements measures that they intend to increase consumer protection and financial inclusion, including limiting bank charges and customer transaction fees (Fitch Ratings, 2013). CBN is also raising the cash reserve requirement for public funds from 12% to 50%, further compromising bank earnings as they will have to maintain higher levels of liquidity (Fitch Ratings, 2013). Banks are expected to counter this earnings pressure by turning their attention to the retail sector, concentrating on low-cost deposits. This could deter banks from serious investment in bringing financial services to the mass market owing to the high customer acquisition cost and capital intensive agent network setup costs involved (Fitch Ratings, 2013). Owing to this, many banks’ efforts in new innovations such as Agency Banking and Mobile Money have centered on their existing branch networks and customer base rather than expanding reach into new areas and demographics. Although some DMBs are pursuing branch and agent expansion strategies as a means of customer acquisition, the geographical focus remains extremely uneven, with a great concentration in the southern states (EFInA; vi).

Despite these challenges, the Nigerian financial sector is shifting increasingly towards a positive perception of the bankability of the low income segment. CBN is very committed to promoting financial inclusion; its Financial System Strategy 2020 aims to provide financial services such as loans, savings, money transfers, insurance and pensions in adequate measures to the disadvantaged and low income population (CBN, 2007). These factors situate the industry in a state of readiness to supply accessible, affordable, and appropriate products for low income groups; the current extent of this will be assessed for each formal traditional financial sector below.

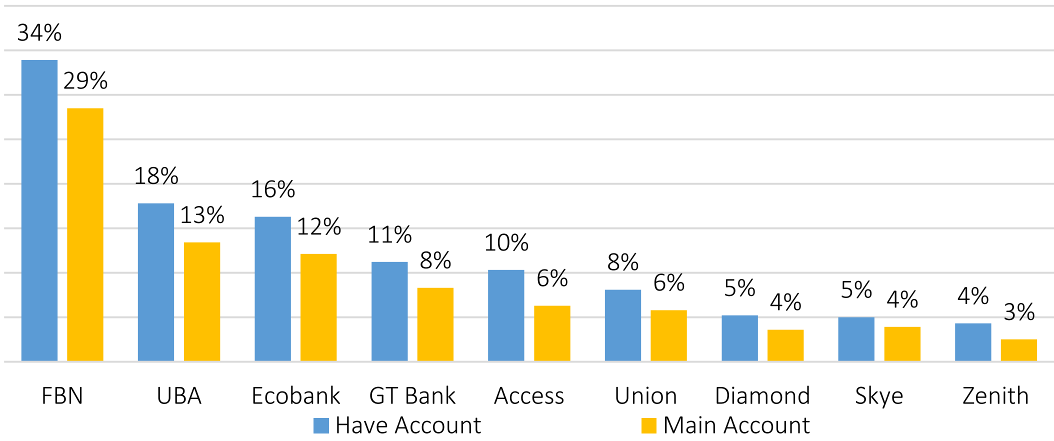
Financial Service Providers

In this section the supply of financial services will be reviewed for their accessibility, affordability and relevance to emerging consumers.

i. Deposit Money Banks (DMBs)

In terms of the supply of financial services, the sector is heavily dominated by the 24 DMBs, with an asset base of almost N20 trillion in 2012 (CBN, 2012: 2). The dominance of DMBs is illustrated by the fact that the 800 Microfinance Banks (MFBs) operating in the country have a combined asset base of N200 billion, equivalent to a little over 1% of the asset base of the 24 DMBs. These 24 DMBs are the dominant operators in the financial sector: they are licensed to offer all financial services directly or through subsidiaries. The DMB sector is highly concentrated, with over half of all banked adults (13.2 million people) having accounts with either FBN or UBA.

Figure 45: Top Banks by Account Ownership (2012)[10]

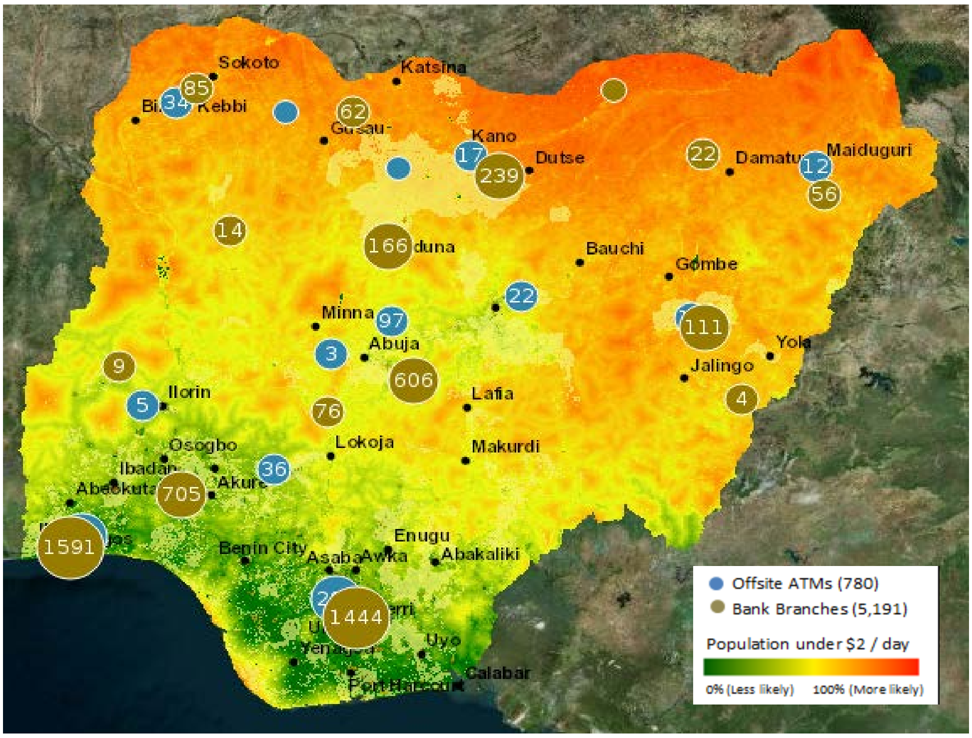


Source: EFInA 2013: 24

Some DMBs have pursued aggressive branch expansion strategies in recent years but the distribution of branches and ATMs remains highly uneven, with a much greater concentration in richer, Southern states, as shown in Figure 46. 85% of DMB access points are in urban locations; 92% of the urban population has a DMB location within 5 kilometers (kms), compared to just 16% for rural populations. One third of rural people have to travel 10kms to reach a bank branch or ATM and half would have to travel 15kms or more (FSP Maps, 2013).

[10] "Have account" means the person has an account with this bank but it is not their primary bank account.

Figure 46: Bank Branch and ATM Distribution per State / Population Under $2 (2013)



Source: FSP Maps

In terms of affordability, DMBs' tariff structures do not create a 'barrier effect' inhibiting access: conditions such as minimum balances do not exclude the low income segment from accessing an account. CBN recently introduced regulation to ban monthly ATM card maintenance fees, limit transfer fees and check book costs and gradually phase out Commission On Turnover (COT) fees to full eradication by 2016 (Daily Independent, 2014). These changes mean that the cost of running an account has been minimized, reducing the fee-based 'barrier effect' which would make using the account too expensive for most low income people. However, there is still an 'inhibitor effect' created by the high cost of getting to a DMB service point for many people, particularly in rural areas.

Savings products are mostly generic with most DMBs offering regular savings accounts and some providing special savings products targeted at specific activities or events such as school fees, asset or purchase. For low income consumers, the inconvenience and cost involved in getting to the bank is not compensated for by the interest they receive on their low value deposits (Interviews, 2014). Some banks, such as Stanbic and Ecobank, are trying to promote the adoption of savings accounts by formalizing the traditional esusu channel by providing agents with Point-of-Sale (POS) terminals.

DMB loan products are generally targeted at salaried workers as most require verified monthly earnings of N30,000 - N50,000 and collateral. The cost of credit (currently 20 - 24% per annum) and the short tenure of many loans make debt servicing costs exclusionary for most Nigerians (CBN, 2014). Challenges accessing credit seem particularly acute for Small to Medium

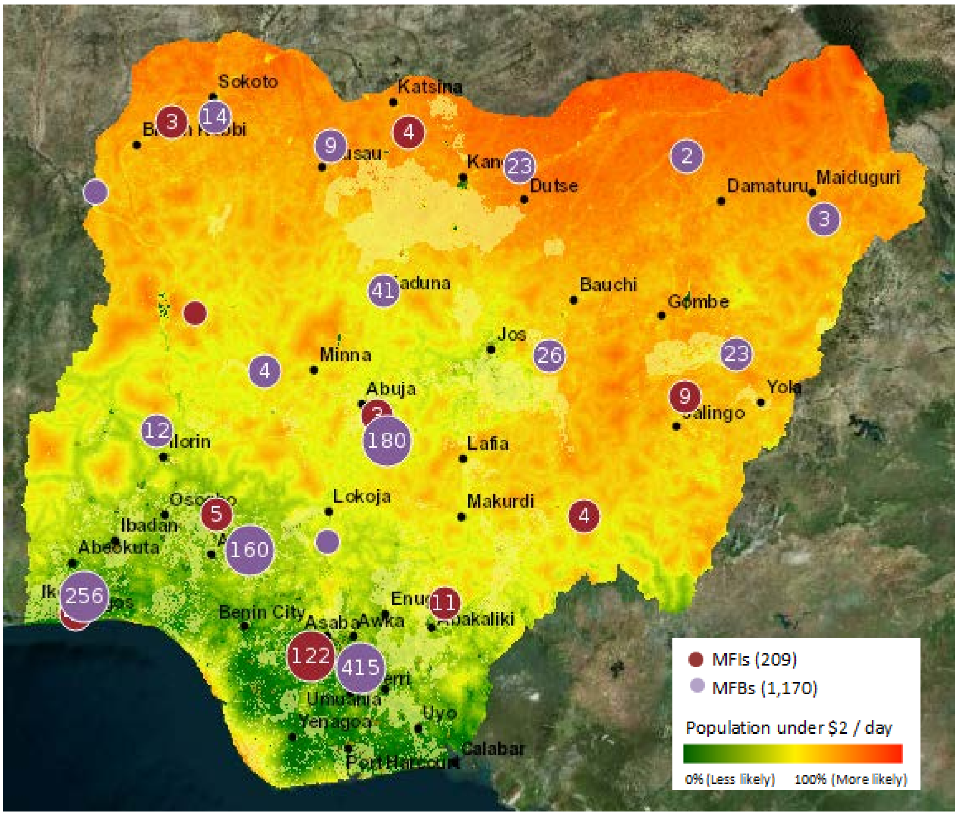
Enterprises (SMEs), with 50% reporting difficulties in securing a loan in the last year (KPMG, 2013: 7).

Some DMBs are innovating around the role of cards and POSs in agency banking. Diamond Bank is combining their agency banking mobile product with a debit card, Stanbic Bank is experimenting with biometric POS and Zenith Bank trialed agent POS for Mobile Money transactions. Some commentators believe that although card use has increased and penetrated somewhat into rural areas, Mobile Money holds much greater potential (Interviews, 2014).

ii. Microfinance Banks (MFBs)

Despite the high number of MFBs, only 5% of Nigerians have a MFB account, compared to 33% for DMBs (EFInA, 2013) and MFBs have a combined asset base of N200 billion. As shown in Figure 47, like DMBs the distribution of MFB branches is concentrated in more prosperous Southern states and urban and peri-urban areas. In fact, several stakeholders in the industry believe that MFBs compete for the same customer base as DMBs, rather than targeting more remote and lower income groups (Interviews, 2014).

Figure 47: MFI and MFB Distribution per State / Population Under $2 (2013)



Source: FSP Maps

Most microfinance service providers are small, focusing on a single state, with an average of around 10,000 borrowers and 30,000 depositors; only Lift Above Poverty Organization (LAPO) has achieved scale with over 1 million clients and presence in 26 states (Interview with LAPO, 2014). A majority of MFBs are weak and unprofitable with poor quality portfolios and negative rates of return on assets; average portfolio at risk is 32.5% (MixMarket, 2014). Causes of this can be attributed to the fact that many MFBs were borne out of failing community banks; the industry grew too quickly for regulatory structures to monitor - over 800 licenses were issued at once to community banks, NGOs, cooperatives and informal finance institutions; and many informal microfinance institutions did not insure customer deposits which caused sector-wide reputational damage when they failed (CFI, 2010). CBN has been undertaking steps to improve the strength and scalability of the microfinance industry over the last few years. In 2010 it revoked the licenses of 224 MFBs for underperformance. In 2013 new regulations were introduced to promote consumer protection and institutional stability. It includes strengthened procedures around documentation, operations, loss mitigation and supervision (CFI, 2013). The new regulation included an increase in the minimum capital requirements, which necessitates recapitalization or mergers for over 600 MFBs (Punch, 2014).

Even the stronger MFBs cite credit risk problems as a factor contributing to the high cost of doing business and a significant cause of underperformance. They called for credit bureau services to boost their lending operations and these were set up in 2010. However, credit bureaus complain of receiving inaccurate or incomplete data from MFBs, owing to lack of adherence to regulatory requirements for data capture, technology constraints and skills gaps (MFW4A, 2013). Credit bureaus are also hindered by a lack of unique customer ID number.

A MFB Association was set up in 2010 which is expected to lead to more collaboration across the sector as well as representation to the regulator.

iii. Insurance Companies

There is huge untapped potential in Nigeria's insurance sector, with less than 1.5% of the population possessing any form of insurance. The insurance industry is heavily reliant on corporate and compulsory accounts; the portfolio of voluntary policies is just 1.5 million and there is a disproportionate representation of motor insurance in the non-life segment (AII, 2013: 28). Offerings are simplistic and commoditized and claims ratios are very low (around 25% on average and as low as 2% for individual companies) indicating the low value of policies, the complexity of the claims process, and a poor record for paying legitimate claims (AII, 2013: 29)[11]. A higher rate of claims would help to build consumer confidence in the industry. Most products offer high cover for expensive premiums, making them unaffordable for low income groups.

The industry has quite an expansive agency network, comprised of 1,700 agents and 706 brokers, but these are focused in urban areas with a corporate target market. Agents are extremely efficient; average premiums generated per agent are higher than most other countries ($747,309) whereas premiums per broker, however, are the lowest ($1.7M) (AII, 2013: 35)

In general, too many players are focused on a handful of corporate and higher income clients. There are 59 insurance companies and although this is a much more reasonable number after consolidation as a result of recapitalization in 2007, this is still high given the low adoption of insurance. The top two companies have 9% market share and the remaining companies have 1% - 5% of the market each, indicating that the market is highly fragmented and likely to cause

[11] Typical claims ratios in developed countries are around 70% (AII, 2013)

confusion among retail customers. The regulator, NAICOM (Nigerian Insurance Commission) is encouraging new entrants to buy out smaller companies rather than issuing new licenses and further consolidation may be enforced.

Until recently insurance companies have shown little interest in developing their non-mandatory or retail segments; there was enough business from corporate clients and lack of micro-insurance-specific regulation previously created uncertainty and hindered expansion. However, the regulatory hurdle was resolved with the publication of guidelines for micro-insurance providers in late 2013 and we are now seeing a definite shift to a focus on new geographies and demographics as more providers develop micro-insurance products. This enabling policy environment will hopefully encourage first movers to catalyze the market by proving the viability of the micro-insurance business in Nigeria. Indeed, a handful of micro-insurance services, including mobile-based products, are now available although uptake has been limited to date. Since most of these products rely on the agency model for distribution these will be discussed further in Chapter V.

iv. Cards

Nigeria's cards and payments industry is growing steadily; it is forecast to continue to grow at a rate of 6%, rising from 48.8 million cards in circulation today to 61.6 million cards in 2017. A variety of cards are available, including debit and credit as well as some promoting access for the low income market, such as prepaid cards[12]. Nigeria has 12,000 ATMs across almost 6,000 locations and 131,000 point-of-sale machines (POS) (Hargreaves, 2013). The value of POS transactions has seen 400% YoY growth, reaching monthly values of N10 billion and volumes of 600,000 in June 2013 (Independent, 2013). However, cash still dominates the payment space: the card market is heavily dominated by debit cards, which account for 92% of cards in circulation and cash withdrawals represent an estimated 95% of current transactions (Timetric, 2013). For low income consumers, the ability to access cash easily is a core value proposition of formal financial services. The ATM network is not sufficiently widespread for convenient access and ATM reliability is hampered by power fluctuations and other operational issues, to the extent that banks are now differentiating themselves from competition based on ATM reliability and liquidity (Adverts seen in Lagos, 2014).

Card processing is mostly dominated by the Verve brand from the domestic issuer, Interswitch, which is carried by 72% of the country's card users (Hargreaves, 2013). MasterCard and Interswitch launched a co-branded chip-and-PIN debit card in 2011.

The most potentially impactful innovation in the card space is MasterCard's partnership with the government to issue National Identity Smart Cards, which are simultaneously ID and prepaid debit cards. This represents the largest roll-out of a formal electronic payment system in the country.

[12] Prepaid cards do not require a bank account. The card is loaded with cash at the issuing bank branch and it can then be used to make payments. Cards can be registered in the customer's name or be non-personalized.

V. AGENCY BANKING LANDSCAPE

A. Regulatory Framework

Cashless / Cash-lite Nigeria

Achieving greater financial inclusion is a central tenet in the CBN's Cashless policy, announced in 2011. The policy is intended to reduce the use of cash in order to modernize the payment system; reduce the cost of banking services and drive financial inclusion by providing more efficient transaction mechanisms and; improve the effectiveness of monetary policy (CBN, 2013c). The scheme imposes caps and penalties for cash transactions of more than N500,000 for individuals or N3 million for corporates. Exceeding limits incurs a 3% penalty fee for individuals or 5% for corporates. Introduced as a pilot scheme in Lagos in 2012, it was extended to Ogun, Rivers, Anambra, Abia, Kano and Abuja in July 2013. This policy has promoted digital finance across the board and increased the prominence of Agency Banking as a method of reducing the circulation of cash.

Regulatory Framework for Mobile Payments Services in Nigeria (2009)

In 2009, the Regulatory Framework for Mobile Payments Services in Nigeria was released (CBN, 2009). It ruled that only licensed deposit-taking financial institutions (DMBs, MFBs) and third parties can receive MM licenses but that mobile network operators (MNOs) are limited to providing technical infrastructure required to deliver the services via mobile phone (such as access to USSD gateways). The CBN has been concerned about enabling MNOs to dominate the formal financial sector, leaving them unable to control growth and to use that potential to deepen access to finance. Most stakeholders agree that CBN will not change the regulations to allow MNO-led MM in Nigeria (Interviews with stakeholders, 2014).

Eligible Licensees: the following scenarios are acceptable for Mobile Payments licenses:

i. **Bank Focused Model:** in which a licensed deposit-taking financial institution (DMB, MFB or discount house) delivers banking services using the mobile phone. Several banks applied for a Mobile Money license to deliver wallet-based services.

ii. **Bank Led Model:** in which a licensed deposit-taking financial institution (DMB, MFB or discount house), or consortium of the same, partner with other, non-financial institutions to deliver banking services via the mobile channel. Theoretically this permits Mobile Money licensees to partner with MNOs in order to leverage their agent network; several MMOs have been in discussions with mobile operators (Airtel, Glo and Etisalat) regarding this but no definite partnerships have been embarked upon yet, with the exception of an MTN pilot with Diamond Bank which started in March 2014. It appears that the slow uptake of this option has stemmed from two issues. First, the telcos were hesitant because they believed that the regulations may change in favor of them obtaining licenses. They, therefore, wanted the non-telco-led model of Mobile Money to fail in order to further justify their acquisition of a license. Second, business models which satisfy both telcos and MMOs have been difficult to define.

iii. **Non-Bank Led Model:** permits a non-bank corporate organization to deliver mobile payments services to customers. Only organizations who are not banks or telecommunications companies can apply for this type of license. A requirement of the license is that the corporate organization partners with a DMB for purposes of a settlement account.

The regulations permit the use of card-based accounts, bank accounts or stored value accounts (such as Mobile Money wallets).

Agent Network Regulations: According to the regulation, agent networks, controlled by the licensees, are subject to the following regulatory requirements:

- Agents can enroll customers, accept deposits, and perform cash-out transactions.
- Agents can be individuals or companies, but must have a bank account in Nigeria.
- Agents can be shared by multiple providers and may not be exclusive to a single MMO.
- The lead organization must purchase fidelity insurance coverage for agents.

Agents cannot be exclusive to one Mobile Money provider.

Know-Your-Customer (KYC) Regulations: Nigeria does maintain a proportional KYC policy for MM which should assist in promoting adoption. The three levels are depicted in Figure 23.

Interoperability Regulations: Wallet-based interoperability, enabled by connection to the national switch, Nigeria Inter-Bank Settlement System (NIBSS), is a condition of the MM license. Although almost all MMOs are connected to NIBSS, none have enabled wallet interoperability because, while this is technically feasible, the commercial incentives to do so have not been defined and agreed.

Fraud and Consumer Protection Policies and Regulations: There are few fraud or risk mandates outlined in the guidelines from CBN. The regulations merely specify transaction values and volumes considered suspicious and which are required to be reported to the CBN.

Guidelines for the Regulation of Agent Banking Relationships in Nigeria:

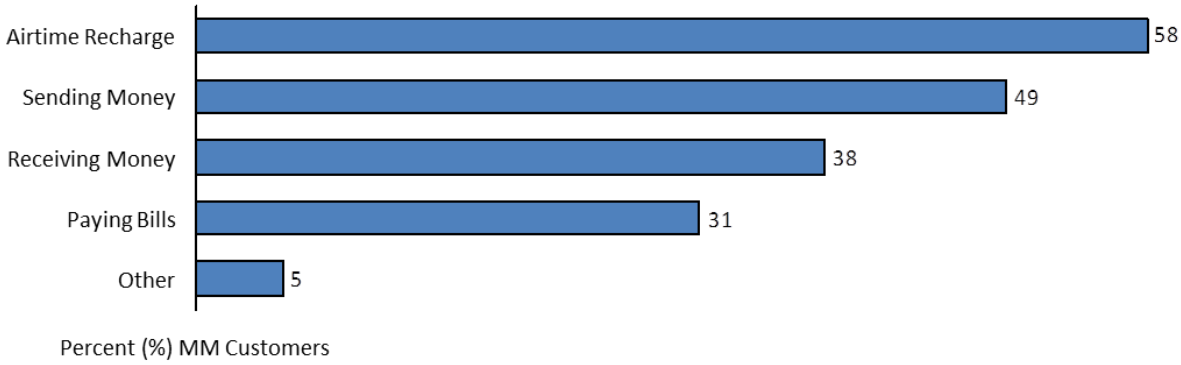
In March 2013 the CBN released their Agency Banking guidelines. This policy permits all deposit taking financial institutions to provide financial services to customers via a third party agent, without applying for a Mobile Money license. The regulation provides more detail on the relative responsibilities and transaction limits of financial institutions, super agents and agents.

Some believe that MNOs may try to obtain licenses by setting up non-bank financial institutions, which could be awarded licenses under the new agency banking regulations, published in 2013 (Interview with IFC, 2014; CBN 2013d). However, no MNOs have confirmed an interest in this (Interviews with MNOs, 2014)

B. Access and Uptake

Awareness and uptake of Mobile Money (MM) is still very low, despite high mobile penetration. Only 5.5% of the adult population has heard of MM and only around 2% is registered with a MM provider. Of those who are registered it is likely that less than half use the service on a monthly basis (Primary Research, 2013). Four out of five people registered for mobile money already have or use bank products and services, indicating that early adopters are formally included and therefore likely from higher income quintiles. Among those who are registered for mobile money, usage of the product is quite limited, with the primary usage being for buying airtime (58%). The main factors that non users said would encourage their adoption of MM are having a better understanding of how MM works, having a MM agent close to their place of residence or work, assurance that MM is safe and increased usage among their peers. 15 million adults (almost 20%) indicated that they would consider using their mobile phones to send money indicating that there is readiness for this product among the target population.

Figure 48: Reasons for Using MM (% of MM customers) (2012)



Source: EFInA 2013: 41

Over one third of all adults who own a mobile phone are unbanked (EFInA 2012) but the mobile money market has not yet reached its potential, despite the presence of over 20 licensed mobile money operators in the market. Its inability to gain significant traction thus far suggests that there are a number of challenges that will need to be overcome in order to reach the unbanked. Some factors which may be inhibiting growth, particularly among the unbanked, are:

- **The agent network is underdeveloped** and contributes significantly to the lack of mobile money adoption. Many independent MMOs and even bank-backed divisions lack the expertise and access to capital required to create and manage an effective agent network. Skills training for agents often focus only on technical aspects and omit training in general business, advertising, business building, book keeping, accounting and other competencies that would help them to run a successful agent business (see Agents section below for more information).

- **CBN's ruling that MNOs cannot receive mobile money licenses**, despite the fact that they have much stronger relationships with the general population than do banks and other entities.

- A better value proposition and range of use cases is required for users. Very **few MMOs are conducting in-depth research and testing with users so many products are not aligned with customers' needs** or current financial management practices (Interview with EFInA, 2014).

- Many argue that there are **too many licensees**, causing the small customer base to be highly fragmented and preventing the attainment by any single operator of the critical mass required for the product to really take off (Interviews with BB, ALMPO, M-Kudi, 2013.) The multiplicity of MMOs, each with their own product with different access protocols and short codes to be remembered, is also causing confusion among consumers (TechLoy, 2013; Interviews, 2013.) The high number of licensees is also deterring serious investment from any one player since this could benefit their 20 or so competitors, many of whom may not have invested highly (Interview BB, 2013). Many MMOs are simply waiting to see how mobile money develops in Nigeria before they actively participate in the industry. Finally, some believe that the high number of licensees exposes the entire industry to reputational risk because if poor services are delivered by any single operator or if a provider is unsuccessful and stops operating, it reflects poorly on the industry as a whole which can damage consumer confidence (Interviews with First Monie and E-Tranzact, 2013).

- **CBN required levels of capitalization that were too low for MMO license applicants**. This has resulted in the existence of many MMOs with insufficient capital to execute, particularly for expensive parts of the business such as agent networks (Interview with EFInA, 2014).

- **The MMO application process was highly politicized and subject to cronyism** so not all licenses were awarded based on merit (Interview with EFInA, 2014)

- **Recurring mobile network downtime and power outages** cause poor product experience for users, including failed transactions. There are many failed USSD calls which are charged to customers even when not successful (Interviews with EFInA and GEMS4, 2014).

- **Regulations preventing agent exclusivity** may inhibit investment by any one MMO since their efforts could benefit the competition. Additionally this could place unattainable burdens on agents who may have to maintain liquidity levels for more than one MMO concurrently.

- **The value proposition for customers is not clear.** The Cash Lite Nigeria regulation does not make the general population feel the pain of cash. Initially the regulation stated that transactions of N150,000 would be penalized for individuals, which would have prompted many traders and SMEs to migrate to digital finance. However, CBN later increased the limit to N500,000 which impacts far fewer people. In general there have been weaknesses in the implementation of the Cash Lite policy which has reduced its role in encouraging electronic money, for instance traders and even international businesses travel to neighboring states to carry out transactions to avoid fines. Initially banks were not actually charging customers the Cash Lite fine as they were afraid of losing customers (Interview with EFInA, 2014).

- **Customer awareness is low.** Many believe that CBN should play an active role in promoting agency banking and Mobile Money. CBN heavily promoted the launch of the Cash Lite regulations and placed a lot of emphasis on POS and cards but not much on mobile financial services. EFInA is now funding some below-the-line customer awareness-raising which is being implemented in partnership with ALMPO (Interviews with MMOs and ALMPO, 2014).

- **Many MMOs did not anticipate realistic business models, investment needs and Return on Investment timelines** so many have found themselves ill-prepared and ill-equipped to execute (Interview with EFInA, 2014).

- There is a **perception among users that a smart phone is required to use MM** because MMOs have promoted smart phone access in their advertising in order to encourage uptake by early adopters and to avoid use of the USSD channel since this attracts a fee levied by the MNOs (Interview with EFInA, 2014).

- Many **independent MMOs suffer from lack of positive brand reputation among potential users**, to whom they are an unknown entity. This is a particularly pertinent issue in Nigeria where incidence of fraud is high (Interview with MMOs, 2014).

- Many MMOs **do not understand the business case for serving the unbanked**, who are expensive and difficult to reach. They also lack the skills and capacity to reach this demographic (Interview with GEMS4, 2014).

- Low income populations primarily use their mobile phone for making calls and many are not literate in English. Therefore an English **menu-based system is difficult for them to navigate**.

- There is a cultural barrier: **"cash is king"** in Nigeria so the transition to electronic finance is not one that feels natural to many potential users.

Figure 49: Mobile Money Access Channels

Access Channels

MM in Nigeria is typically accessible via several different channels. Each potential channel is explained here:

USSD (Unstructured Supplementary Service Data):
USSD messages create a real time connection with the mobile operator's system. The USSD session essentially appears as a menu into which customers enter information or select certain options. This information is then passed on to the relevant platform for execution. MMOs would have to negotiate with mobile operators to have access to their USSD gateway at a fee. Most customers top up their airtime using USSD strings provided on scratch cards, so familiarity with hot access a service using USSD is relatively high. People are not used to navigating a USSD menu, however, and many customers struggle with this.

SMS (Short Message Service):
SMS interactions can be used to execute a MM transaction. This is where a customer sends keywords to a specific short code (3 or 4 digit number), which triggers the relevant platform to respond to demand another piece of information. Each time the

customer replies to the SMS additional information is sent to the relevant platform. SMS is not a very secure method of transmitting data. Customers often struggle to adhere to keywords which have to be spelled perfectly for them to work.

IVR (Interactive Voice Response):
An interactive system in which the user hears recorded information and is required to select certain options or provide information verbally or using the phone's keypad. Some MMOs have an IVR platform to enable their customers to execute a MM transaction using a voice-based system. While many customers of low literacy like to hear messages instead of read them, the concept of an IVR system is very novel to them and they do not always understand how to navigate the IVR menu.

SIM Tool Kit (STK):
A system which enables the SIM card to initiate commands, STK is often used for menu-based interactions requiring high levels of security. Some users struggle to navigate STK menus.

Mobile Apps:
A software application designed to run on smart or feature phones. The customer is required to download the application before they can use it. Apps are typically targeted at users with high end phones although java applications can run on feature phones.

C. Key Players and Products

i. Mobile Money Operators (MMOs)

The regulatory framework for mobile payment services was issued by the CBN in 2009 and MM licenses were awarded in 2010. However, Mobile Money Operators (MMOs) were slow to take off in Nigeria and the first products launched only in January 2012.

MMOs are made up of either Financial Institutions (FIs) or independent companies. Independent companies, for the most part, have struggled to secure investment since they compete domestically with industries with much quicker and more guaranteed returns, such as real estate, agro-processing, import and wholesale, and transportation (Interviews with Stakeholders, August 2013). Without significant and patient investments, independent MMOs struggle to implement key, capital-intensive parts of the business, especially the development of an agent network (Interviews 2013 & 2014). Therefore, while many independents have robust technology platforms, they lack the operational capacity to achieve presence in the market (Interviews, 2013 & 2014). Additionally, independents represent a completely unknown brand among consumers and so they have struggled to solicit the high levels of customer trust required when dealing with a financial service (Interviews, 2013 & 2014). In this respect, the banks are better situated to generate consumer interest in MM since they are able to leverage the core banking brand trust.

Banks with MMO licenses have better access to capital as they are able to leverage funds from other parts of their businesses. However, as explored in Chapter B: Demand Side Financial Sector Analysis, banks have also been experiencing a financial downturn and have been slow to recognize the business case in expanding their services to low income customers.

CBN has not published the full list of current licensees but the table below should be an accurate reflection. It is rumored that a further 2 to 3 licenses may be awarded in the coming months of 2014, bringing the total to around 24 licensed MMOs (Interviews, 2013 & 2014).

Most MMOs, particularly the independents, are active members of the industry trade group, the Association of Licensed Mobile Payment Operators (ALMPO), which aims to define industry standards, provide a unified voice when liaising with the regulator and promote collaboration between MMOs on certain aspects such as marketing (Interviews with ALMPO, 2013 & 2014). CBN was supportive of the establishment of the association and recognizes its legitimacy as a representative of MMOs.

Some MMOs have already closed down their operations and others are dormant. Of the active MMOs, many have extremely low levels of transactional activity with minimal or non-existent customer outreach or agent networks. The most active MMOs are described in more depth here, along with any of their projects which have relevance for reaching the unbanked.

Figure 50: Licensed Mobile Money Operators in Nigeria

No.	Company	Product Name	Status	Entity Type		
				DMB / MFB	Switch	Independent
1	GTBank	GTMobileMoney	Active	✓		
2	FirstBank	FirstMonie	Active	✓		
3	Ecobank	Ecobank Mobile Money	Active	✓		
4	Zenith Bank	EazyMoney	Active	✓		
5	Stanbic IBTC	*909# Mobile Money	Active	✓		
6	Sterling Bank	TBD	Active	✓		
7	Fortis MFB	Fortis Mobile Money	Active	✓		
8	eTranzact	PocketMoni	Active		✓	
9	PagaTech	Paga	Active			✓
10	Monitize	Monitize	Stopped			✓
11	FETS	my.wallet	Active			✓
12	Eartholeum	QikQik	Stopped			✓
13	Teasy Mobile	Teasy Mobile	Active			✓
14	M-Kudi	Mimo	Active			✓
15	PayCom	PIDO	Active			✓
16	VTNetwork	VCash	Active			✓
17	Cellulant	CeLLulant	Active			✓
18	Parkway Projects	ReadyCash	Active			✓

19	AfriPAY	Umo	Stopped			✓
20	Prada Systems	NA	Dormant			✓
21	Chams Mobile	Chams	Active		✓	
22	Zinternet	EzPay	Active			✓

Paga Tech

Paga Tech's aim is to provide low-cost financial services to the mass market. This mission aligns Paga with projects aiming to serve low income communities, unlike several other MMOs whose initial target is corporate or already-banked populations. Paga has management offices on the mainland in Lagos and in Abuja, enabling the company to adequately support projects in both southern and central regions of the country.

Rather than aiming for national penetration from the outset, Paga is focusing intensely on 12 cities but they have presence in 25 states. Paga has 3,800 agents and is careful to expand this footprint only in line with customer demand, ensuring that agents generate sufficient returns to justify continued investment of their working capital in the Paga business. The result is an agent network with substantial levels of activity and motivation, setting them apart from most other MMOs. The company strives to set up their agents as pillars in the community for financial services. 80% of Paga agents are in urban areas and 20% are in peri-urban areas as this is where there is current demand for MM.. Paga's aim is to grow their agent network to 8,000 and they hope to be able to work with agent aggregators to fulfill this.

Paga's user base is growing rapidly; 2012 saw 850% growth in registered customers. Paga currently has over 1 million registered users, one third of whom are active monthly (performing at least one revenue-generating transaction in a 30 day period). The company is adding 2,600 new customers per day through its dedicated customer acquisition team of 60, who organize marketing events around agent locations. 8 unique users transact every minute. Paga executes approximately 400,000 transactions with a total value of $27.5 million (N4.5 bn) per month.

Paga's access channels are SMS, web, mobile web, mobile applications and SIM Toolkit (with Etisalat). There is no USSD access yet but this will come soon. 30% of transactions are over-the-counter (OTC) transactions performed at agent locations. OTC transactions are those performed by an agent on behalf of a customer, therefore not requiring the customer to perform the transaction themselves. This can be a good way to lower the barrier to usage particularly for lower income customers who typically struggle to navigate menus owing to low (mobile) literacy.

Products, services and projects being conducted by Paga which are relevant to financial inclusion are the Ogun State Health Facility Collections, bundled savings & insurance product through a partnership with MicroEnsure, Merchant payment portal, SMS savings reminders, and a voucher system in which vouchers could be purchased at Paga agents and be redeemed for specific products and services.

Fortis Mobile Money

The only MMO born out of a MFB, Fortis Mobile Money's primary aim is financial inclusion. Fortis MFB is Abuja-based, has 11 branches and is Nigeria's 11th largest MFB in terms of borrowers (MixMarket, 2013). Fortis MFB owns 25% of Fortis Mobile Money and the rest of their financing coming from private equity, donors and revenue. Fortis Mobile Money does offer standard peer-to-peer transfers, airtime purchases, but their primary focus is on creating a MM channel to reduce Fortis MFB's own operational costs, primarily for loan disbursement and repayment, and increase customer acquisition in rural areas. It has 700 active agents across 17 states in 2012. Agents were recruited from the MFB's beneficiaries, leveraging the MFB's relationships at the community level.

Fortis uses the Fundamo platform and offers access via USSD, WAP, mobile web and java app. Its products, services and projects which are relevant to financial inclusion are loan disbursement and repayments, Growth & Employment in States 4 (GEMS4) for use of Mobile Money for SME traders along the principle trading corridors in Nigeria, Fortis Academy, and Health Insurance.

Diamond Bank

While not a licensed MMO, Diamond Bank is actively delivering banking products via the agency model. It claims that it can do this without a MM license as the products use the core banking platform rather than a wallet-based system. However, customer accounts are segregated in a cloud-based software program while funds sit in a single pool account on the core banking platform, so in effect this service has many similarities with MM. In any case, licensing is unlikely to be an issue as CBN announced last year that all deposit-taking financial institutions will be automatically granted permission to offer agency banking services (CBN, 2013).

Diamond Bank is relatively strong in retail (7th in terms of market share for accounts) and recognizes that the market is becoming increasingly competitive so they see agency banking as a way to increase their access to new customers. It understand that the breakeven point in serving this market is quite far away but the company understand this and is ready to be patient in its expectations for returns.

Diamond Bank has partnered with MTN on their agency banking strategy and it aims to have 250,000 agents eventually, focused on rural market areas and trading centers. It is currently running a pilot with 150 MTN agents in 3 cities, after which it intend to scale up to include other MTN super agents.

Its products, services and projects which are relevant to financial inclusion are basic savings accounts opened utilizing mobile agents. The customer is immediately issued a debit card which they can use to make payments or do withdrawals at ATMs. Deposits and withdrawals can also be conducted by the mobile agents and the service is exclusively OTC at the moment. The customer is not required to interact with the phone at all because Diamond Bank's research showed that low income customers are not comfortable navigating the phone-based menu and mobile phone ownership is low among some segments. Cash in via an agent costs N50 and cash out is free. These fees are the inverse of standard wallet-based fees which usually offer free deposits and charged withdrawals. Diamond Bank said this is because their research showed that the pain point for banked customers was making a deposit as this required queuing at the bank, whereas withdrawals were relatively painless as they could be conducted at ATMs. Diamond Bank particularly hopes to provide group lending services, loan disbursement and repayment and micro-insurance via their agency banking product.

Funds and Electronic Transfer Solutions (FETS)

After starting out with a mass market, consumer-facing wallet-based service, in 2013 FETS changed its strategy to focus on the collection of funds in retail and corporate distribution networks, particularly for Fast Moving Consumer Goods companies (FMCGs). FETS has partnered with FanMilk, Dansa Food Limited, and other FMCGs and utilities companies, to handle the collections of funds in their distribution network to introduce more transparency and reduce losses through theft or provision of goods on credit. FETS is also working with IGI and other insurers to collect premiums in Lagos and other states and is in discussion with state governments regarding using the FETS platform for the disbursement of payments to contract staff and vendors. Fees are typically 1.25% of the transaction value. For the collection company, the FETS collection platform facilitates real time access to accounts via a web portal and resettlement support. This strategy has been able to gain rapid traction since companies are highly incentivized to use Mobile Money for funds collection since the CBN's Cash Lite policy heavily penalizes them for conducting transactions in cash. As a result, FETS dominates the market by far in terms of transaction value, processing billions of Naira each month. For their agent network FETS mostly works with e-money dealers who are each responsible for around 60 agents. Some agents are managed by FETS directly by their 30 field staff dedicated to agent management.

FETS is now looking to diversify their product range to incorporate offerings for low-income retail customers. They are financing this endeavor using revenues generated from their corporate services. They currently offer a generic mobile wallet and are actively developing other mass market products such as micro-insurance. The insurance product is being developed in partnership with Hygeia; it provides individual health cover for N400 per week.

Teasy Mobile

Teasy Mobile is an Abuja-based independent MMO partnered with Verifone. Their main focus is on rolling out contactless POS systems in the transportation sector. This will involve customers sticking a small RFID chip on their phone which enables payments when tapped at a mobile POS. The RFID sticker is charged to the customer at N250 and the mobile POS costs $100. The main target use case is for the daily collection of fees from public transportation providers, which is currently done in cash by traffic wardens with great risk of leakage. The Transport Union has 1 million members each making a daily payment to permit them to offer public transportation services. Migrating this payment to a mobile POS would enable the leakages to be minimized and costs to be reduced by simplifying reconciliation. Additionally, Teasy will be targeting the domestic remittances market. The Transport Union has formalized the domestic remittance use case by creating kiosks to collect and distribute these transfers at transport locations, at a cost of 20% of transaction value for the customer. Teasy will now convert these kiosks into MM agents and introduce their wallet-based service to make this offering cheaper and safer. Teasy has a partnership with the Transport Union to deliver both of these services. The Transport Union will be involved in managing agents and providing liquidity and Teasy also has a partnership with Microleverage, an agent aggregator, to support agent network expansion.

Ecobank

Ecobank's primary target for MM is the financially excluded; the unbanked and the under-banked. They have 3,441 retail MM agents and 565 bank branches offering MM services. Agent activity is low and Ecobank considers this to be their major challenge in delivering MM. In addition to its retail agents, Ecobank also has a team of 134 Direct Sales Agents (DSAs) whose primary responsibility it is to register customers and monitor fixed agents and provide them with liquidity support.

Ecobank MM currently has 1 million registered customers but less than 2% of these are currently active. This is likely not atypical of many of the MMOs reporting similarly high numbers of registered customers. Ecobank has noticed some minor regional differences while building out their agent network. In the northern regions it tries to recruit more female agents than male as women customers do not feel comfortable patronizing male agents. Additionally, operations in the northern regions are more difficult than in the south owing to lack of infrastructure and disparate populations.

Products and projects being conducted by Ecobank which are relevant to financial inclusion are CCT's tied to Millennium Development Goals for disbursing welfare payments, Ministry of Agriculture and Natural Resources Youth Commercial Agriculture Development Program (YCAD)m and Microsavings through its acquisition of Oceanic Bank. The MFI offers micro savings accounts, currently using cash deposits. Ecobank intends to use MM for loan disbursement and repayment eventually.

First Monie

First Bank of Nigeria (FBN) has the largest market share in the banking sector in Nigeria, accounting for 34% of all deposit accounts and 30% of all card transactions at Points of Sale (POS) and Automatic Teller Machines (ATMs). FBN has a very strong brand value and the most extensive branch network of any bank in the country with 641 branches and a strong presence in low income communities.

FBN has set up a separate wholly FBN-owned subsidiary to manage its mobile money product, First Monie. First Monie has 300,000 registered customers and is adding 40,000 new unique users per month. The main acquisition channel is First Monies agents who receive a commission for registered subscribers. First Monie is also working in partnership with Airtel for customer recruitment. Airtel profiles their customer base to target customers with specific airtime expenditures and behaviors (e.g. subscription to Value Added Services or data). Airtel then markets the First Monie service to selected customers via SMS. Special promotions are offered to customers who register through MNO advertising; they are given \$0.60 (N100) of e-value and with which they are encouraged to buy airtime as the MNO gives them \$1.50 bonus airtime for this initial transaction.

First Monie leverages FBN's bank branches as MM agents and in addition has 9,000 retail agents, 25% of which are active (perform at least one transaction per month). First Monie's agents are present in every state in Nigeria including challenging states such as Kanu and Jigawa. First Monie uses a network of super agents to manage agents and their liquidity and also have their own agent management staff on the ground. It also has a partnership with the national postal carrier, Nipost, to start to have First Monie agents in their 938 post offices. It is not clear what percentage of First Monie agents are active but it is suspected to be quite low.

The company considers agent network management to be one of their key challenges. (Interview with First Monie, 2014).

Products, services and relevant to financial inclusion are a land use charge collections platform for the Lagos State Government; Disbursements platform on behalf of UNICEF to their polio eradication volunteers to cover their transport and other expenses; micro-insurance and savings.

Stanbic Bank

Stanbic has a small market share for traditional banking services and a limited branch network, and so they see agency banking as an important opportunity for them to expand their customer base. Therefore, the company has a fairly substantial team dedicated to Mobile Money.

Stanbic has almost 1 million registered customers and reports to have over 3,000 agents in 15 states comprising of 2,500 MM retail agents, 163 bank branches and 500 Total petrol stations offering Stanbic MM services. Stanbic's focus is on the states involved in the Cash-less Nigeria roll out. Stanbic aims to target the mass market and specifically low income householders with its Mobile Money product. Their focus is on incorporating what they call "lifestyle banking" into MM, in which the product suits the existing behaviors of their clients; they recognize that they are dealing with populations with daily earnings and so are keen to provide products which permit daily contributions.

Access channels for Stanbic bank are USSD, SMS, Smartphone apps and SIM Toolkit on Etisalat. Despite their reported focus to gain traction in the mass market, Stanbic seems to mostly promote the Smartphone app.

Zenith Bank

Zenith's core banking focus has always been on high value customers and corporate customers. It sees MM as a way to break into the mass market. Because of their strength with business banking, Zenith is initially targeting their existing corporate clients, particularly in Fast Moving Consumer Goods (FMCGs) to use its MM product, EaZyMoney, in their distribution networks. It has developed bill payments mechanisms (for instance for popular TV stations) which can benefit their existing retail banking clients. Zenith Bank also has an expansive Point of Sale (POS) reach (15,000 merchants) for cards payments and want to leverage this existing network by enabling these merchants to accept MM payments.

EaZyMoney currently has 400 retail agents, 350 bank branches and 88 Visafone offices offering MM and will expand its network according to customer demand. Visafone is a CDMA mobile operator and a sister company to Zenith Bank.

E-Tranzact

E-Tranzact is an electronic transaction switching and payment processing platform. It offers two products in the mobile money space; a mobile money product called PocketMoni, and a switching platform to provide clearing services between MMOs. Other MMOs are of the opinion that these two products conflict as MMOs would not want to procure clearing services, and therefore expose their usage data, to a company who is also a competitor mobile money provider. Therefore, there has been low uptake of E-Tranzact's switching platform.

E-Tranzact's MM offering, PocketMoni, has half a million registered mobile money users but data regarding what proportion of these are active was unavailable. The access channels are USSD, SMS, IVR and mobile apps. The company is now focusing on building out its agent network but says that it has faced many challenges in keeping agents incentivized to do the business given the low demand from consumers. The company has also enabled its MM customers to do withdrawals at ATMs, reducing dependence on the agent network but also perhaps diverting potential agent business.

E-Tranzact stated it has 2,500 agents, 60% of whom are active. Their concentration is on Ogun, Kano, Abuja, the northern territories and Lagos. E-Tranzact is mostly targeting higher income groups and corporate clients with its MM service. It collects fees for all universities in the country by MM. E-Tranzact is also quite active in the merchant payments space for cable TV, mobile and electricity bills and restaurant and other service industry payments. It is deploying a bulk payments platform for disbursements for corporate clients for transactions such as payroll to contract workers.

E-Tranzact works with lower income groups includes loan disbursements to farmers on behalf of USAID's MARKETS program.

M-Kudi

M-Kudi started operations in 2012 with a wallet-based MM service accessible through its own agent network. Access channels were SMS and java applications, with no USSD option owing to the high set up fees and the $0.07 per session transaction fee charged to the end user by the MNOs. M-Kudi has now decided to discontinue focus on its mass market, customer-facing business owing to the cost of developing and maintaining the agent network. They are now focusing on MiMo, a bulk payments platform for e-value disbursements salaried populations. MiMo is targeting disbursements for payroll to contract staff such as drivers and security staff. Payment can be to M-Kudi wallets or other MMO wallets owing to wallet interoperability. The MiMo platform could be used for collection of e-value as well as disbursements.

VTNetwork

VTNetwork's MM product, VCash, has 700,000 registered users, 50,000 of whom have done a transaction in the last 12 months. The company's customer acquisition methods are SMS broadcasts, email and incentivized refer-a-friend initiatives. It is pursuing a partnership with a bank who can introduce the service to their customers.

There are 4,000 VCash agents, at various stages of going live which are managed by 3 office-based agent management staff. Agent expansion is largely driven by existing agents who are paid to recruit and train other agents. This could be considered a counterintuitive model since agents essentially compete with each other for customer business and this method makes it very difficult to control quality of selection and training. However, this shows how much of a challenge MMOs consider building their agent network and the different models that have evolved to try to deal with this.

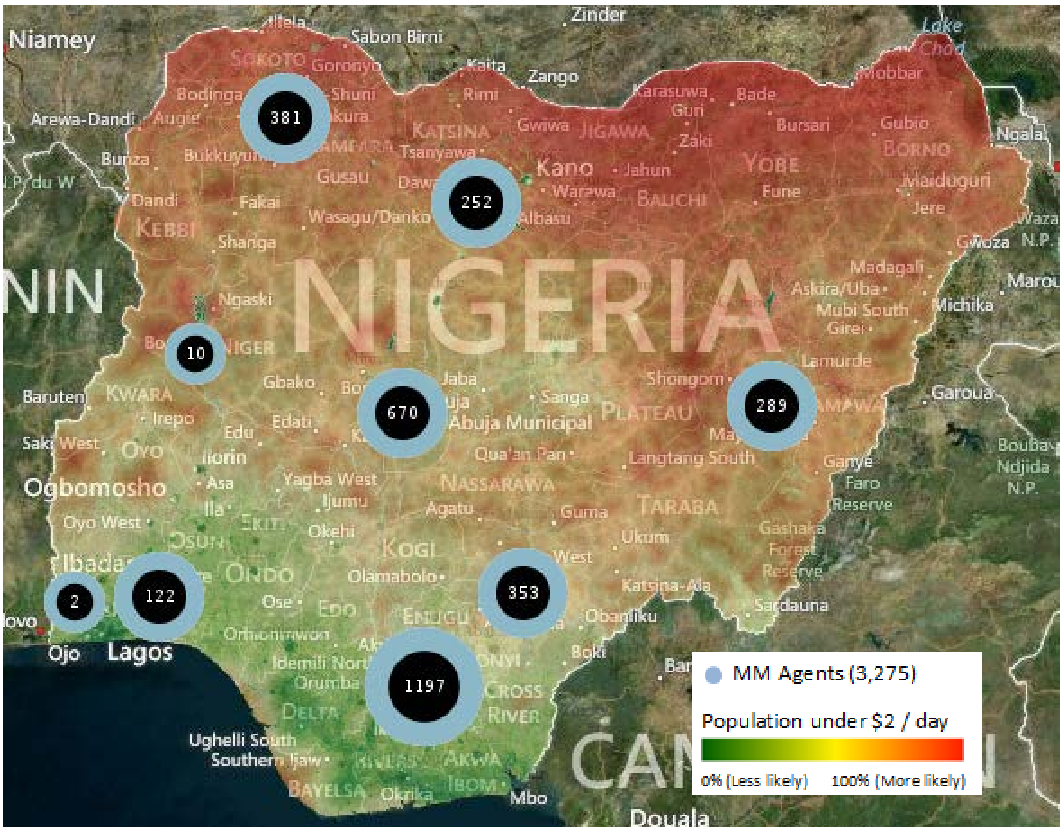
VCash has invested heavily in its technology platform, which the company owns and has been developed in the USA. VCash's primary focus is on merchant payments, enabling people to pay for goods and services with MM. Additionally VCash is partnered with Western Union, enabling remittances from abroad to be received as VCash.

VCash has two products relevant to financial inclusion, the first is a group savings product that mimics group savings schemes, and an individual savings product where the customer purchases a VCash Savings scratch card from a vendor and enters the information via USSD string, in just the same way a user would load airtime. This deposits e-value of the appropriate amount into the customer's VCash savings wallet. The use of scratch cards means that the scheme relies on a process with which customers are very familiar already owing to airtime top ups. The VCash team believes that feel, touch and physical evidence of a transaction are very important to customers in Nigeria.

ii. Mobile Money / Branchless Banking Agents

The reported number of MM agents in Nigeria varies widely. CBN reports over 50,000 registered agents whereas FSPMaps, a Gates-funded mapping of financial access points conducted in 2012, reports only 3,275 active agents nationwide, mostly in urban centers and higher income areas, as shown in Figure 47.

Figure 51: Mobile Money Agents per State / Population Under $2 (2013)



Source: FSP Maps (2013)

From discussions with MMOs it seems likely that there are tens of thousands of registered agents, a small percentage of whom are actually active. MMOs estimate that 65% - 80% of their agents are in urban areas and most report a 20% - 30% activity ratio.

The lack of quality agents has become a focus for CBN. EFINA and NIBBS hosted strategy sessions with MMOs and the CBN governor in late 2013 about how to accelerate agent networks in Nigeria (Interviews, 2014). The governor is now trying to source funding to improve this situation and formally create some role for MNOs as agent aggregators (Interview with ALMPO, 2014). CBN is also exploring how to harness the extensive network of 7,000 post office branches, which penetrates into the rural areas. Nigeria Postal Services (NIPOST) is considered a key player for social promotion, financial and digital inclusion by the government but it has been undergoing extensive restructuring to achieve financial viability over the past few years. OneNetwork, an agent aggregator, has attempted to secure a partnership with NIPOST but this has not resulted in an active partnership to date.

MMOs consistently reported that the agent network is the biggest single challenge to their work and to achieving financial inclusion (Interviews with MMOs and other industry experts, 2014). MMOs find it difficult to manage this extremely capital and labor intensive part of the business alongside the other key verticals (such as customer acquisition and product development). The relative weakness of the MM agent network is both symptomatic of and a cause of low MM adoption in Nigeria to date. The low level of agent activity is attributable to several issues:

- Independent MMOs **lack the capital required** to provide agents with the monitoring and support needed to maintain their activity, which is usually particularly demanding in the early stages of MM adoption (Interviews with M-Kudi, VTNetwork, FETS, Teasy). Similarly, many banks are just returning to profitability after the financial crisis and many MM teams are under-resourced and under pressure to show profitability of the MM business to justify further investment (Interviews with Ecobank, Stanbic, Zenith, 2014). This causes many MMO agents to be undertrained, illiquid and unsure how to conduct the MM agent business (Interview with Beyond Branches, August 2013).

- The CBN-enforced **non-exclusivity of agents to MMOs may be deterring investment** in the agent network by any one player as their work could benefit all MMOs working with that agent. Non-exclusivity can also further strain agent liquidity as their e-money investment is spread between the different MMOs they work with; agents could be required to have e-floats of up to $615 (N100,000) for each MMO they represent. Exclusivity may have helped stimulate initial MMO investment. Competing MMOs are now evaluating the possibility of sharing their agent networks to expand their reach and ability to effectively manage agents; there is recognition by some providers that cooperation rather than competition may benefit the industry as a whole in the early stages. In the last year there has been increasing interest in partnering with organizations which already have extensive agent networks to increase MMOs' footprints (Interviews with First Monie, August 2013; Interviews with ALMPO, eTranzact, LAPO, Accion, Microleverage, Zenith, Stanbic, Ecobank, Diamond Bank, 2014).

- Both banks and independent MMOs **lack expertise in building distribution networks** and feel that they need to reinvent what MNOs and some MFBs already have already achieved (Interviews with MMOs, 2014). Some MMOs are hiring staff with distribution expertise from the MMOs but there also seems to be some reluctance to develop agent networks from scratch as MMOs look to negotiate partnerships with MNOs, MFBs, Nipost, petrol retailers and other institutions with existing distribution chains to leverage their existing networks. Defining the commercial and operational models for such partnerships is proving complex and time-consuming. Organizations with existing agent networks seem nervous about partnering with MMOs and unsure as to how to commercialize or operationalize the opportunity to offer agent aggregation services (Interviews with LAPO, Accion, Stanbic, 2014). It remains to be seen if the MNO with the strongest footprint, MTN, will share its agent network although the recent partnership with Diamond Banks illustrates progress in this domain (Interview with MTN, 2014). MTN actually recruited and trained 9,000 MM agents when it partnered with GT bank and Fortis MM on a MM product, before CBN shut down the operation on the grounds that MM should not be telco-led. MTN has retained these 9,000 agents in the hope that CBN will revise its policy but in the meantime has incorporated the agents into their airtime business. In effect, this incapacitates the use of those agents for MM since they will make far better profits from airtime and therefore lose the incentive to invest in MM e-value..

- **Customer demand for MM is so low that agents are not motivated to invest their working capital in the MM business**, causing them to churn (Interviews with VTNetwork, FETS, Ecobank, Stanbic, MTN, 2014). Street sellers (known as mallams) earn \$10 - \$15 per day from selling low cost provisions such as cigarettes and sweets; trading in e-value cannot generate similar returns currently and so the product cannot compete for investment by small traders. Most MMOs are trying to compensate for this lack of MM demand by enabling agents to purchase airtime with e-money for resale to customers (Interview with Ecobank, August 2013). Airtime sales account for the majority of agent and customer MM transactions (~60%) in Nigeria today (EFInA,2013).

- Many MMOs, in an effort to achieve instant capillarity, registered tens of thousands of agents and now have **too high a ratio of registered agents to active customers**. This means that the amount of business going to each agent is low, which compounds the issue of agents not being able to generate enough revenue from MM and thus defecting. Leveraging bank branches, post offices and other institutional POSs, while they provide more robust liquidity and reliable customer service, may further cannibalize business that could be channeled to agents to increase their profitability and therefore reduce agent churn.

- There is **low liquidity management support** for MM agents in Nigeria. In countries with successful MM implementations agents are usually provided with liquidity management tools backed by sophisticated monitoring programs for e-value distributors. E-value distributors are typically local dealers whom an agent can purchase e-money from or sell e-money to, to ensure that they have sufficient amounts of both e-money and cash rather than surpluses of either. Today in Nigeria only Paga, Fortis and Ecobank provide this support at the agent's doorstep; agents of other MMOs are required to travel to bank branches or other agents to rebalance e-money or cash levels (Interviews with MMOs, August 2014). Since there is low demand for MM at the moment in Nigeria, this issue may not be impeding business growth yet but this will probably become a challenge as adoption increases and the agent footprint expands into less urban areas which are further from bank branches.

- The haste with which many MMOs tried to expand their network has led to the recruitment of **low quality and poorly trained agents**. Many MMOs have not rigorously defined agent selection and monitoring criteria and have minimal quality control. The little training provided to agents mostly focuses on the technical and practical aspects of how to operate MM and does not adequately equip agents with skills or knowledge in customer acquisition, potential earnings – commissions and incentives, how to market the service in the local community and general business management. This results in agents who do not feel incentivized or empowered to own the MM business in their area (Interviews with MMOs, 2014).

MMOs with the most robust agent networks currently are Paga Tech and Fortis Mobile Money, organizations who have placed an emphasis and invested heavily in agent network expansion.

The challenges with agent management reveal business models around agent aggregation and management. Several companies have been set up to offer such services and, although at very nascent stages of development, could have a big impact on the industry if successful. The main agent management players are:

Beyond Branches

Beyond Branches (BB) conducted a proof of concept pilot in 2013 involving 20 agents in the Lagos area. By virtue of a partnership with Interswitch (see Switching Companies section) BB agents offer an OTC service enabling customers to make MM wallet deposits and withdrawals, make bank deposits and withdrawals, purchase airtime, and make payments to any of the 200 vendors registered with Interswitch. The system does not rely on any MM system, rather agents top up their BB account by transferring funds from their bank into BB's bank account. Once the agent has money in their BB account they can use the BB mobile web portal, connected to Interswitch, to execute transactions. For wallet deposits and withdrawals, the BB agent can deposit funds either into a customer's MM wallet or directly into a recipient's wallet. Alternatively they can generate a MM voucher by transferring money from their BB account to the relevant MM provider. Therefore, using this model neither sender nor recipient needs to have a MM wallet, reducing the barrier to adoption for the customer and therefore enabling agents to start serving customers from the onset, even if there is low penetration of the mobile wallet. Additionally the agent is MMO agnostic but is able to provide services for all MMO wallets, increasing the business they are able to attract and therefore their profitability and level of motivation.

Customers pay $0.60 (N100) per transaction performed and this is split as follows: 45% to InterSwitch, 25% to BB, 30% to the agent. The InterSwitch share would decrease as volumes increase. All transactions are confirmed with an SMS to the customer and agent.

Upon registering to be a BB agent, agents can access a loan of N1,000 (at a competitive rate of interest) in order to provide them with liquidity to kick start the business. Each BB agent is trained, monitored and supported by an agent manager who conducts regular in-person visits to agents. BB plans to build a liquidity management module next which would monitor the real time BB account balance of each agent and provide SMS alerts to both agents and agent managers once certain e-money thresholds are reached.

Before embarking on the pilot, BB undertook very thorough research with 4,000 potential agents to understand their unmet needs. They found that agent needs are quite varied and include soft requirements such as book-keeping skills and accounting processes for their main business, as well as financial needs such as insurance and microcredit. Therefore, BB would like to motivate their agents by satisfying these needs to create a business case that is less reliant upon transaction-based commissions, which are low particularly in the early stages of agency banking adoption. They envisage an agent roadmap in which agents are eligible for various rewards once they achieve certain levels of performance.

The 2013 pilot was successful; 43% of agents were consistently active (much higher than rates reported by MMOs) and N2 million of transactions have been executed. BB is now scaling up to 140 agents in 14 locations and is raising Series A investment. They plan to provide agency banking services to all service providers, including DMBs, MMOs, insurance companies and MFBs. They intend to offer transactional services but also customer acquisition and financial education services via their agents. They are already in discussion with Mansard Insurance for premium collections and Union Bank for cash in and out services.

Microleverage

Microleverage is considered to be one of the most collaborative and functional agent management companies. Because of the low demand of MM services in agent areas, they have yet to show success in the market. They report to have thousands of agents but the majority has performed just a single transaction in a three month period (Interview with Microleverage). However, the company was selected to partner with GEMS4 on an initiative to use MM for SMEs along trading corridors, which may help the company to gain some traction.

One Network

OneNetwork is an agent management company which presented a very impressive agent management plan which included a much sought-after partnership with NIPOST. Over a year after negotiating agreements with MMOs, the company continues to work to build up an agent network. The partnership with NIPOST seems to still be under discussion or is at least not yet operational.

iii. Mobile Network Operators (MNOs)

MNOs are prohibited by CBN regulations to receive MM licenses so their involvement to date has mainly been providing the technology required to run the service. This can include platform hosting but is generally limited to providing the access channels required for agents and customers to interact with the MM services: SMS, USSD, IVR and the data connection required to run MM apps.

There has been much contention over the price that mobile operators charged MMOs for USSD access. Initially telcos were charging N120 per USSD session (every time the MM menu is accessed). MMOs could absorb this cost on behalf of the user but they are subjected to a large fee unless minimum volumes are met each month, making this a prohibitive option for them. To avoid this, MMOs have to pass this charge on to the user. Subjecting the end user to a N120 USSD access fee in addition to the transaction fee made MM an unattractive option for customers. MMOs lobbied NCC and CBN who mandated that telcos had to reduce the USSD access fee and as a result this is currently N12. However, MMOs still argue that this cost is too high and it is discouraging uptake.

Since MM is telco-agnostic in Nigeria the mobile operator does not have an opportunity to leverage this as an anti-churn or loyalty product.

Some mobile operators are now partnering with MMOs to offer use of their agent networks. MMOs pay a flat fee in addition to a revenue share on the MM fees in exchange for the telco recruiting and training agents as well as handling e-money and cash distribution, which would be handled by the telco's aggregators and dealers. These telco agents, in line with CBN's Agency Banking Guidelines, would be able to offer any financial service from an FI (including insurance), not just MM. Airtel, Etisalat and Glo have shown openness to this. Glo is aiming to have 15,000 such agents by the end of 2014 and will comprise of some airtime resellers but also many new agents since the requirements for financial services agents are quite different. MTN has recently started a pilot using their agent network to offer agency banking services for Diamond Bank and are very happy with this partnership which now enables them to participate in Mobile Financial Services in a controlled way and with a commercial structure that is appealing to them.

However, there are some mobile micro insurance schemes starting in Nigeria which are being used as anti-churn devices. Airtel and FBN Life launched a life insurance product, Padi4Life, in July 2013. The product is based on airtime deductions; $0.12 (N20) is deducted each day and 25 days of deductions must be successful in the month for the cover to be valid. For this $3 (N500) monthly the premium the customer receives life coverage of $3,000 (N500,000) the next month. At the time of writing no claims had been made (March 2014) and uptake has been low because customer acquisition efforts have been minimal. Airtel is responsible for Below-The-Line marketing and FBN is responsible for Above-The-Line marketing as part of the deal. FBN and MTN recently launched a similar life insurance product with Salt and Einstein and Mansarnd Insurance and they intend to expand to accident and health cover. Their insurance partners are responsible for marketing and customer acquisition and MTN gains a revenue share of the premiums. The product is based on airtime deduction with no freemium component. Etisalat and FBN are also due to launch a life and accident insurance in the coming months. Premiums will be $6 (N1,000) per month for N500,000 life insurance and N10,000 medical expenses in the case of an accident (Interview with FBN, 2013). It seems that FBN has had a strategy change which has demoted the importance of micro-insurance, which may lead to some stagnation of FBN products (Interview with FBN, 2014).

According to NCC regulation, any product requiring an airtime deduction of N100 or less per day is considered a Value Added Service (VAS) and therefore does not require additional regulatory approval. Any product requiring deductions worth more than this would require regulatory authorization.

iv. Electronic Transaction Switching and Payment Clearing Companies

CBN regulation requires wallet interoperability in Nigeria, necessitating switching and clearing. There are 2 entities supporting switching for MM:

Nigerian Interbank Settlement System (NIBSS)

NIBSS is essentially the national switch, 10% CB- and 90% bank-owned. CBN mandates that all MMOs must be connected to NIBSS for switching, with which most operators have complied. However, most MMOs who are connected to NIBSS do not actually route transactions through it (or any other switching company) meaning that wallet interoperability is not a reality today. Wallet interoperability is technically possible via NIBSS but the commercial grounds for enabling this are not clear which is why it is not activation. While those MMOs who do connect through NIBSS are happy to do so because their per transaction fee is very low, there have been some challenges with some transactions failing to complete when routed through NIBSS.

InterSwitch

InterSwitch is owned by a handful of Nigerian banks and private investors and is the largest clearing house in Nigeria, processing $24bn per year. They offer switching services and also connections to most merchants accepting electronic payments in Nigeria, such as subscription TV, airlines and utilities companies. Therefore, all MMOs are connected to InterSwitch, not only for redundancy on peer-to-peer transactions (in case NIBSS goes down) but also so that they can enable merchant payments. In this respect InterSwitch represents an aggregator for wallet-based payments, so any entity wishing to be able to collect payments from all MMO wallets would easily be able to do this by connecting to InterSwitch. Stakeholders are very satisfied with InterSwitch services but complain that their fees are far too high.

InterSwitch has high vested interest in developing agency banking in order to develop their own business by driving more transactions to their switch. Therefore, they have partnered with several organizations looking to develop agent networks for financial services. InterSwitch is interested in developing agent networks for the full array of financial services, not only MM, as they believe the business model around focusing only on MM agents is not sustainable. InterSwitch is interested not only in partnering with organizations looking to build agent networks but also in supporting them with the tools to do so: they have developed an agent management and liquidity distribution solution with VeriCash which could be used by MMOs and agent aggregators.

V. INVESTORS

There are a number of organizations investing in agency banking and mobile financial services in Nigeria. Some of them are:

Alithea

Alithea is the only financial inclusion investor in Nigeria; it was Paga Tech's first institutional investor and they have also have equity in Main Street DMB and MicroCred MFB. The company invests funds from the Dutch, German and Norwegian Development Finance Institutions (DFIs) and they have invested $2 million to date. Alithea invests in any company with the potential to further financial inclusion and they are particularly interested in and seeking deals with MFBs and agent management companies, both for purchasing equity but also providing matched funding or technical assistance for new product development.

Accion Frontier Investments (AFI)

AFI is an impact investment fund currently sponsored by Accion International that provides early stage equity to companies with disruptive business models to promote financial inclusion at the base of the pyramid. AFI's mandate is to invest in the catalytic technologies, products and services that will radically enhance the quality and scale of financial service delivery to the unbanked and underbanked. Their target sectors are technology (e.g. off-the-shelf core banking systems, credit scoring, business process outsourcing solutions), distribution (e.g. agent aggregation companies, mobile banking, cards and POS, and other branchless payment systems), and new financial products beyond microcredit (e.g. micro-insurance, housing, energy and education).

Kaizen Venture Partners (KVP)

Run by Chijioke and Ngozi Dozie, the sons of Pascal Dozie, the founder of Diamond Bank and current Chairman of MTN, KVP has a $20m co-investment agreement with IFC as part of their Debt and Asset Recovery program. The company is focused consumer finance and particularly supporting lending to the mass market in Nigera. They are particularly interested in any channel that helps them to reach potential micro-loan recipients, whose credit worthiness they can then assess via very small loans with a view to providing them with more substantial loans depending on their credit history. They are currently negotiating a deal with DealDey as a potential channel for such information and intend to continue to build this portfolio.

vi. Development Organizations

There are a number of development organizations whose mission it is to increase financial inclusion in Nigeria:

Enhancing Financial Innovation & Access (EFInA)

EFInA is a financial sector development organization (FSD) that promotes financial inclusion in Nigeria. It is funded by the UK Government's Department for International Development (DFID) and the Bill & Melinda Gates Foundation. The organization focuses on four areas: Research, Innovation, Advocacy and Capacity Building.

EFInA's biennial Access to Financial Services in Nigeria Survey, started in 2008, has become a crucial source of reliable data regarding how individuals and households manage their finances. The survey covers 20,000 consumers nationwide. EFInA also conducts other mostly quantitative studies covering demand and supply side financial sector issues. The organization outsources survey enumeration and design thinking work to external entities (such as Brand Fusion and IPSOS; and IDEO, respectively).

EFInA's innovation grants have been awarded to several MMOs to help accelerate the adoption of MM through the development of novel approaches for reaching the under-banked. Technical Assistance grants are for 12 months and Innovation grants are for a longer period. Grants have been awarded to UBA, MIMO, Paga, Fortis and several others. EFInA has an excellent relationship with CBN and is often able to serve in an advisory role to them.

Growth and Employment in States 4: Wholesale and Retail (GEMS 4)

GEMS4 is a DFID-funded, Coffey-managed project working to promote SME growth in the wholesale and retail sectors using the Making Markets Work for the Poor methodology. They aim to create incentives for the private sector to support a pro poor way of doing business. GEMS4 found that a significant constraint holding back SME growth is the lack of access to financial services and payment solutions. Some SMEs that they work with have to travel 150 kilometers to get to the nearest bank branch. Others travel hundreds of kilometers with billions of Naira in cash to purchase retail items. This reliance on cash increases the cost of doing business for SMEs and affects their profitability.

Therefore, GEMS4 wants to promote the adoption of MM for B2B payments in the wholesale and retail corridors of Nigeria. They want to achieve this by:

- Addressing policy constraints through consultation with CBN. They have completed workshops in major trading centers to raise policy makers' awareness of SME needs.
- Raising awareness among SMEs via marketing roadshows in 30 trading locations along major trading routes. CBN will support this so that customers are more likely to trust the products.
- Working with MMOs and agent management companies to deploy agents along trading corridors. GEMS4 has recruited MicroSave to provide technical assistance for the recruitment and training of agents. They selected MicroSave because of their experience managing large networks and addressing the needs of agents. The project will be in collaboration with CTTel, MicroLeverage, Zenith Bank, ReadyCash and Fortis Money under cost sharing agreements.

The feasibility of using MM for B2B retail and wholesale payments will be tested in a small pilot.

Additionally, GEMS4 works with FMCG distributors to determine how best their payments could be migrated to agency banking. For FMCGs the business case is clear as they are being subject to fines under the Cash Lite Nigeria regulations; their sales men can save time by using an electronic method of funds collection as less time will be spent on reconciliation; and they can save money by minimizing leakage of funds through loss, theft or fraud, which currently results in losses of up to 30%.

International Finance Corporation (IFC)

IFC is committed to furthering the advancement of Mobile Financial Services in Nigeria. So far they have taken a conservative approach; their first investment was in InterSwitch to promote payments and to create an enabling environment for Mobile Money by creating the platform to connect to merchants. IFC invested in Adlevo, which in turn invested in PagaTech. IFC also financed a 12 month pilot with eTrazanct, MTN and SEAP. The 10 month pilot was to turn MFI beneficiaries in rural areas into Village Phones Operators who would function as both access points for the mobile network and also mobile financial services agents. The Village Phone Operator's loan was also disbursed and collective via MM. The pilot went well and eTranzact's PocketMonie service was created out of this pilot; IFC is now at the due diligence phase for investing in them but there are concerns about the low level of traction the product has achieved to date. IFC is a technical partner on FBN's Gates-funded project, assisting Gates to disburse funds and advising FBN on how the grant is spent. IFC is also technical advisor to Diamond bank assisting them with an agricultural MSME strategy.

VI. CONCLUSION

The data and analysis in this report lead to three recommendations for bolstering digital finance in Nigeria: Expand and strengthen the agent network, take on further research of the sector from a human centered design perspective, and support product innovation and implementation.

A widespread agent network is essential for promoting digital financial services in Nigeria. However, as this report has shown, lack of such a robust network is the greatest single barrier to the uptake of agency banking. Mobile Money Operators (MMOs) lack the capital, expertise, and geographical reach to develop their networks. Existing agent aggregators are small, inexperienced, and underfunded. Some of Nigeria's Microfinance Banks (MFBs) have extensive reach at the community level, but various factors have thus far prevented substantial leverage of their distribution networks. The best way to develop agency banking is to reduce the operational costs of MFBs and other potential agent networks, and to leverage their networks for use by digital financial service providers.

Further research in this sector is needed and should focus in-depth on consumer insights regarding the emotive and personal aspects of financial management and decision-making. Few MMOs have the skills, time, or resources to research consumer needs when developing or testing products. Due to a lack of local expertise, external and foreign-based firms have done the majority of such research. As such, there is no body of knowledge accumulated locally. A Human Centered Design (HCD) approach can tease out consumer insights on broad themes that can help MMOs develop customer-centric services. One report that offers such information is MasterCard Center for Inclusive Growth and Grameen Foundation's "Mobile Money in Nigeria: The User Experience." Such research can help MMOs innovate not only around product offerings but also marketing, communication strategies, and pricing.

Existing mobile financial products create barriers to financial inclusion via agency banking in Nigeria. Customers have little incentive to change their cash orientation when digital alternatives are more expensive and do not sufficiently meet their needs. Additionally, many traditional financial service providers do not see a business case in serving the mass market using products that do not garner increased revenue. There is a need to help MMOs with product innovation, testing, and implementation to make their services more appealing to a broad-based audience and to find ways for them to draw revenue. Further, incubators can help strong organizations secure investment to help their products and services reach scale.

As this report emphasizes, Nigeria's market provide great opportunity for digital financial services. But there are significant challenges in the landscape that may prevent the development of this sector unless comprehensively addressed. MMOs, Mobile Network Operators, and traditional banks all have roles to play in expanding and strengthening this industry, and MFBs may be able to make substantial, unique contributions to the expansion of these services to underserved populations.

APPENDIX: REFERENCES

Adetunji, M. O. (2012) 'Determinants of Urban Poverty in Osun State, Nigeria', Interdisciplinary Journal of Contemporary Research in Business, Vol. 3, No. 11, pp. 267 - 281. Available at: www.journal-archieves16.webs.com/267-281.pdf. Last accessed 13th March 2014.

All Africa (2014) 'Nigeria: Centenary Celebration - Govt Bans Telecom Operators' Promos'. Available at: www.allafrica.com/stories/201401300336.html. Last accessed 28th February 2014.

ALMPO (2013) 'ALMPO Press Release – 4th June 2013'. Available at: www.virtualterminalnetwork.com/pr/images/ALMPOLAUNCHPRESSRELEASE_Jun42013.pdf. Last accessed 28th August 2013.

Anyanwu, J. C. (2012) 'Accounting for Poverty in Africa: Illustration with Survey Data from Nigeria', African Development Bank Group Working Paper Series, No. 149. Available at: www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/WPS%20Nos%20149_Anyanwu_Clean.pdf. Last accessed 13th March 2014.

Augusto & Co (2013) in All Africa 'Nigeria: GTBank, Zenith, Access, FBN Tagged Most Profitable Tier One Banks'. Available at: www.allafrica.com/stories/201307150515.html. Last accessed 28th August 2013.

BizTech Africa (2013) 'Nigeria's Sluggish MobileMoney Initiative'. Available at: www.biztechafrica.com/article/nigerias-sluggish-mobile-money-initiative/5279/. Last accessed 13th March 2014.

BizTechAfrica (2012) 'Paga Nigeria Secures Fresh Investment'. Available at: www.biztechafrica.com/article/paga-nigeria-secures-usd30m-investment/3397/. Last accessed 28th August 2013.

Bloomberg (2013) Globacom Nigeria to Expand Phone Network With $1.25 Billion. Available at: www.bloomberg.com/news/2013-04-30/globacom-nigeria-to-expand-phone-network-with-1-25-billion.html. Last accessed 28th August 2013.

Bloomberg (2013b) 'First Bank of Nigeria's Profit Little Changed as Costs Rise'. Available at: www.bloomberg.com/news/2013-08-27/first-bank-of-nigeria-s-profit-little-changed-as-costs-rise.html. Last accessed 28th August 2013.

Bureau of Statistics (2014) 'Nigeria Statistical Data Portal'. Available at: www.nigeria.prognoz.com. Last accessed 13th March 2014.

Business Day (2013) 'Nigeria: Insurance Tap into Mobile Platform to Deepen Policy Uptake'. Available at www.mobilemoneyafrica.com/details.php?post_id=1290. Last accessed 13th March 2014.

Business Monitor International (BMI) (2013) Nigeria Telecommunications Report. Available at: www.store.businessmonitor.com/nigeria-telecommunications-report.html. Last accessed 28th August 2013.

CBN (2007) 'Financial System Strategy 2020'. Available at: www.cenbank.org/OUT/SPEECHES/2007/GOVADD18-4-07.PDF. Last accessed 13th March 2014.

CBN (2009) 'Regulatory Framework for Mobile Payments Services in Nigeria'. Available at: www.cenbank.org/OUT/CIRCULARS/BOD/2009/REGULATORY%20FRAMEWORK%20%20FOR%20MOBILE%20PAYMENTS%20SERVICES%20IN%20NIGERIA.PDF. Last accessed 13th March 2014.

CBN (2012) 'Deposit Money Banks Monthly Activities Report for March 2012'. Available at: www.cenbank.org/OUT/2012/PUBLICATIONS/REPORTS/GOV/DMBS'%20REPORT.PDF. Last accessed 13th March 2014.

CBN (2013a) '2011 in Retrospect: MfB Operators Score Sector High' Available at: www.cenbank.org/out/2013/ccd/3%20tiered%20kyc%20requirements.pdf. Last accessed 13th

March 2014.

CBN (2013b) 'Clarification on the Requirements for Agent Banking In Nigeria'. Available at: www.proshareng.com/news/20692.html. Last accessed 13th March 2014.

CBN (2013c) 'Further Clarifications on Cash-Less Lagos Project'. Available at: www.cenbank.org/cashless. Last accessed 28th August 2013.

CBN (2013d) 'Guidelines for the Regulation of Agent Banking and Agent Banking Relationships in Nigeria'. Available at: www.cenbank.org/out/2013/ccd/guidelines%20for%20the%20regulation%20of%20agent%20banking%20and%20agent%20banking%20relationships%20in%20nigeria.pdf. Last accessed 20th March 2014.

CBN (2014) 'Money Market Indicators (In Percentage)'. Available at: www.cenbank.org/rates/mnymktind.asp. Last accessed 13th March 2014.

Center for Financial Regulation and Inclusion (CENFRI) (2011) 'Opportunities for Insurance Inclusion in Nigeria'. Available at: www.cenfri.org/images/stories/Documents/microinsurance/EFINA1101_A2F_Survey_analysis_final_27.06.11.pdf. Last accessed 28th August 2013.

CFI (2010) '224 Nigerian MFBs Stripped of Licenses: What's the Story Behind the Headline?' Available at: www.cfi-blog.org/2010/11/15/224-nigerian-mfbs-stripped-of-licenses-what%E2%80%99s-the-story-behind-the-headline. Last accessed 13th March 2014.

CFI (2013) 'New Microfinance Regulation in Nigeria'. Available at: www.cfi-blog.org/2013/01/14/new-microfinance-regulation-in-nigeria. Last accessed 13th March 2014.

CIA Factbook (2014) 'Nigeria'. Available at: www.cia.gov/library/publications/the-world-factbook/geos/ni.html. Last accessed 13th March 2014.

Daily Independent (2013) 'E-payment transactions hit N2.3tr in June'. Available at: www.dailyindependentnig.com/2013/09/e-payment-transactions-hit-n2-3tr-in-june. Last accessed 13th March 2014.

Daily Independent Nigeria (2014) 'CBN reviews bank charges, to phase out COT by 2016'. Available at: www.dailyindependentnig.com/2013/03/cbn-reviews-bank-charges-to-phase-out-cot-by-2016. Last accessed 13th March 2014.

Daily Trust (2013) 'Nigeria: NCC Fines MTN, Glo, Airtel, Etisalat N22 Million Over Promos'. Available at: www.allafrica.com/stories/201303020109.html. Last accessed 28th August 2013.

Demographic and Health Survey (DHS) (2008). Available at: www.measuredhs.com/pubs/pdf/FR222/FR222.pdf. Last accessed: 28th February, 2014.

Economist Intelligence Unit (2014) 'Nigeria Economic and Political Outlook Country Report Nigeria'. Available at: www.store.eiu.com/Product.aspx?pid=50000205&gid=1650000165. Last accessed 14th March 2014.

EFInA (2012a) 'Access to Financial Services in Nigeria 2012 Survey Key Findings'. Available at: www.efina.org.ng/assets/Documents/Updated-Documents/Key-Findings-2012.pdf. Last accessed 28th February 2014.

EFInA (2013) 'EFInA Innovation Grant Round 5: Incentives and Innovations to Increase the Usage of Mobile Money'. Available at: www.efina.org.ng/publications/forcedownload/544. Last accessed 28th August 2013.

Euromoney (2013) 'Nigeria's emerging 'cashless policy' boosts card payments'. Available at: www.euromoney.com/Article/3234473/Nigerias-emerging-cashless-policy-boosts-card-payments.html?copyrightInfo=true. Last accessed 13th March 2014.

FinIntel (2013) 'Sectoral Analysis of Nigeria's Economy'. Available at: www.myfinancialintelligence.com/banking-and-finance/sectoral-analysis-nigeria%E2%80%99s-economy. Last accessed 14th March 2014.

Fitch Ratings (2013) 'Nigerian Banks Are Unlikely to Repeat 2012 Profit Highs'. Available at:

www.fitchratings.com/gws/en/fitchwire/fitchwirearticle/Nigerian-Banks-Are?pr_id=798232. Last accessed 28th August 2013.

Forbes (2011) 'Nigeria's Mobile Money Startup Pagatech Fills a Need, Attracts U.S. Investment'. Available at: www.forbes.com/sites/mfonobongnsehe/2011/11/28/nigerias-mobile-money-startup-pagatech-fills-a-need-attracts-u-s-investment. Last accessed 28th August 2013.

Friedman, J (2013) 'Behind Low Rates of Participation in Micro-Insurance: A Misunderstanding of the Insurance Concept?'. Available at: www.blogs.worldbank.org/impactevaluations/behind-low-rates-participation-micro-insurance-misunderstanding-insurance-concept. Last accessed 13th March 2014.

Gates Foundation (2014) 'FSP Maps'. Available at www.fspmaps.com. Last accessed 13th March 2014.

GSMA (2011) 'African Mobile Observatory 2011: Driving Economic and Social Development through Mobile Services'. Available at: www.gsma.com/publicpolicy/wp-content/uploads/2012/04/africamobileobservatory2011. Last accessed 18th July 2013.

Guardian (2011) 'Who Will Champion the Urban Poor'. Available at: www.theguardian.com/global-development/poverty-matters/2011/oct/03/nigeria-ajegunle-championing-urban-poor. Last accessed 13th March 2014.

Guardian (2013) 'Mobile Payments Hits N74b Mark, Agent Banking Scheme Lagging'. Available at: www.nigeria.gounna.com/show/show/41186/1. Last accessed 13th March 2014.

Guardian (2013b) 'MTN puts number porters at 22,000, NCC plans review of scheme'. Available at: www.ngrguardiannews.com/business-news/129316-mtn-puts-number-porters-at-22000-ncc-plans-review-of-scheme. Last accessed 28th August 2013.

Hargreaves, R. (2013) 'Three Low-Risk Plays on the Expanding Nigerian Financial-Services Market'. Available at: www.fool.com/investing/general/2013/09/23/three-low-risk-plays-on-the-rapidly-growing-nigeri.aspx. Last accessed 13th March 2014.

Huber, C (2013) 'From Diagnostic to Action: Developing Microinsurance in Nigeria'. Available at: http://www.cgap.org/blog/diagnostic-action-developing-microinsurance-nigeria. Last accessed 12th March 2014.

IFC (2011) 'Mobile Money Study 2011: Nigeria'. Available at: www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/06/2011mobilemoneyreportnigeria.pdf. Last accessed 13th March 2014.

IFC (2012) 'Mobile Money Scoping Country Report: Nigeria'. Available at: www.ifc.org/wps/wcm/connect/a37edc004e466439a86da87a9dd66321/MobileMoneyScoping_Nigeria.pdf?MOD=AJPERES. Last accessed 13th March 2014.

IFC (2013) Mobile Money Adoption Lifecycle. Available at: www.ifc.org/wps/wcm/connect/61a201804a1b3f2a8fc2ffdd29332b51/Mobile%2BMoney%2BProduct%2BAdoption%2BLife%2BCycle.pdf?MOD=AJPERES. Last accessed 14th March 2014.

Igbuzor, Otive (2011), Nigeria's Experience in Managing the Challenges of Ethnic and Religious Diversity Through Constitutional Provisions. Available at: www.encburma.net/index.php/feature/54-feature/166-nigerias-experience-in-managing-the-challenges-of-ethnic-a-religious-diversity-through-constitutional-provisions.html. Last accessed 28th August 2013.

Intermedia (2012) 'Tanzania Mobile Money Tracker Study: Quarter 2 Report'. Available at: www.audiencescapes.org/sites/default/files/Tanzania%20MM%20Tracker%20Quarter%202%2027July2012%20FINAL.pdf. Last accessed 13th March 2014.

Intermedia (2013) 'Tanzania Mobile Money Tracker Study: Wave 4 Report'. Available at www.intermedia.org/wp-content/uploads/TZ-MM-Wave-4-Report-FINAL.pdf. Last accessed 13th March 2014.

ITU (2013) 'MTN loses subscribers in Home Market. Other Markets perform comparatively'. Available at: www.itu.int/ITU-D/ict/newslog/CategoryView,category,Operators.aspx. Last accessed 28th August 2013.

KPMG (2013) 'Global Debt Sales: Nigeria'. Available at: www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/global-debt-sales/Documents/nigeria-2013.pdf. Last accessed 13th March 2014.

KPMG (2013) 'Nigeria Country Profile 2012/13'. Available at: www.kpmg.com/Africa/en/KPMG-in-Africa/Documents/2012-2013%20Country%20Profiles/Nigeria%20Country%20Profile_2012-2013_01.pdf. Last accessed 13th March 2014.

Kushnir, K., Mirmulstein, M.L. & Ramalho, R. (2010) 'Micro, Small, and Medium Enterprises Around the World: How Many Are There, and What Affects the Count?: MSME Country Indicators, World Bank, IFC'. Available at: www.ifc.org/wps/wcm/connect/9ae1dd80495860d6a482b519583b6d16/MSME-CI-AnalysisNote.pdf?MOD=AJPERES. Last accessed 12th August 2013.

Lange, P. (2013) ‘Nigeria - Telecoms, Mobile, Broadband and Forecasts’. Available at: www.budde.com.au/Research/Nigeria-Telecoms-Mobile-Broadband-and-Forecasts.html. Last accessed 28th August 2013.

Mancini, L. (2009) ‘Comparative trends in ethno-regional inequalities in Ghana and Nigeria: evidence from Demographic and Health Surveys’, CRISE Working Paper No 72. Available at: www.r4d.dfid.gov.uk/PDF/Outputs/Inequality/workingpaper72.pdf. Last accessed 28th August 2013.

Matul M., McCard M., Phily C., Harms, J. (2009) 'The Landscape of Microinsurance in Africa'. Available at: www.a2ii.org/fileadmin/data_storage/documents/external_documents/The_Landscape_of_MI_in_Africa_2012_full_study_web.pdf. Last accessed 12th August 2013.

Mawoli, M. A. (2009) ‘Liberalisation of the Nigerian Telecommunication Sector: A Critical Review’ in Journal of Research in National Development: 7 (2). Available at: www.transcampus.org/JORINDV7Dec2009/JournalsV7NO2Dec200930.html. Last accessed 28th August 2013.

Medhi, I., Nagasena, G. S. N., and Toyama, K. A 'Comparison of Mobile Money-Transfer UIs for Non-Literate and Semi-Literate Users'. Available at: http://research.microsoft.com/apps/pubs/default.aspx?id=143165. Last accessed 13th March 2014

MFW4A (2013) 'Interview with Credit Bureau Association of Nigeria'. Available at: www.mfw4a.org/stakeholders-engagement/mts/mts-interviews/2827/credit-bureau-association-of-nigeria.html. Last accessed 13th March 2014.

MFW4A, GIZ & BMZ (2014) 'Towards Inclusive Insurance in Nigeria: An Analysis of The Market and Regulations'. Available at: www.a2ii.org/document-details.html?dam_single=2729. Last accessed 19th March 2014.

Mobile Money Gateway (2013) 'Mobile Money - in Support of Going Cashless in Nigeria'. Available at: www.mobile-money-gateway.com/sites/default/files/Shift%20Thought%20Nigeria%20Mobile%20Money%202013%20Report.pdf. Last accessed 13th March 2014.

MTN (2013a) Corporate Information about MTN Nigeria. Available at: www.mtnonline.com/about-mtn/corporate-information. Last accessed 28th August 2013.

MTN (2013b) ‘Summary consolidated reviewed financial results’, MTN Group: Media Release, 14 August 2013. Available at: www.mtn.com/PressOffice/Documents/PressItemPDF/MTN_interim_results_announcement.pdf. Last accessed 28th August 2013.

National Bureau of Statistics (2010) 'NBS Press Briefing on The Nigeria Poverty Profile 2010 Report: Results from the Harmonized Nigeria Living Standards Survey 2009/2010'. Available at: www.reliefweb.int/report/nigeria/nigeria-poverty-profile-2010-report. Last accessed 13th March

2014.

National Bureau of Statistics (2010) 'The Nigeria Poverty Profile 2010 Report'. Available at: www.nigerdeltabudget.org/National%20Bureau%20of%20Statistics%20Poverty%20Profile%20of%20Nigeria%202012%20(1).pdf. Last accessed 13th March 2014.

National Bureau of Statistics (2012) 'Demographic Statistics Bulletin 2012'. Available at: www.nigerianstat.gov.ng/pages/download/103. Last accessed 13th March 2014.

National Census in UNICEF (2011) 'At a glance: Nigeria'. Available at: www.unicef.org/infobycountry/nigeria_statistics.html. Last accessed 13th March 2014.

National Communications Commission (NCC) (2014a) Subscriber Data: Monthly Subscriber Data 2013. Available at: www.ncc.gov.ng/index.php?option=com_content&view=article&id=125&Itemid=73. Last accessed 28th February 2014.

National Communications Commission (NCC) (2014b) Industry Data: Subscriber / Teledensity Data (2011 – 2013): Market Share of Mobile Operators October 2013. Available at: www.ncc.gov.ng/index.php?option=com_content&view=article&id=68:art-statistics-industry&catid=65:cat-web-statistics&Itemid=70. Last accessed 28th February 2014.

National Mirror (2013) Telecoms: Nigeria's ARPU to decline by 6.9% this year. Available at: www.nationalmirroronline.net/index.php/business/infotech/46573.html. Last accessed 28th August 2013.

NCC (2012a) Determination of Dominance in Selected Communications Markets in Nigeria. Available at: www.ncc.gov.ng/index.php?option=com_docman&task=doc_download&gid=365&Itemid. Last accessed 28th August 2013.

NCC (2012b) Nigeria Consumer Satisfaction Survey Final Report Part 1: Overview. Available at: www.ncc.gov.ng/index.php?option=com_docman&task=doc_download&gid=369&Itemid. Last accessed 28th August 2013.

NCC (2013) 'Operator Data, June 2013'. Available at: www.ncc.gov.ng/index.php?option=com_content&view=article&id=70&Itemid=76. Last accessed 28th August 2013

NCC (2013) 'Percentage Market by Operator, June 2013'. Available at: www.ncc.gov.ng/index.php?option=com_content&view=article&id=68&Itemid=70. Last accessed 28th August 2013.

NCC (2014) 'Internet Subscriber Data: Active Internet Subscriptions (GSM)'. Available at: www.ncc.gov.ng/index.php?option=com_content&view=article&id=68&Itemid=70. Last accessed 28th February 2014.

Ogun, T. P. (2010) 'Infrastructure and Poverty Reduction: Implications for Urban Development in Nigeria', United Nations University World Institute for Development Economics Research Working Paper No. 2010/43. Available at: www.wider.unu.edu/publications/working-papers/2010/en_GB/wp2010-43/_files/83470208826802337/default/2010-43.pdf. Last accessed 13th March 2014.

Omonona, B. (2010) Quantitative Analysis of Rural Poverty in Nigeria, IFPRI Nigeria Strategy Support Program, Brief No. 17. Available at: www.ifpri.org/sites/default/files/publications/nssppb17.pdf. Last accessed 28th August 2013.

Online Nigeria (2013) Nigeria Profile. Available at www.bbc.co.uk/news/world-africa-13951696. Last accessed 28th August 2013.

OPEC (2013) 'Annual Statistics Bulletin'. Available at: www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2013.pdf. Last accessed 14th March 2014.

Osborn, Jessica (2013) Lessons Learned from Implementing Mobile Money in Ghana, Mobile

Money Expo 2013, Lagos, Nigeria

Otite, Onigu (1990) 'Ethnic Pluralism and Ethnicity in Nigeria'. Available at: www.books.google.co.mz/books/about/Ethnic_pluralism_and_ethnicity_in_Nigeri.html?id=97oMAQAAIAAJ&redir_esc=y. Last accessed 14th March 2014.

Paga (2013) Available at: www.mypaga.com/paga-web/start.paga. Last accessed 28th August 2013.

Population Institute (2010) 'Population and Failing States: Nigeria'. Available at: www.populationinstitute.org/external/files/Nigeria.pdf. Last accessed 13th March 2014.

Punch (2013) 'GSM Firms to Spend N980.35bn on Network Upgrade'. Available at: www.punchng.com/business/business-economy/gsm-firms-to-spend-n980-35bn-on-network-upgrade. Last accessed 28th August 2013.

Sahara Reporters (2014) 'President Jonathan Orders Ousted CBN Governor Sanusi's Security Detail Removed'. Available at: www.saharareporters.com/news-page/president-jonathan-orders-ousted-cbn-governor-sanusis-security-detail-removed. Last accessed 13th March 2014.

The Guardian (2013) The Dominance Challenges in Telecoms Sector. Available at: www.store.businessmonitor.com/nigeria-telecommunications-report.html. Last accessed 28th August 2013.

This Day Live (2013) 'NAICOM to Release Micro-insurance Guidelines Soon'. Available at: www.thisdaylive.com/articles/naicom-to-release-micro-insurance-guidelines-soon/146422/. Last accessed 28th August 2013.

This Day Live (2014) 'Non Oil Sector Drives Nigeria's GDP Growth'. Available at: www.thisdaylive.com/articles/non-oil-sector-drives-nigeria-s-gdp-growth/170407/. Last accessed 13th March 2014.

Timetric (2013) 'Emerging Opportunities in the Debit Card Market in Nigeria: Market Size, Industry Drivers and Consumer Trends'. Available at: www.researchandmarkets.com/research/pr7rht/emerging. Last accessed 13th March 2014.

TNS (2013) 'Navigating Growth in Africa' in 25% of Nigerian Mobile Subscribers use Smartphones, Punch. Available at: www.punchng.com/business/technology/25-of-nigerian-mobile-subscribers-use-smartphones-tns/. Last accessed 28th August 2013.

Usman Muhammad (2012) Rural Solar Electrification in Nigeria: Renewable Energy Potentials and Distribution for Rural Development'. Available at: www.ases.conference-services.net/resources/252/2859/pdf/SOLAR2012_0232_full%20paper.pdf. Last accessed 28th February 2014.

Vanguard (2012) 'NCC slams MTN, ETISALAT, Airtel, Glo with N1.17b penalty over poor quality of service'. Available at: www.vanguardngr.com/2012/05/ncc-slams-mtn-etisalat-airtel-glo-with-n1-17b-penalty-over-poor-quality-of-service/. Last accessed 28th August 2013.

Vanguard (2012) www.vanguardngr.com/2012/01/2011-in-retrospect-mfb-operators-score-sector-high. Last accessed 13th March 2014.

World Bank (2011) 'Changes in Country Classifications'. Available at: www.data.worldbank.org/news/2010-GNI-income-classifications. Last accessed 15th July 2013.

World Bank (2012) Population Ranking. Available at: www.data.worldbank.org/data-catalog/Population-ranking-table. Last accessed 27th August 2013.

World Trade Press Best Country Reports (2014) 'Population Density Map of Nigeria'. Available at: www.bestcountryreports.com/Population_Map_Nigeria.php. Last accessed 13th March 2014.