



# DIGITAL FINANCIAL SERVICES IN NIGERIA

STATE OF THE MARKET REPORT | 2018

## ACKNOWLEDGEMENTS

This work would not have been possible without the support of:

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# **DIGITAL FINANCIAL SERVICES IN NIGERIA**

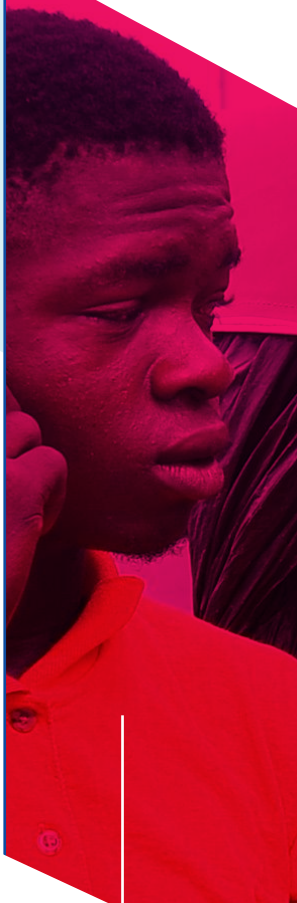
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AUTHOR'S  
NOTE

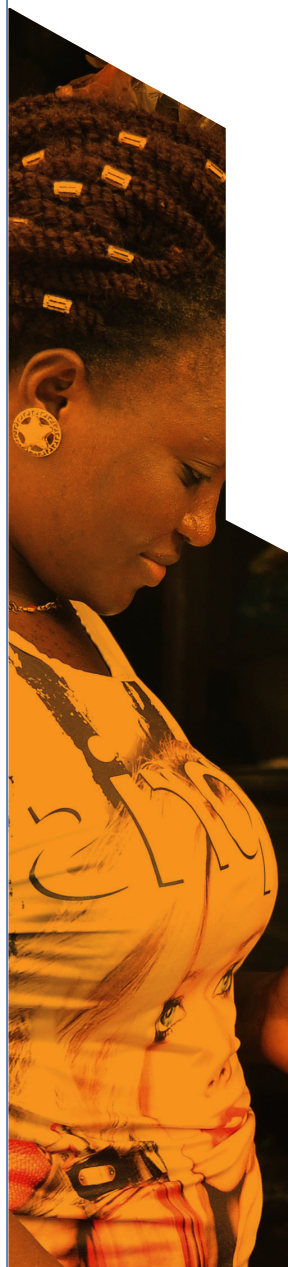
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STATE OF THE  
MARKET REPORT

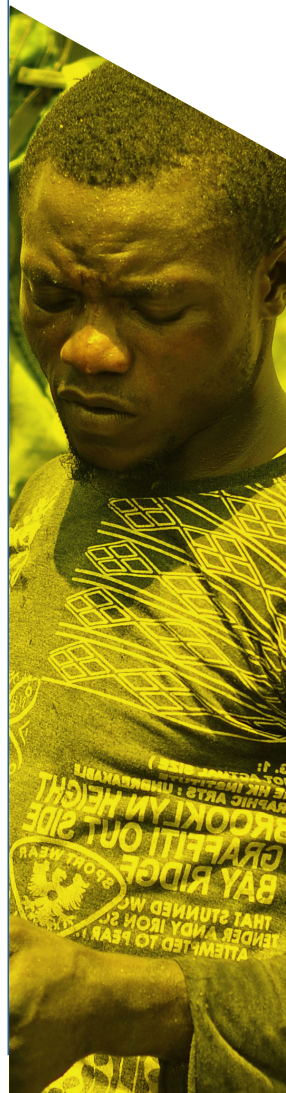
**WHAT'S  
NEW?**

10



**EXECUTIVE  
SUMMARY**

12



CHAPTER ONE  
**INTRODUCTION**  
A YEAR  
IN REVIEW

20





## C O N T E N T S

CHAPTER THREE  
**FINANCIAL  
INCLUSION &  
DEVELOPMENT**

104

**APPENDICES**

132

CHAPTER TWO  
**CONSUMER  
INSIGHTS**

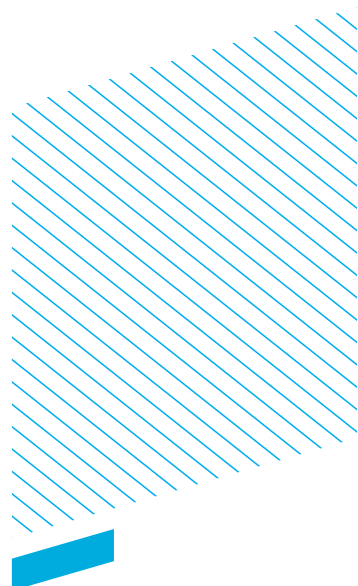
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## AUTHOR'S NOTE

This 2018 report takes a broader approach to exploring financial inclusion as a national imperative. Besides the financial system, linkages between financial inclusion and the sustainable development goals (SDGs) and other macro-economic indicators are established.



**Financial inclusion  
is also a stimulant  
for economic  
development.**



Since 2016, when the Sustainable and Inclusive Digital Financial Services (SIDFS) initiative was launched at the Lagos Business School, we have continuously made efforts to catalyse financial inclusion in Nigeria. The annual State of the Market Report, the flagship publication, highlights topical issues on digital financial services (DFS) and financial inclusion.

Previous editions have focused on financial inclusion and the DFS ecosystem. This 2018 report, however, takes a broader approach to exploring financial inclusion as a national imperative. Besides the financial system, linkages between financial inclusion and the sustainable development goals (SDGs) and other macro-economic indicators are established. Hence, elevating financial inclusion to a national level will benefit the financial system and ease the attainment of economic and social SDGs such as poverty alleviation (#1) and gender equity (#7). Financial inclusion is also a stimulant for economic development, enhancing gross domestic product (GDP) and other key economic indicators like job creation and liquidity.

This third state of the market report explores financial inclusion as a national imperative through in-depth analyses of the relationships between key macro-economic indicators. From these, we highlight policy implications and possible interventions, which when addressed position financial inclusion as an economic development apparatus.

We hope the insights presented in this year's report informs and inspires you, as well as everyone within the ecosystem, to intensify their efforts to attain our financial inclusion goals.

# ACRONYMS

Acronym	Description
<b>A2F</b>	Access to Finance
<b>AIP</b>	Approval-in-Principle
<b>ATM</b>	Automated Teller Machine
<b>BDC</b>	Bureaux-de-Change
<b>BIS</b>	Bank for International Settlements
<b>BVN</b>	Bank Verification Number
<b>CBN</b>	Central Bank of Nigeria
<b>CCT</b>	Conditional Cash Transfer
<b>CICO</b>	Cash-In Cash-Out
<b>DFRRI</b>	Directorate for Food, Roads, and Rural Infrastructure
<b>DFS</b>	Digital Financial Services
<b>DMB</b>	Deposit Money Bank
<b>DSU</b>	Deficit Spending Unit
<b>EFInA</b>	Enhancing Financial Innovation and Access
<b>FAS</b>	Financial Access Survey
<b>FII</b>	Financial Inclusion Insights

<b>FIRS</b>	Federal Inland Revenue Service
<b>FSI</b>	Financial Services Industry
<b>FSP</b>	Financial Service Point
<b>FSS</b>	Financial System Strategy
<b>GDP</b>	Gross Domestic Product
<b>GPZ</b>	Geo-Political Zone
<b>GSMA</b>	Global System for Mobile Association
<b>ICT</b>	Information and Communications Technology
<b>KYC</b>	Know-Your-Customer
<b>MFB</b>	Microfinance Bank
<b>MLR</b>	Maximum Lending Rate
<b>MDA</b>	Ministries, departments and agencies
<b>MMO</b>	Mobile Money Operator
<b>MNO</b>	Mobile Network Operator
<b>MSME</b>	Micro, Small and Medium Enterprises
<b>NAICOM</b>	National Insurance Commission
<b>NBS</b>	National Bureau of Statistics



<b>NCC</b>	National Communications Commission
<b>NDI</b>	National Disposable Income
<b>NDE</b>	National Directorate of Employment
<b>NDIC</b>	National Deposit Insurance Commission
<b>NEEDS</b>	National Economic Empowerment and Development Strategy
<b>NEFT</b>	NIBSS Electronic Funds Transfer
<b>NEP</b>	National Employment Policy
<b>NFIS</b>	National Financial Inclusion Strategy
<b>NIBSS</b>	Nigeria Inter-Bank Settlement System
<b>NIMC</b>	National Identity Management Commission
<b>NIN</b>	National Identity Number
<b>OFN</b>	Operation Feed the Nation
<b>P2P</b>	Person-to-Person
<b>PENCOM</b>	National Pension Commission
<b>PLR</b>	Prime Lending Rate

<b>PSB</b>	Payment Service Bank
<b>PSP</b>	Payments Service Provider
<b>PSSP</b>	Payments Solution Service Provider
<b>PTSA</b>	Payment Terminal Service Aggregator
<b>PTSP</b>	Payment Terminal Service Provider
<b>SANEF</b>	Shared Agent Network Expansion Facilities
<b>SDG</b>	Sustainable Development Goals
<b>SEC</b>	Securities and Exchange Commission
<b>SIM</b>	Subscriber Identity Module
<b>SIP</b>	Social Investment Programmes
<b>SSU</b>	Surplus Spending Unit
<b>UFA</b>	Universal Financial Access
<b>USSD</b>	Unstructured Supplementary Service Data
<b>VAS</b>	Value Added Services
<b>You-Win</b>	Youth Enterprise with Innovation in Nigeria



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MARKET REPORT  
/// 2018

WHAT'S  
NEW



### Consumer insights:

This edition of the State of the Market Report extends the presentation of the gender disaggregation by estimating the size of the gender gap.

The gender gap is computed as the percentage variance of the number of males less the number of females over the number of males.

The gender gap is represented by sign (positive or negative) and magnitude (percentage value) indicating the extent (likelihood) to which women will be represented.

Revised ecosystem map: taking a cursory look at the supply-side interventions from financial services providers and regulators, we present a revised map of the DFS ecosystem (See Figure 1.21)



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MARKET REPORT  
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# EXECUTIVE SUMMARY





## EXECUTIVE SUMMARY

This report, the third in the series, extends the review of trends and competitive positions in the industry, mapping of customer profiles and recommendations for policy and regulatory reform. It analyses and presents the dynamics and synergistic relationship between financial inclusion, poverty eradication, the economy and development.

**The National Financial Inclusion Strategy (NFIS) was revised, incorporating many of the changes advocated in last year's State of Market Report.**

In 2017 financial inclusion rate inched up to 49 percent. The banked and under-banked segments grew by 7.5 percent and 0.2 percent respectively, whilst the unbanked declined by 7.6 percent. Yet, this presents a formidable challenge for attaining the projected national target of 80% by 2020. DFS awareness and utilisation remain low or non-existent among the under-banked and unbanked. Even among the banked many remain in informal channels (thrift and group savings), especially women.

The number of banked females declined by 0.2 percent, under-banked and unbanked increased by 0.1 percent and 2.2 percent respectively. The number of banked males increased by 7.5 percent, unbanked declined by 5.4 percent and the under-banked remained static.

On average, banked adults are more likely male while under-banked and unbanked adults are more likely female. The most popular products are savings, investment (albeit witnessing declining levels in 2016, owing to recessionary effects) and credit products, whilst pension and insurance are the least popular, in that order.

Significant changes in policy and regulatory guidelines meant to drive inclusion occurred in the year. The National Financial Inclusion Strategy (NFIS) was revised, incorporating many of the changes advocated in last year's SOMR. The key priorities are:

1. Creating a conducive environment to expand DFS.
2. Enabling rapid growth of agent networks with nationwide reach.
3. Reducing KYC requirements to opening and operating a bank account.
4. Creating an environment conducive to serving the most excluded.
5. Driving adoption of cashless payment channels, notably in Government to person payments (G2P) and person to Government (P2G) payments.
6. Enhancing product development, particularly for the youth; females; Northern-regions; MSMEs; and rural locations.



Another significant initiative by CBN was the issuance of guidelines for licensing of Payment Service Banks (PSB). This allows telecommunications operators (Telco's) to directly participate in the market, albeit with restrictions on creation of credit and so on.

Deposit Money Banks (DMBs) also launched a new credit facility, the Shared Agent Network Expansion Facility (SANEF), for licensed MMOs and super-agents to enhance the rollout of financial access points. By 2020, SANEF aims to recruit 40 million unbanked Nigerians, increase the number of agents to 500,000 and increase the number of assigned bank verification numbers (BVN) to 70 million unique identities. Other regulators (insurance, pension, capital market) in the DFS space have also launched targeted interventions aimed at enhancing the adoption and delivery of DFS.

Financial services adoption levels among urban dwellers remain higher than in rural locations. Figures for the banked individuals are higher in Southern States, the under-banked figures for Northern and Southern States are about even; but, the unbanked are more prevalent in the northern States,

notably, the North-West. Poverty levels are higher in under-banked and unbanked households, which are also more populous. Financial services adoption in households of four or more is declining.

Financial exclusion is increasing among women. As mentioned earlier, women suffer financial exclusion more in all categories, albeit women are more likely to utilise informal financial services, whilst fewer banked women, compared to men access formal financial services. Financial inclusion rates are increasing among the married segments, exclusion is rising among the singles. Youth, often unemployed, are the most financially excluded. These trends suggest the need for innovative financial products that take consumer attitudes and behaviours into consideration; financial literacy and economic empowerment, to improve adoption of financial services.

A female adult in the North West is 27.7 percent and 92.3 percent more likely to be unbanked and under-banked respectively than a counterpart male. Except for the South-East region, banked women are less likely [than men] to be financially excluded.





Under-banked and under-banked women are more likely [than men] to be financially excluded, mostly in the South East. Except for 3-member households, women are less likely [than men] to access formal financial services. Even though phone access does not inhibit access to formal financial services, lack of phone access is more likely a constraint for women accessing informal financial services and other financial services.

The most prevalent measure of national economic output is GDP. Nominal gross output diminished between 2011 and 2015, but increased in 2016. Between 2011 and 2014, real gross output was stable around 4 percent but declined since 2014 when the economy had a consistent negative growth in real GDP. From 2007, the structure and composition of outputs changed, with the service sector as the dominant output source, followed by a declining extractive sector, and a flat secondary sector. Domestic factor incomes are accountable for about 96 percent of National disposable income (NDI). Operating surplus' accounted for 69 percent of inflation-adjusted disposable income.

The average growth in real income was 5.22 percent between 2010 and 2015 while disposable income grew by 6.01 percent over the same period. Significant improvements of diaspora and external inflows were clear in 2014 and 2015. While domestic factor income rose at an annual average of 4.54 percent, the wages and salaries sub-component contracted at an annual average of 1.9 percent and shrank by almost 9 percent in 2015. In contrast, the

'operating surplus' sub-component showed a yearly increase of 6 percent. Improvements in the provision and use of financial services will mobilise loanable funds, improve access to credit and may lower the cost of credit. These will lead to economic growth and higher income. Higher levels of investment will increase employment, income, savings and transaction volumes and thus increase the use of financial services.

On the average, from 2011 to 2017, N7,675.57 billion (about 74 percent) was recurrent expenditure, capital spending and transfer payments were N2,629.50 billion (26 percent) and N359.89 billion (4 percent) of average total expenditure, respectively. More emphasis on transfer payments that have a direct impact on the use of financial services should advance government payments and improve social welfare. The conditional cash transfer initiative (CCT) of government can create an avenue for the financial inclusion of the poor given that the monies paid are deposited into beneficiary bank accounts as opposed to cash disbursements.

Ensuring that cash flows occur through financial institutions produces a multiplier effect of further value creation by financial intermediaries. The provision and use of financial services enables the effective distribution of the government payments using DFS.



Government payments lead to higher income and will thus increase the use of financial services. In particular, more transfers should flow through local governments whose spending has the most impact on financial inclusion.

Consistent fiscal deficits are a regular feature of the Nigerian public-sector finances at all levels, especially in recent times, occasioned by the recent decline in revenue associated with the oil price slump. Over the last decade, the domestic sources make up 40 percent of financing, of which deposit money banks (DMBs) contribute 78 percent of local finance. Efforts towards diversifying Nigeria's public-sector revenue base, and improving financial institutions and payment systems to increase the enumeration and collection of non-oil taxes should, therefore, be intensified.

An increase in government spending should lead to a rise in aggregate demand and thus increase financial inclusion. However, fiscal policy interventions that lead to increases in the taxation rates on bank transactions will cause a rise in financial exclusion. Financial inclusion interventions that focus on socio-economic activity which lead to outcomes like higher literacy levels, infrastructure improvements and higher levels of education amongst the youth will increase the access and use of credit, boost economic activity and job creation. However, financial inclusion interventions that produce more informal jobs may create more government leakages in the system.



Basic economic theory suggests that a reduction in lending rate will lead to an increase in output and therefore a decline in inflation rate. However, it is possible that lending interest rate (especially MLR) will not change because of the uncompetitive nature of the Nigeria banking environment. Autonomous changes in interest rates (lending and deposit) will impact financial inclusion. Increases in deposit rates and decreases in lending rates matched with a reduction in the requirements to access credit will encourage consumers to save more with the formal financial sector and cause a shift from informal to formal financial services. Financial inclusion interventions such as financial literacy campaigns and improving financial infrastructure to enhance access to financial services should increase the deposit base within the formal financial sector. These may reduce the cost of credit, encourage individuals active in the informal sector to open and maintain bank accounts, therefore, encouraging economic activity.

The firm monetary policy stance of the CBN (sustained a monetary policy rate of 14 percent) is taking a toll on the currency in circulation amidst growth in aggregate liquidity. Increased access to financial services should lead to: increasing use of non-cash payment platforms, greater utilisation of formal financial products and services and





increases in using informal financial services. The demand side hypothesis suggests that liquidity drives financial inclusion. Therefore, CBN should seek to curb the increase in cash holdings that may hinder price stability and enhance digital financial transactions to better manage liquidity. Our hypothesis is that increases in capital financial infrastructure will increase financial inclusion and access to credit and increases in investment will increase employment and job creation.

Increase in labour-intensive economic activities lead to job creation, notably youth employment, income growth and financial inclusion. However, increase of jobs in the informal sector may not increase financial inclusion. Therefore, Government

should blend job creation policies at the grassroots to stimulate and grow informal financial inclusion, pursue strategies which complement the existing job creation framework, social support and conditional transfers, while sustaining credit to SMEs.

We propose a “finance-led growth hypothesis” or a supply-leading response which argues that financial sector development drives the real sector of the economy and causes growth. Increase in capital financial infrastructure should increase financial inclusion and access to credit. Also, increase in investments should increase employment and job creation.



# CHAPTER ONE

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# INTRODUCTION: **A YEAR IN REVIEW**





## OVERVIEW

This section presents headline conclusions that summarise financial services activities in Nigeria. It represents the data summaries as strands that illustrate penetration levels across the defined customer segments.

## KEY TRENDS

Nigeria recorded progress in growing the banked and under-banked segments, but a significant number lack access to formal financial services and are yet to be categorised as banked

Banked adult is more likely male while under-banked and unbanked adults are more likely female

Higher penetration levels amongst the banked and under-banked customer segments across most financial services products;

Savings is the most accessible financial services product and insurance the least accessible

DFS awareness and utilization is low and non-existent among target segments - under-banked and unbanked

## Introduction

The Nigerian digital financial services (DFS) ecosystem has over the last decade witnessed growth in the financial inclusion numbers driven by a policy environment that facilitated the entry of new players, a licensing regime that established various tiers of operators and an increase in the number of financial access points. With the 2020 target of 80 percent financial inclusion bearing down on us, the need for stakeholders to innovate and collaborate has become even more imperative. As was discussed in last year's State of Market Report, financial inclusion has many moving parts and dimensions - policy formulation, amendments and implementation; consumer awareness and literacy, increase in financial access touch points, increased investments in mobile network technology infrastructure, and so on – all of which determine DFS growth and progress.

The current financial inclusion rate of 49 percent after eight years shows that the country still has a steep journey to attaining the 80 percent goal. This section of the 2018 State of the Market Report discusses recent ecosystem developments from the demand and supply perspectives.

The demand side focuses on the consumer while the supply-side presents provider and policy or regulatory perspectives.

## Demand-side Perspectives

The year 2018 is a landmark year for financial inclusion in Nigeria. 2018 marks a decade of the Enhancing Financial Innovation and Access (EFInA) access to finance (A2F) measurements. Since the 2008 EFInA survey, the bi-annual measure has provided a means to measure access to financial services in Nigeria.

Notwithstanding the EFInA measures, Intermedia also provides annual financial inclusion insights (FII), comprising of financial inclusion progress recorded from surveys conducted in 5 key economies. The World Bank Global Findex survey is still the largest global measure of financial inclusion, measuring access across over 160 economies.

The financial inclusion strands presented in this section comprise an aggregation of the various survey results from 2008. The statistics presented represent a single study or an aggregate of multiple studies, reporting progress according to the financial access profiles reported - banked, under-banked and unbanked. The section presents these national progress statistics from three perspectives - financial inclusion financial services penetration and DFS/mobile money penetration.

## Operational Definitions Financial Access Profile

### Demand side

An individual is banked if they access financial services from a formal (licensed and regulated) provider. This covers any individual that owns or operates a bank (or wallet) account with either a deposit money bank (DMB), microfinance bank (MFB) or non-bank financial institution such as a mobile money operator (MMO). In addition, banked individuals use other financial services such as insurance, pension or investments. An individual that utilises informal financial services like thrifts and group savings is under-banked. Unbanked individuals do not take part in formal and informal financial services. Although economically active, unbanked individuals conduct cash transactions and self-administer their limited financial services through home-based savings, credit from family and friends. Investments are in convertible assets such as real estate (land) and livestock.

The current financial inclusion rate of 49 percent after eight years shows that the country still has a steep journey to attaining the 80 percent goal.



# Financial Access Profiles

## Supply side

While these operational definitions profile financial inclusion penetration levels, further segmentation of the banked category is evolving from supply-side data. Banked sub-segments are fully-served and under-served. This classification probes further into the level (depth) of financial access. The fully-served sub-segment refers to the banked who exploit the full range of formal financial services; while the under-served, though banked, seldom utilise the full complement of financial products and services. Likewise, levels of economic activity defines unbanked sub-segments. The unbanked economically-active who conduct cash transactions, save at home or access credit through family and friends. They differ greatly from the unbanked economically-inactive, whom we refer to as excluded.

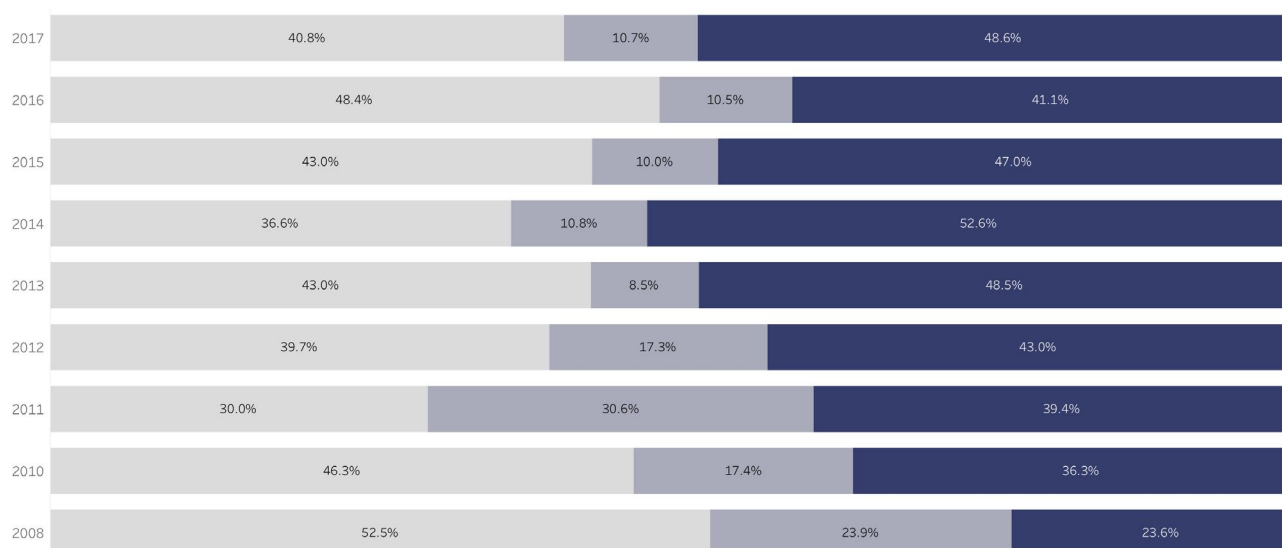
## Financial Inclusion

### National

To a certain degree, Nigeria recorded progress in growing the banked and under-banked segments by 7.5 and 0.2 percent respectively whilst reducing the unbanked segment by 7.6 percent (Figure 1.1). This reduction marks a reversal of the increasing number of unbanked observed since 2014. The trend analysis (Figure 1.2) confirms the increase in banked and decline in the under-banked and unbanked categories.

### National Strands

Figure 1.1 National financial inclusion strands (source: compiled by author)

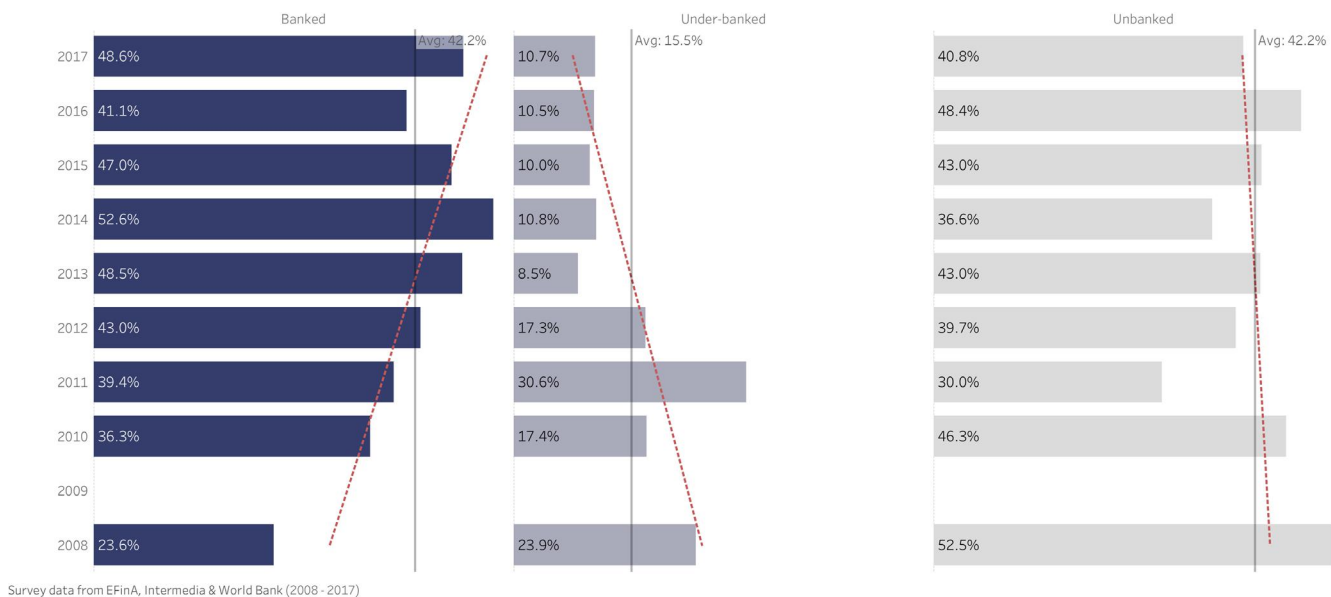


National financial inclusion strands (2008 - 2017)  
Compiled by author with survey data from EFinA, Intermedia & World Bank

**Legend**  
■ Banked  
■ Under-banked  
■ Unbanked

## National Trends

Figure 1.2 National financial inclusion trends (source: compiled by author)



## Gender:

### To what extent are women disadvantaged?

Including women in the adoption and use of financial services has drawn special attention in efforts to promote gender equity (SDG #5). The disaggregated charts (Figure 1.3) highlight the differences between males and females - a higher proportion of women lack access to financial services (unbanked) while a higher proportion of men have access to formal financial services (banked). In the gender disaggregation analyses, the number of females categorised as banked decreased by 0.2 percent while increases in the under-banked and unbanked categories account for 0.1 and 2.2 percent respectively. This trend (Figure 1.4) is reversed amongst the males where the number of banked increased by 7.5 percent and declines of 5.4 among the unbanked, with the under-banked remaining static.

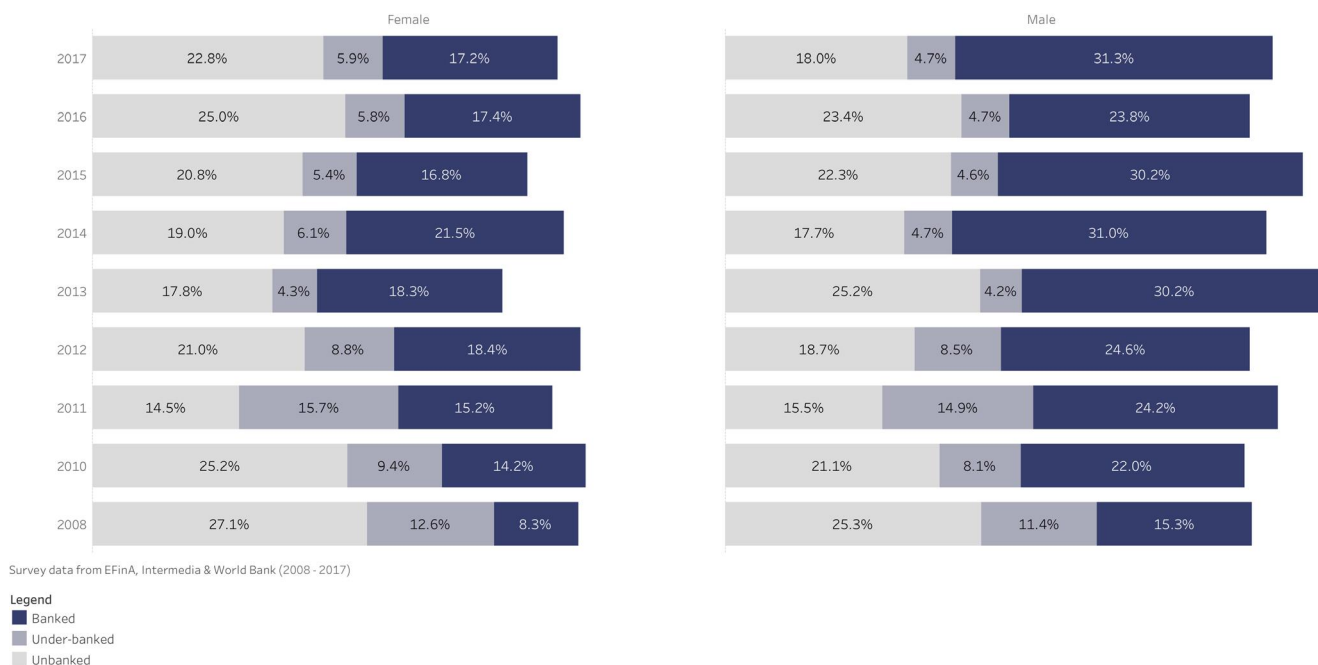
The extent to which it disadvantages women, measured by the gender gap, is the computation of the percentage variance between the number of males and females in each category over the total number of males. The sizing of the gender gap highlights directionality (positive or negative) and magnitude (value), representing the likelihood of female participation in financial services. Figure 1.5 highlights the national gender gap of access to financial services. The most recent measurements show that women are 42.5 percent less likely [than men] to use formal financial services - women are 37.3 percent more likely [than men] to use informal financial services - and that women are 26.0 percent more likely [than men] to lack access to financial services (financial exclusion).

The sizing of the gender gap highlights directionality (positive or negative) and magnitude (value), representing the likelihood of female participation in financial services

In sum, the charts show that, on average, banked adults are more likely to be male while under-banked and unbanked adults are more likely to be female.

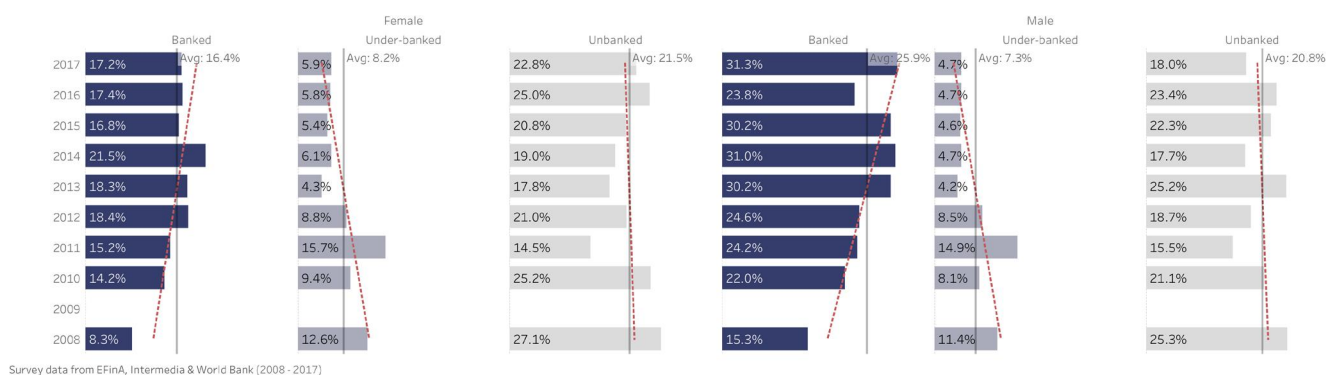
## Gender Strands

Figure 1.3 National financial inclusion strands disaggregated by gender (source: compiled by author)



## Gender Trends

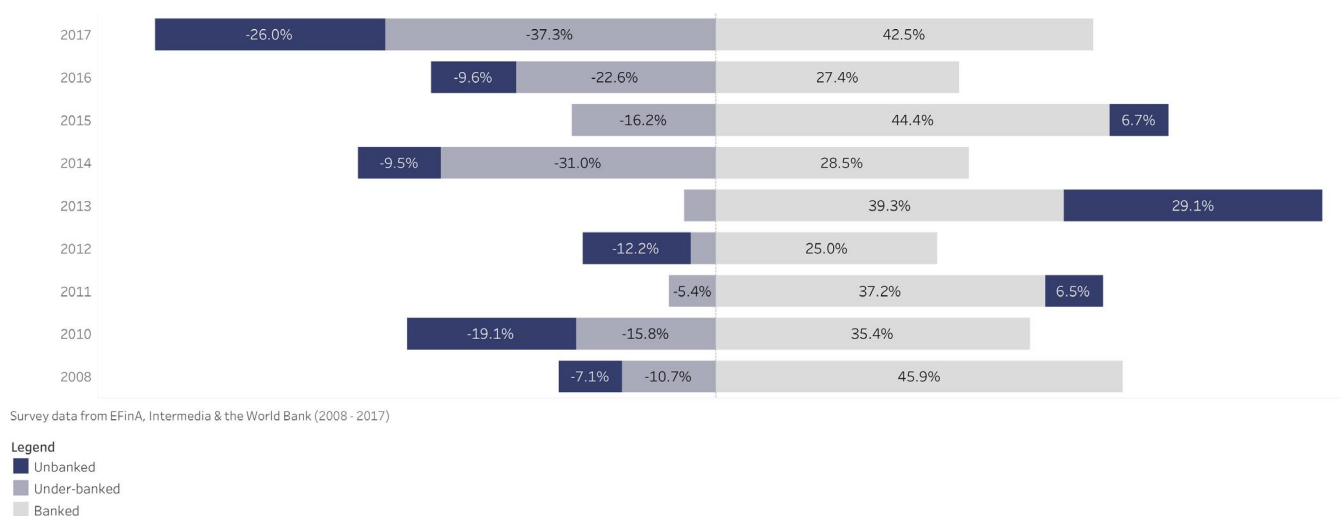
Figure 1.4 National financial inclusion trends disaggregated by gender (source: compiled by author)





## Gender Gap

Figure 1.5 National gender gap (source: compiled by author)



## Financial Services Penetration

### National

While financial inclusion numbers provide headline indicators of the level of activity, further investigations of the ubiquity of financial products and services in Figure 1.6 highlight access to financial products and services by customer segments. As expected, the chart shows higher penetration levels among the banked and under-banked customer segments across most financial services products; with savings being the most accessible and insurance the least accessible (total insurance penetration of the banked adults is only 8 percent).

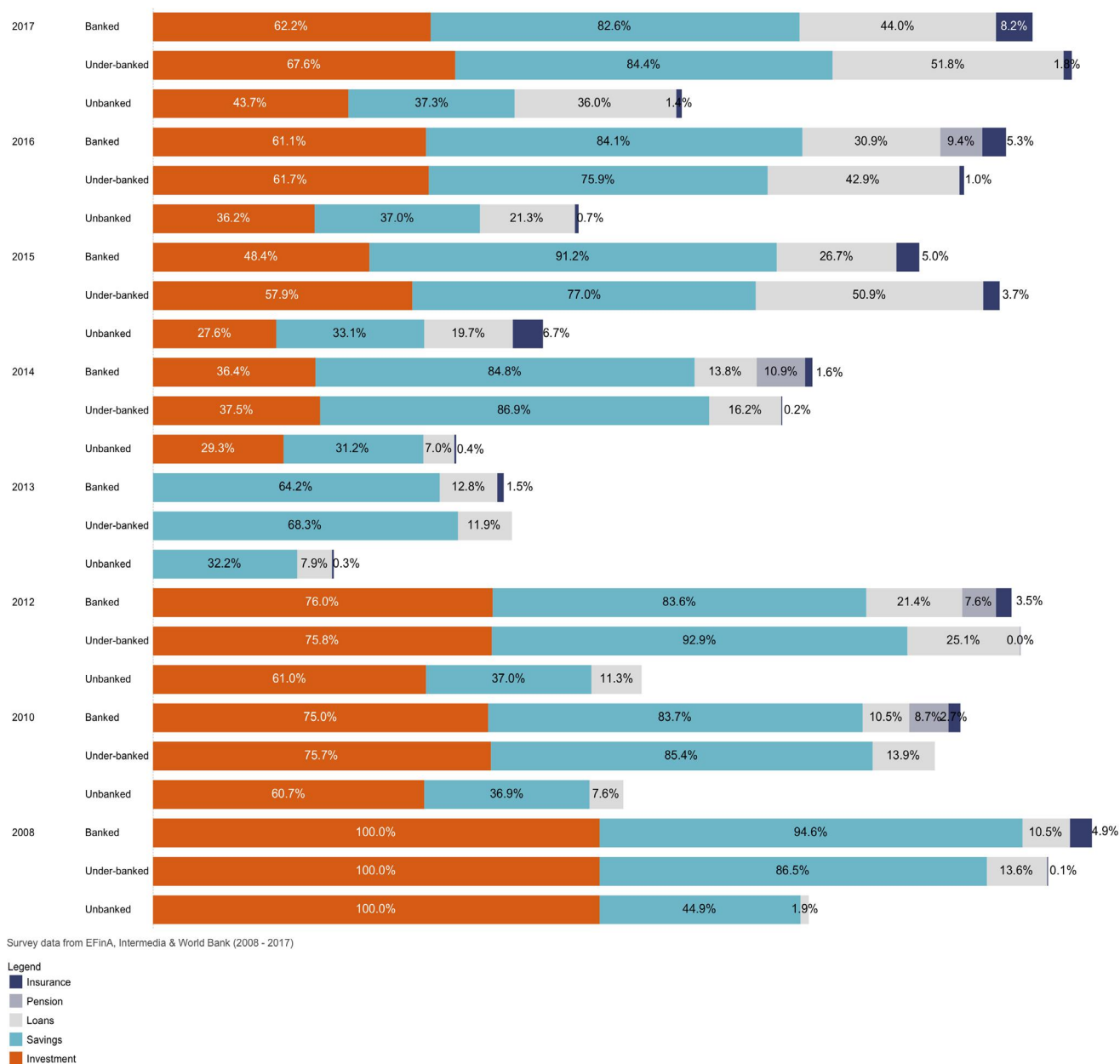
The trend analysis of financial services penetration (Figure 1.7) highlights declines in savings and investment products and increases in credit products across all customer segments. A possible explanation for this pattern is the 2016 recession and associated high levels of unemployment and under-employment.

Even though some datasets do not measure pension penetration, higher pension penetration levels among the banked supports the hypothesis of pensions only being accessible to employees in organisations bound by the Pension Reform Act.

The sizing of the gender gap highlights directionality (positive or negative) and magnitude (value), representing the likelihood of female participation in financial services

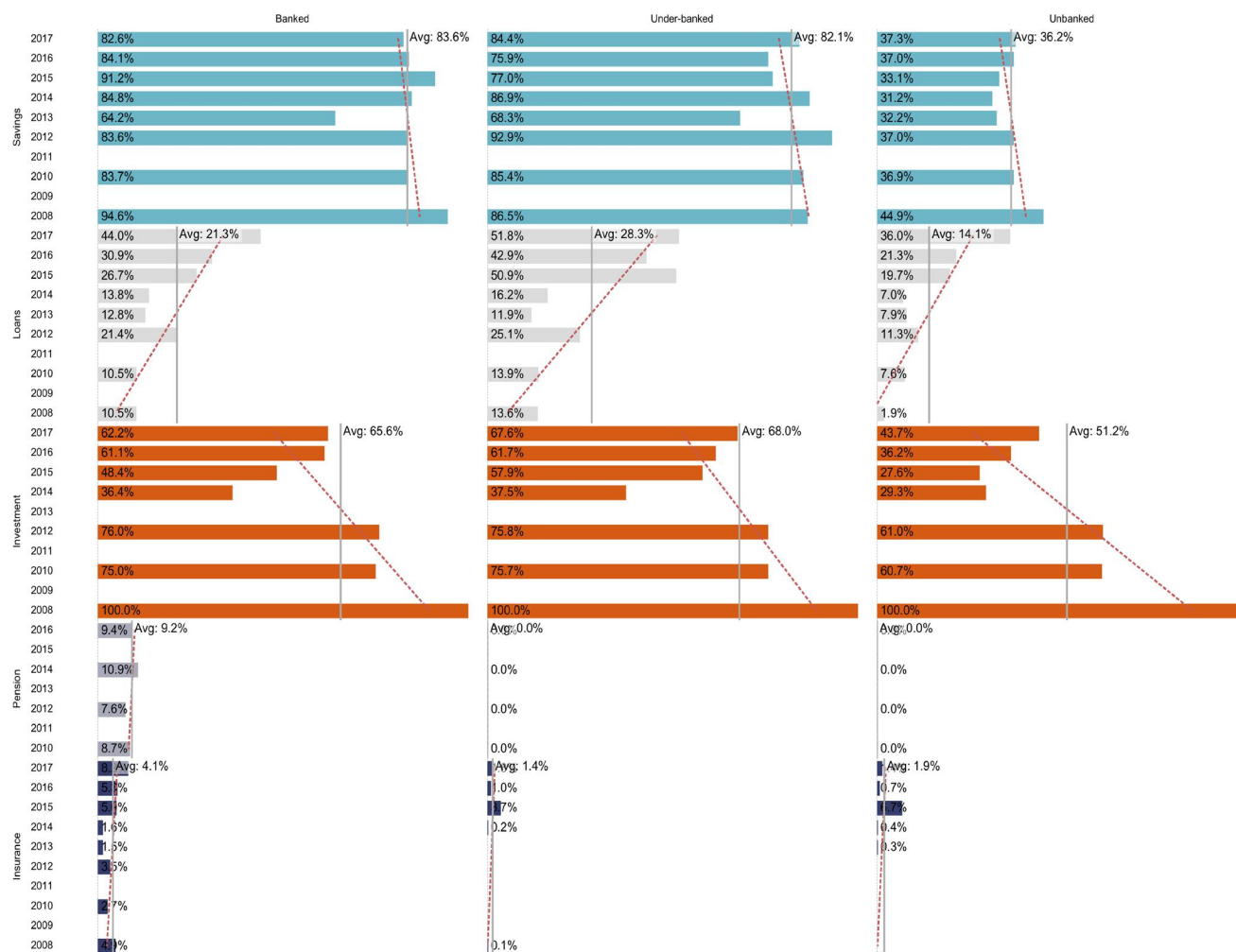
## National Strands

Figure 1.6 National financial services penetration strands (source: compiled by author)



## National Trends

Figure 1.7 National financial services penetration trends (source: compiled by author)



Survey data from EFinA, Intermedia & World Bank (2008 - 2017)

## Gender

Banked men access more financial products and services than other male categories. Under-banked women access more financial products and services than other female categories (Figure 1.8), a trend across product groups that is also consistent with global trends (Figure 1.9).

To varying degrees, women are less likely than men to access diverse formal financial services products, with insurance being the least usable product (Figure 1.10). Under-banked women are more likely than men to use informal financial products and investments. Except for insurance that women are less likely than men to adopt, to varying degrees, women are more likely to use individualised (self-service) savings, credit and investment products.



## Gender Strands

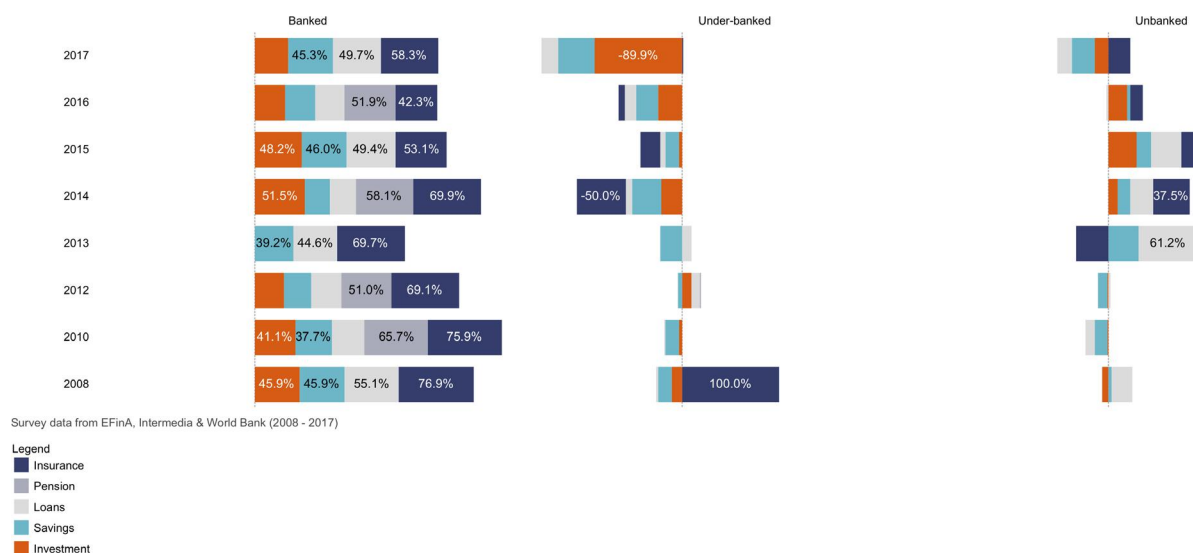
Figure 1.8 National financial services penetration strands disaggregated by gender (source: compiled by author)



## Gender Trends

Figure 1.9 National financial services penetration trends disaggregated by gender (source: compiled by author)



**Figure 1.10 National financial services penetration gender gap (source: compiled by author)**

## Digital Financial Services (DFS)

### National

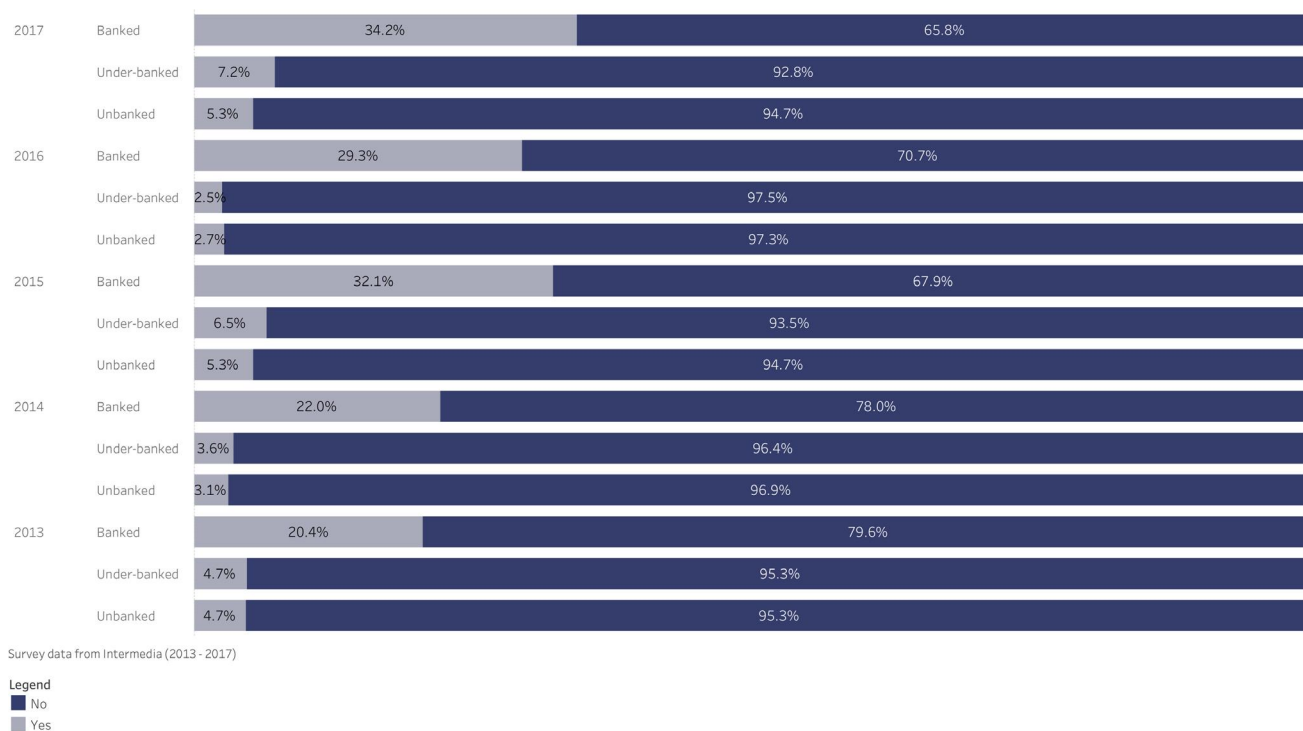
As an alternative store of value, the mobile wallet alongside mobile money services in 2008 has not enhanced the financial inclusion rates as in Nigeria as in other countries. The World Bank Global Findex reports attribute increased financial inclusion levels to the existence of mobile wallets. Notwithstanding this trend in progressive markets, the trends in Nigeria are incongruous where mobile money awareness (Figure 1.11 and Figure 1.12) and adoption (Figure 1.13 and Figure 1.14) rates are highest among the banked populations rather than the intended customer segments – the under-banked and unbanked. Despite increasing levels of awareness with the under-banked and unbanked, the conversion process to adoption and utility is not deriving significant results. Thus, increased awareness of mobile money across the under-banked and unbanked segments and adoption-conversion processes are essential.

### Mobile Money Awareness

While mobile money awareness is on the rise, the knowledge penetration amongst the banked is higher than the target market segments - the under-banked and unbanked (see Figure 1.11 and Figure 1.12).

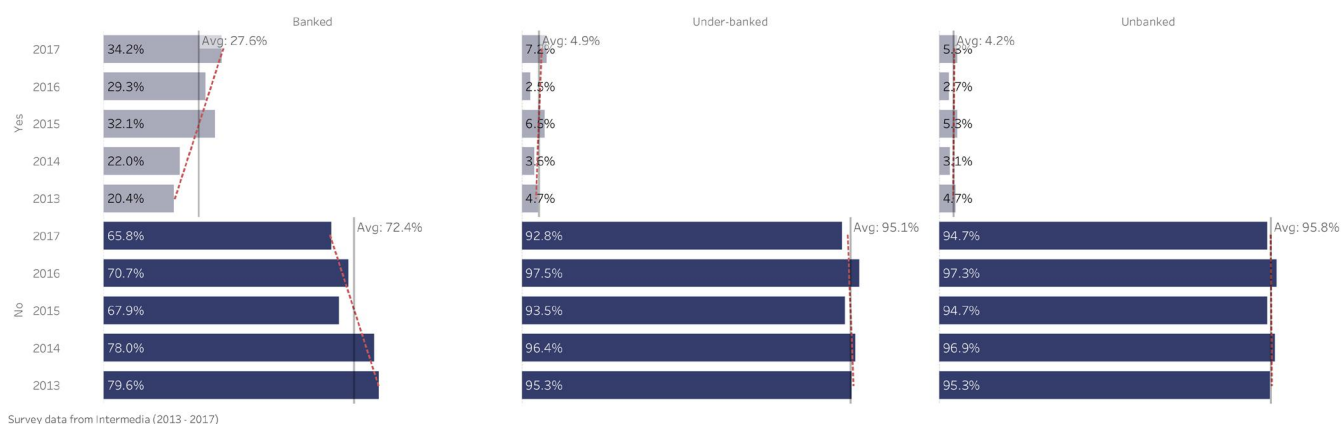
## Mobile Money Awareness Strands

Figure 1.11 National mobile money awareness strands (source: compiled by author)



## Mobile Money Awareness Trends

Figure 1.12 National mobile money awareness trends (source: compiled by author)



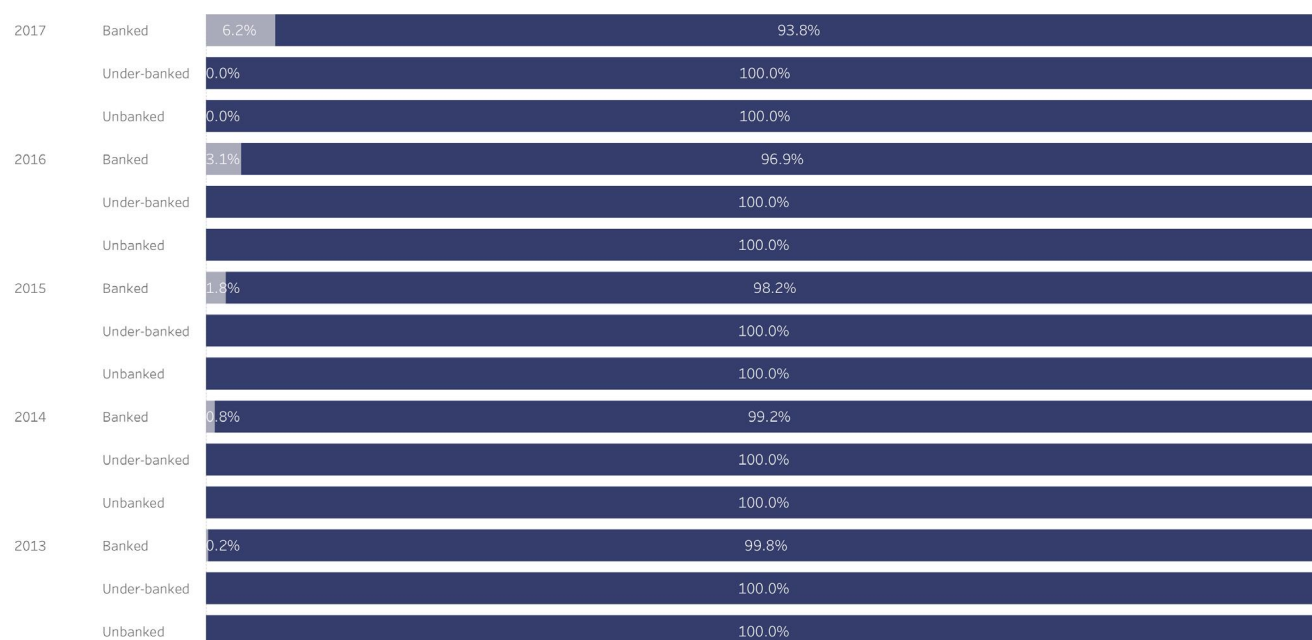
## Mobile Money Utility

The utilisation of mobile money services is not as widespread (Figure 1.13 and Figure 1.14), with the only evidence of utilisation being from users of formal financial services.



## Mobile Money Utility Strands

Figure 1.13 National mobile money utility strands (source: compiled by author)

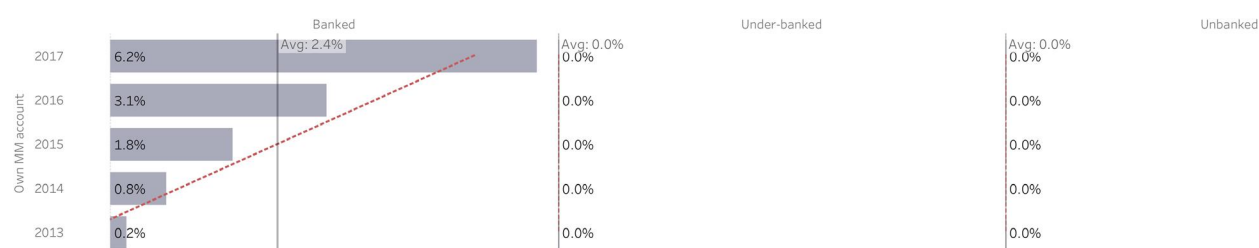


Survey data from Intermedia (2013 - 2017)

**Legend**  
 ■ Don't own MM account  
 ■ Own MM account

## Mobile Money Utility Trends

Figure 1.14 National mobile money utility trends (source: compiled by author)



Survey data from Intermedia (2013 - 2017)

## Gender

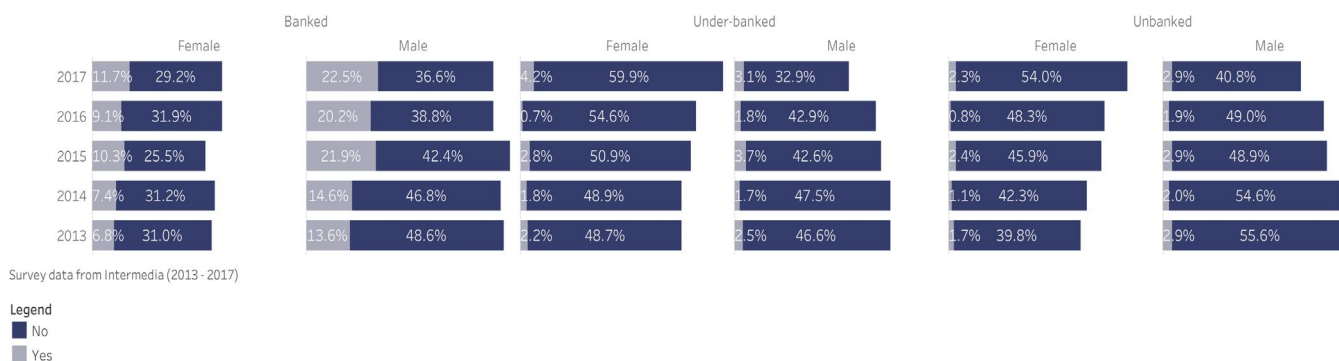
The disaggregated strands reveal that unlike their male counterparts, lack of awareness is not only higher among under-banked and unbanked females (Figure 1.15), but is also on the rise (Figure 1.16). This low adoption pattern is repeated in Figure 1.18 and Figure 1.19.

## Mobile Money Awareness

In line with national trends, awareness levels among the under-banked and unbanked are low. Figure 1.17 highlights that women using formal financial services are 20.3 percent less likely than men to have mobile money knowledge while women accessing informal financial services are 35.3 percent more likely [than men] to be unaware of mobile money services. In the excluded segment, women are 19.5 percent more likely [than men] to be cognizant of mobile money services. This trend shows that exclusion is not as a result of awareness but could be due to other socio-economic factors.

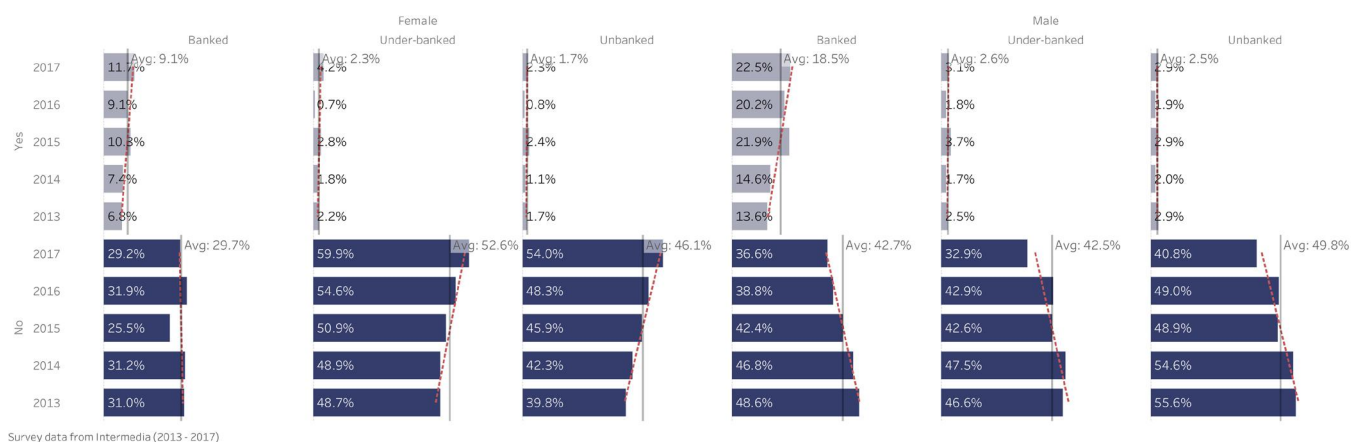
## Mobile Money Awareness Strands

Figure 1.15 National mobile money awareness strands disaggregated by gender (source: compiled by author)



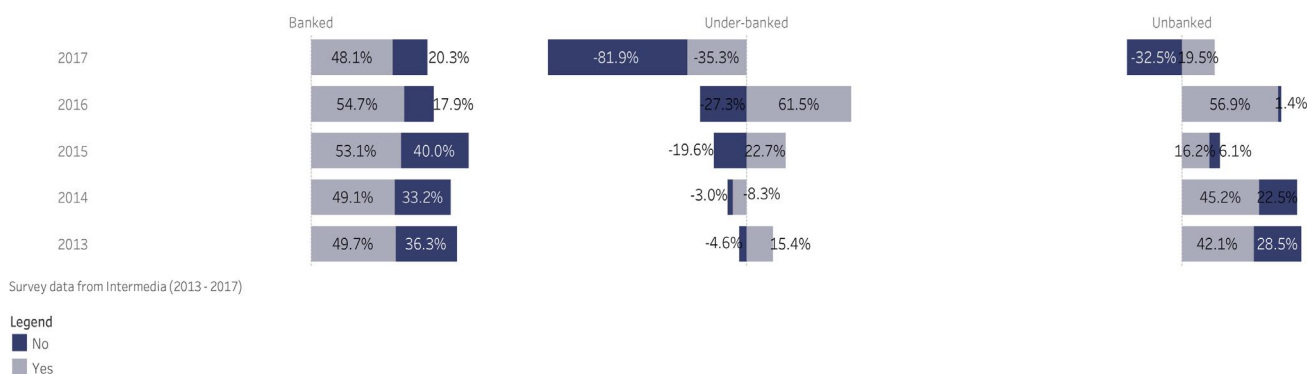
## Mobile Money Awareness Trends

Figure 1.16 National mobile money awareness trends disaggregated by gender (source: compiled by author)



## Mobile Money Awareness Gender Gap

Figure 1.17 National mobile money awareness gender gap (source: compiled by author)



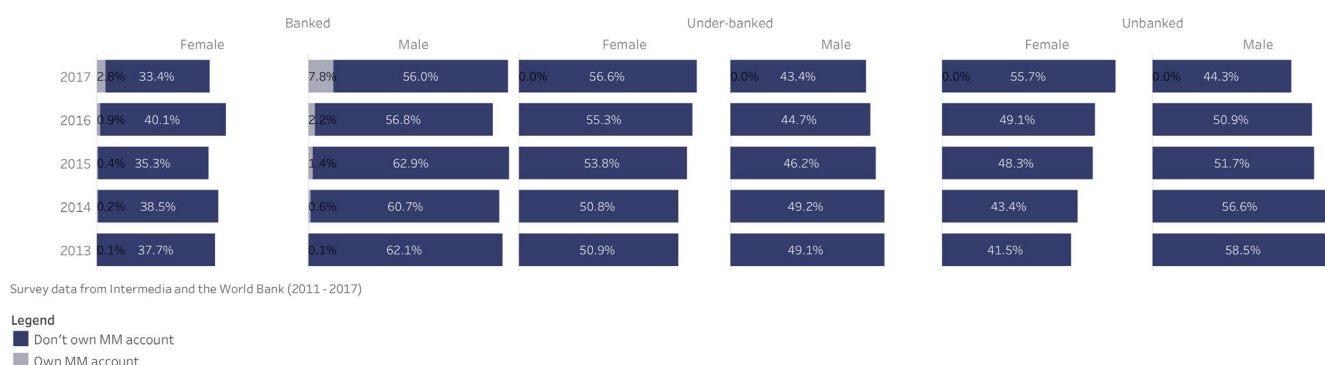
## Mobile Money Utility

Banked women are more likely to own a mobile money account (Figure 1.18) whereas, under-banked women are more likely not to own a mobile money account.

The utilisation gender gap chart (Figure 1.20) shows that women using formal financial services are 64 percent less likely than men to utilise mobile money. Although there is no evidence to suggest the utilisation amongst current users of informal and no financial services, the chart suggests that both male and female users in these groups are not likely to use mobile money.

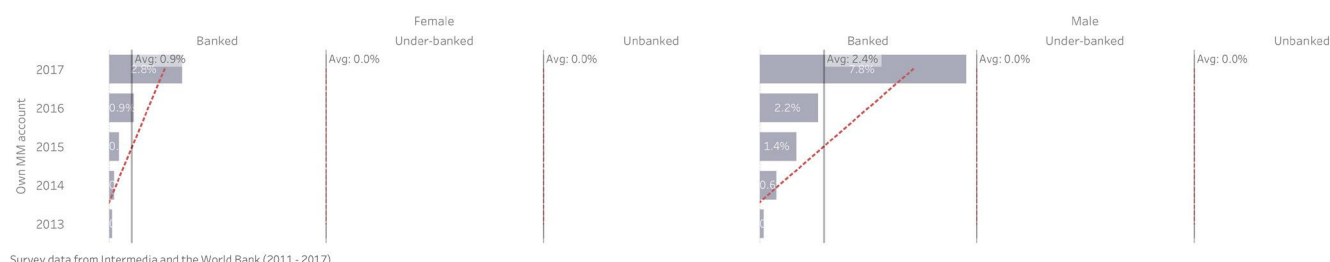
## Mobile Money Utility Strands

**Figure 1.18 National mobile money utility strands disaggregated by gender (source: compiled by author)**



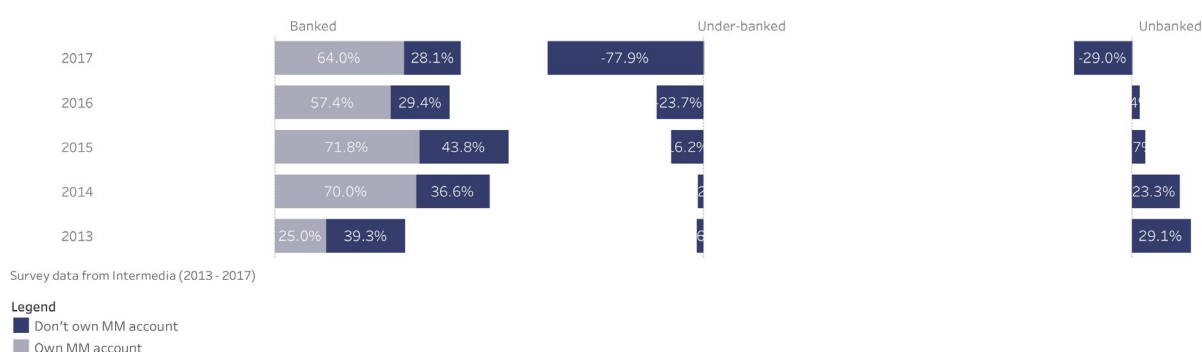
## Mobile Money Utility Trends

**Figure 1.19 National mobile money utility trends disaggregated by gender (source: compiled by author)**



## Mobile Money Utility Gender Gap

**Figure 1.20 National mobile money utility gender gap (source: compiled by author)**



## Supply-Side

The supply-side of the DFS ecosystem has experienced changes as explained in this section. Notable changes include a new credit facility for licensed MMOs and super-agents to enhance the rollout of financial access points and the evolving nature of non-bank financial technology actors, also known as fintechs.

### Provider Interventions

#### SANEF

The Shared Agent Network Expansion Facility (SANEF) is an initiative launched by the Bankers Committee aimed at addressing financial inclusion through an aggressive rollout of financial access points. DMBs designed SANEF to merge resources and invest in an aggressive rollout of new financial access points nationwide, create private sector jobs and play a unified role in the race to attain the 80 percent financial inclusion rate by 2020 as defined by the NFIS document.

SANEF is an incorporated limited liability company with the individual subscribing DMBs as investors/shareholders. The institution provides licensed MMOs and super-agents access credit facilities to support financial access point rollouts, with special emphasis on the northern regions. SANEF aims to:

- Recruit 40 million unserved low-income Nigerians
- Increase the number of agents from 70,000 to 500,000 by 2020; with distribution: North East, 30 percent, North-West, 30 percent, North-Central, 20 percent, South-South, 7.5 percent, South East 7.5 percent and South-West, 5 percent
- In collaboration with the Nigerian Interbank Settlement Scheme (NIBSS), increase the number of assigned bank verification numbers (BVN) from 33 million unique identities to 70 million by 2020.

The core questions on the implementation of the SANEF initiative centers on prioritising agent rollout activities in the six geopolitical zones, with special emphasis on agent viability and sustainability. Focus on agent viability and sustainability mandates careful attention to agent profitability models and their customer value proposition. Drawing from insights in previous State of the Market Reports, new agents face several inhibitors including low transaction activity and high operational costs.

### The Fintech Evolution

Digital technologies have transformed Nigeria's financial system from an analogue banking environment to a vibrant entrepreneurial ecosystem including international and indigenous new entrants. Innovation, new business models and a desire to expand financial access to the unserved and under-served motivate these financial technology firms. Although financial inclusion rates are still low, the country's large population and potential for DFS has sustained the interest of venture capitalists and private equity firms. Some notable investments within the last few years include:

- A \$10 million investment in Flutterwave, a low-cost technology platform facilitating payments for individuals and businesses in Africa;
- Cellulant is a leading payment platform infrastructure service provider operating in 12 African markets. Cellulant raised \$47.5 million as a fresh equity investment from Rise Fund, a global impact investing fund managed by growth equity platform TPG Growth.
- Piggybank.ng, a Nigerian fintech start-up, raised \$1.1M to grow its online savings platform. Piggybank makes it possible for Nigerians to overcome the problem of savings by depositing as little as \$1 a day into an online Piggybank.ng account, and limits withdrawals until an agreed date. Early withdrawals result in a penalty but customers accrue interest at a pre-determined interest rate on all automated savings.



Many other fintechs are emerging to facilitate savings, payments, lending and identity management. Most of them are indigenous while a handful are from other developed and emerging economies. This suggests the attractiveness of the Nigerian consumer market to the international investment community. We expect the DFS space to experience even more growth and expansion. There is also an increase in the number of local DMBs who now rely on fintechs for technology support and partnerships to scale and expand financial access to under-served and unserved Nigerians. The regulators may also need to step up to the regulatory challenge of ensuring the increase in entry and sustenance of these fintechs as they also have the potential of leveraging their low-cost technology platforms to scale financial inclusion efforts.

## Regulatory Interventions

The most notable regulatory developments in 2018 include the release of guidelines for licensing payments service banks and the national financial inclusion strategy refresh.

### Payment Service Bank Guidelines

The CBN took essential strides in 2018 to strengthen the policy environment and create an atmosphere for increased financial inclusion by releasing of the guidelines for payment service banks (PSBs).

- **Scope:** The guidelines expects PSBs to facilitate low-value high-volume transactions in remittances, micro-savings and withdrawals, establish presence in rural areas (with at least 25 percent of their access points in rural areas) and use technology to drive financial services adoption.
- **Promoters:** The guidelines address one of Nigeria's greatest licensing inconsistencies - levelling the playing field. Eligible promoters of PSBs include banking agents, telecommunication companies through subsidiaries, retail chains and mobile money operators.

- **Capital Requirements:** The guideline requires PSBs have a minimum paid-up capital of N5 billion.
- **Permissible activities:** The guidelines stipulate that PSBs maintain savings accounts for individuals and small businesses, carry out payments and remittances, electronic issue of debit and prepaid cards and operate electronic purses for their customers. PSBs can invest in Federal Government and CBN securities, but invest no less than 75 percent of their deposit liabilities in these debt instruments. PSBs are to place all funds over their minimum required float with a deposit money bank.
- **Non-permissible activities:** PSBs cannot extend any form of credit or loans to customers, neither can they trade in foreign exchange, insurance underwriting nor establish subsidiaries.

It is the ecosystem's expectation that the establishment and entry of PSBs into the Nigerian DFS space will help push the financial inclusion numbers higher within the next few years. Some major improvements from the existing model of the mobile money operators and super-agents model are the ability of PSBs to invest funds over their float in Government debt instruments, earning income from this activity and sharing same with their depositors. Their exclusion from any form of lending or credit extension may be a disincentive, and requiring additional efforts in tailoring and integrating the savings/payment products of PSBs to the needs and aspirations of the bulk of the unbanked consumers.

### NFIS Refresh

In the 2012 National Financial Inclusion Strategy (NFIS), Nigeria committed to reducing financial exclusion to 20 percent by 2020 from 46.3 percent in 2010. This document contained clear goals, objectives, key performance indicators and an implementation agenda which

guided all financial inclusion interventions. Given the lacklustre improvement in financial inclusion levels since the launch of the NFIS, it became necessary to review and refresh the strategy considering environmental, technology and ecosystem developments.

Four strategic areas form the bedrock of the NFIS: mobile banking/mobile payments, agency banking, linkage models and client empowerment. Because of these strategic areas, four topics made up priority focus for guideline development – tiered know-your-customer (KYC) regulations, agent banking regulations, a national financial literacy strategy and consumer protection. The NFIS defined a set of metrics and targets by product, channel and enablers further broken down into targets for access, usage, affordability, appropriateness, financial literacy, consumer protection and gender.

Some of the important indicators that caused a refresh of the strategy include:

- A focus on solutions (such as point-of-sale terminals) which were no longer the most suitable or efficient channel for DFS penetration
- The existing regulatory regime and transaction fee structure which limited innovation and sustainable operational business models. The regulations have been responsible for the limited growth in the number of operators in the sector.
- Some innovations and new approaches that have fast-tracked financial inclusion in other markets could not take root in Nigeria due to regulations and restrictions.
- The challenging macroeconomic and security environment of the country further constrained the strategy's implementation.

After stakeholder consultations, the NFIS refresh identified five priority areas which deserve critical focus in pushing for the earlier identified targets. The priority areas are:

1. Create a conducive environment to expand DFS – The fundamental tenets of this pillar shall include creating a level playing field for all operators in the space, ensuring fair competition and preventing oligopolies by enforcing antitrust rules and compliance, achieving universal telecommunications access and prompt resolution of disputes and queries.
2. Enable rapid growth of agent networks with nationwide reach – The principal tenets of this pillar will be to lower barriers to entry and allow market forces drive demand and supply as well as to limit the degree to which government requirements increase costs.
3. Reduce KYC requirements for opening and operating a bank account – The key initiatives here shall include harmonisation of KYC requirements per activity regardless of provider, ensuring the appropriateness of KYC requirements in relation to the risk that is being managed without requiring more than is necessary, achieving universal coverage and accessibility of national ID system.
4. Create an environment conducive to serving the most excluded – This involves ensuring a level playing field for non-interest products, channelling public and donor resources towards creating pre-competitive public goods and insights that would build the market for the underserved and deploy donor resources strengthens business cases. This is important where it is insufficient for private actors to enter the space and align with the licensing requirements to better enable community-based financial institutions play their roles in serving the most underserved.
5. Drive adoption of cashless payment channels, notably in government to person payments (G2P) and person to government (P2G) payments – The key initiatives here will be to ensure that

1. the government leads by example by digitising all G2P/P2G payments. It is important to communicate the benefits of this to stakeholders by showcasing the significant associated cost reduction, as well as the mitigation of fraud and leakages.
2. The NFIS refresh also recognised the need for product development to address the following priority segments: 1) youth 2) females 3) northern-regions 4) MSMEs and 5) rural locations.

### CBN Restructure

The CBN restructuring of the Banking and Payments System Department resulted in creating two departments: 1) the Banking Services Department (BKSD) and 2) the Payments System Management Department (PSMD). BKSD will continue to oversee banking services matters such as real-time gross settlement (RTGS), accounts opening and management, government securities, among others. Along with other responsibilities, the new PSMD will manage the payments infrastructure.

### MFB Capitalisation

Recognising the challenges<sup>1</sup> limiting the effective operations of MFBs and their inability to address the mandate of increasing access to finance and reducing financial exclusion, the CBN raised the minimum capital base of microfinance banks (MFBs) with a compliance deadline of April 2020 (see Table 1.1). The apex bank advised licensed MFBs to explore the possibility of mergers or injection of fresh equity.

### MFB License Changes

**Table 1.1 Microfinance bank recapitalisation**  
(source: compiled by author)

	Unit MFB	State MFB	National MFB
Current paid-up share capital	N20 million	N100 million	N2 billion
Reviewed paid-up share capital	N200 million	N1 billion	N5 billion
Branches/ Cash Centres	✗	✓	✓

### License Tiering for Payment System Providers

The CBN has compacted the licensing regime for fintechs operating in the payments space as payment service providers (PSPs). This evolution, which was driven by the rapid entry of fintech companies, comes with its own operational risk dynamics and therefore, the new licensing regime is intended to adequately address these new developments.

The new guideline proposes a three-tier license structure (super, standard and basic) which encompasses previous license categories.

A super PSP license encompasses licenses for operating any of the following payments businesses: switching, payment solution service provider (PSSP), payment terminal service provider (PTSP), non-bank merchant acquirer and super agency. The minimum shareholders funds for the super PSP license is N5 billion.

The standard PSP license supports the following activities: mobile money operations, super agency and non-bank merchant acquirer.

<sup>1</sup> Some notable problems include inadequacy of their capital, weak corporate governance, inadequate risk management practices, the shortage of requisite capacity and mission drift.

The minimum shareholders funds for the standard PSP license is N3 billion. The basic PSP license permits the operation of one business activity - super agency, PSSP or PTSP. The minimum shareholders funds for the basic PSP license ranges from N50 million to N100 million.

#### CBN and NCC sign Memorandum of Understanding to Enhance Payment Systems

In what was regarded as a milestone for the DFS ecosystem, the Central Bank of Nigeria and the Nigerian Communications Commission signed a Memorandum of Understanding to enhance Payment Systems in Nigeria. The MoU identifies crucial areas requiring collaboration between the two regulators with regards to improving financial inclusion, which so far, has been driven by the CBN. The agreement also describes responsibilities of the two organizations towards the achievement of government's objective on payment systems, including but not limited to mobile money services.

#### CBN releases USSD Regulatory Framework

In response to the increased use of the Unstructured Supplementary Service Data (USSD) technology by providers to deliver financial services to their customers, the CBN released a regulatory framework to guide its operations. Previously, the use of USSD to deliver financial services was regulated solely by the guidelines on short code operation released by the National Communications Commission (NCC). The new framework, among other things, mandates providers to install behavioural monitoring systems to track unusual user transactions and also limits the daily transaction limit to N100,000.

#### Other Notable Regulatory Interventions

Other regulators in the DFS space have also launched targeted interventions aimed at enhancing the adoption and delivery of DFS. Some of these notable interventions include:

1. Guidelines for the Takaful insurance operators by the National Insurance Commission (NAICOM) in 2013 and the enabling of MFBs to act as insurance agents. Bancassurance now makes insurance available at bank branches.
2. The Nigerian Deposit Insurance Corporation (NDIC) has extended deposit insurance to MFBs, NBFIs and passthrough insurance for MMOs.
3. With a low pension penetration of just 11 percent of Nigeria's working population, the National Pension Commission (PENCOM) introduced guidelines for micro-pensions to cater to informal workers and also introduced legislation that will ensure pension provisions for small businesses with fewer than five staff.
4. The Securities and Exchange Commission (SEC) reached over 100 artisans with an awareness programme in the north central part of the country and launched the first sovereign Sukuk bond that was 6 percent oversubscribed.
5. The Nigerian Identity Management Commission (NIMC) has harmonised the existing database with that of bank verification number (BVN). They are also in talks with the Nigerian Communications Commission to harmonise their database with the subscriber identification module (SIM) card registration data. The NIMC number is sufficient documentation for the tier-1 KYC account.

## Conclusion:

### Expanded & Evolving Ecosystem

The demand-side surveys provide indicators of the adoption and utilisation of financial services; based on a performing and active supply-side comprising of regulators and financial services providers (FSPs).



Since the 2016 State of the Market Report, the key DFS ecosystem actors have evolved beyond mobile money operators (MMOs) into a broad range of financial technology firms or fintechs. Using new business models, these fintechs provide a range of digital financial services such as payments, credit and savings.

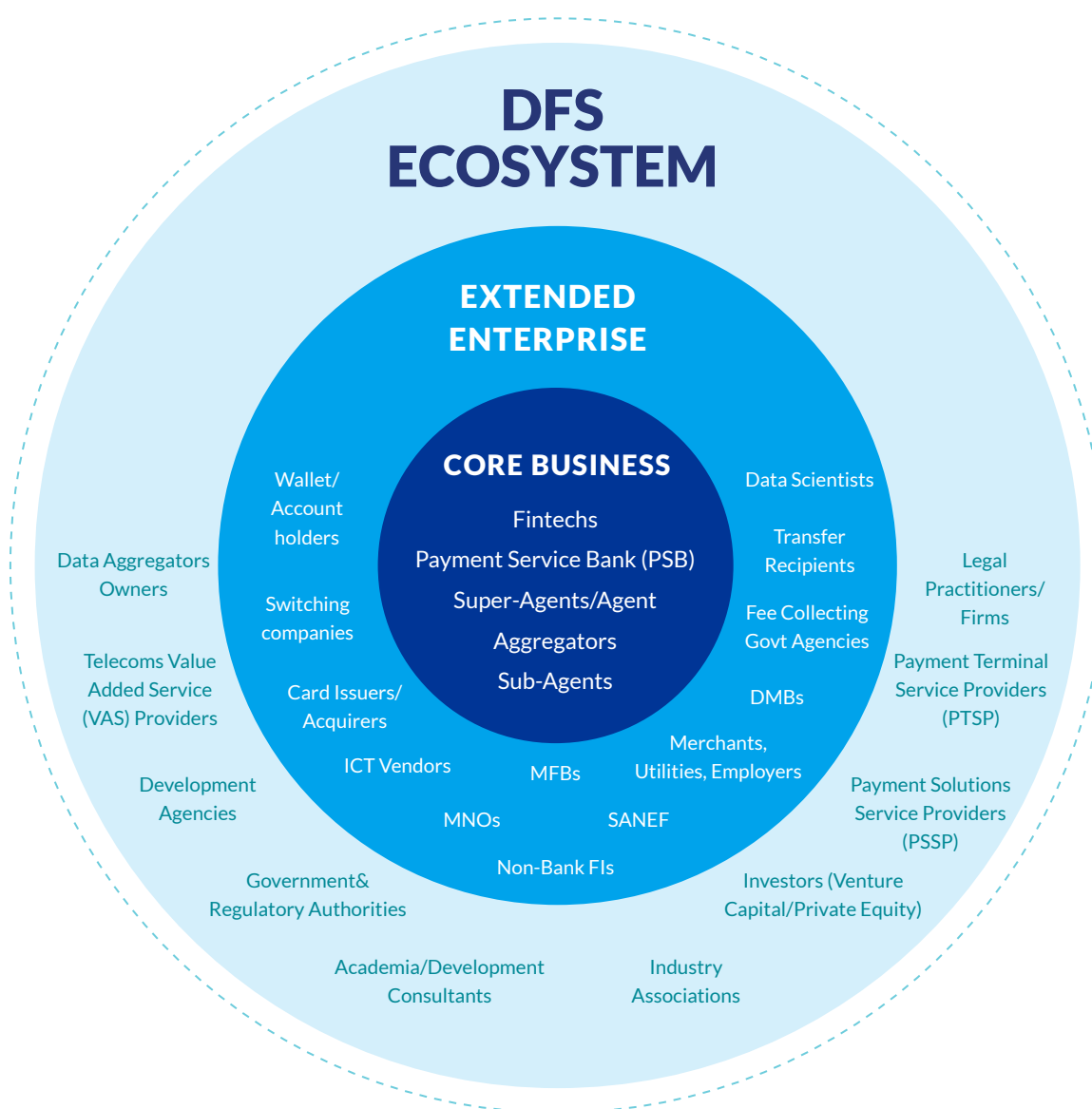
The new banking class, Payment Service Bank (PSB), introduces an era of carrier-based financial services. Membership of complementary businesses such as legal practitioners and firms, private equity and venture capital firms as well as competencies such as data science are also prevalent in the ecosystem.

The increasing demand for data scientists to meet the need for sophisticated algorithms that support electronic customer service assistants (chatbots), credit scoring and making lending decisions.

The growing number of alternative lending services warrants access to diverse data points either sourced directly from data owners or through data aggregators. Figure 1.21 represents a refreshed ecosystem map.

## Extended Ecosystem

Figure 1.21 DFS Ecosystem (source: compiled by author)



# CHAPTER TWO

STATE OF THE  
MARKET REPORT

/// 2018

DIGITAL FINANCIAL SERVICES



# CONSUMER INSIGHTS

NATIONAL PROFILES

GENDER PROFILES







# NATIONAL PROFILES COMMUNITY

## OVERVIEW

### KEY TRENDS

Rural locations are underrepresented across customer segments

Northern regions have lower banked populations and higher unbanked populations

### INTERVENTIONS

Payment service bank (PSB) with focus on rural locations

Rural infrastructure development - power, telecoms

Economic development programmes that stress the activities of the rural locations



## Introduction

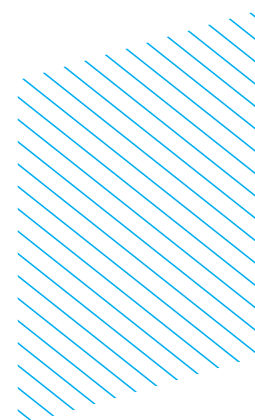
The community lens of financial inclusion, represented by geographic location and region (geo-political zone) highlights the extent to which financial services are being adopted.

## Location

Financial services adoption levels among urban dwellers are relatively higher than their rural counterparts across the customer segments examined (Figure 2.1). With better access to infrastructure (power, telecommunications) and financial services providers, urban locations boast of higher proportions of banked individuals and, rural locations boast of higher proportions of under-banked and unbanked individuals. Notwithstanding this pattern, the trends (Figure 2.2) illustrate marginal increases among urban under-banked and unbanked individuals vis-a-vis declines in the same segments in rural locations. Likewise, increases among the banked in rural locations are prevalent amidst reductions in banked individuals in urban locations. Possible explanations of this trend include rural-urban economic migration patterns, explaining the profile patterns

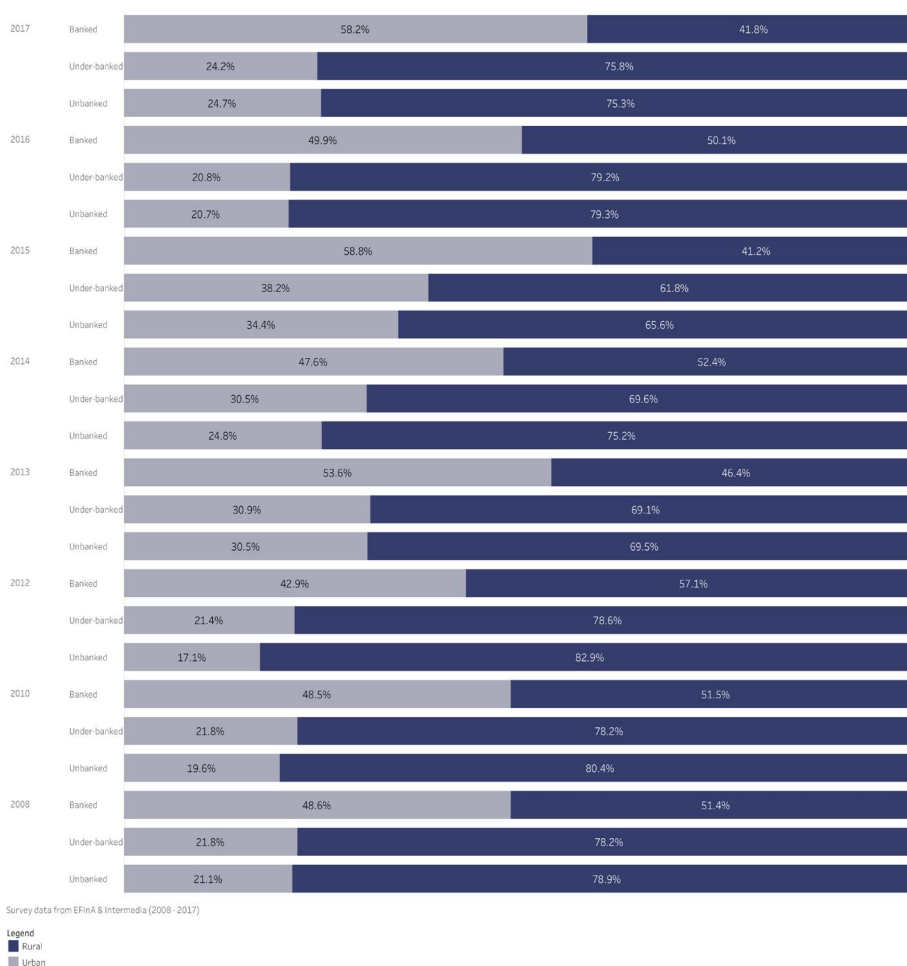
of increased migration among the under-banked and unbanked and reverse migration among the banked.

Hence, rural empowerment programmes and infrastructure improvements (power, telecommunication and social) to curb rural-urban migration alongside an increase in the number of financial access points could improve financial inclusion.



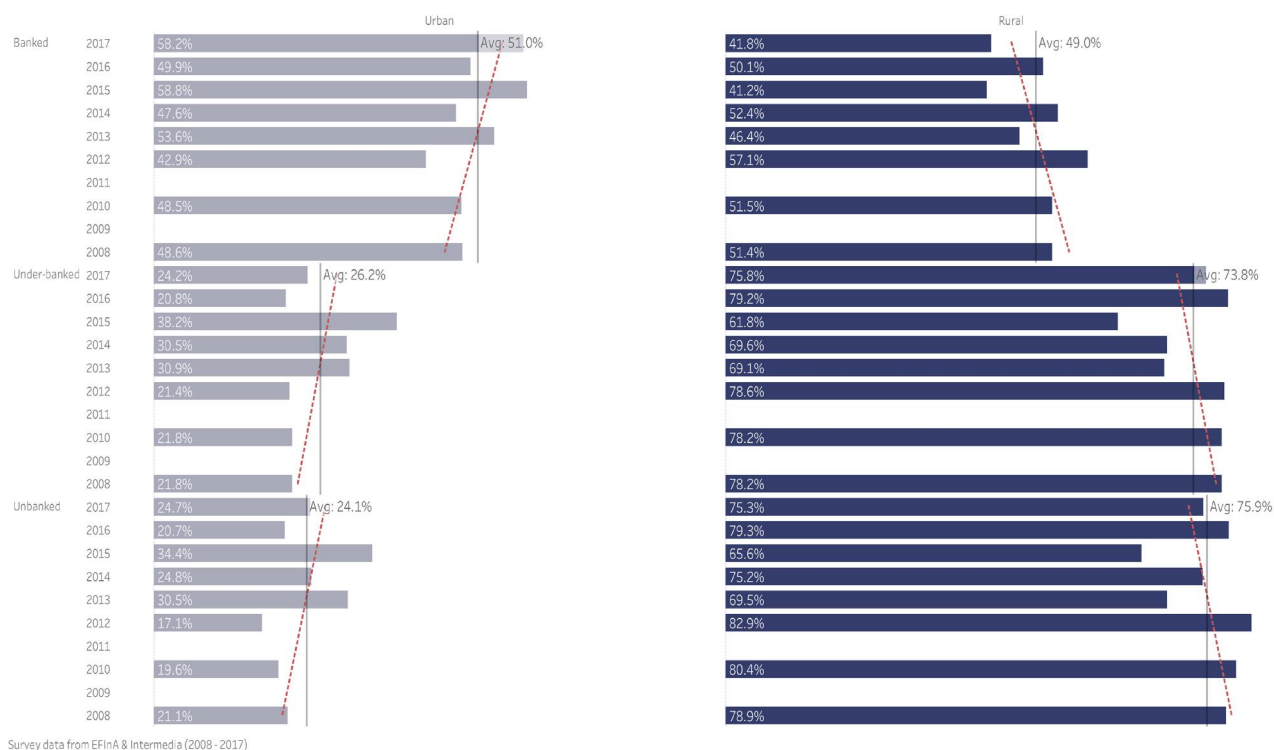
## Location Strands

**Figure 2.1 Location financial inclusion strands (source: compiled by author)**



## Location Trends

Figure 2.2 Location financial inclusion trends (source: compiled by author)

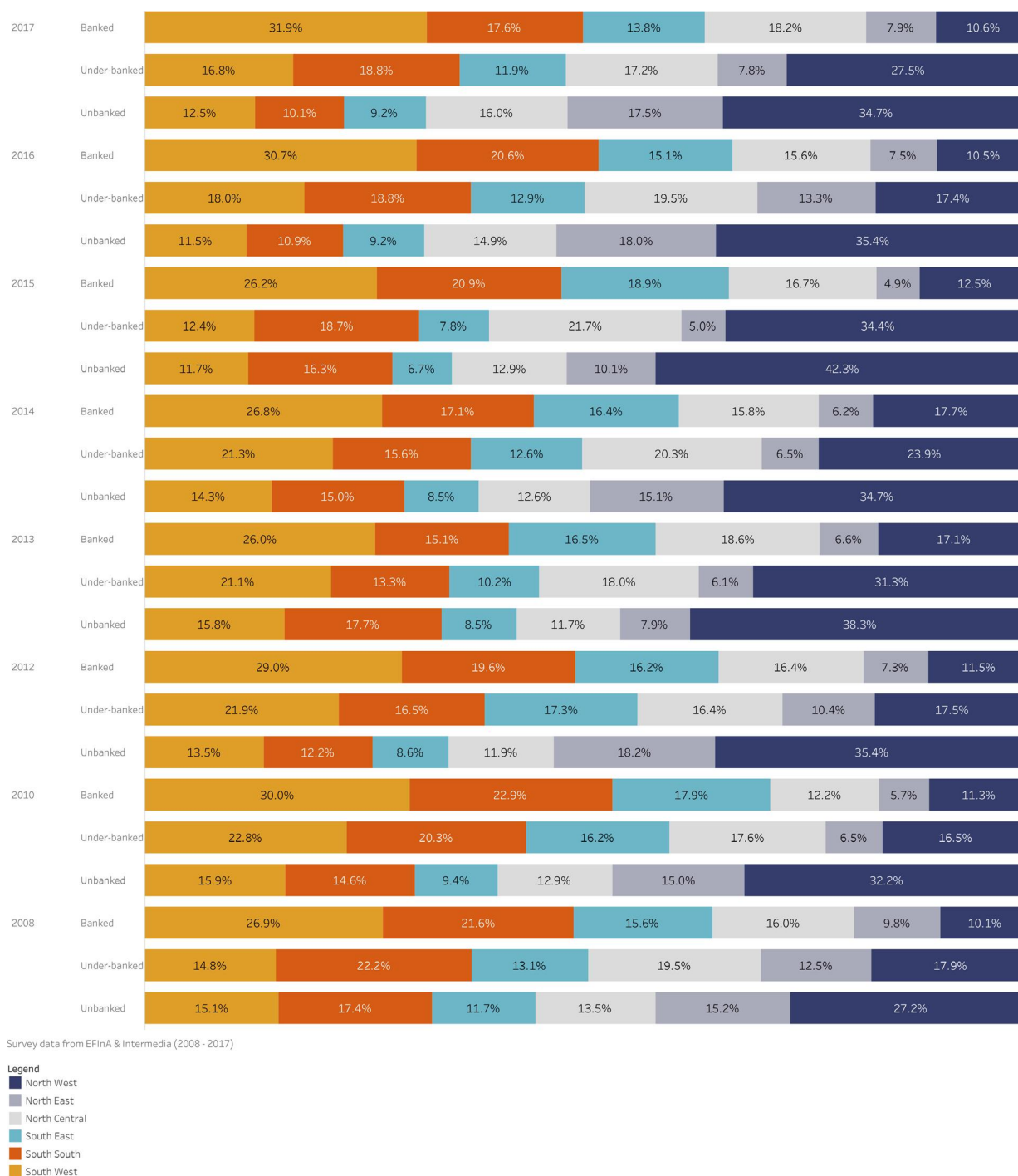


## Region

Geo-political zone groupings have clustered Nigeria's 36 states and federal capital with similarities across the dimensions of culture, ethnicity and history. The states in the southern region (south-west, south south and south east) have higher proportions of banked individuals. The distribution in the under-banked segment is even across both southern and northern states; but, the unbanked are more prevalent in the northern regions of the country, distinctly in the north-west (Figure 2.3 and Figure 2.4). The skirmishes and insecurity in north eastern Nigeria have reduced the population in the region and sent a high number of internally displaced persons (IDPs) to neighbouring northern regions, thus resulting in the lower penetration rates.

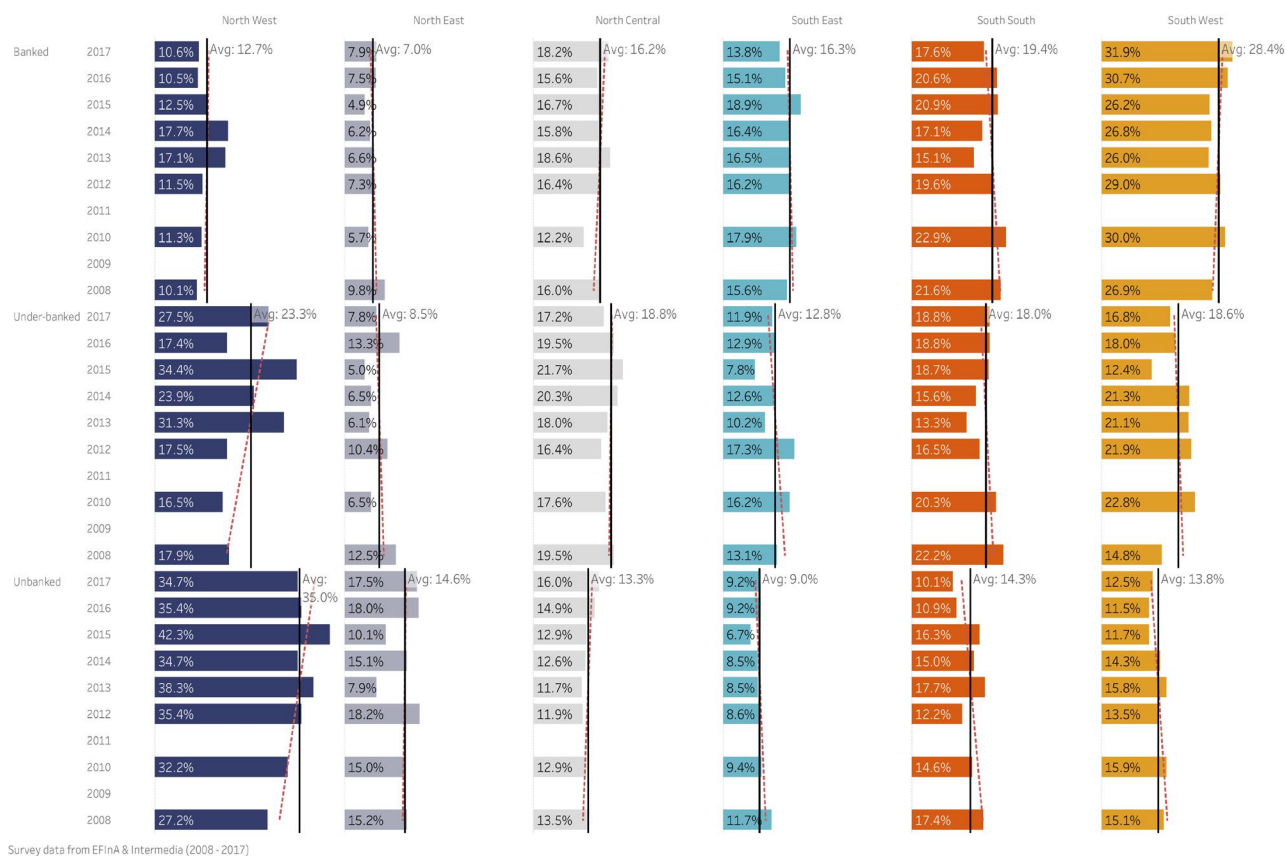
## Region Strands

Figure 2.3 Region financial inclusion strands (source: compiled by author)



## Region Trends

Figure 2.4 Region financial inclusion strands (source: compiled by author)







# NATIONAL PROFILES HOUSEHOLD

## OVERVIEW

### KEY TRENDS

Poverty levels higher in under-banked and unbanked households

Under-banked and unbanked households are more populated

### INTERVENTIONS

Poverty alleviation programmes

Affordable housing schemes

## Introduction

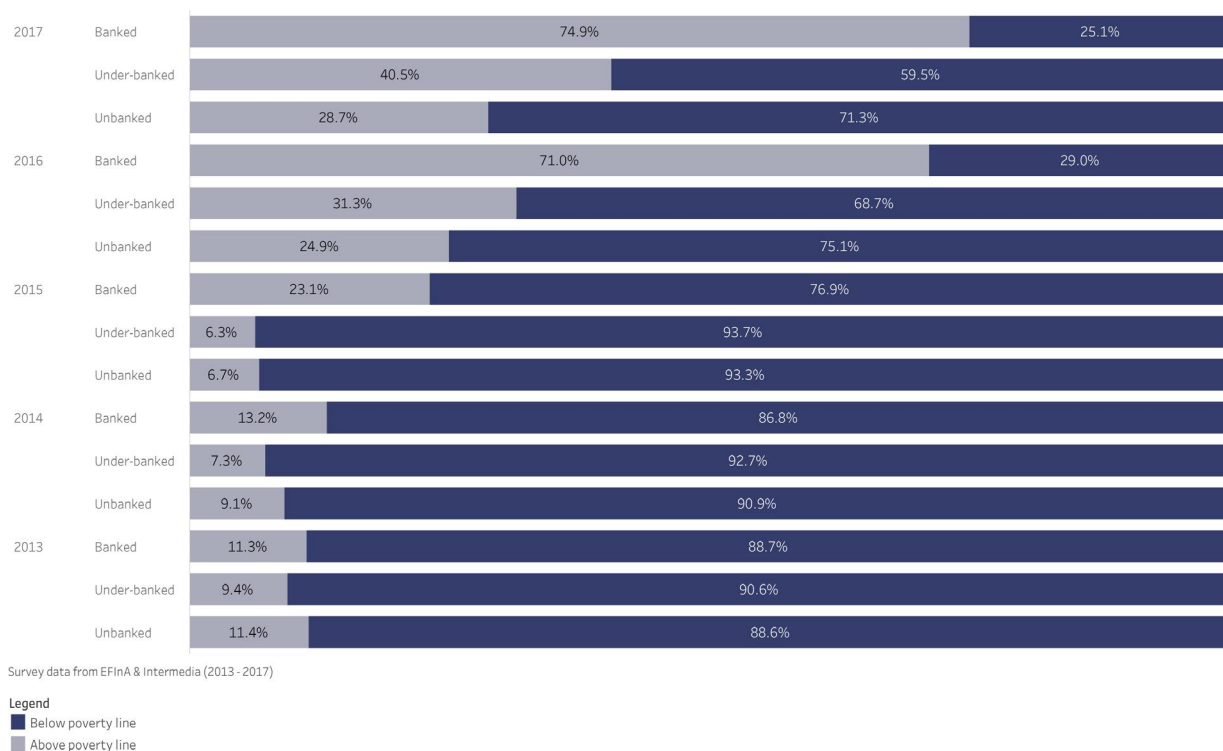
The concept of households in environments such as Nigeria goes beyond the immediate family to include dependents such as parents, siblings and other extended family members. Despite limited data, the household lens highlights factors impacting financial services adoption and provides insights that may enhance financial services adoption in the household. The household strand highlights family dynamics (size, income class) that may enhance financial inclusion.

## Poverty

The economic status of households represented by their poverty thresholds show that households with banked members are economically better off than households of under-banked and unbanked members (Figure 2.5), with increasing trends across customer segments (Figure 2.6).

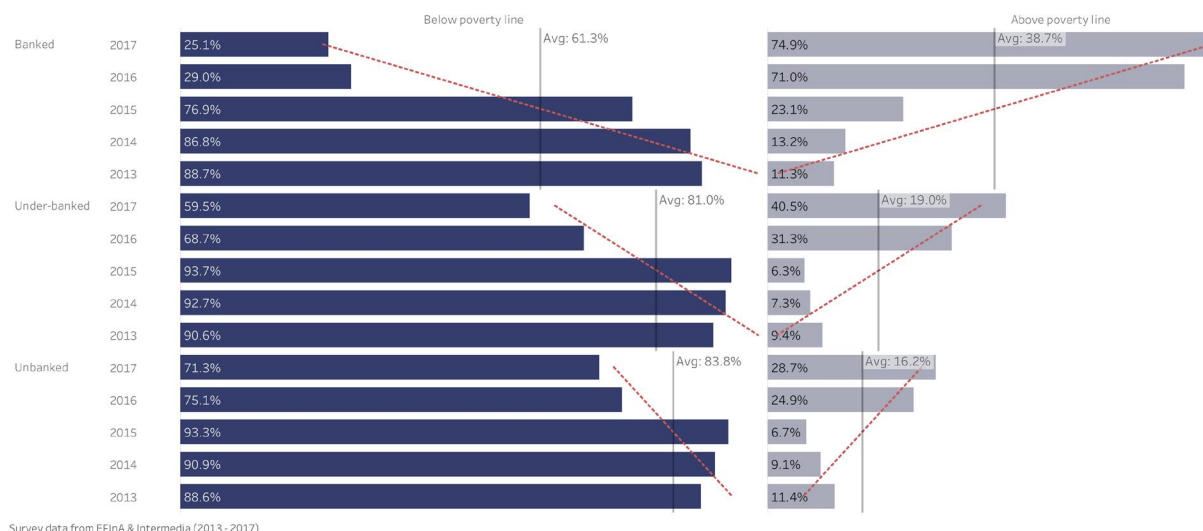
### Poverty Strands

**Figure 2.5 Household income financial inclusion strands (source: compiled by author)**



## Poverty Trends

Figure 2.6 Household income financial inclusion trends (source: compiled by author)



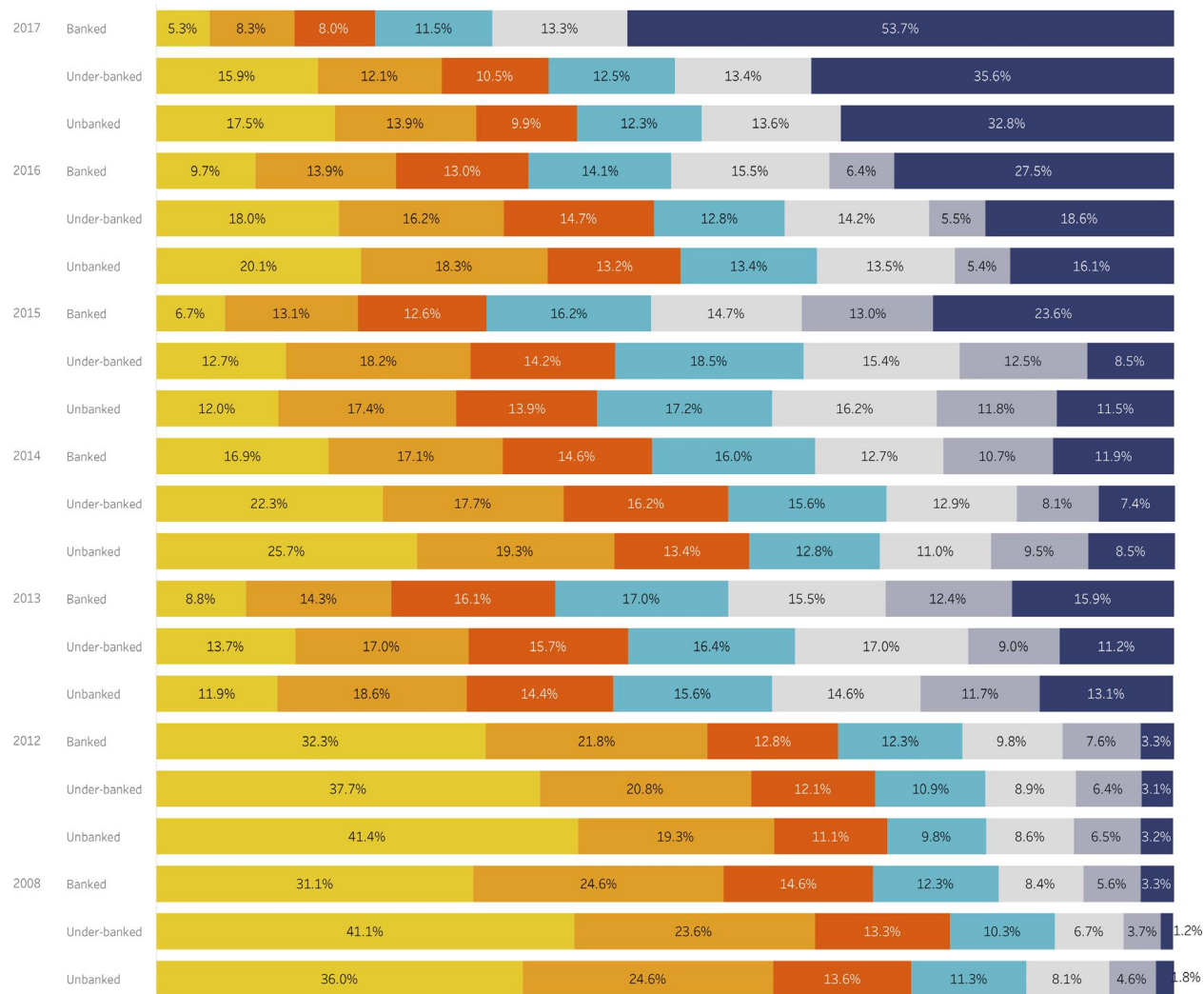
## Size

Consistent with the household economics insights where banked members of households are richer, this segment has fewer members than the under-banked and unbanked segments that have larger households despite their lower economic status (Figure 2.7). Declining financial services adoption are also observed in households of four or more (Figure 2.8). While early trends highlighted reducing levels of financial exclusion among the under-banked and unbanked, more recent indicators show a reversal in this pattern and rising financial exclusion levels.

In sum, family and community relationships influence individual adoption of financial services.

## Size Strands

Figure 2.7 Household size financial inclusion strands (source: compiled by author)



Survey data from EFinA & Intermedia (2008 - 2017)

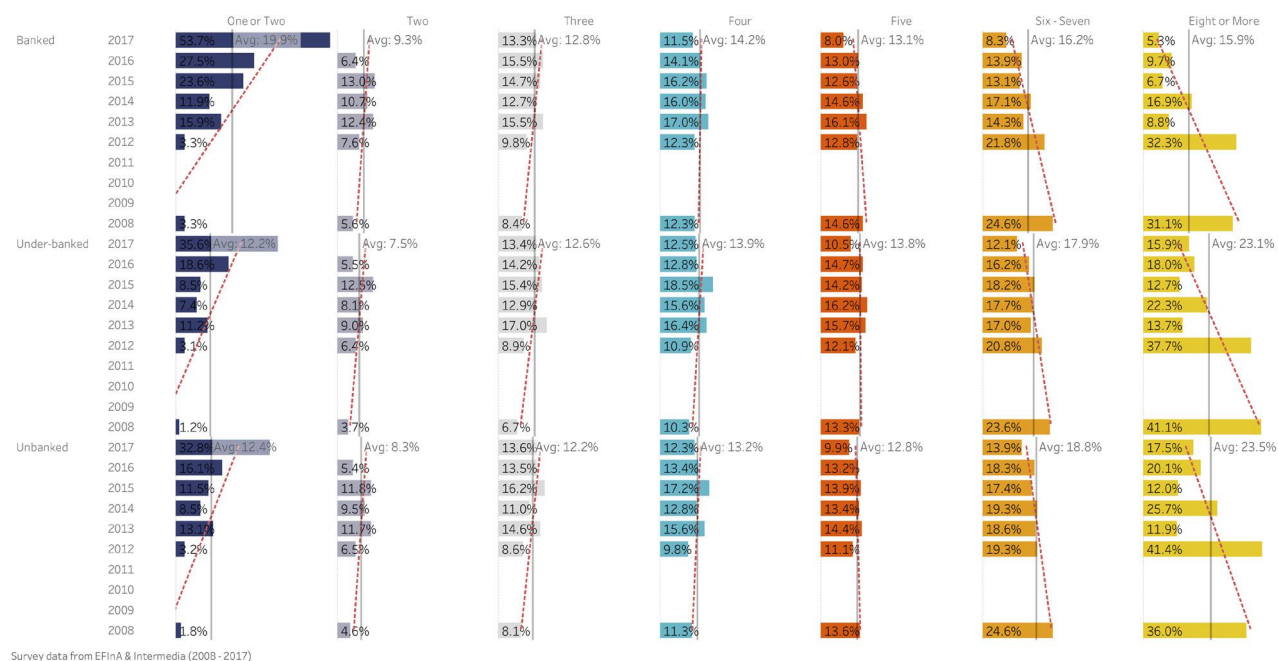
### Legend

- One or Two
- Two
- Three
- Four
- Five
- Six - Seven
- Eight or More



## Size Trends

Figure 2.8 Household size financial inclusion trends (source: compiled by author)





# NATIONAL PROFILES INDIVIDUAL

## OVERVIEW

### KEY TRENDS

A higher proportion of men are banked

Gender inequity - Women are more likely to be under-banked and unbanked

Under-banked and unbanked households are more populated

Basic literacy is on the decline

### INTERVENTIONS

Youth skills development and employment schemes

Financial products and services targeted at demographic segments - female, youth, couples

Access to quality education

Skills acquisition programmes that enhance employability

Macro-economic stability/economic management

Economic programmes with outcomes for individuals of each income category

As a mobile-first market, product focus should be on mobile-enabled digital financial services (DFS)

Data protection and privacy policies

Financial literacy should be encouraged

## Introduction

The individual lens portrays demographic and socio-economic attributes and trends of the various customer segments.

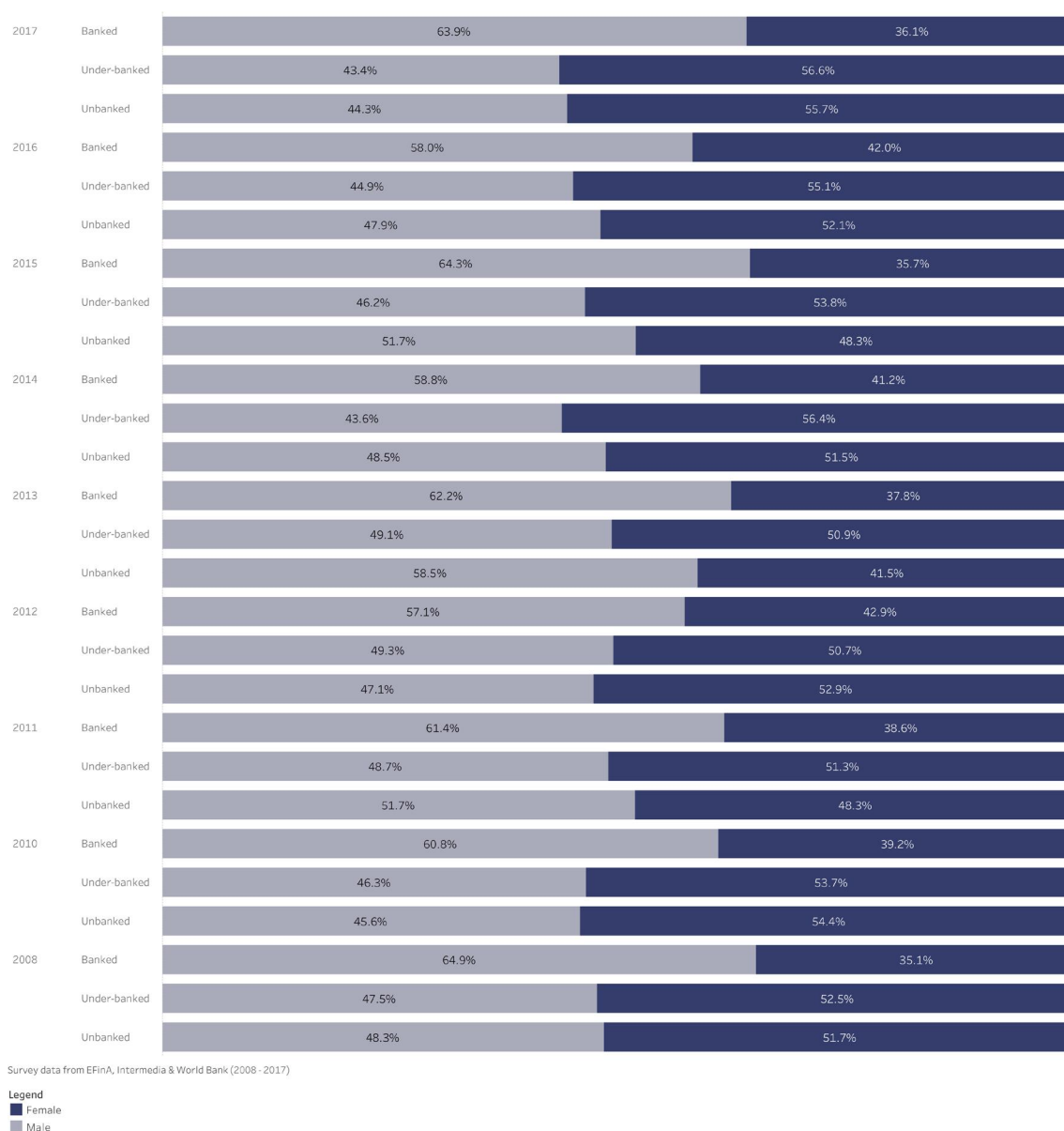
## Demographic

### Gender

The impact of gender on financial services adoption is apparent in the strands that show that males are more likely to be in the banked sub-category and women in the under-banked and unbanked categories (Figure 2.9). Despite the growth in the number of banked women over the years, this growth cuts across the under-banked and unbanked segments while the male population trends show higher inclusion progress with declines in the under-banked and unbanked (Figure 2.10).

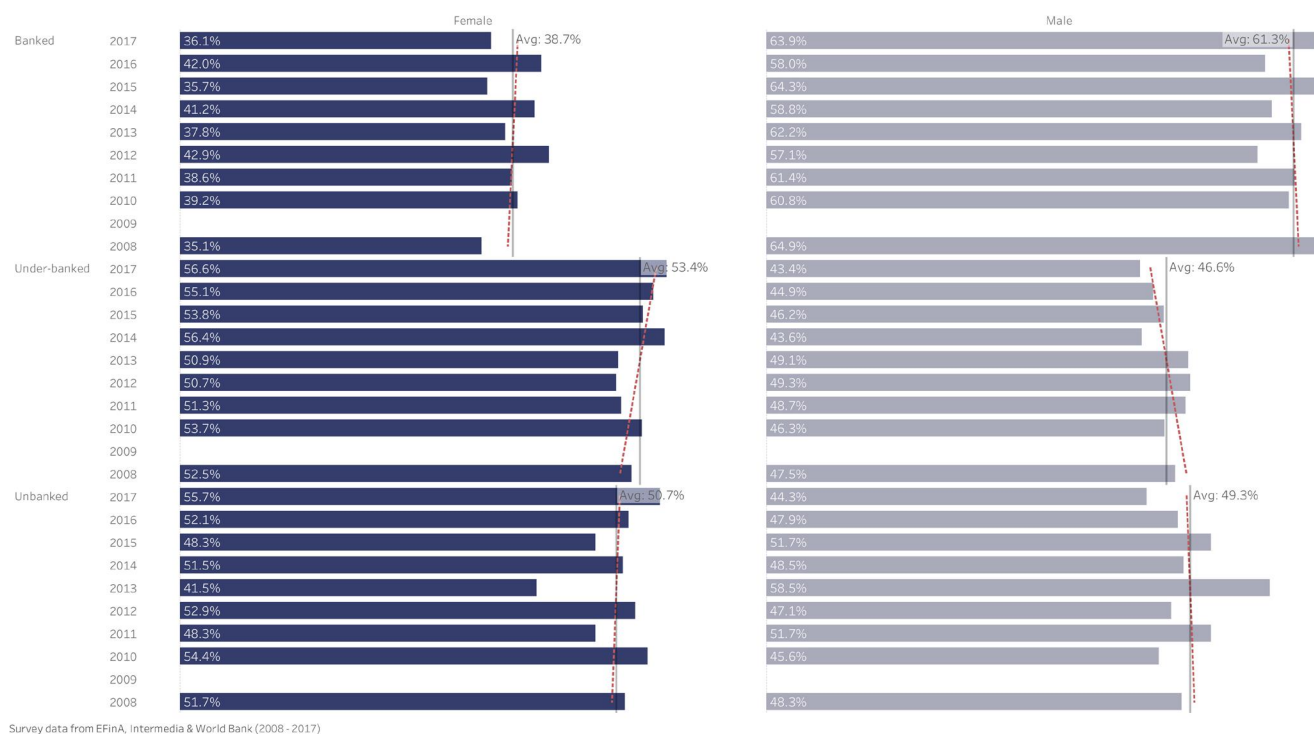
### Gender Strands

**Figure 2.9 Gender distribution financial inclusion strands (source: compiled by author)**



## Gender Trends

Figure 2.10 Gender distribution financial inclusion trends (source: compiled by author)



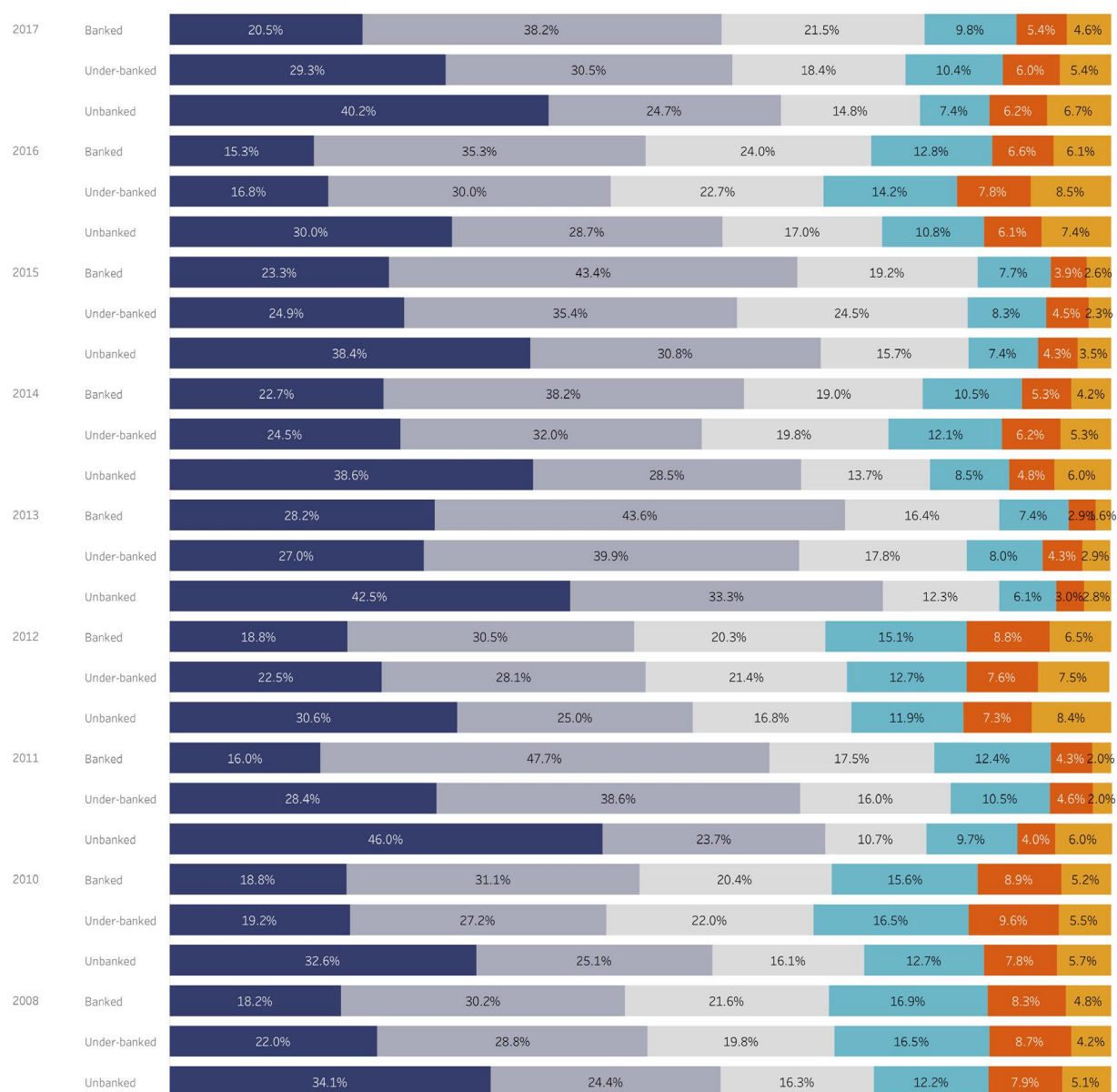
## Age

With the sizeable youth population of Nigeria, younger Nigerians between the ages of 15 and 35 form the lion's share of the addressable market, that is, the bankable customer base (Figure 2.11). The trends (Figure 2.12) show increasing levels of financial exclusion among this age segment with declines in the number of banked and increasing levels of under-banked and unbanked. This pattern confirms the impact of youth underemployment and unemployment.



## Age Strands

Figure 2.11 Age distribution financial inclusion strands (source: compiled by author)

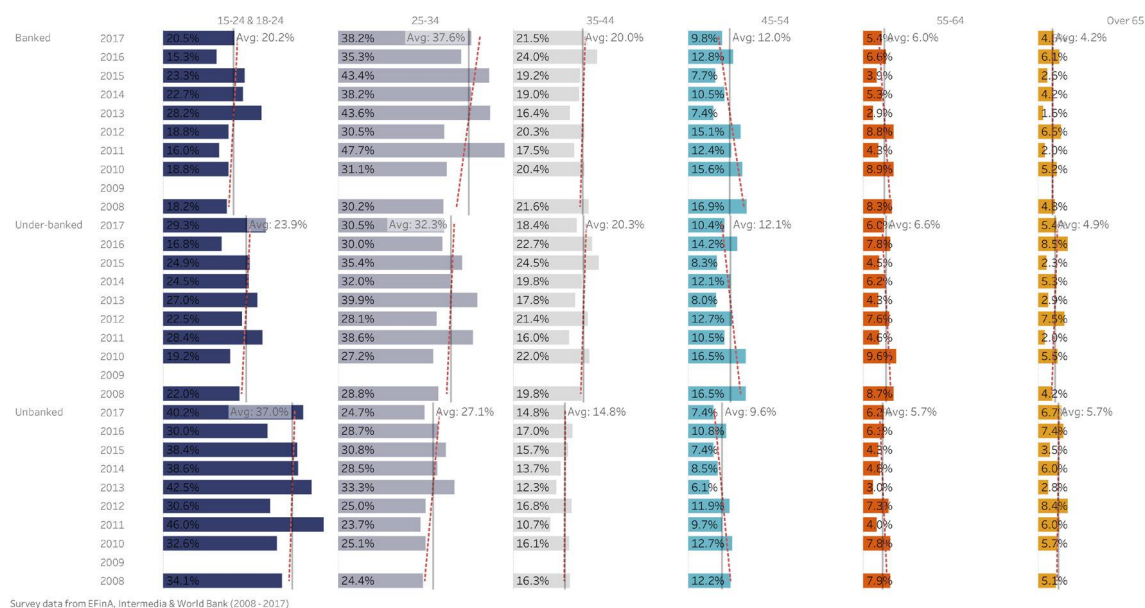


Survey data from EFinA, Intermedia & World Bank (2008 - 2017)

**Legend**  
■ Over 65  
■ 55-64  
■ 45-54  
■ 35-44  
■ 25-34  
■ 15-24 & 18-24

## Age Trends

Figure 2.12 Age distribution financial inclusion trends (source: compiled by author)

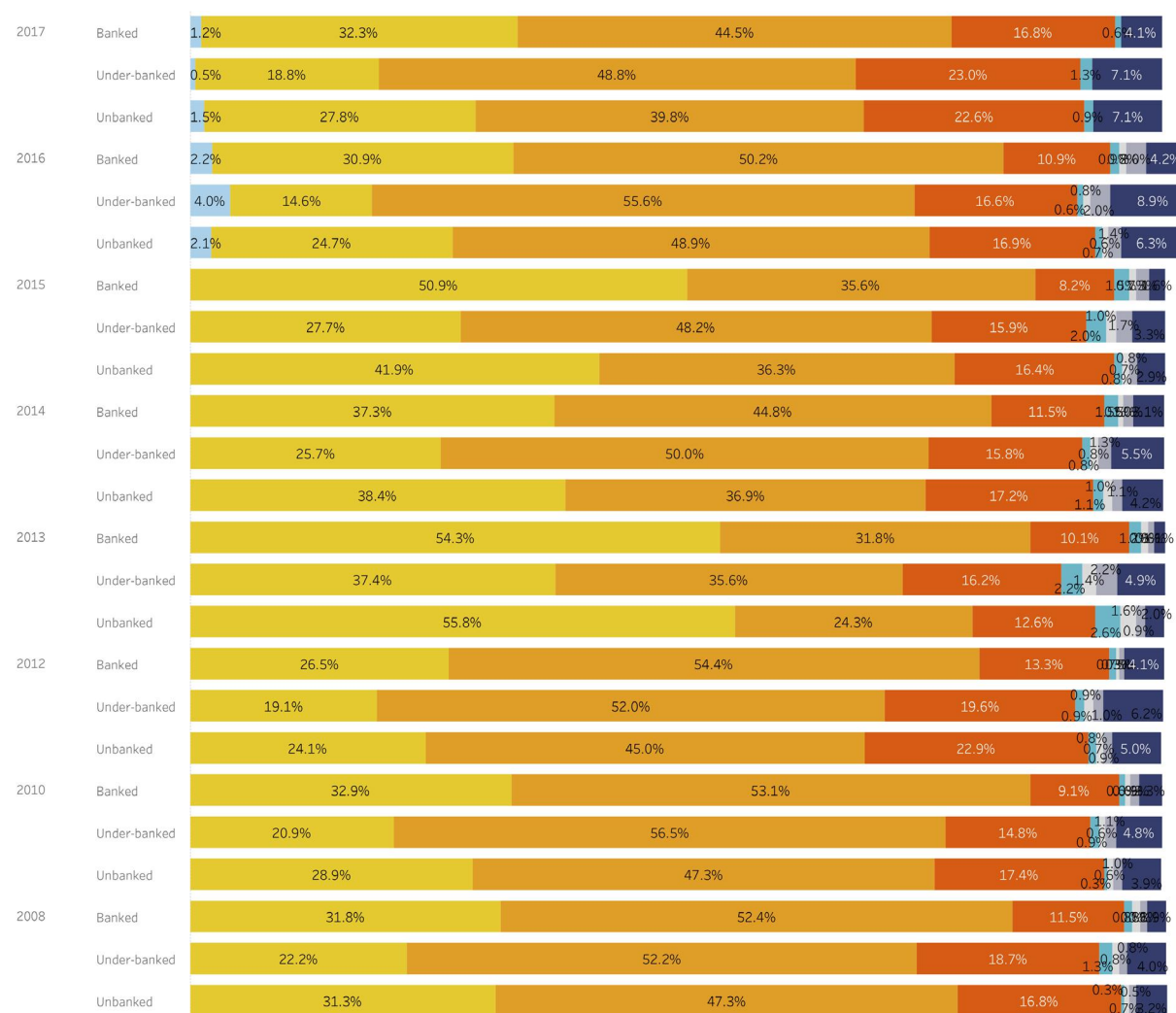


## Marital Status

The strands (Figure 2.13) highlight that a majority of Nigerians are either single or in formal relationships (monogamous or polygamous marriages). While financial inclusion rates are increasing among the married segments (increasing banked and reducing under-banked and unbanked segments), exclusion is rising among the singles (reductions in banked vis-a-vis increasing under-banked and unbanked) as seen in Figure 2.14.

## Marital Status Strands

Figure 2.13 Marital status distribution financial inclusion strands (source: compiled by author)



Survey data from EFinA & Intermedia (2008 - 2017)

**Legend**

- Widowed
- Separated
- Divorced
- Living together/Cohabiting
- Polygamously Married
- Monogamously Married
- Single/Never Married
- Divorced/Separated

## Marital Strands Trends

Figure 2.14 Marital status distribution financial inclusion trends (source: compiled by author)



## Socio-Economic

The socio-economic bearings of individuals represented by education, employment and income offer insights on one's ability to adopt financial services and their willingness and ability to pay.

### Education

The banked, often with university degrees, are better educated than the under-banked and unbanked (Figure 2.15). But, the under-banked and unbanked have basic (primary) and sometimes higher (secondary) levels of education. In spite of this, the unbanked form the dominant segment with no formal education (Figure 2.16). This trend highlights the need for innovative financial products that take consumer attitudes and behaviours into consideration.

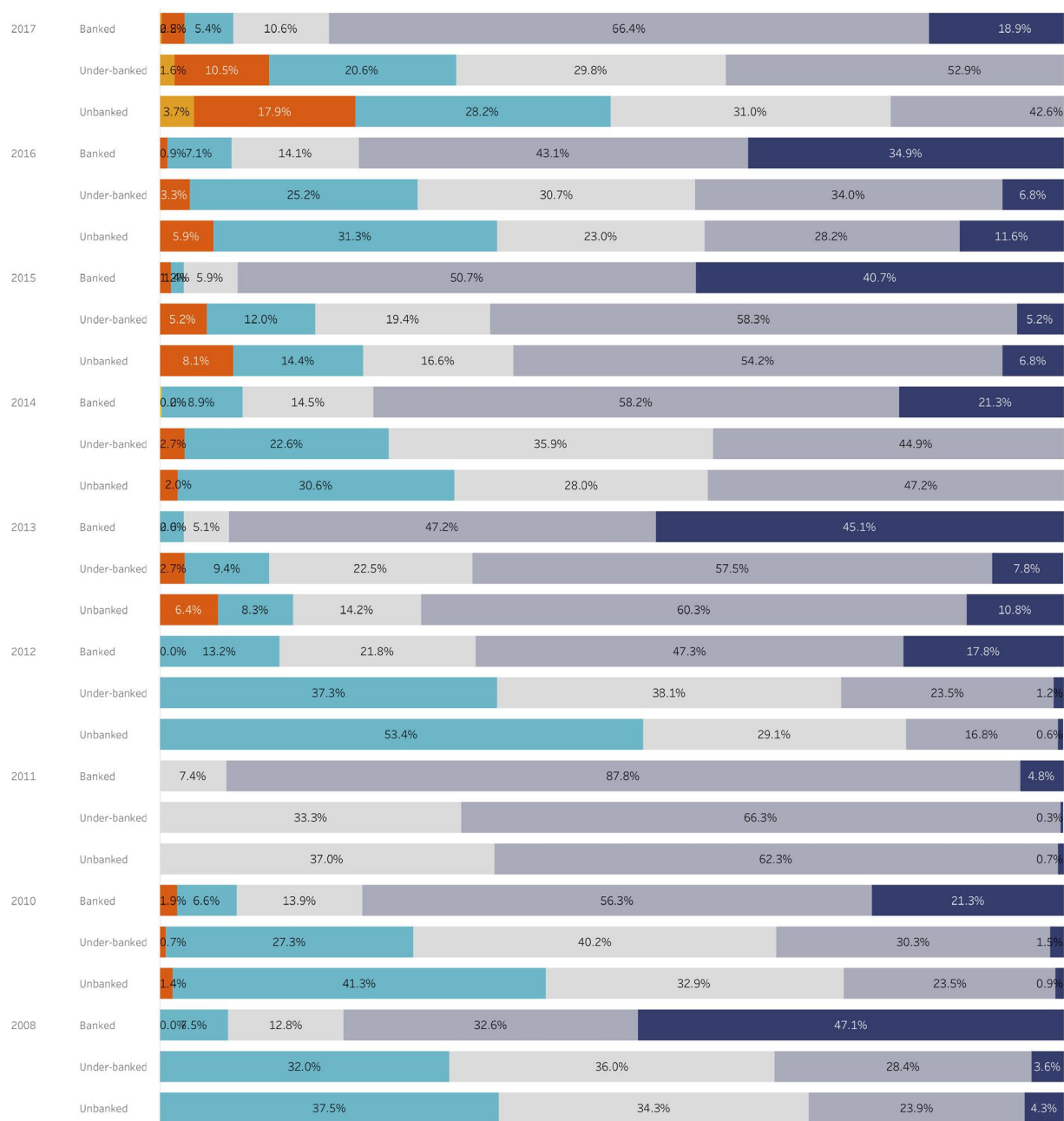
Providers should target these groups with financial products that take their educational status and exposure into consideration.

Intervention programmes, in the form of financial literacy and economic empowerment, targeted at the groups will improve the adoption of financial services.



## Education Strands

Figure 2.15 Education attainment distribution financial inclusion strands (source: compiled by author)



Survey data from EFInA, Intermedia & World Bank (2008 - 2017)

### Legend

- Higher Education & Tertiary or Higher
- Secondary Education
- Primary Education & Primary or Less
- No Formal Education
- Other
- Don't Know
- Refused

## Education Trends

Figure 2.16 Education attainment distribution financial inclusion trends (source: compiled by author)

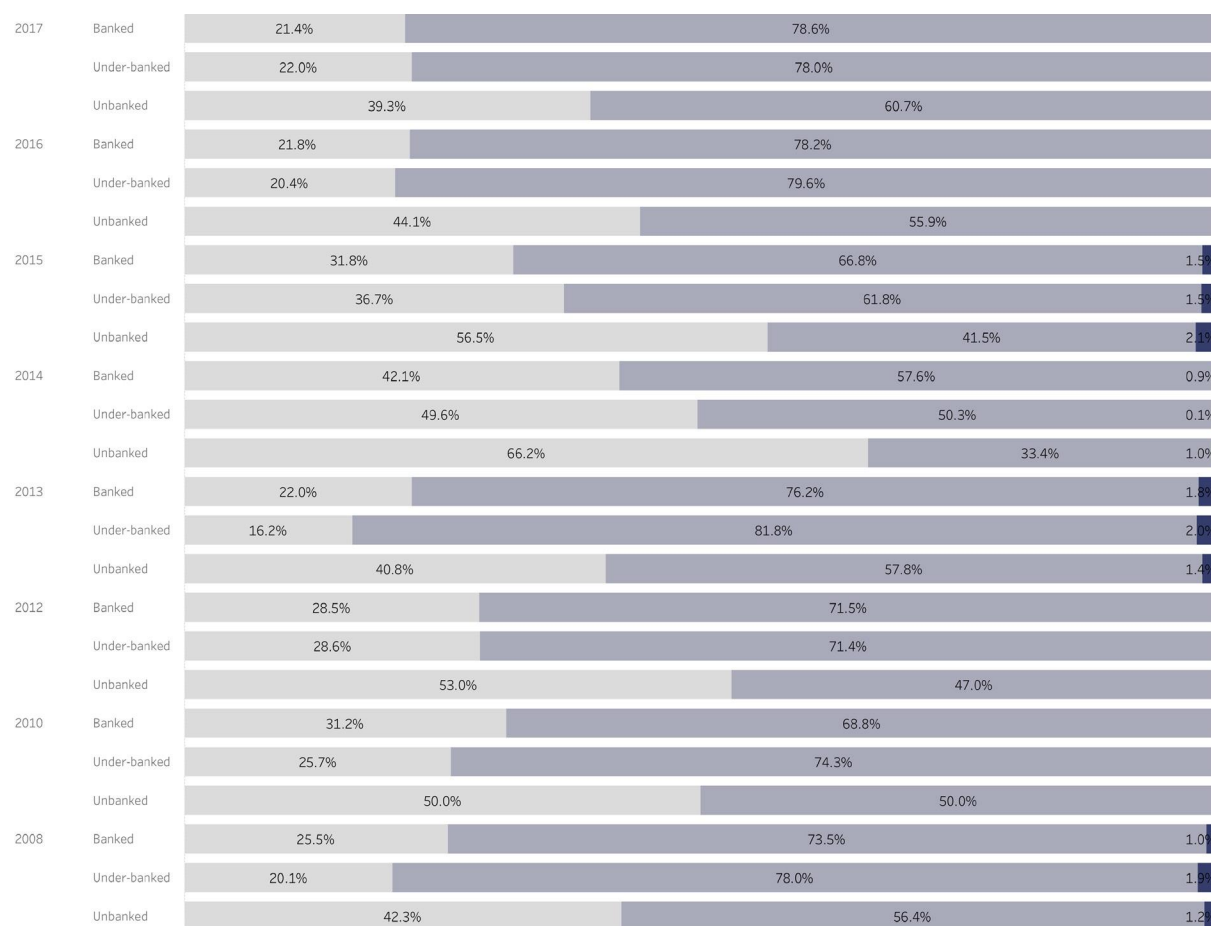


## Employment

While unemployment and underemployment are rife, the unbanked are more vulnerable. Across the customer segments, financial inclusion is on the rise among working individuals and the converse is true among the unemployed (See figure 2.17 and 2.18).

## Employment Strands

Figure 2.17 Employment status financial inclusion strands (source: compiled by author)

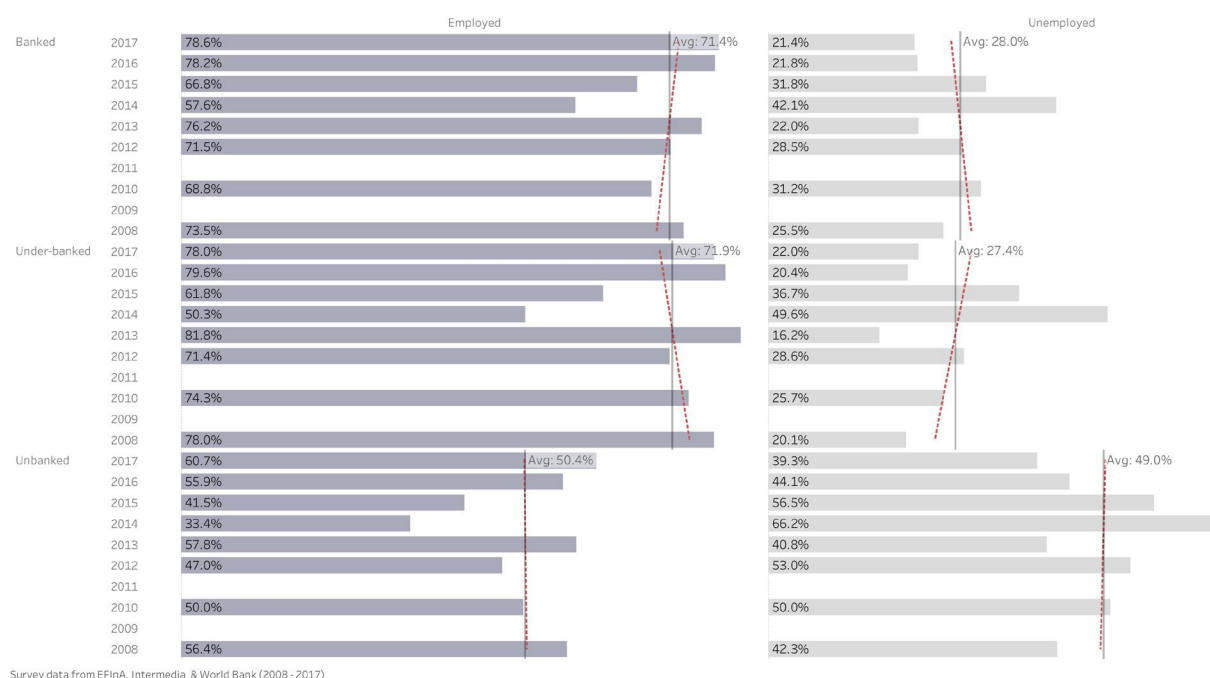


Survey data from EFINA, Intermedia & World Bank (2008 - 2017)

Legend  
 ■ DK  
 ■ Employed  
 ■ Unemployed

## Employment Trends

Figure 2.18 Employment status financial inclusion trends (source: compiled by author)



## Income

The belief that under-banked and unbanked Nigerians are low-income individuals is unfounded as illustrated in the income classification strand (Figure 2.19 and figure 2.20). While a high proportion of the banked are within the richest 20 percent, the unbanked make up the poorest 20 percent. But, the relative growth of the unbanked in the poorest 20 percent and the decline of the banked classified as the richest 20 percent shows the weak macroeconomic performance that is impacting the wealth of most Nigerians.

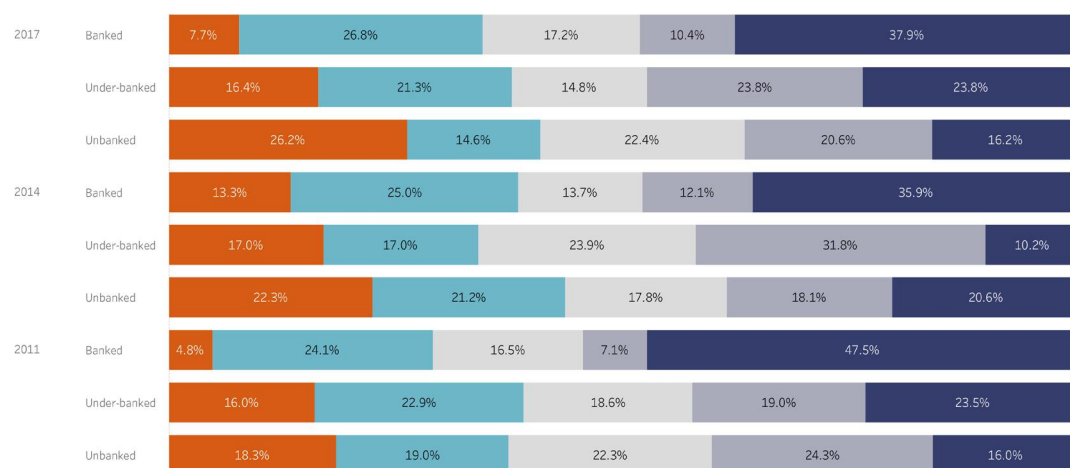
A deep dive into income sources based on employment status provides more insight into top sources of income and employability (Figure 2.21).

This suggests that as the unbanked become economically empowered, they access either informal or formal financial services. Thus, with access to the right financial products, adults in the upper- and middle-income categories can be brought into the formal financial system.



## Income Strands

Figure 2.19 Income distribution financial inclusion strands (source: compiled by author)

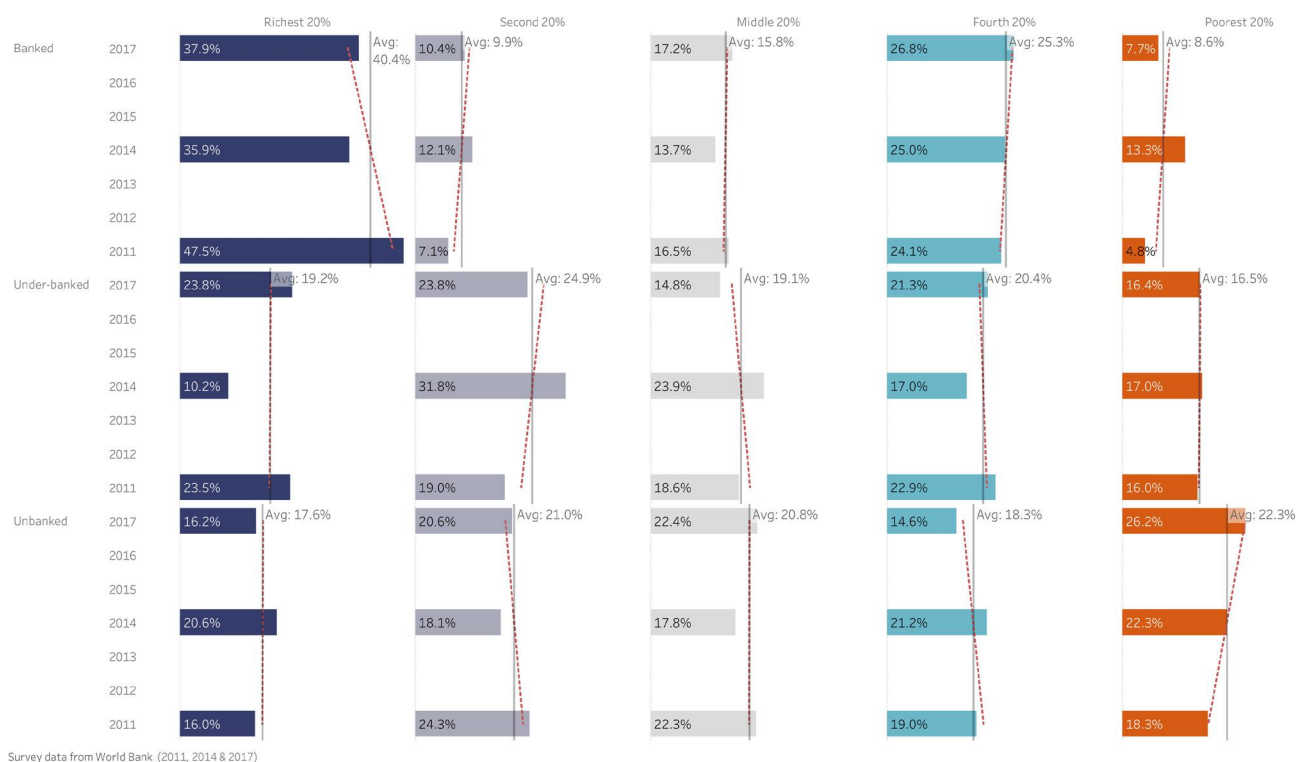


Survey data from World Bank (2011, 2014 & 2017)

**Legend**  
 Richest 20%  
 Second 20%  
 Middle 20%  
 Fourth 20%  
 Poorest 20%

## Income Trends

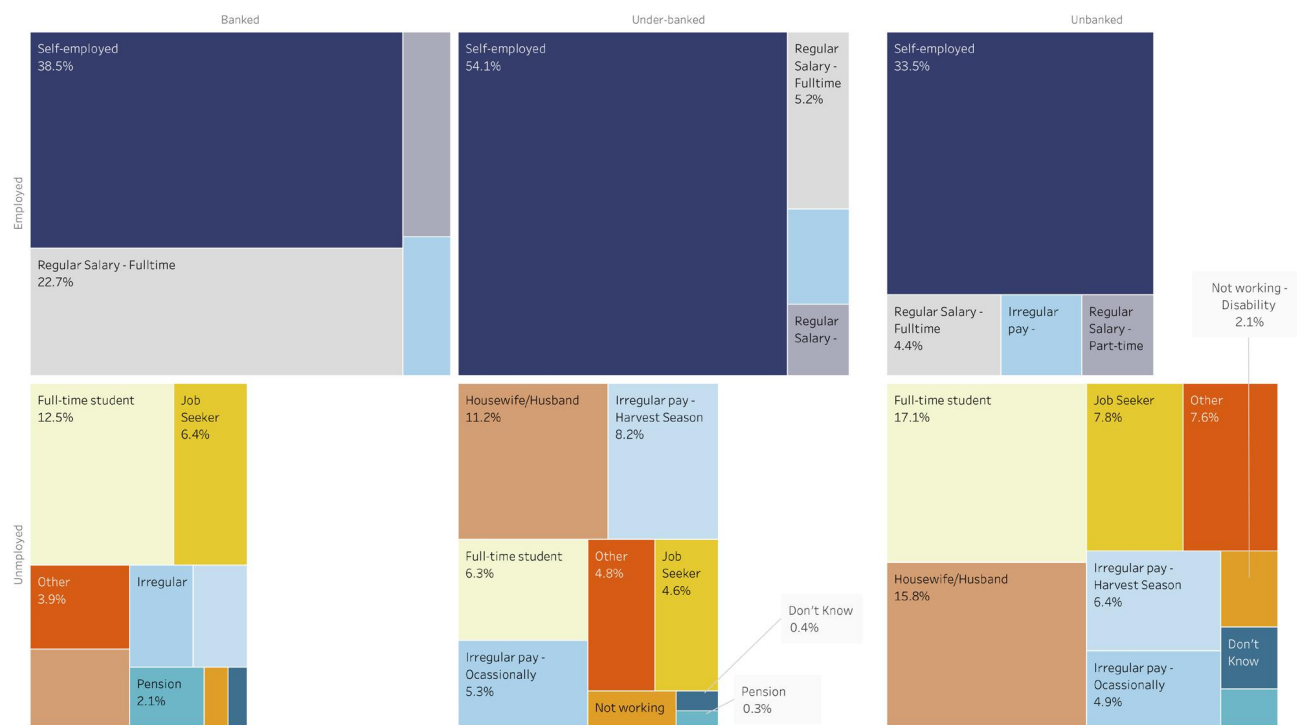
Figure 2.20 Income distribution financial inclusion trends (source: compiled by author)



Survey data from World Bank (2011, 2014 & 2017)

## Income/Employment Type Treemap

Figure 2.21 Income source treemap (source: compiled by author)



Survey data from Intermedia (2013 - 2017)

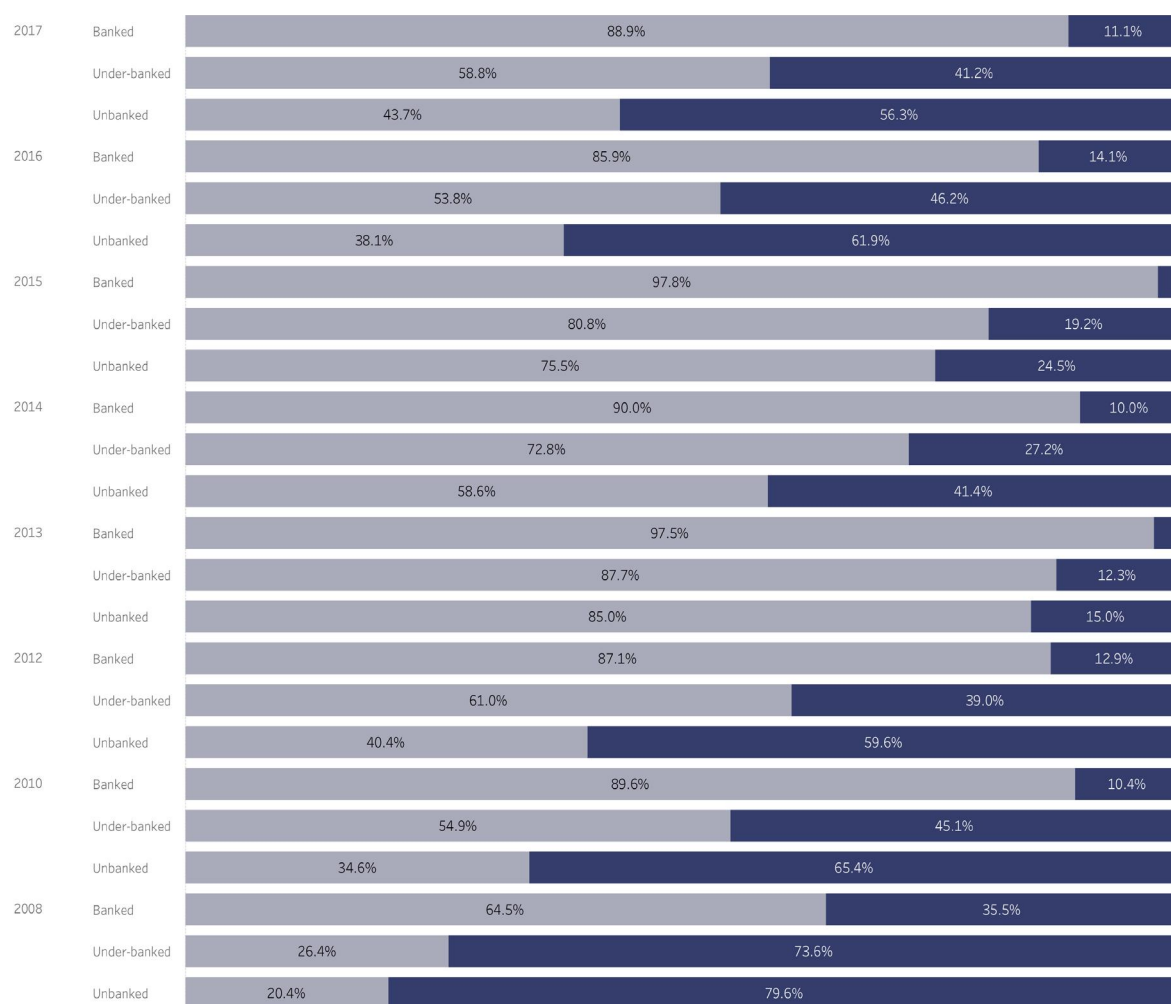
## Digital

### Phone Ownership

Overall, phone ownership is highest amongst the banked. The increasing trend across the customer segments is a good indicator for mobile-enabled DFS (Figure 2.22 and figure 2.23)

## Phone Ownership Strands

Figure 2.22 Phone ownership distribution financial inclusion strands (source: compiled by author)



Survey data from EFInA &amp; Intermedia (2008 - 2017)

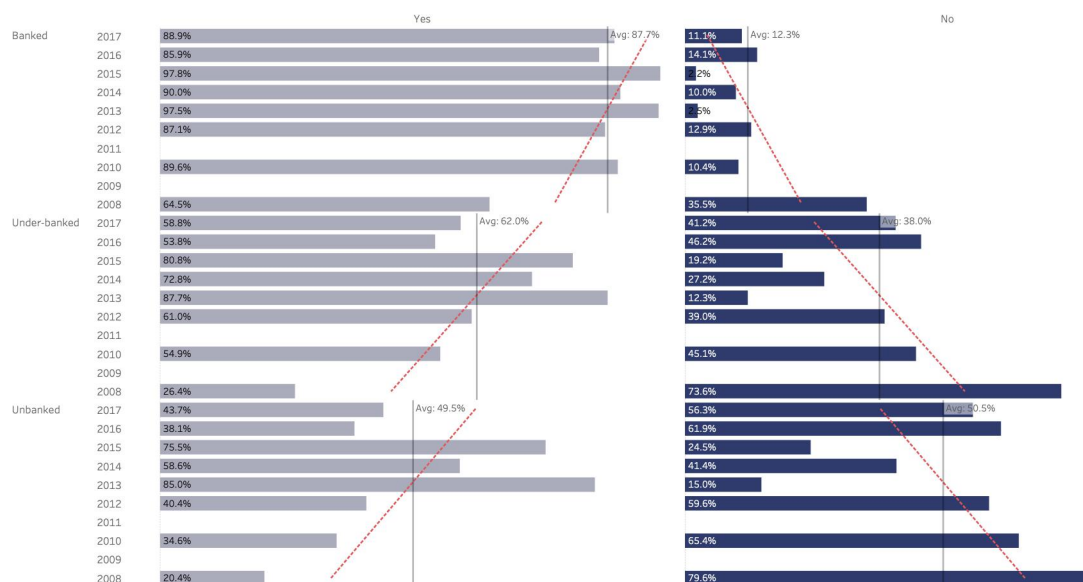
Legend

■ No

■ Yes

## Phone Ownership Trends

**Figure 2.23 Phone ownership distribution financial inclusion trends (source: compiled by author)**

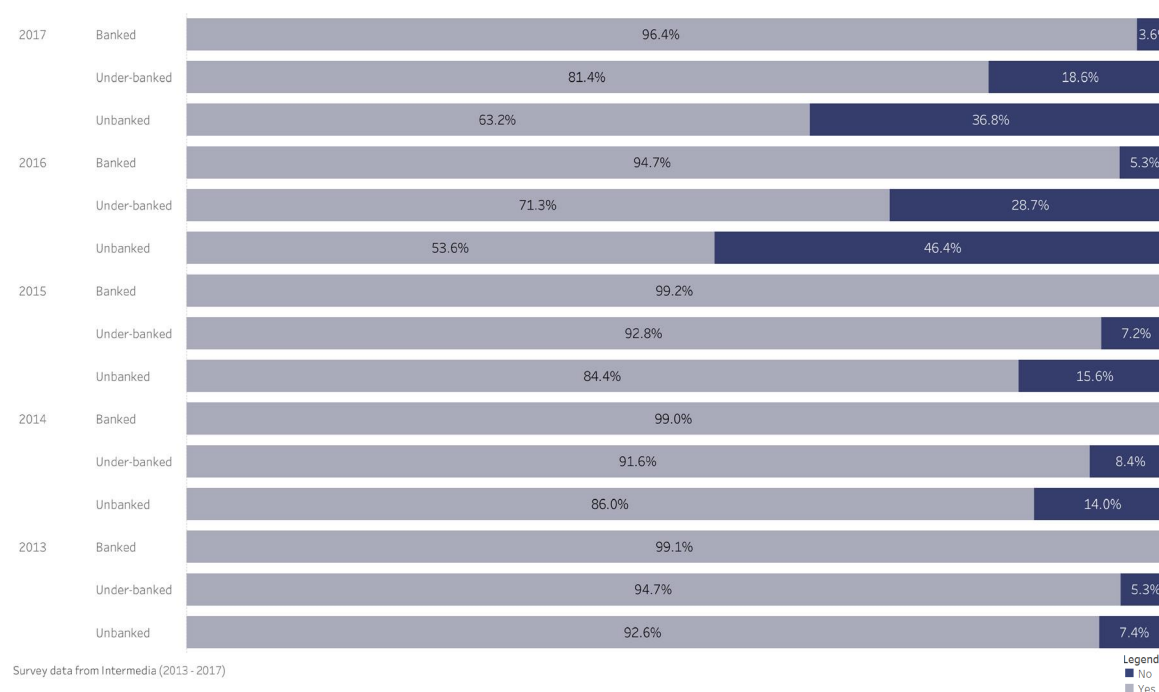


## Phone Access

Where individuals do not own phones, lack of access to telephony is more prevalent and rising among the under-banked and unbanked (Figure 2.24). While this trend poses an opportunity for mobile-enabled DFS, complementary data protection and privacy implications should not be disregarded (Figure 2.25).

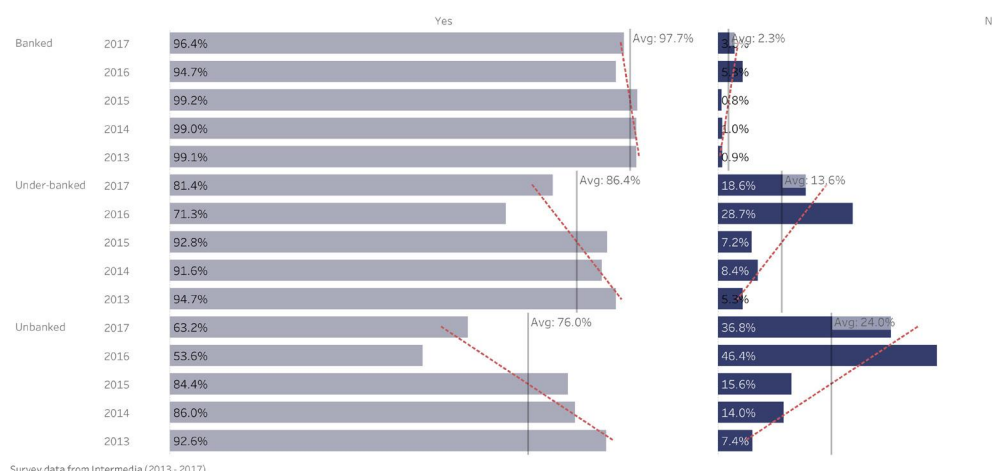
## Phone Access Strands

**Figure 2.24 Phone access distribution financial inclusion strands (source: compiled by author)**



## Phone Access Trends

Figure 2.25 Phone access distribution financial inclusion trends (source: compiled by author)



## Identity

Access to identification documents, an important part of the know your customer (KYC) and other compliance guidelines, is a constraint limiting financial inclusion. KYC compliance documentation mandates that customers offer a national identity document and other information verifiable against other data sources. Despite the plethora of identification systems and documents, the voter's card remains the most available (Figure 2.26 - Figure 2.29).

Even though the national surveys do not capture this information, the financial services identification system, the bank verification number (BVN) had about 31 million people enrolled on it as at December 2017.

## Identity Treemap

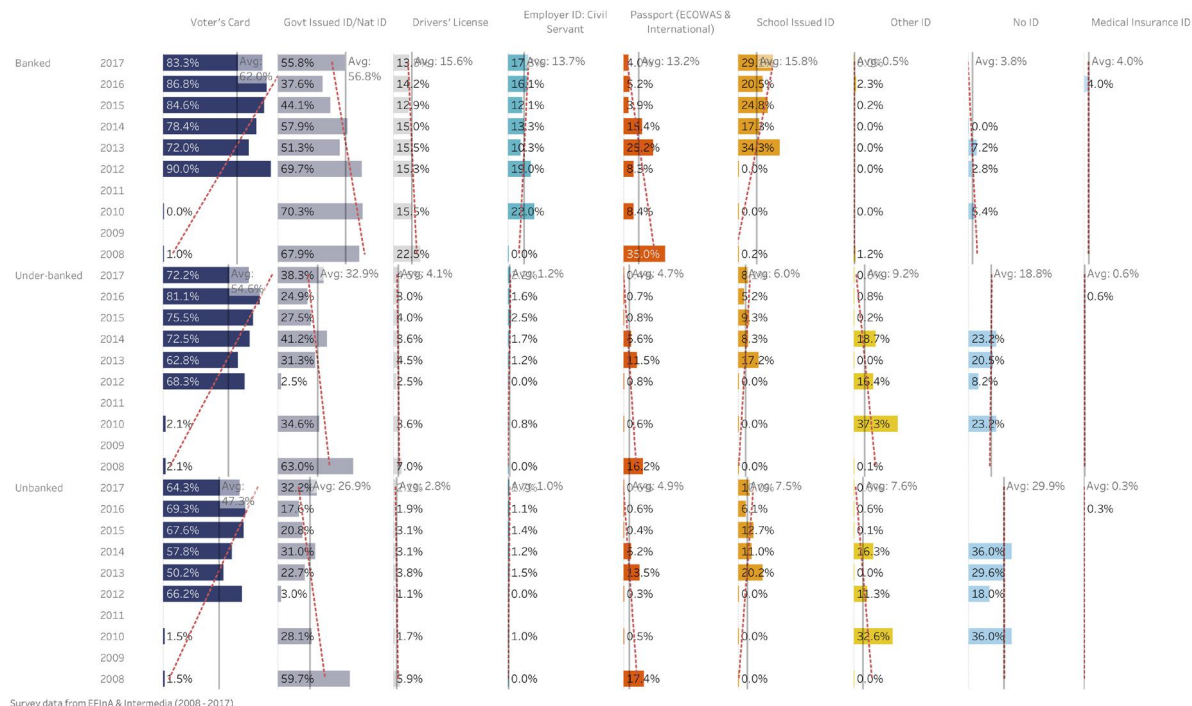
Figure 2.26 Identity document financial inclusion treemap (source: compiled by author)





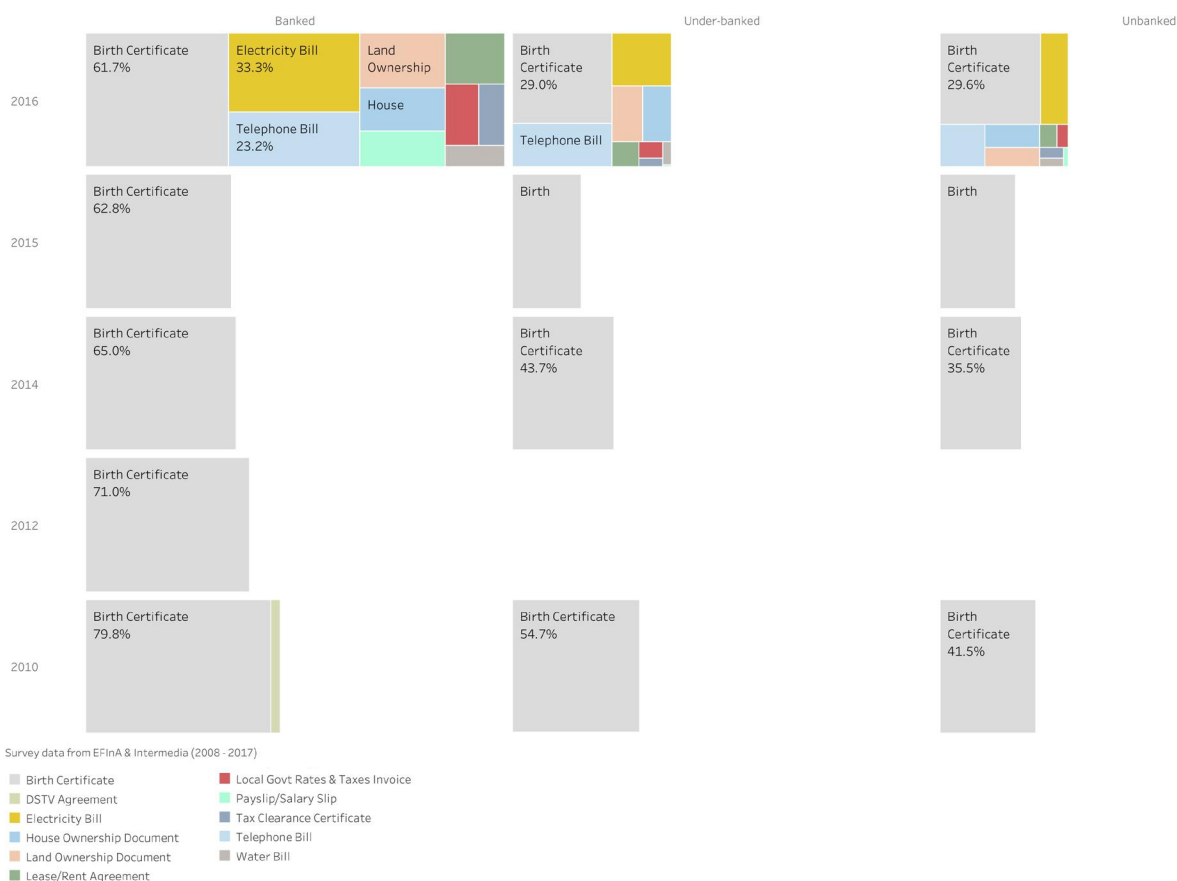
## Identity Trends

Figure 2.27 Identity document financial inclusion trends (source: compiled by author)



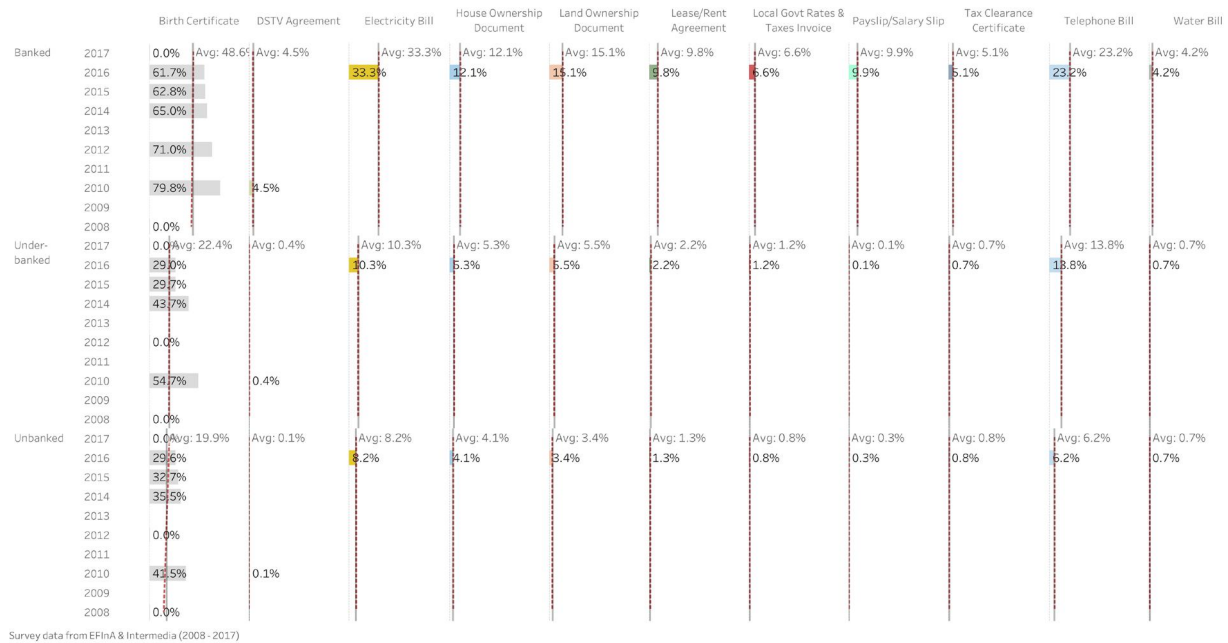
## KYC Documents

Figure 2.28 KYC document financial inclusion treemap (source: compiled by author)



## KYC Analytics

Figure 2.29 KYC document financial inclusion trends (source: compiled by author)

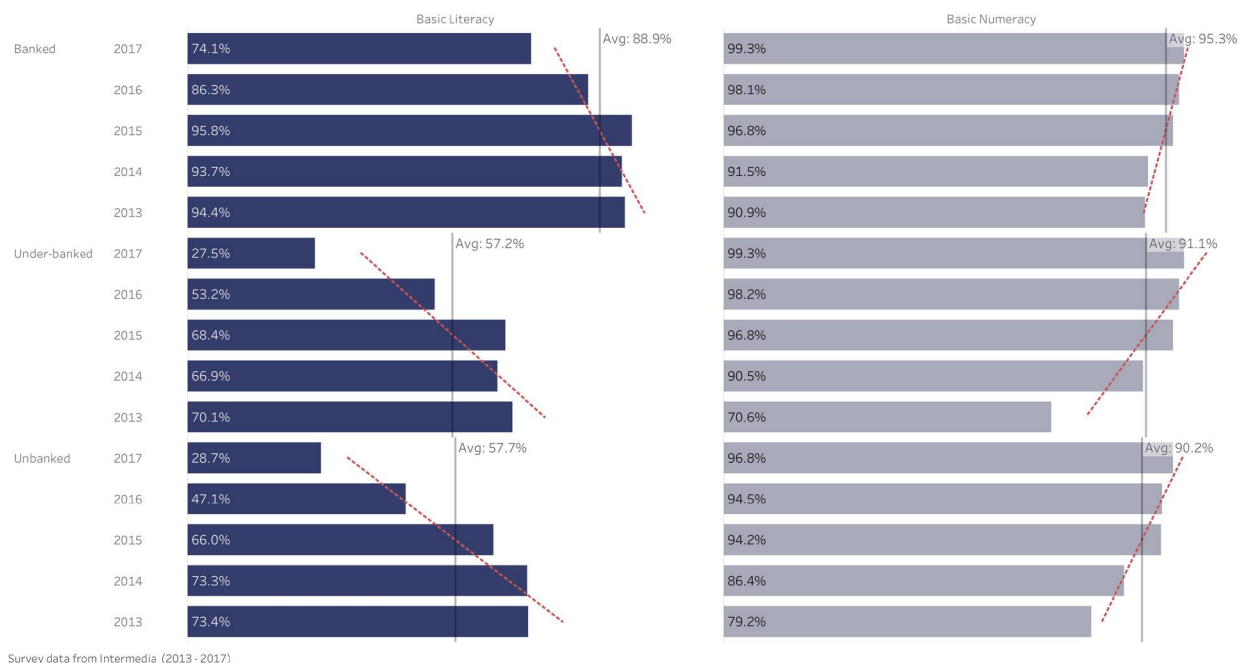


## Basic Literacy

The literacy lens provides more insight on the capabilities of Nigerians irrespective of their educational qualifications. While basic numeracy (ability to conduct simple arithmetic calculations) is high across the customer segments, basic literacy (the ability to read and write) is highest among the banked (Figure 2.30).

## Basic Literacy Strands

Figure 2.30 Basic literacy financial inclusion trends (source: compiled by author)



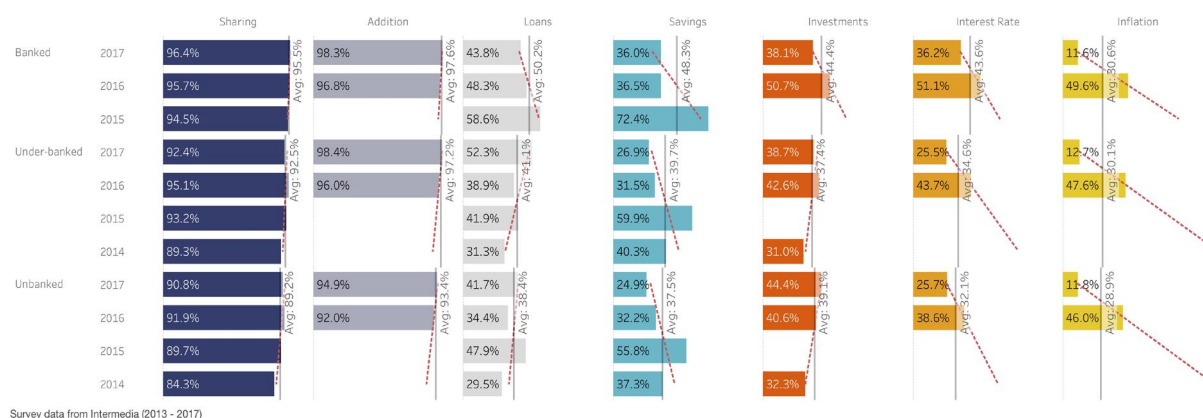
## Financial Literacy

The high levels of basic numeracy show the ability to grasp simple knowledge areas in the financial literacy portfolio. As illustrated, detailed knowledge of the specificities of financial services products and macro-economic indicators such as inflation are limited across the customer segments (Figure 2.31).

There is thus a need for financial literacy interventions to improve the ability of the excluded to access and use various financial services and products.

### Financial Literacy Strands

Figure 2.31 Financial literacy financial inclusion trends (source: compiled by author)





## GENDER PROFILES **THE CASE FOR WOMEN IN FINANCIAL INCLUSION**

Including women in the adoption and use of financial services has drawn special attention in efforts to promote gender equity. This section presents gender-disaggregated charts of the national profiles earlier presented and explains the extent (gender gap) to which women are disadvantaged in the financial services ecosystem.

The section presents the gender gap analyses of the profiles for the under-banked and unbanked populations.





# COMMUNITY

## OVERVIEW

### KEY TRENDS

Women have less access to financial services than their male counterparts, notably in rural locations and in the north east and north west regions

The gender gap is widest in the south east

### INTERVENTIONS

Mandatory nationwide deployment of gender-focused products and services, paying attention to cultural and ethnic preferences to drive adoption

Further investigations of the large gap across the consumer segments in the south east region



## Introduction

The community lens of financial inclusion provides insights into financial inclusion by gender and the gender gap by geographic location and region.

### Location

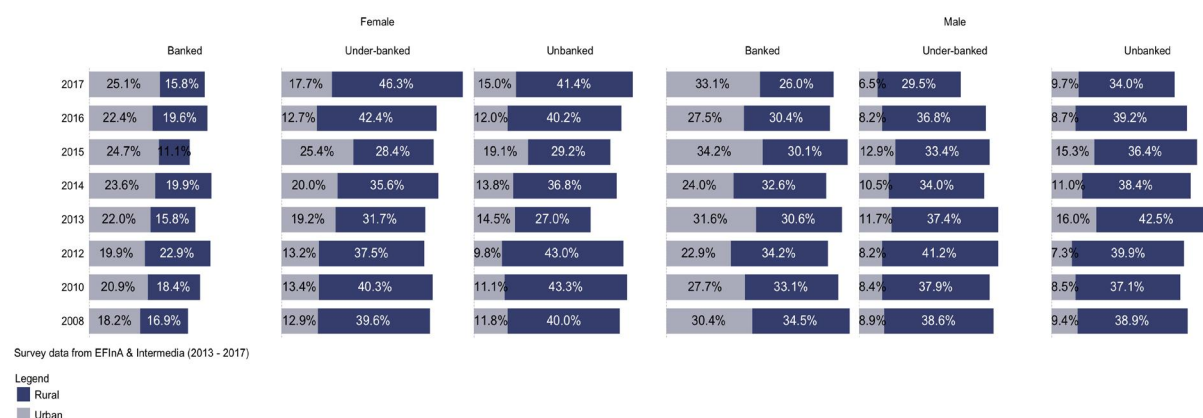
Rural locations have higher proportions of under-banked and unbanked women (Figure 2.32 and figure 2.33).

In Figure 2.34, the most recent gender gap measurement shows an increasing negative gender gap in the rural and urban locations chiefly amongst the under-banked and unbanked populations. This chart suggests that over the years, more men than women are being financially included. In 2017, a rural female adult is 21.8 and 57.1 percent more likely to be unbanked and under-banked respectively than a rural male. The gaps are even wider for urban dwellers. An urban female is 54.1 and 172.2 percent more likely to be unbanked and under-banked respectively when compared to an urban male adult.

Despite the relative availability of formal financial access points in urban locations, urban women still access informal financial services through savings groups and cooperative societies.

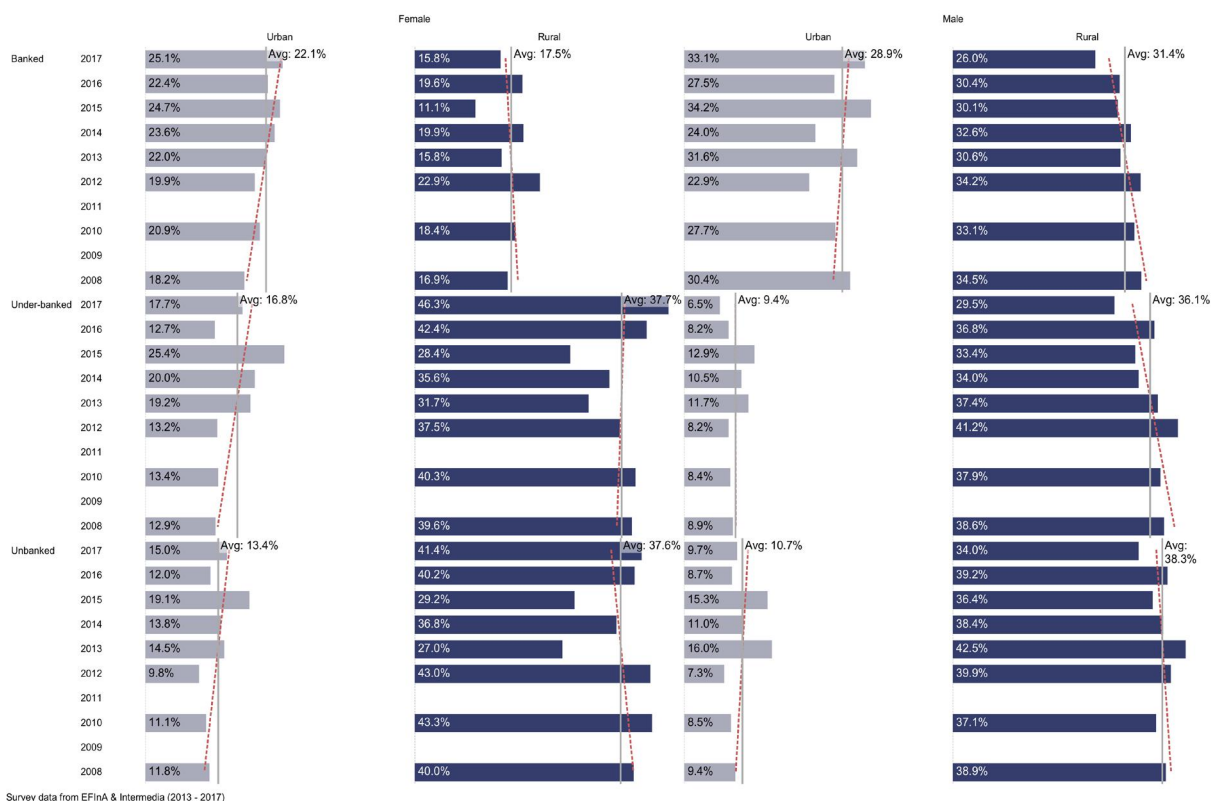
### Location Strands

**Figure 2.32 Location financial inclusion strands disaggregated by gender**  
(source: compiled by author)



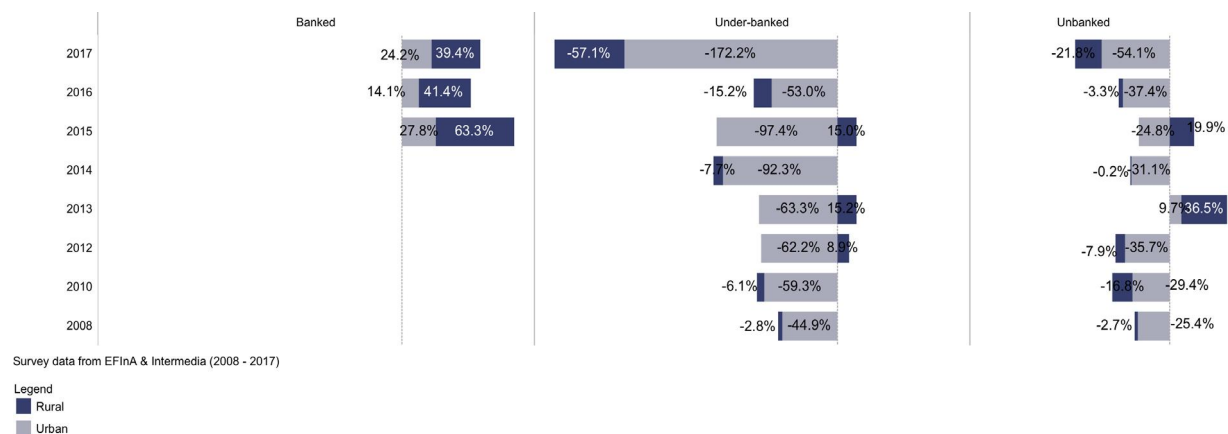
## Location Trends

Figure 2.33 Location financial inclusion trends disaggregated by gender (source: compiled by author)



## Location Gender Gap

Figure 2.34 Location gender gap (source: compiled by author)



## Region

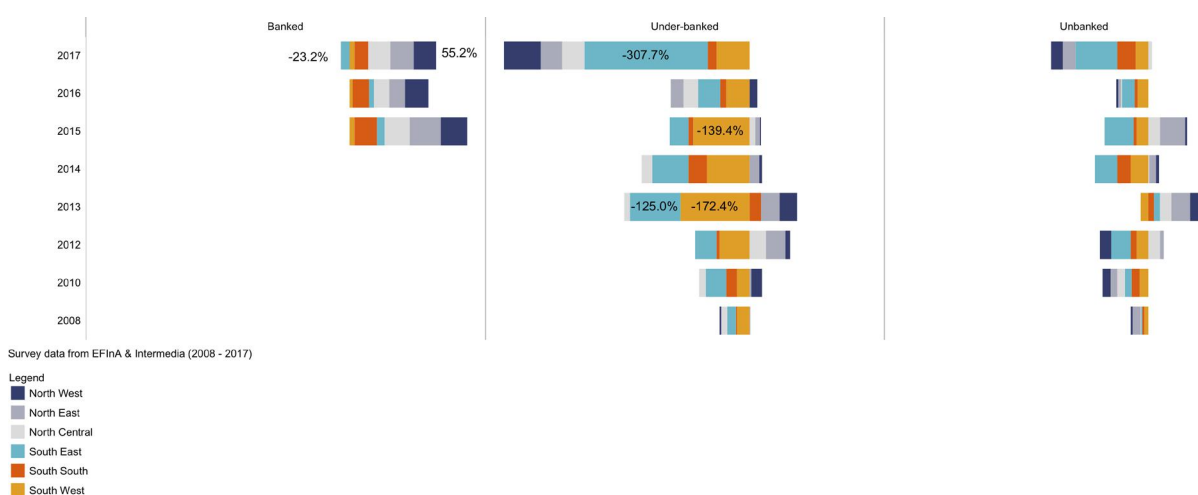
The strands (Figure 2.35) highlight that women have less access to financial services across the geo-political zones. This notion is specifically true of under-banked and unbanked women in the north east and north west. These trends highlight increases in the number of banked women only in the south west (Figure 2.36).

The recent gender gap measurement (Figure 2.37) shows an increasing negative gender gap across most regions among the under-banked and unbanked populations. This chart suggests that over the years, more men than women are being financially included, specifically in the south east and north west regions. In 2017, a female adult in the North West is 27.7 and 92.3 percent more likely to be unbanked and under-banked respectively than a counterpart male. The gender gap sizing highlights the following:

- Except for the south east region, women are less likely than men to be financially included
- Women are more likely than men to be under-banked and unbanked, chiefly in the south east

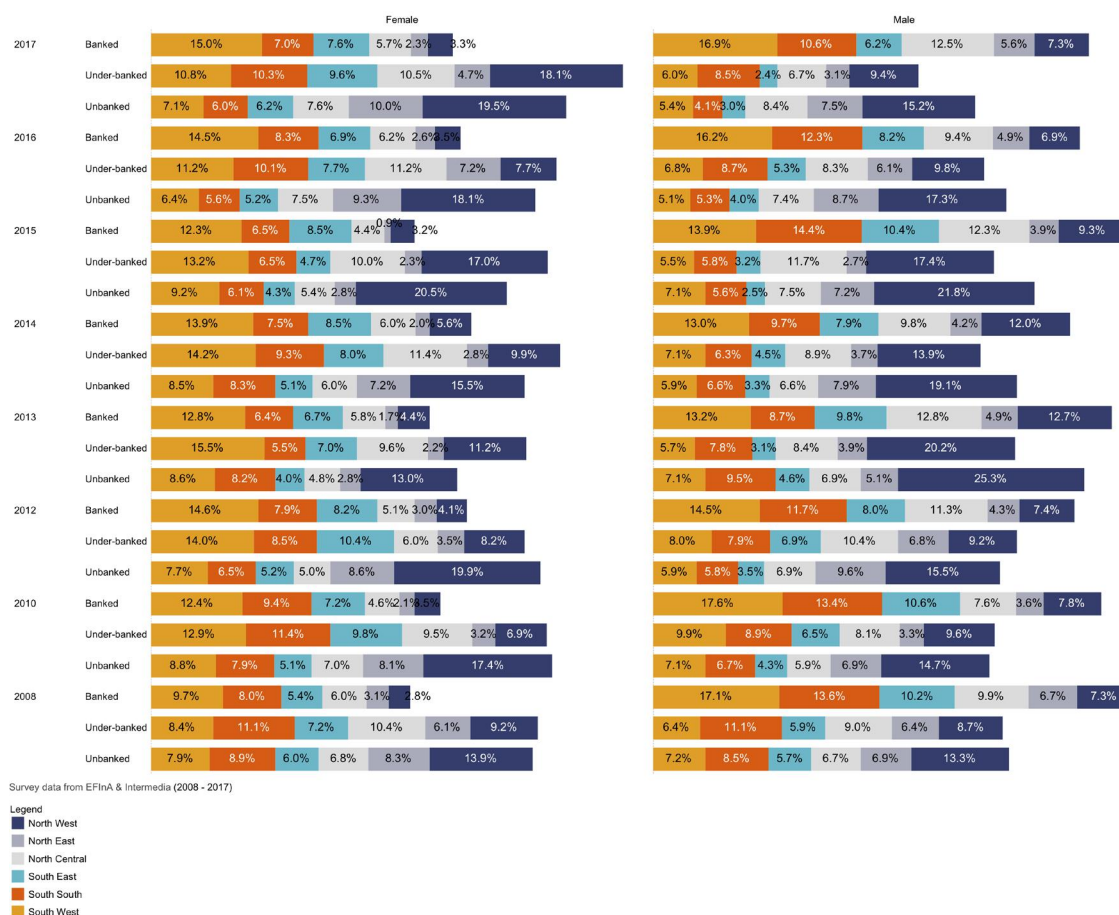
## Region Gender Gap

Figure 2.37 Region gender gap (source: compiled by author)



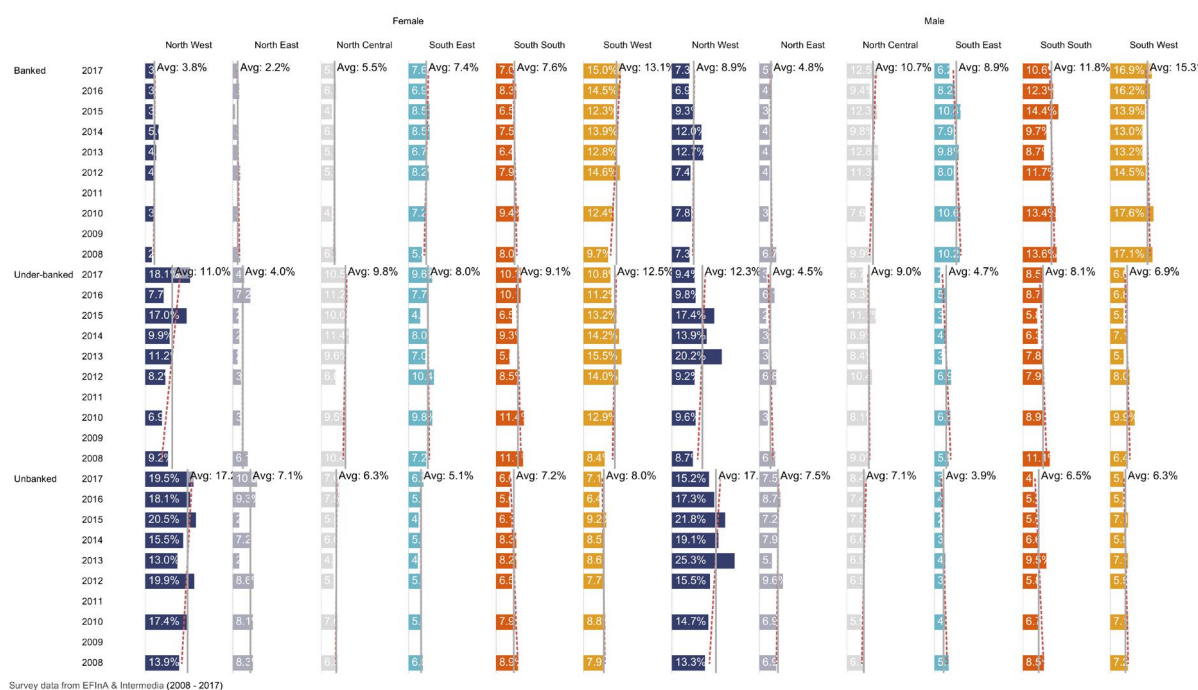
## Region Strands

Figure 2.35 Region financial inclusion strands disaggregated by gender (source: compiled by author)



## Region Trends

Figure 2.36 Region financial inclusion trends disaggregated by gender (source: compiled by author)







## GENDER PROFILES HOUSEHOLD

### OVERVIEW

#### KEY TRENDS

Women in under-banked and unbanked segments live in poorer households

As household incomes improve (or as poverty reduces), women are more likely to adopt informal as opposed to formal financial services

The likelihood of formal financial exclusion is higher amongst women irrespective of household size

#### INTERVENTIONS

Economic stimulants for women in poor, multi-person households



# Introduction

The household lens of financial inclusion provides insights into financial inclusion by gender and the gender gap by household indicators such as size and income.

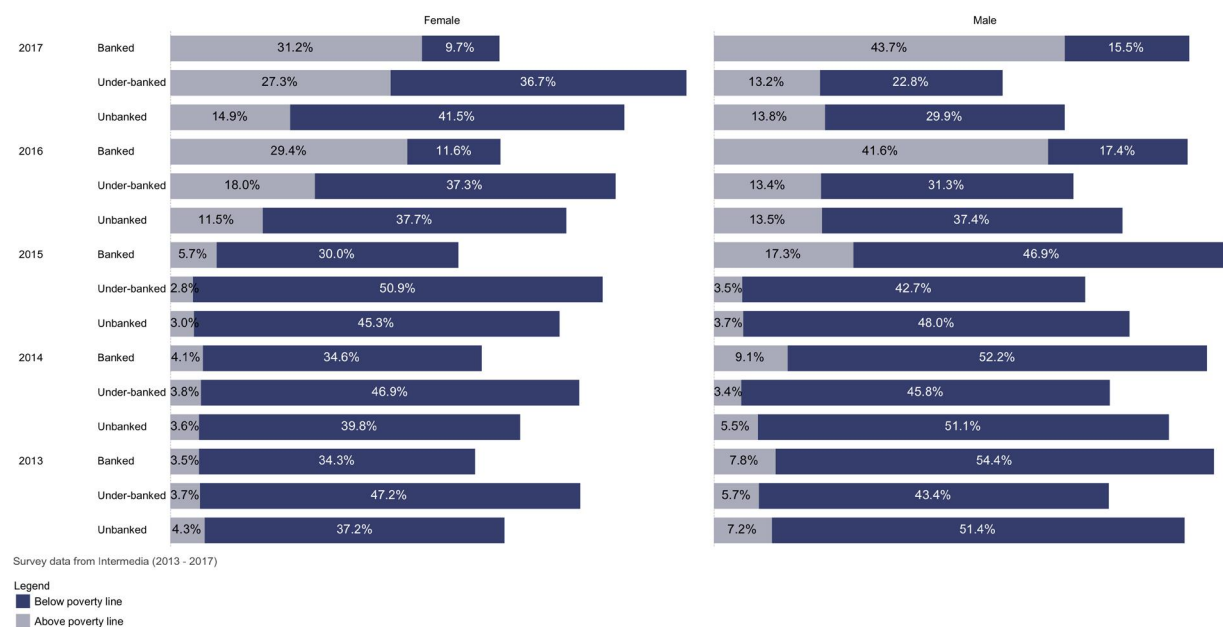
## Poverty

The under-banked and unbanked households are poorer than banked households, but a higher proportion of women in under-banked and unbanked segments live in poorer households (Figure 2.38). In spite of this, the trend patterns show increasing household income levels across the customer segments (Figure 2.39), with the most recent gender gap sizing (Figure 2.40) highlighting that irrespective of household income status, women are less likely than men to access formal financial services. Women are more likely than men to have access to informal or no financial services. The size suggests that as household income improves (or as poverty reduces), women are more likely to adopt informal as opposed to formal financial services.

## Poverty Strands

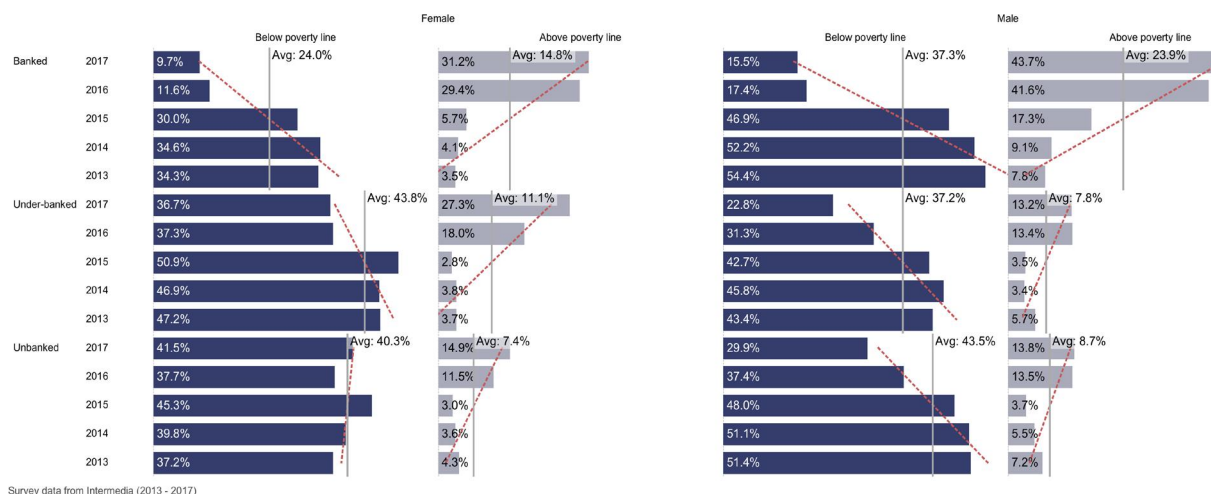
**Figure 2.38 Household income financial inclusion strands disaggregated by gender**

(source: compiled by author)



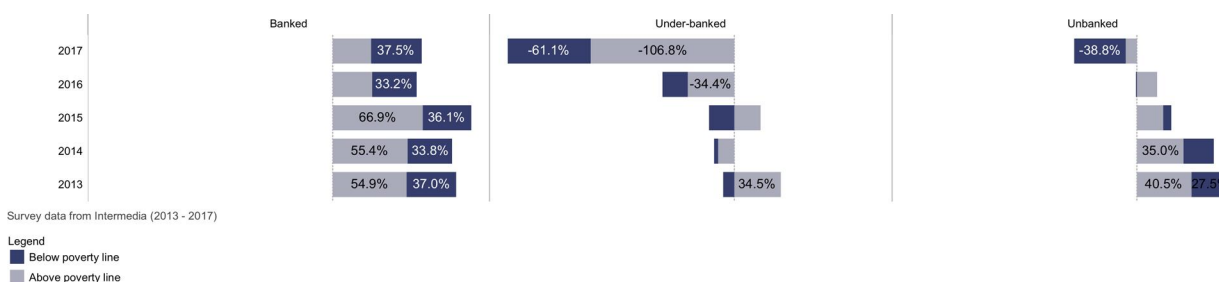
## Poverty Trends

**Figure 2.39 Household income financial inclusion trends disaggregated by gender**  
(source: compiled by author)



## Poverty Gender Gap

**Figure 2.40 Household income gender gap** (source: compiled by author)



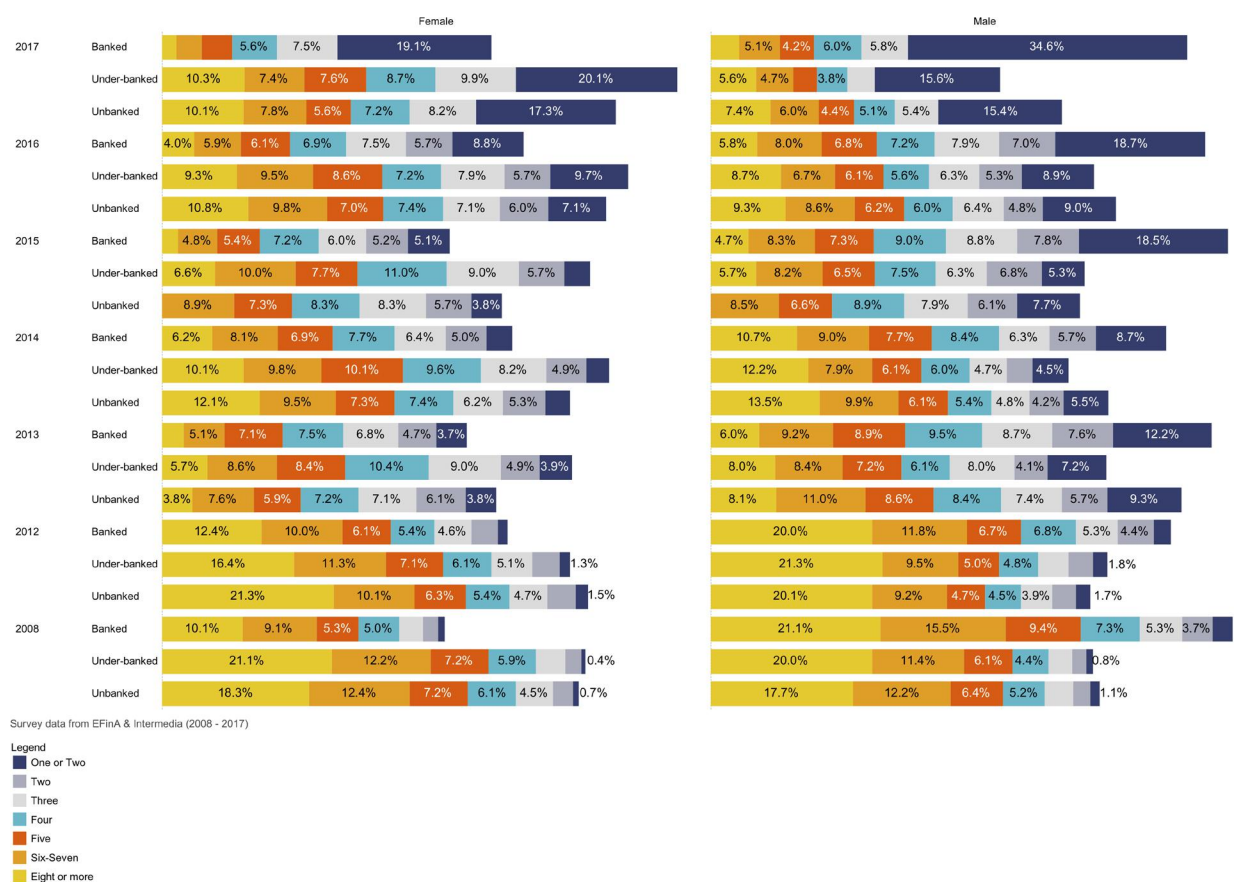
## Size

The household size lens highlights fewer households with banked women, but the converse in households with women in the under-banked and unbanked segments (Figure 2.41). The trends (Figure 2.42) show more significant growth in smaller households with female respondents across the three consumer segments.

Highlights of the gender gap (Figure 2.43) sizing show that except for 3-member households, women are less likely [than men] to access formal financial services. Further, irrespective of household size, women are more likely [than men] to either have access to informal or no financial services. Hence, with varying degrees of household size, the likelihood of formal financial exclusion is higher amongst women irrespective of household size.

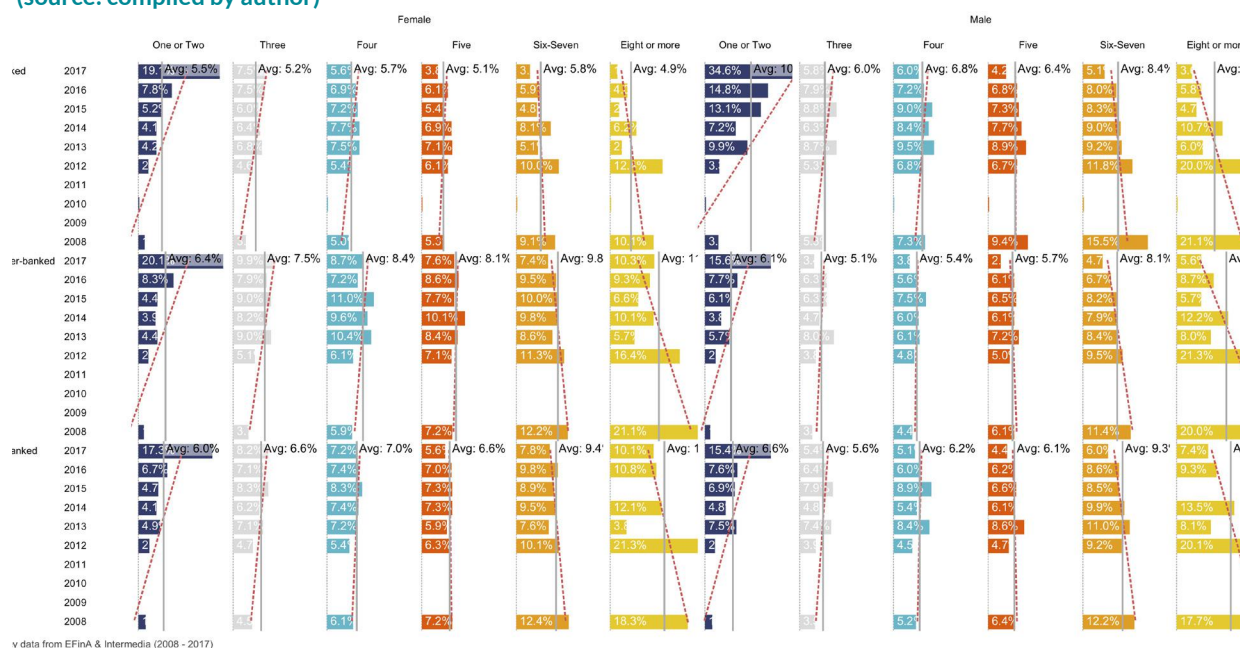
## Size Strands

Figure 2.41 Household size financial inclusion strands disaggregated by gender (source: compiled by author)



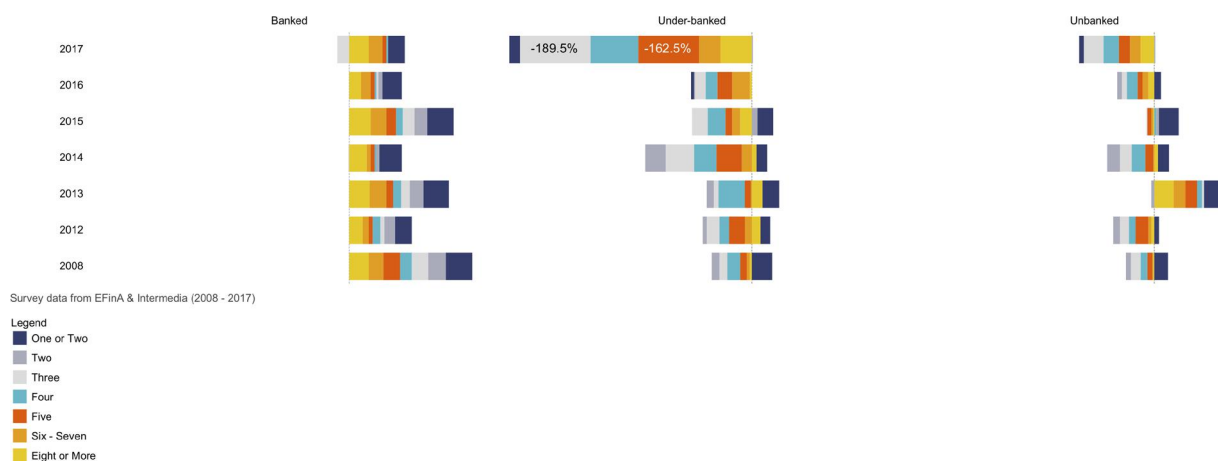
## Size Trends

Figure 2.42 Household size financial inclusion trends disaggregated by gender (source: compiled by author)



## Size Gender Gap

Figure 2.43 Household size gender gap (source: compiled by author)





# GENDER PROFILES INDIVIDUAL

## OVERVIEW

### KEY TRENDS

A female adult is more likely to be under-banked [than a male adult], with the highest risk age segments being between 25 and 44 years

Women, especially those between 35 and 44, are more likely [than men] to be financially excluded

Financial exclusion rates are higher amongst married women, especially monogamously married women

Financial services product design and communication strategies should take education levels into consideration

More women, especially in the under-banked and unbanked segments, have primary and/or secondary level education

Gender inequity exists in the employment race, but women in employment are more likely to adopt both formal and informal financial services

While income is not a barrier to financial inclusion, women in the richest income segments are less likely [than men] to access informal financial services

### INTERVENTIONS

Skills development and capacity building interventions to enhance earning prospects for women between 35 and 44

Promotion of female education up to tertiary levels

Socio-economic schemes and programmes for women to enhance employment, as well as sub-interventions that focus on widows and youth between the ages of 25 and 34

Affordable devices and complementary DFS policies will enhance adoption of financial services





## Introduction

The household lens of financial inclusion provides insights into financial inclusion by gender and the gender gap by household indicators such as size and income.

### Demographic

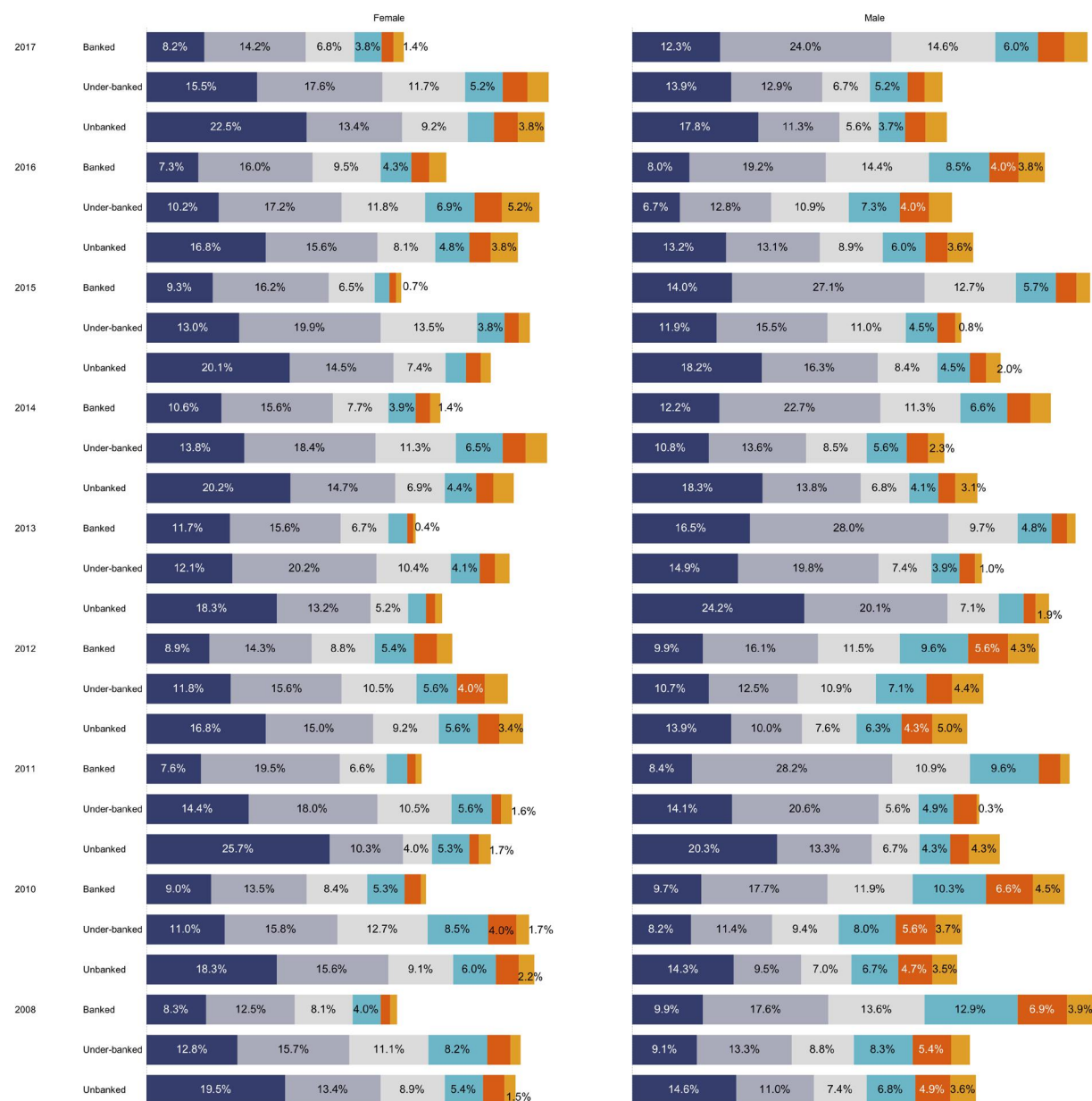
#### Age

The overall proportion of banked women vis-a-vis banked men is lower while under-banked and unbanked women have higher female proportions (Figure 2.44) with varying trend patterns across age groups (Figure 2.45). Unpacking the gender gap by age distribution (Figure 2.46), explains that across the various age groups, women are less likely [than men] to access formal financial services and more likely [than men] to have none or informal financial services access. But, the preference for informal financial services among women of 25 to 55 is higher; while women of 35 to 44 are more likely to be financially excluded.

## Age Strands

Figure 2.44 Age distribution financial inclusion strands disaggregated by gender

(source: compiled by author)

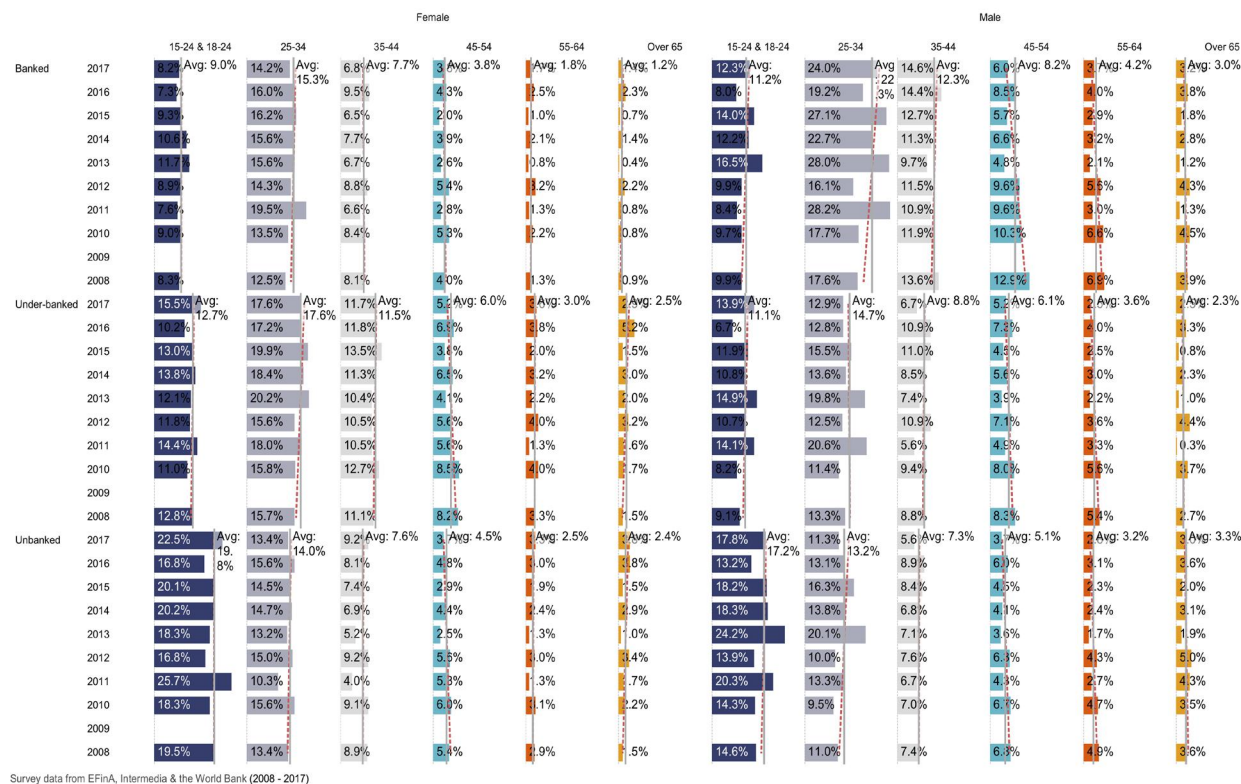


Survey data from EFinA, Intermedia & the World Bank (2008 - 2017)

Legend  
 Over 65  
 55-64  
 45-54  
 35-44  
 25-34  
 15-24 & 18-24

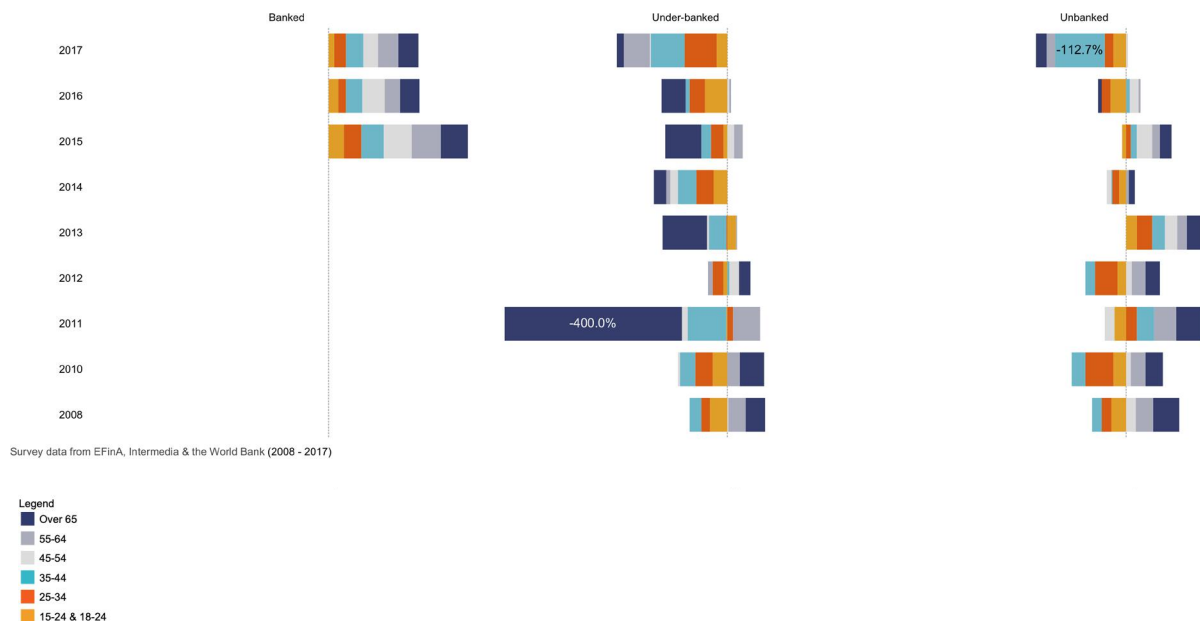
## Age Trends

Figure 2.45 Age distribution financial inclusion trends disaggregated by gender  
(source: compiled by author)



## Age Gender Gap

Figure 2.46 Age distribution gender gap (source: compiled by author)



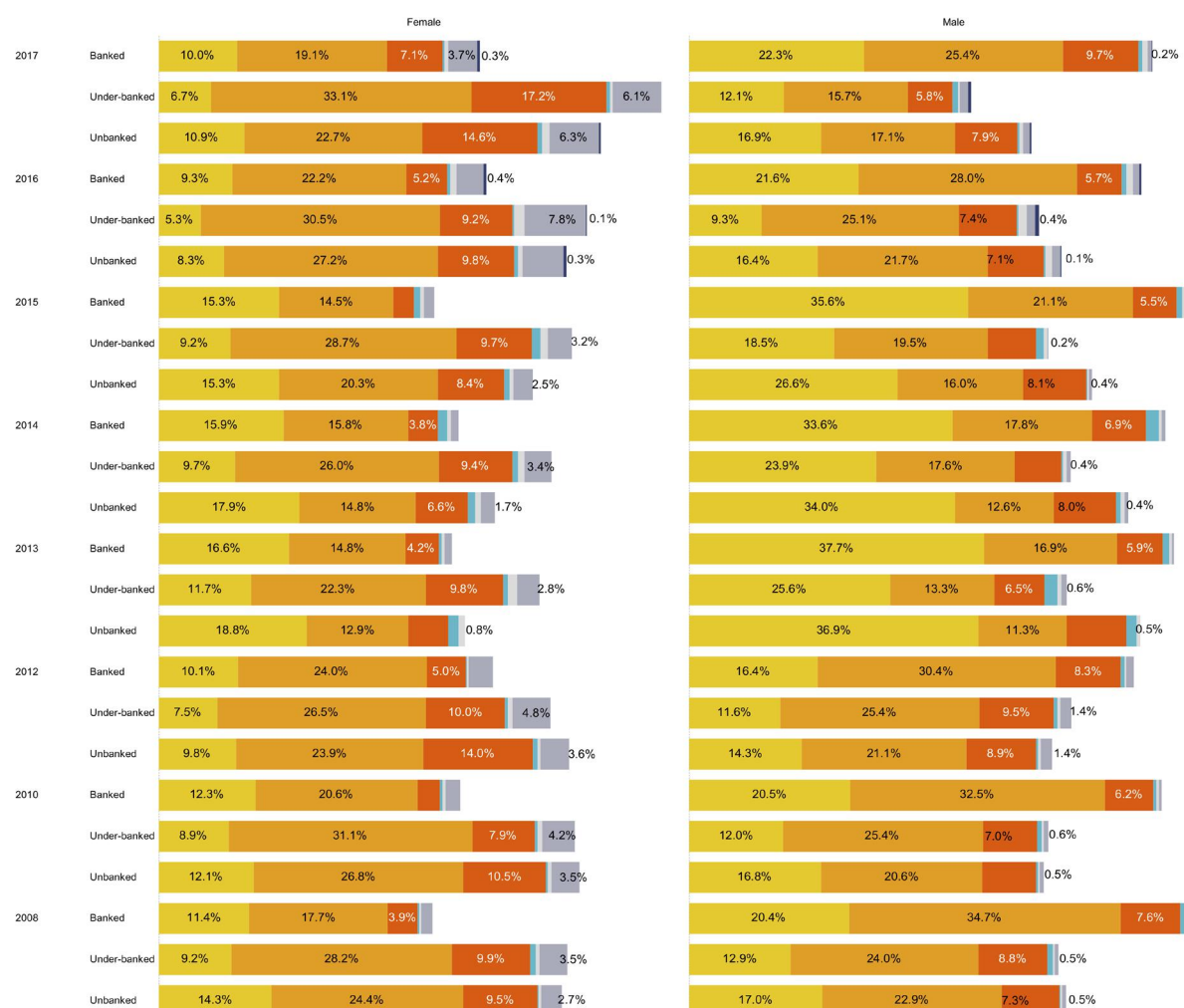
## Marital Status

By marital status, the financial inclusion strands (Figure 2.47) show higher financial exclusion rates among married women, notably monogamously married women. Even though the trends highlight improvements across marital status, a slight gradient representing rate of change among women exists (Figure 2.48).

The most recent gender gap computations (Figure 2.49) highlight the vulnerabilities of widowed women who are less likely [than men] to have access to financial services and hence more likely to be financially excluded. In addition, the likelihood of women accessing formal financial services is lower than that of men irrespective of marital status. Despite these trends, single women are less likely [than men] to access informal financial services and to be financially excluded.

## Marital Status Strands

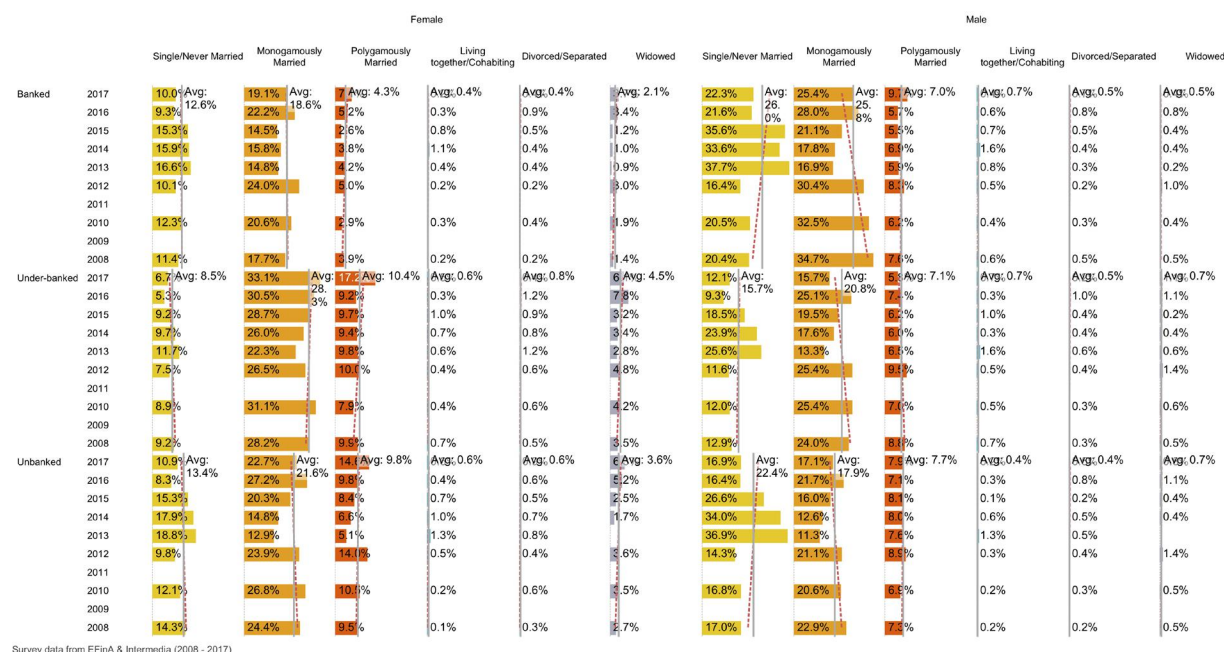
**Figure 2.47 Marital status distribution financial inclusion strands disaggregated by gender (source: compiled by author)**



## Marital Status Trends

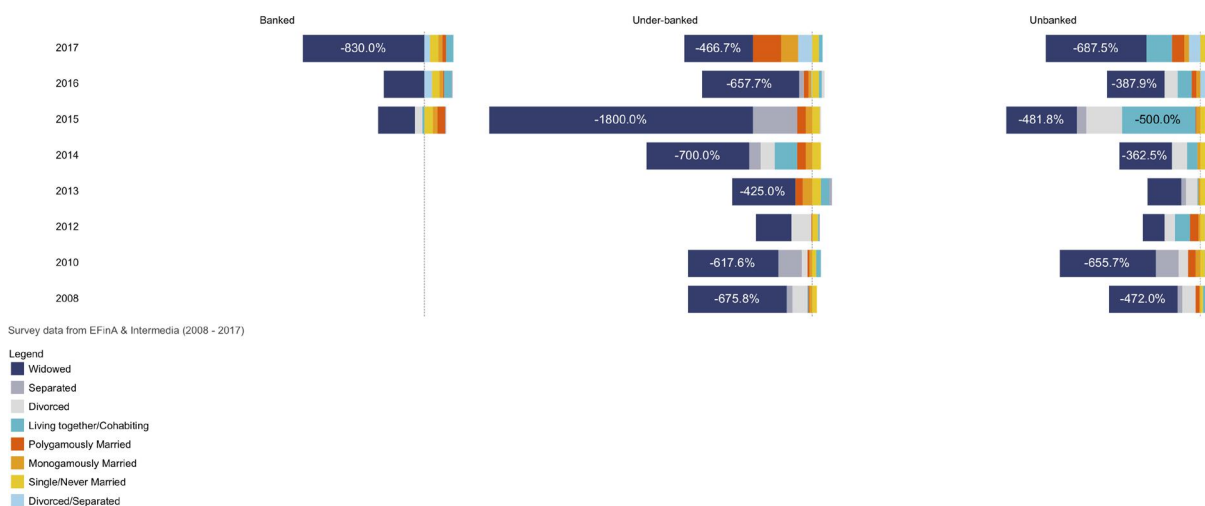
Figure 2.48 Marital status distribution financial inclusion trends disaggregated by gender

(source: compiled by author)



## Marital Status Gender Gap

Figure 2.49 Marital status distribution gender gap (source: compiled by author)



## Education

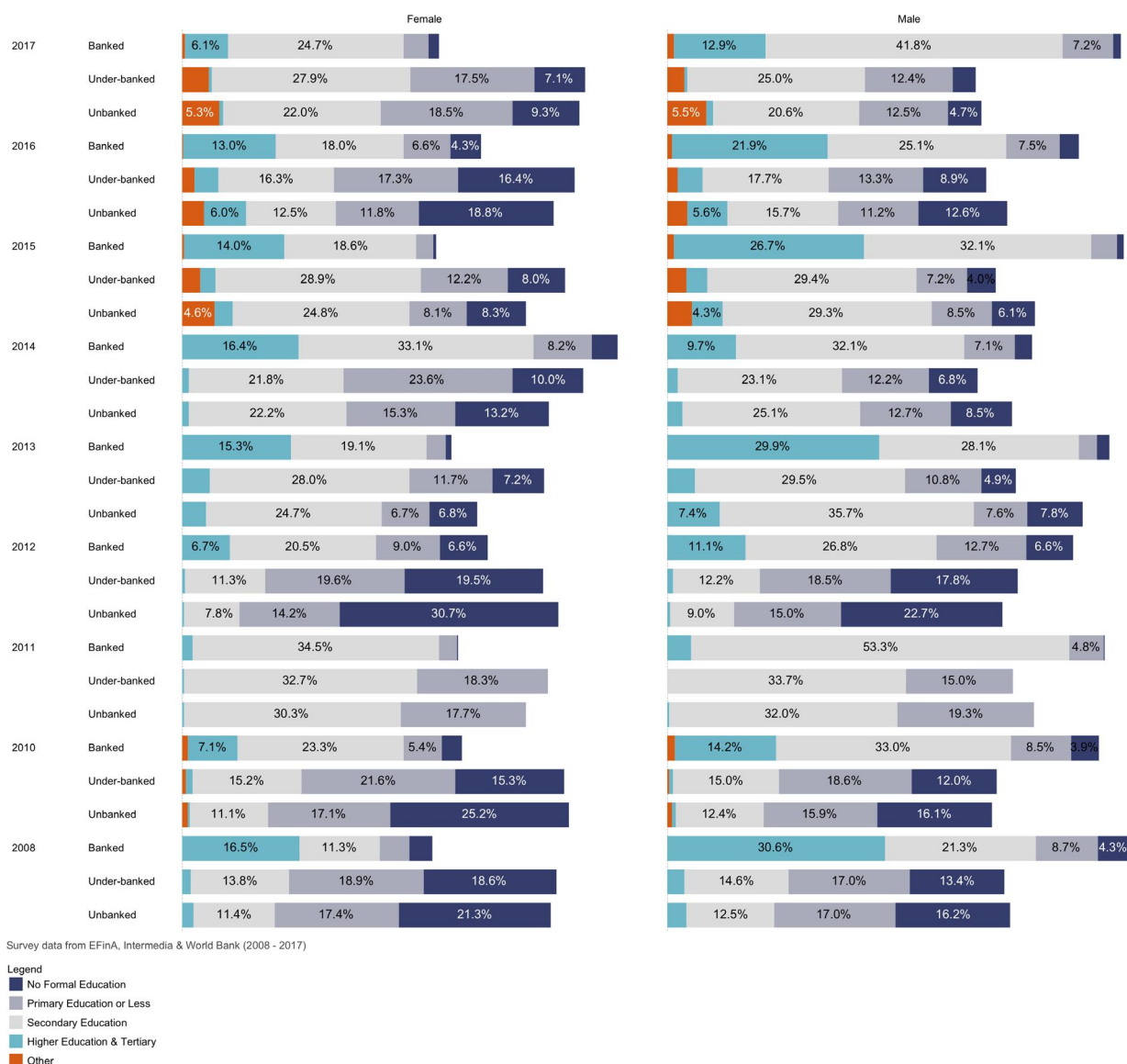
Compared with men, fewer educated women exist in the banked segment while the converse is the case in the under-banked and unbanked segments (Figure 2.50). In addition, a higher proportion of banked men are educated up to the tertiary level. Even though tertiary education levels are declining (Figure 2.51), the evidence shows that women across the customer segments seek primary and secondary education.



The gender gap illustration (Figure 2.52) highlights that women lacking formal education are more likely [than men] to access financial services. Women with tertiary education are less likely [than men] not to access financial services but are more likely [than men] to either access informal or no financial services. Even though the gap highlights that educational attainment presents little or no barriers for female adults accessing formal financial services, product design and communication strategies should take education levels into consideration.

## Education Strands

**Figure 2.50 Education attainment distribution financial inclusion strands disaggregated by gender**  
(source: compiled by author)



## Education Trends

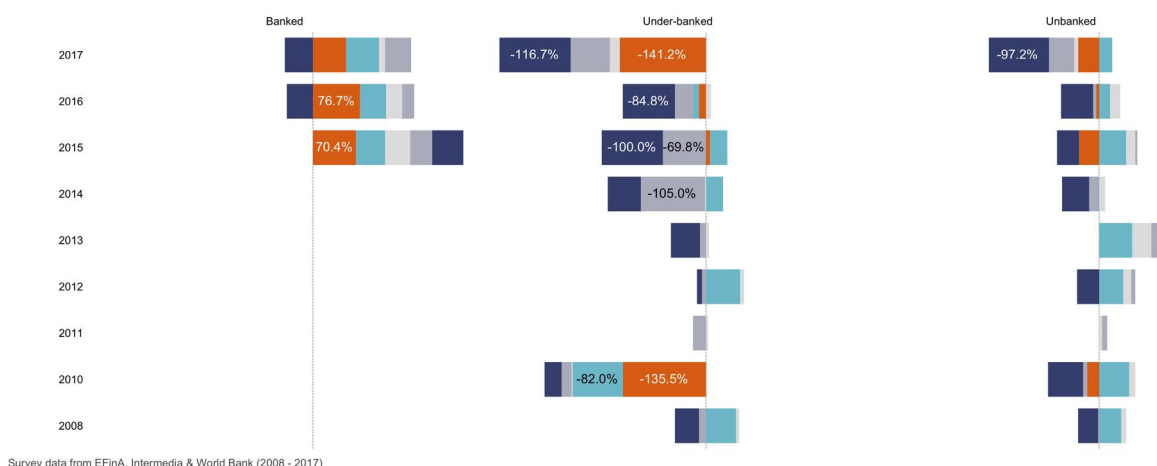
Figure 2.51 Education attainment distribution financial inclusion trends disaggregated by gender

(source: compiled by author)



## Education Gender Gap

Figure 2.52 Education attainment gender gap (source: compiled by author)



Legend

- No Formal Education
- Primary Education & Primary or Less
- Secondary Education
- Higher Education & Tertiary or Higher
- Other

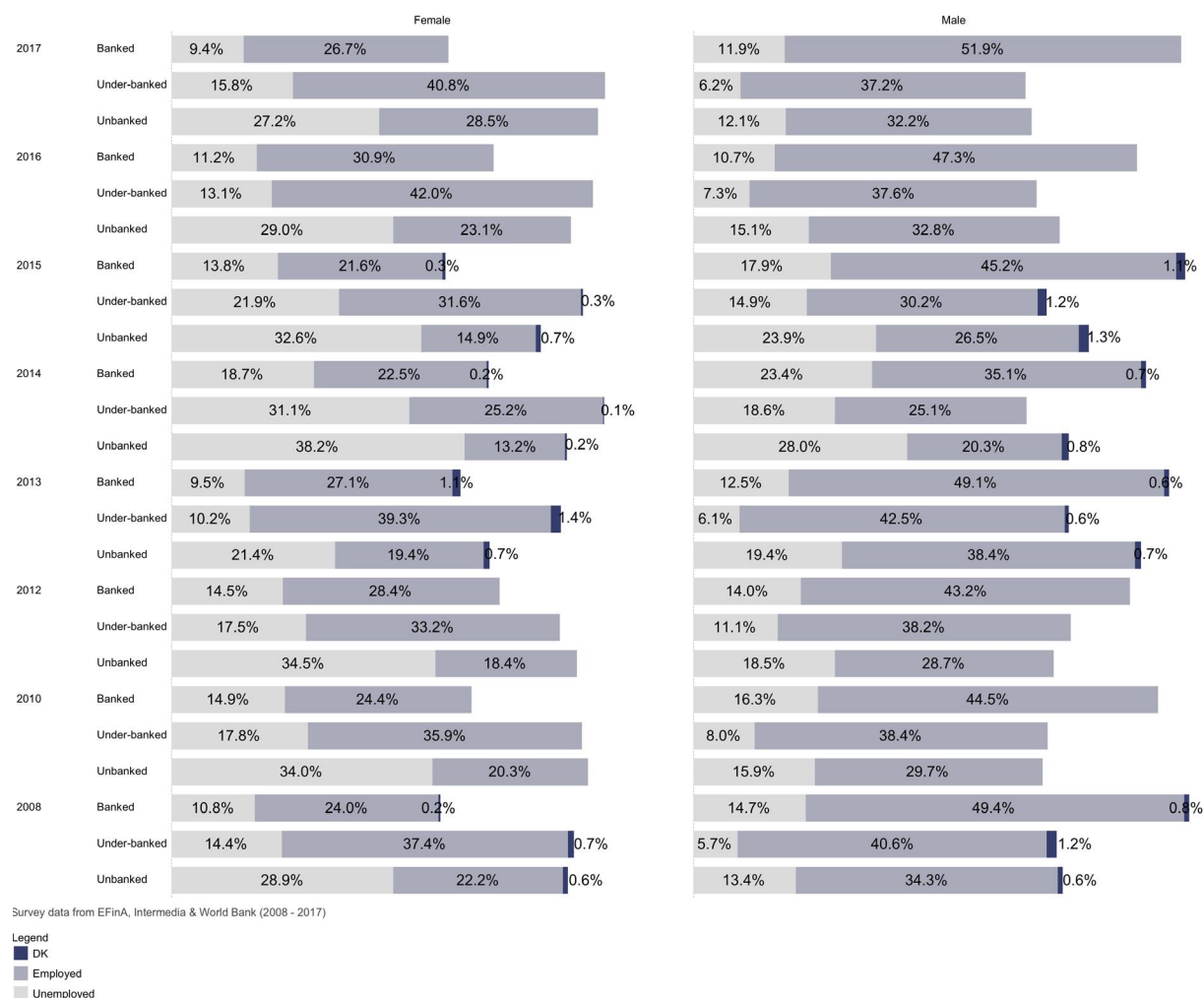
## Employment

Unemployment levels are higher among under-banked and unbanked women while employment is higher among banked men (Figure 2.53 and Figure 2.54), indicative of gender inequity. This is highlighted in the gender gap computations.

Insights from the gender gap sizing (Figure 2.55) shows that women with jobs are more likely [than men] to access formal financial services and less likely to fall into the financially excluded categorisation. But, a preference for informal financial services amongst women in employment exists.

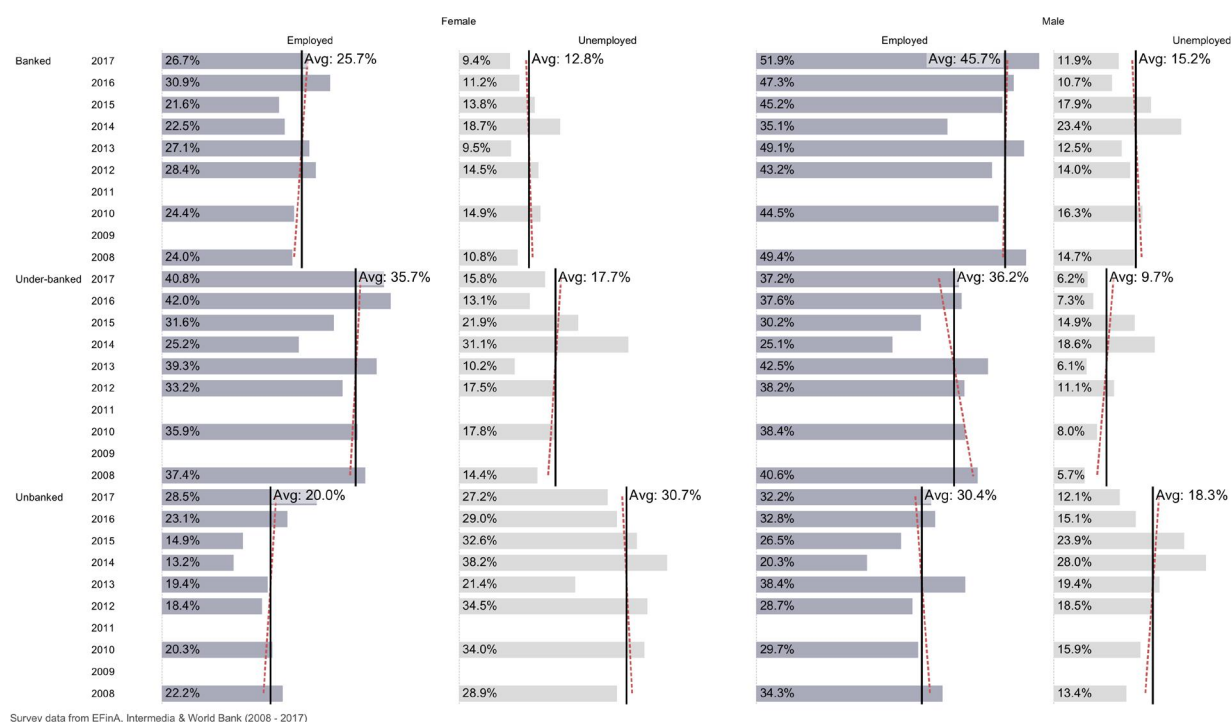
## Employment Strands

**Figure 2.53 Employment status financial inclusion strands disaggregated by gender (source: compiled by author)**



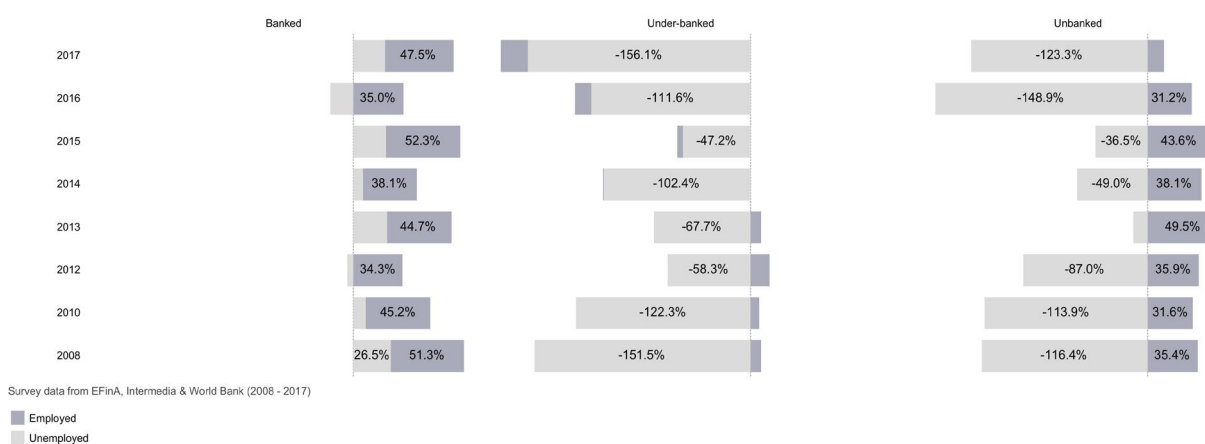
## Employment Trends

Figure 2.54 Employment status financial inclusion trends disaggregated by gender (source: compiled by author)



## Employment Gender Gap

Figure 2.55 Employment status gender gap (source: compiled by author)



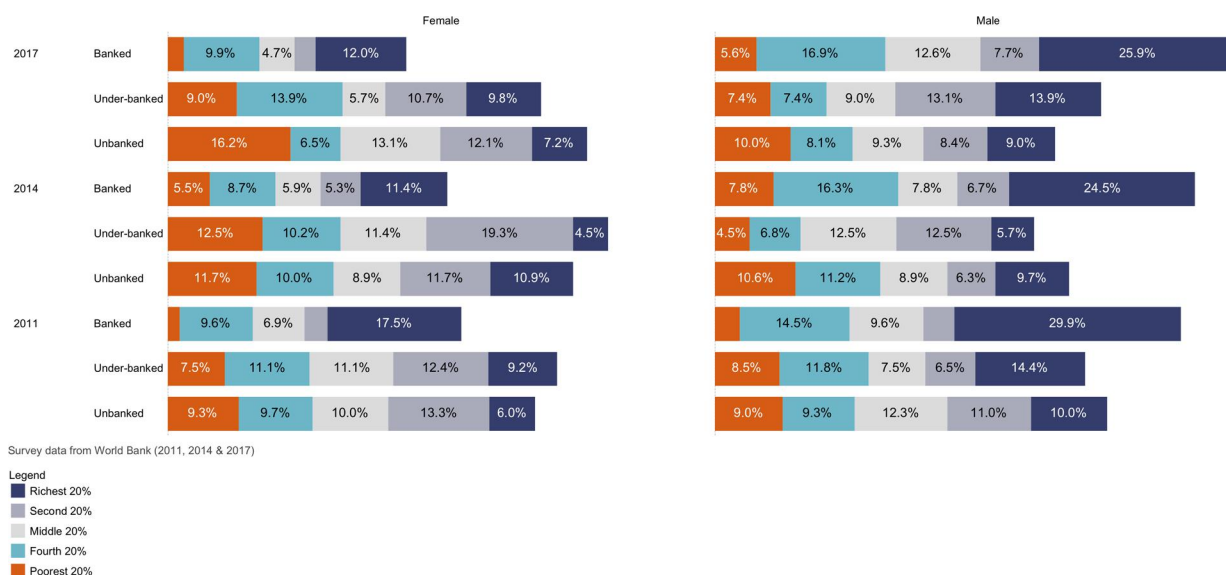
## Income

Figure 2.56 highlights the wealth distribution disparity among those who have fewer socio-economic opportunities (Figure 2.57). As illustrated in Figure 2.58, women are less likely [than men] to access formal financial services across the income brackets, a trend that challenges the hypotheses of income and financial inclusion and more factors inhibiting financial inclusion amongst women. In addition, women in the richest income segments are less likely [than men] to access informal financial services.

## Income Strands

Figure 2.56 Income distribution financial inclusion strands disaggregated by gender

(source: compiled by author)



## Income Trends

Figure 2.57 Income distribution financial inclusion trends disaggregated by gender (source: compiled by author)

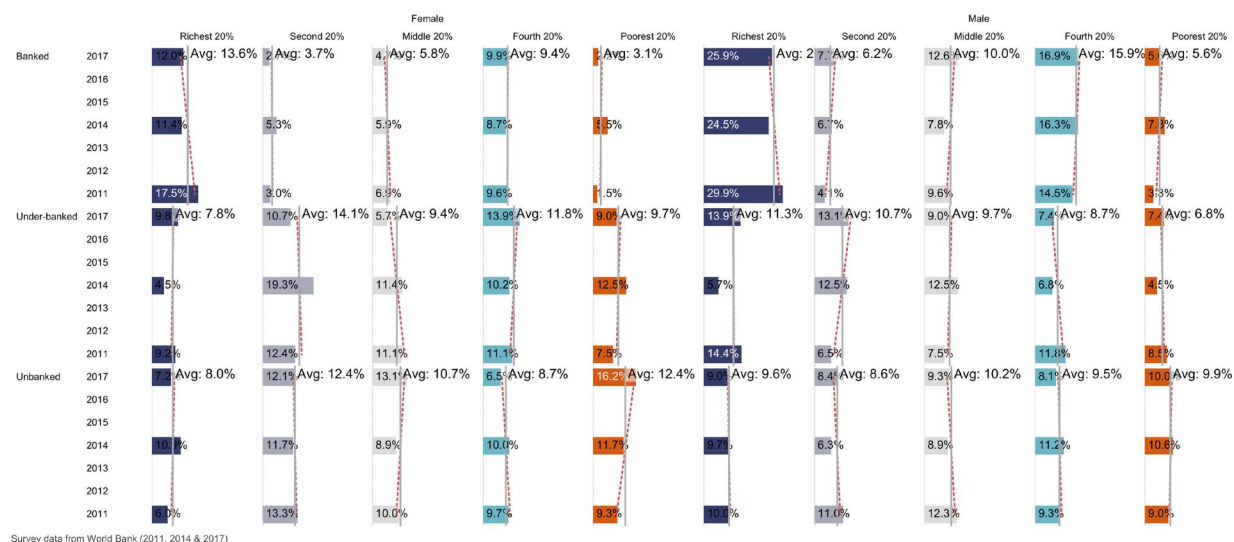
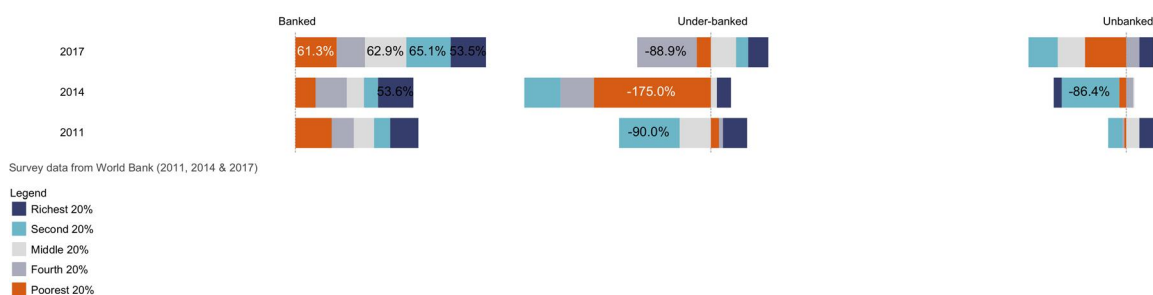


Figure 2.58 Income distribution gender gap (source: compiled by author)





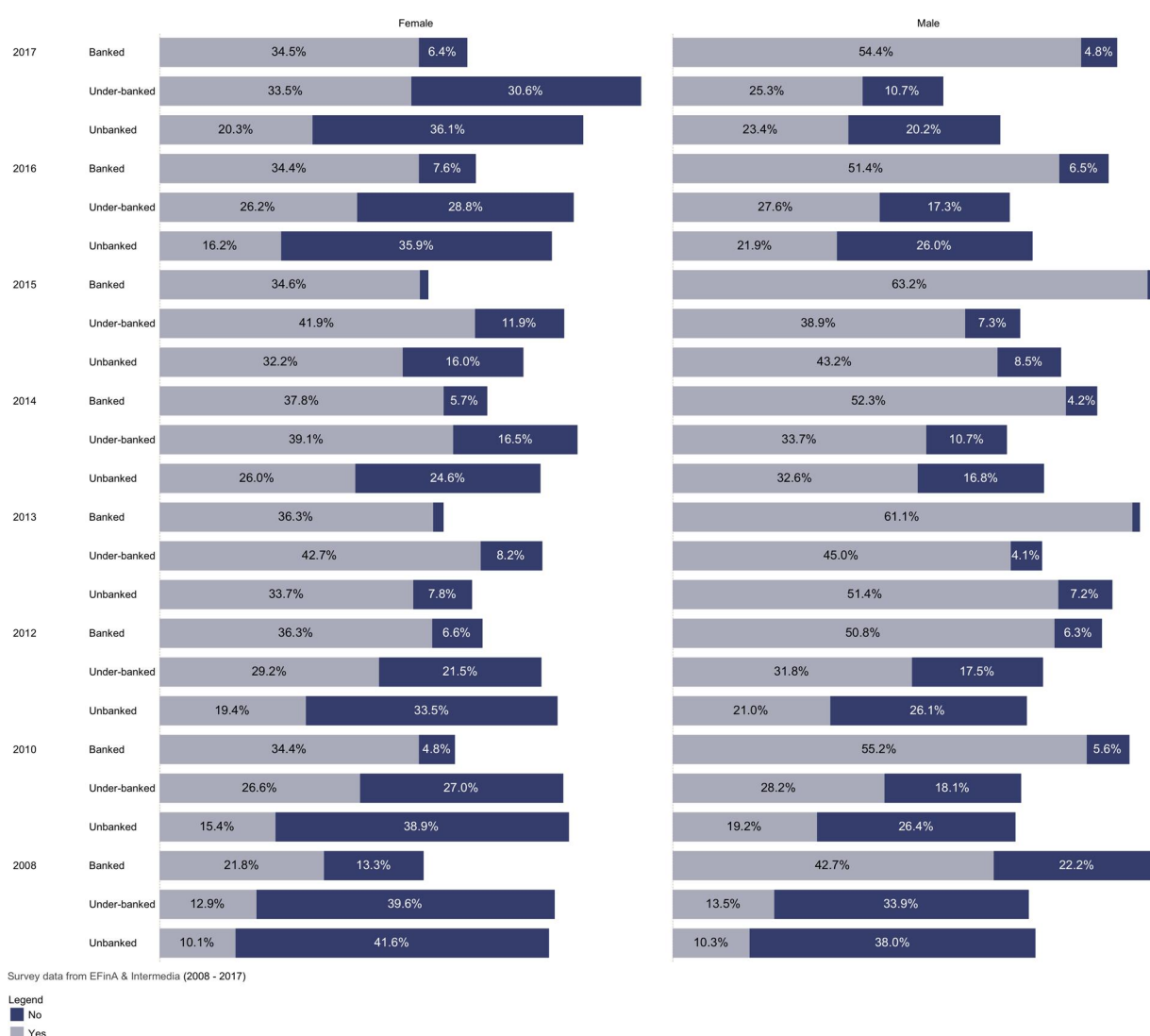
## Digital

### Phone Ownership

Phone ownership (Figure 2.59), though on the rise across the customer segments, is higher with under-banked and unbanked women. While the trends (Figure 2.60) show increasing patterns, women lack access to ubiquitous digital devices. The gender gap sizing chart (Figure 2.61) further highlights the impact of phone (device) ownership on financial inclusion.

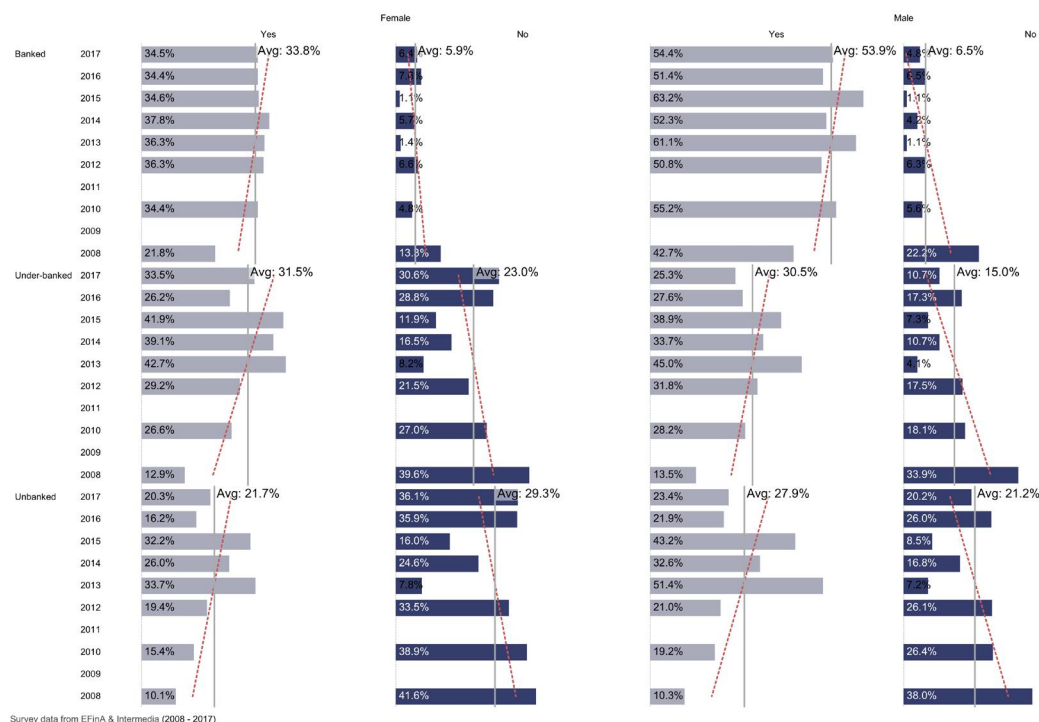
### Phone Ownership Strands

**Figure 2.59 Phone ownership distribution financial inclusion strands disaggregated by gender**  
(source: compiled by author)



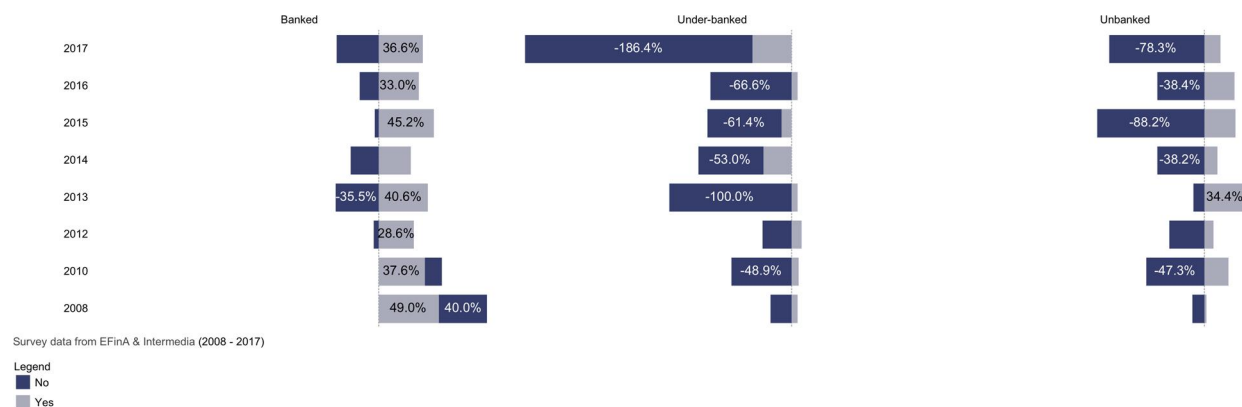
## Phone Ownership Trends

**Figure 2.60 Phone ownership distribution financial inclusion trends disaggregated by gender**  
(source: compiled by author)



## Phone Ownership Gender Gap

**Figure 2.61 Phone ownership gender gap (source: compiled by author)**



## Phone Access

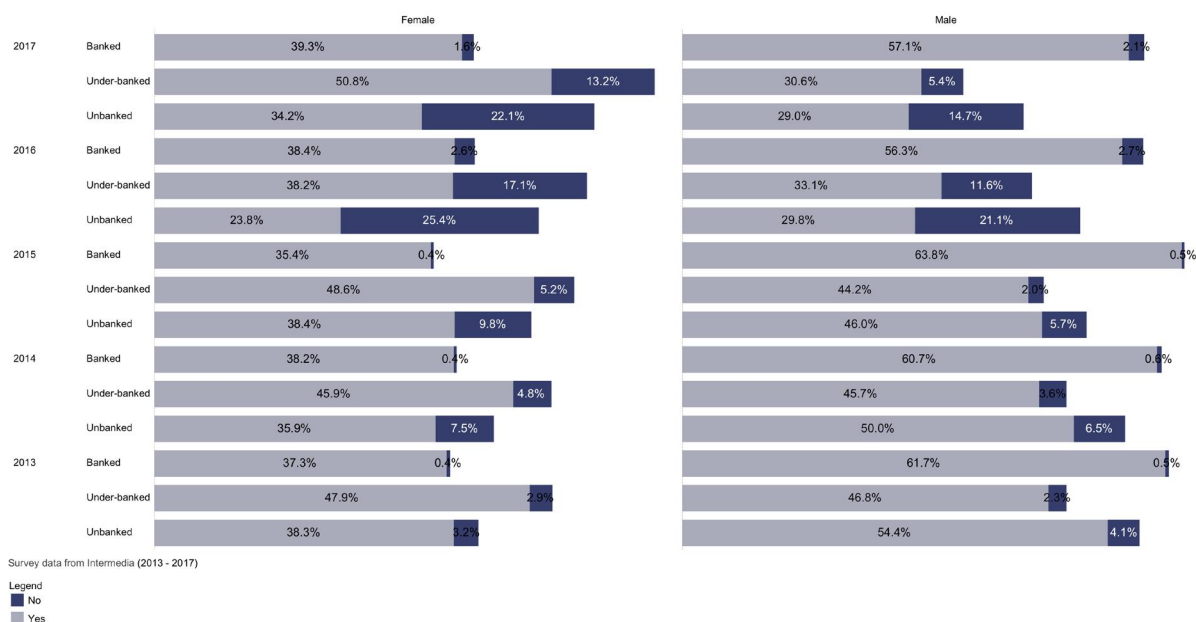
Corresponding with phone ownership trends, phone access is lower among women (Figure 2.62). However, with under-banked and unbanked women specifically, phone access is on the rise (Figure 2.63). Even though phone access does not inhibit access to formal financial services, lack of it is more likely to be a constraint for women accessing informal and other kinds of financial services. Hence, women without access to phones are more likely [than men] to access informal financial services or to be financially excluded (Figure 2.64).

The impact of this phenomenon on the under-banked is more significant as highlighted by the large gender gap sizing where women with or without phones are more likely [than men] to access informal financial services.

## Phone Access Strands

**Figure 2.62 Phone access distribution financial inclusion strands disaggregated by gender**

(source: compiled by author)



## Phone Access Trends

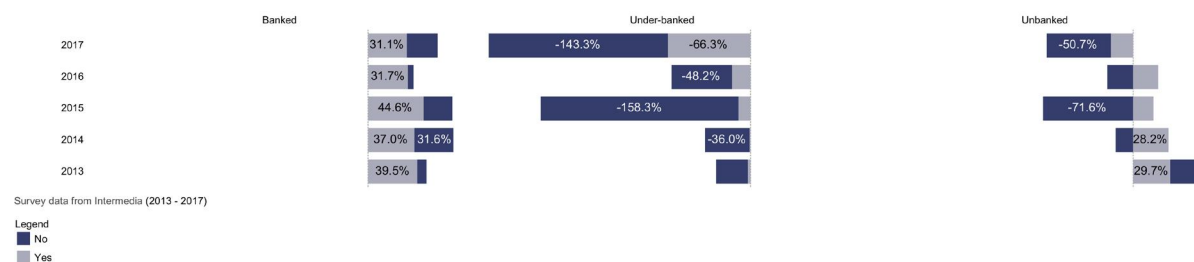
**Figure 2.63 Phone access distribution financial inclusion trends disaggregated by gender**

(source: compiled by author)



## Phone Access Gender Gap

Figure 2.64 Phone access distribution gender gap (source: compiled by author)

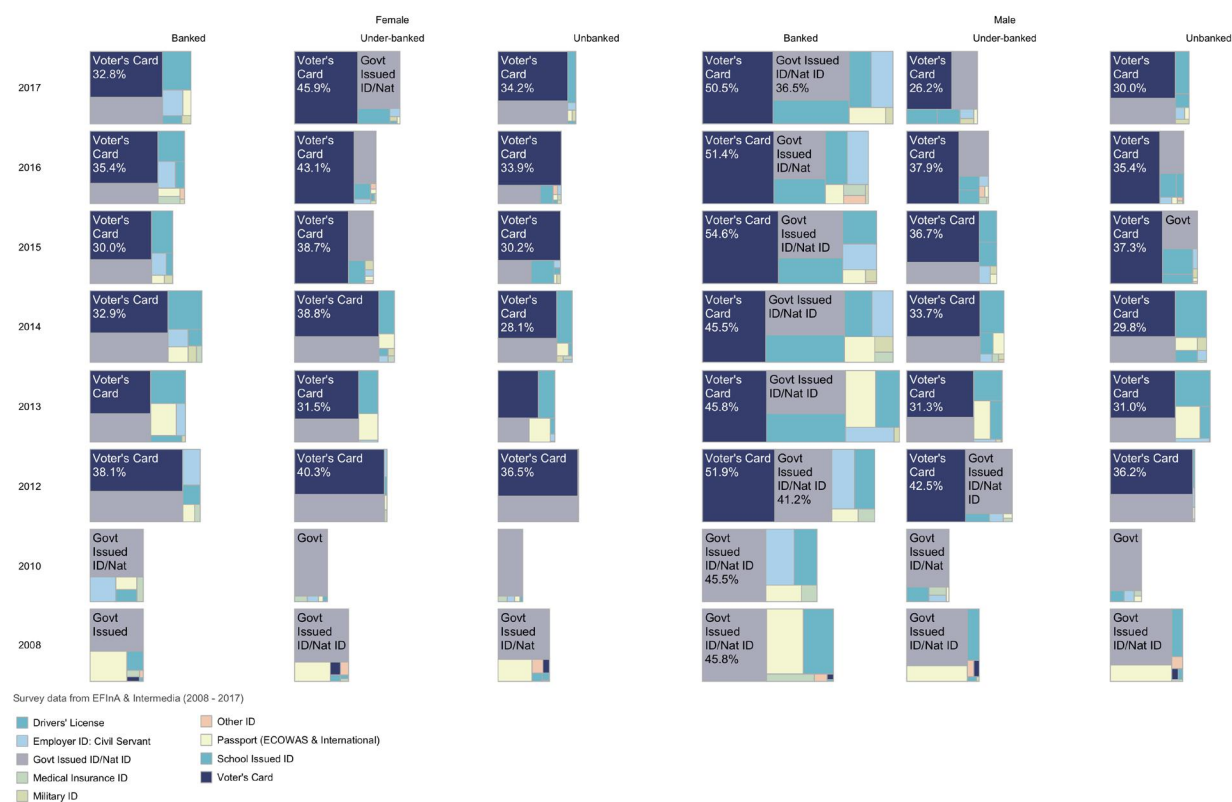


## Identity

Despite the plethora of identity documents, the voter's card remains dominant among adult Nigerians, with ownership of the national identity document on the rise (Figure 2.65). Banked men with identity documents are more pervasive than banked women across the identity documents categories. Among the under-banked and unbanked populations, more women have voter's cards and national identity documents (Figure 2.66). The gender gap (Figure 2.67) shows that women with voter's cards and national identity documents are more likely [than men] with similar identity documents to access informal financial services. Hence, without the constraints of identity documents, financial service providers should target these women with the right financial products.

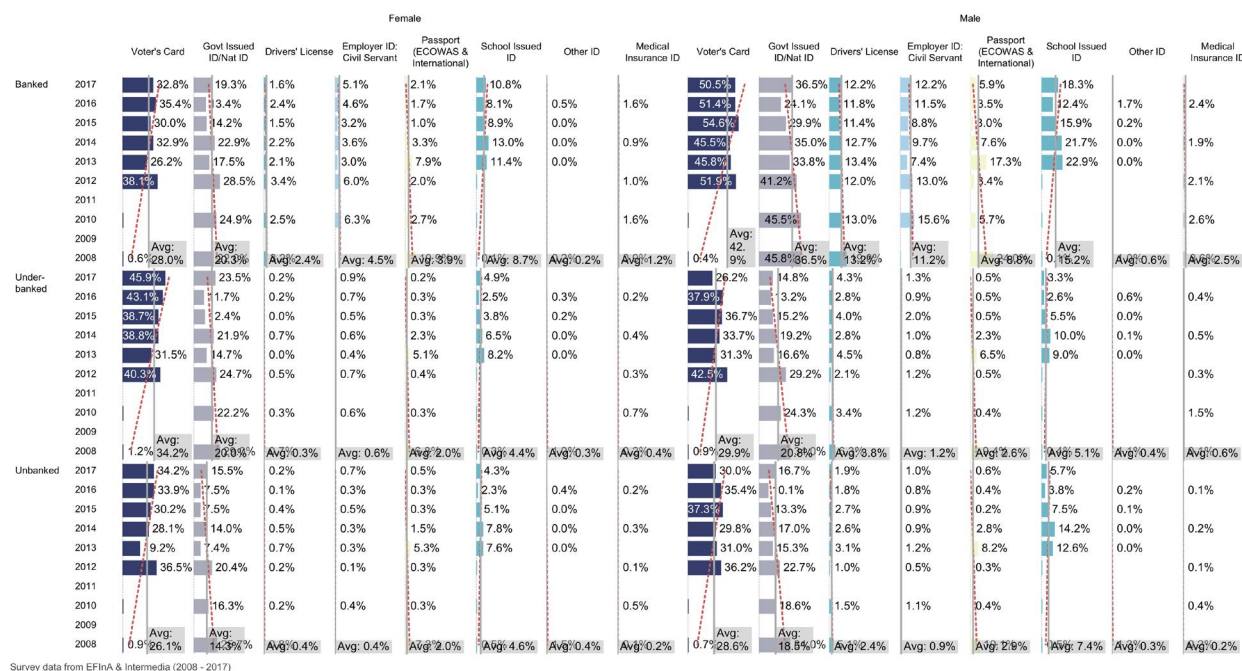
## Identity Treemap

Figure 2.65 Identity document financial inclusion treemap disaggregated by gender (source: compiled by author)



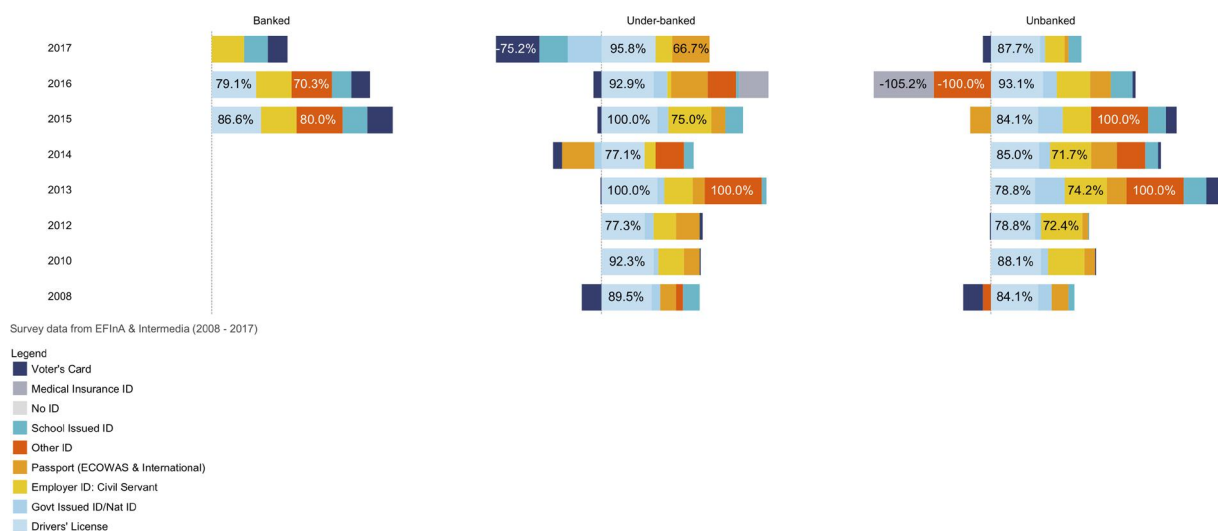
## Identity Trends

Figure 2.66 Identity document financial inclusion trends disaggregated by gender (source: compiled by author)



## Identity Gender Gap

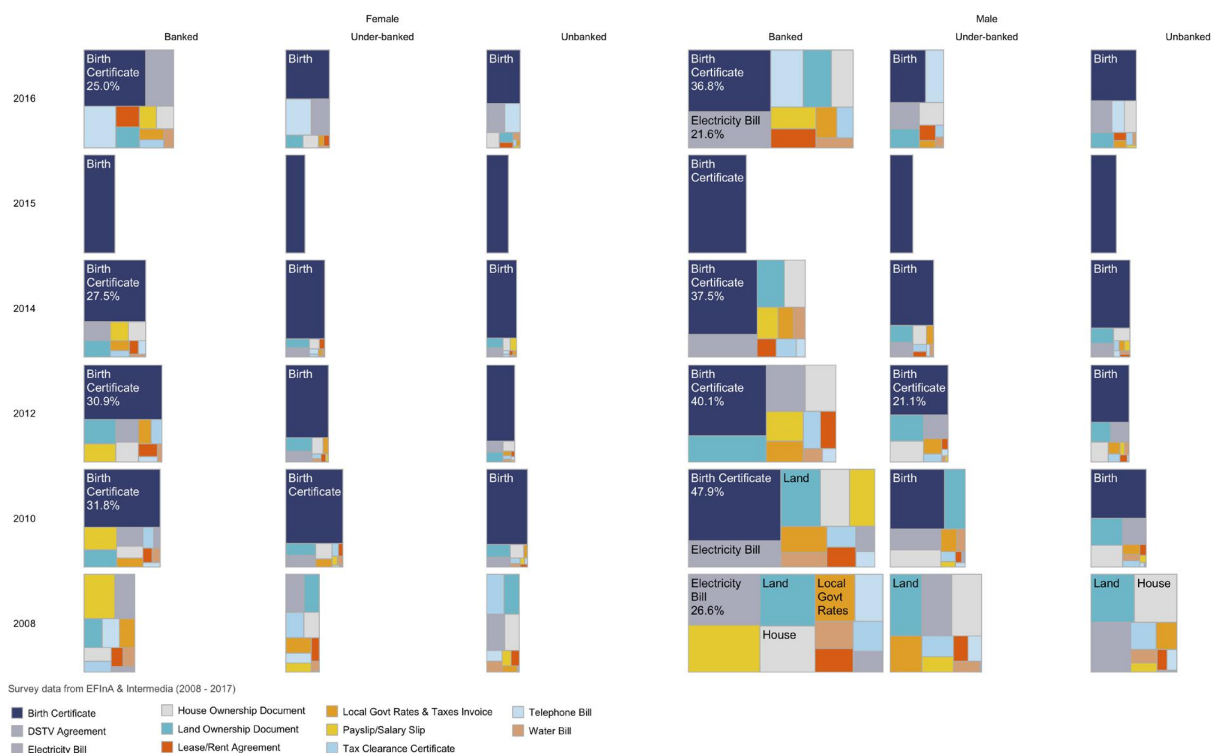
Figure 2.67 Identity document gender gap (source: compiled by author)





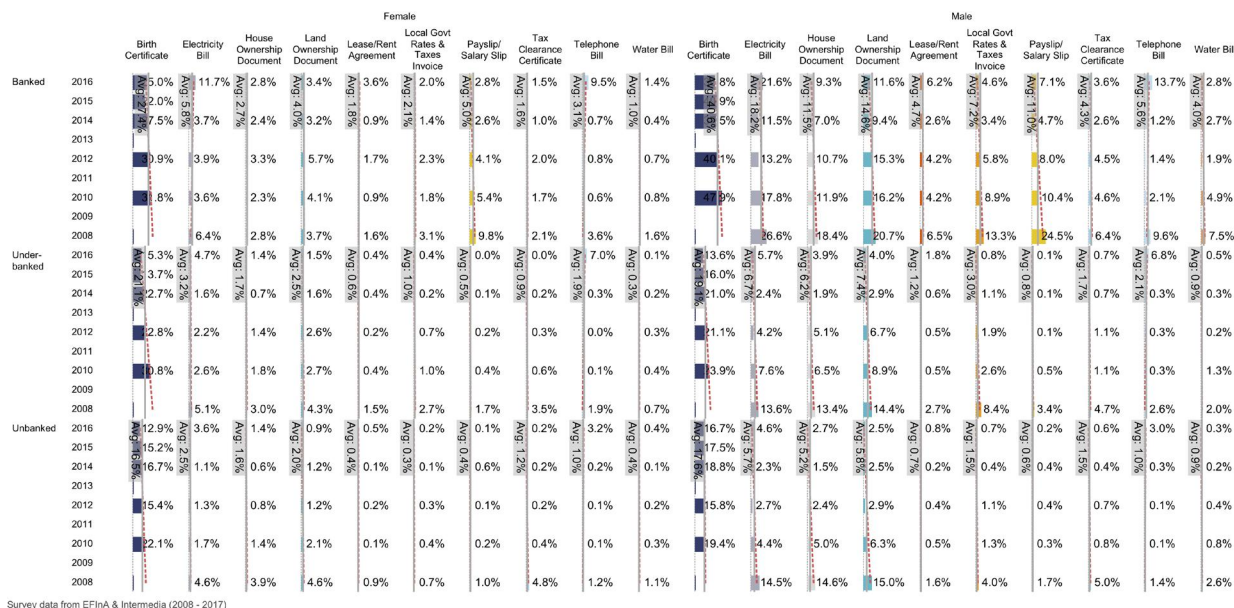
## KYC Documents

Figure 2.68 KYC document financial inclusion treemap disaggregated by gender (source: compiled by author)



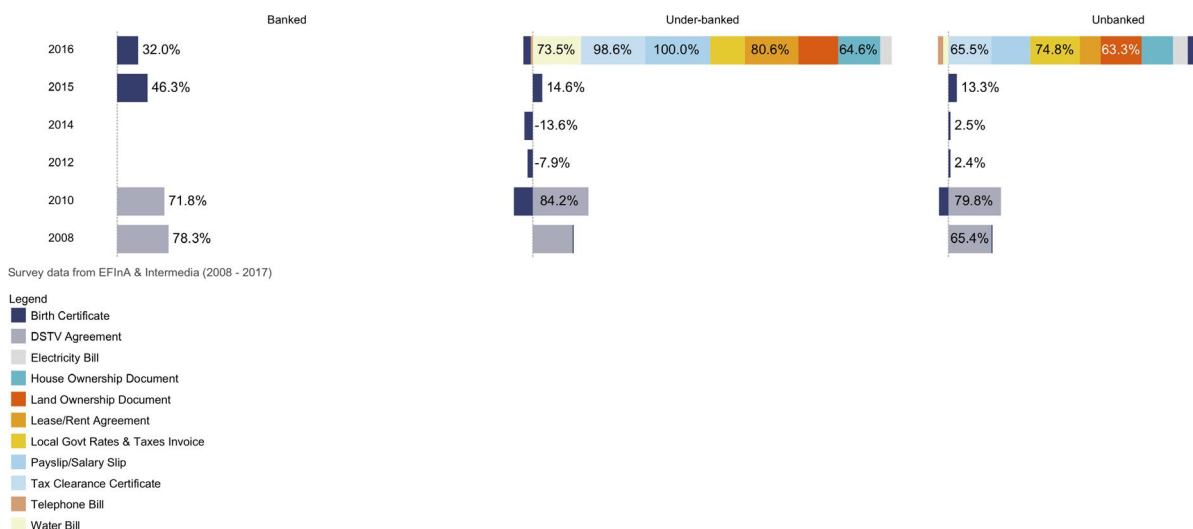
## KYC Trends

Figure 2.69 KYC document financial inclusion trends disaggregated by gender (source: compiled by author)



## KYC Gender Gap

Figure 2.70 KYC document gender gap (source: compiled by author)

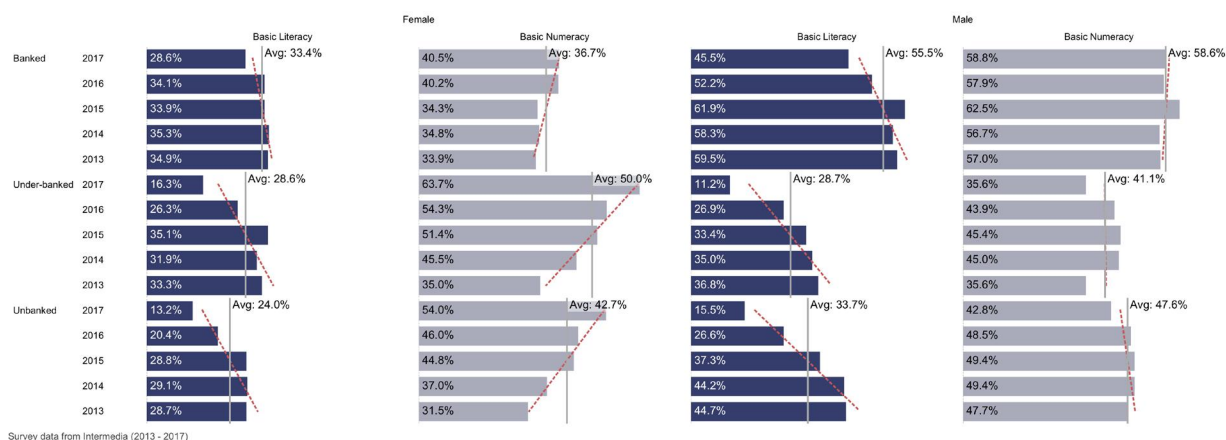


## Basic Literacy

Financial inclusion rates are higher among men with basic literacy and numeracy skills than among women with these skills (Figure 2.71). Basic literate and numerate men access and use formal financial services more than women with the same skills. However, the majority of adults that access and use informal financial services are women with basic numeracy skills. In addition, more women than men with basic literacy skills are under-banked. Again, more than half of the financially excluded adults in Nigeria are women with basic numeracy skills. The gender gap chart (Figure 2.72) shows that men with basic literacy and numeracy skills are more likely than women with these skills to access formal financial services, while women with the same skills are more likely [than men] to access informal financial services. This suggests that a substantial percentage of women that use informal financial services have the requisite basic numeracy and literacy skills and will only need targeted financial literacy skills and the right financial products to bring them into the formal financial system.

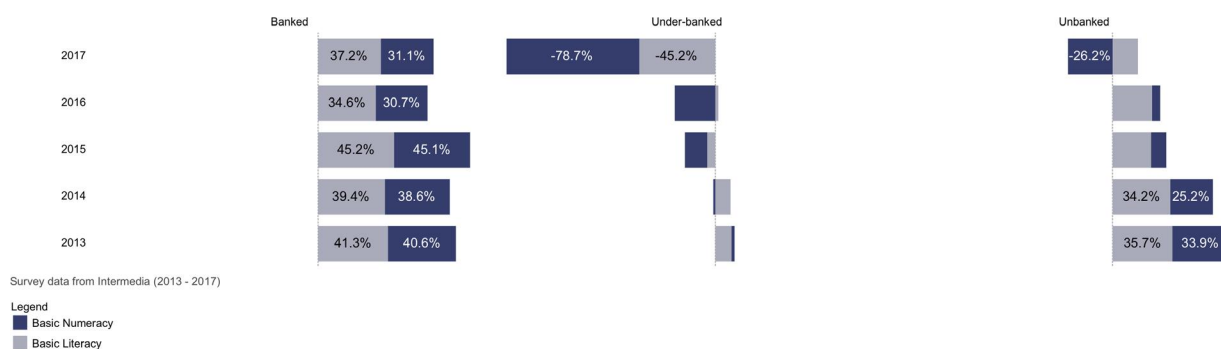
## Basic Literacy Trends

Figure 2.71 Basic literacy financial inclusion trends disaggregated by gender (source: compiled by author)



## Basic Literacy Gender Gap

Figure 2.72 Basic literacy gender gap (source: compiled by author)

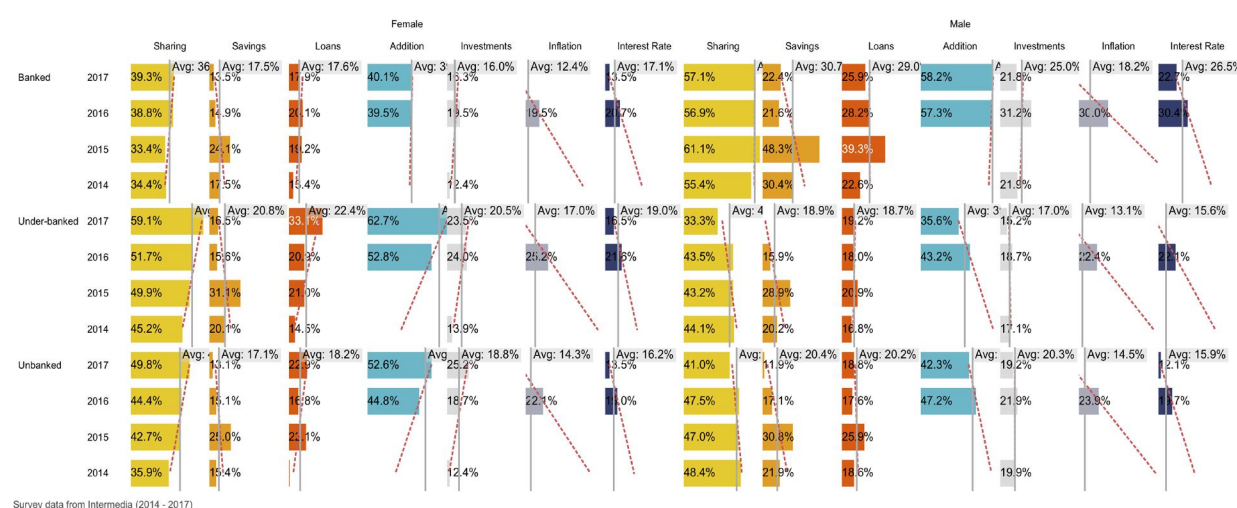


## Financial Literacy

Men with financial skills make up the higher share of the banked adult population (Figure 2.73). In the banked segment, men are more financially savvy with knowledge about interest rates, inflation, investments, loans, savings and sharing. But, in the under-banked and unbanked segments, women are less financially savvy. In the gender gap analysis (Figure 2.74), financially literate men are more likely than financially literate women to access formal financial services. On the flip side, financially literate women are more likely than men to access informal financial services. Providers should develop and target these underserved but financially literate women with financial products that meet their needs. There is still a need to offer financial literacy interventions for women due to low financial literacy levels.

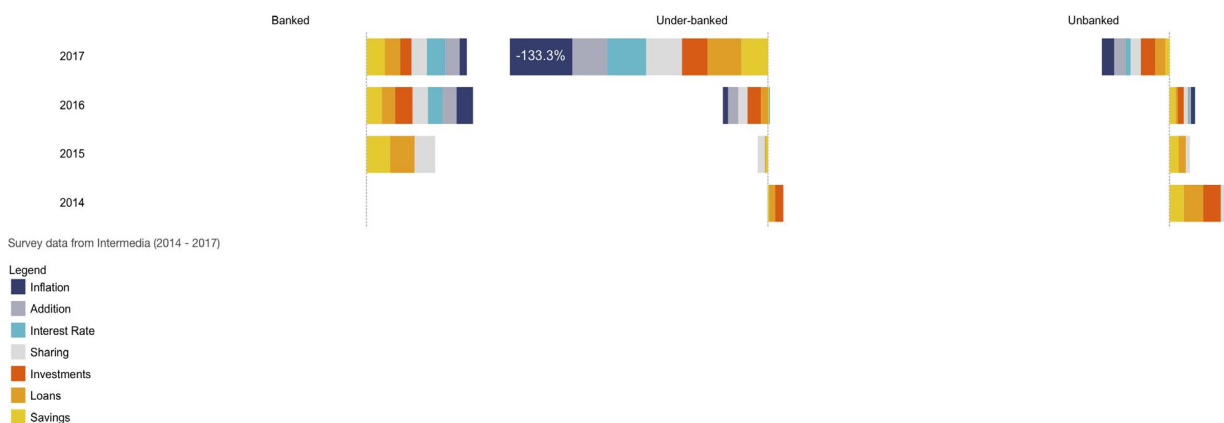
## Financial Literacy Strands

Figure 2.73 Financial literacy financial inclusion trends disaggregated by gender (source: compiled by author)



## Financial Literacy Gender Gap

Figure 2.74 Financial literacy gender gap (source: compiled by author)



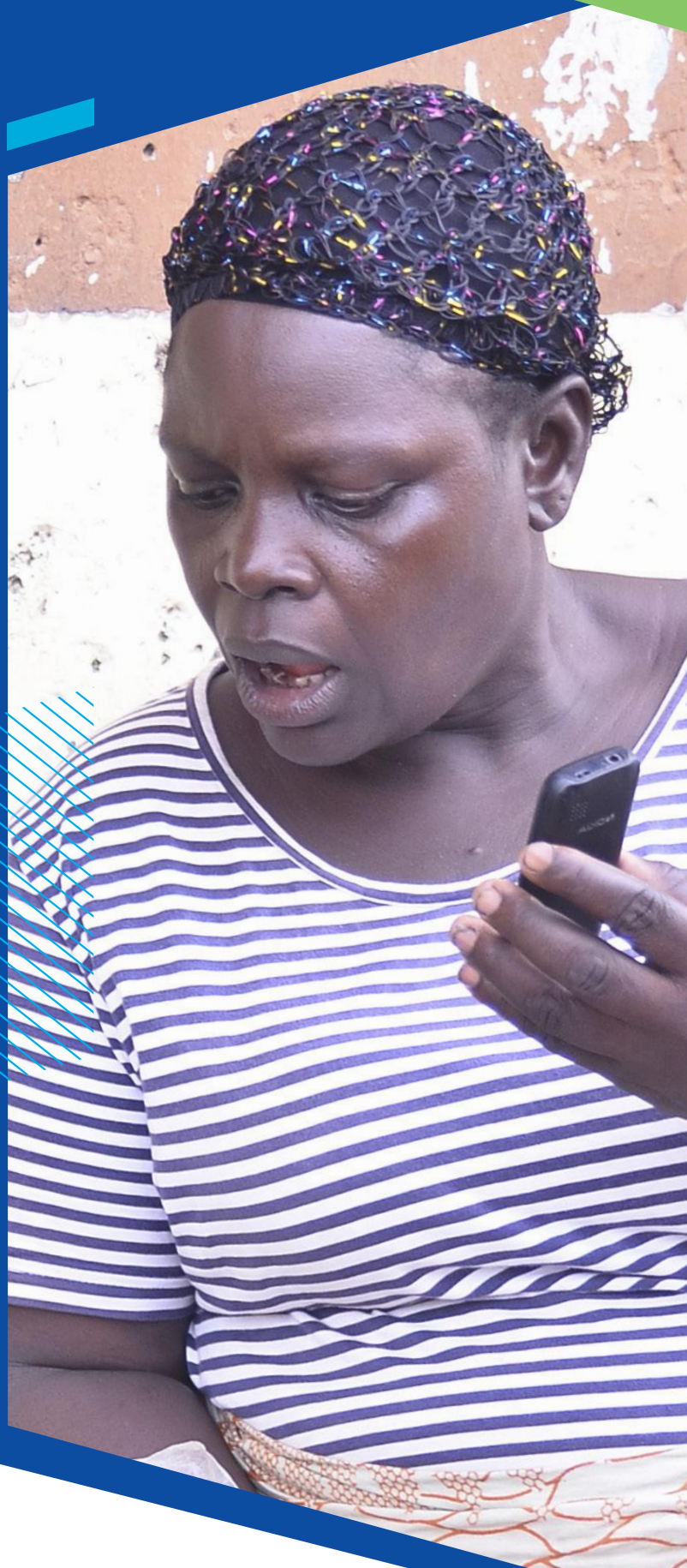


# CHAPTER THREE

STATE OF THE  
MARKET REPORT

/// 2018

DIGITAL FINANCIAL SERVICES







# **NEXUS BETWEEN FINANCIAL INCLUSION AND ECONOMIC DEVELOPMENT**





# OVERVIEW

## INTRODUCTION & BACKGROUND

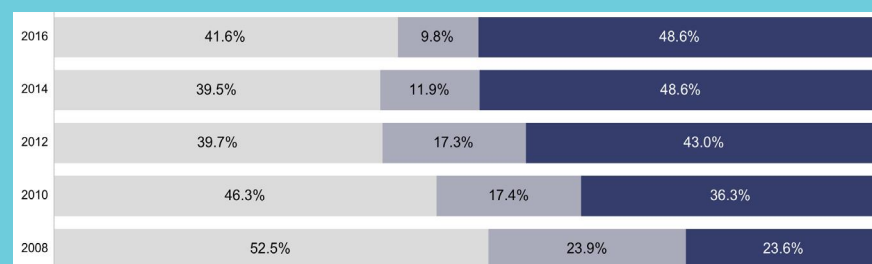
Despite the significant innovations and economic revolutions across many nations of the world, there still persists a severe gap in access to financial services. The 2017 World Bank Findex Report revealed that 1.7 billion adults remain unbanked, that is, they lack access to quality, affordable financial services. Furthermore, 4 percent of the 1.7 billion adults are Nigerian.

Financial inclusion, defined as greater access to and use of affordable financial services, has gained significant attention on the international scene since the turn of the millennium, particularly because of its potential to enhance inclusive and sustainable growth. Financial inclusion includes the access to and utilisation of quality financial services at affordable prices, in a convenient manner and delivered by a range of providers in a stable and competitive market (Financial Inclusion 2020 Progress Report, 2015).

Some researchers have identified financial access as an important policy tool that can be employed by government in stimulating growth given its ability to facilitate efficient allocation of productive resources, thus reducing the cost of capital. An inclusive financial system is now widely recognised as a policy priority in many countries with initiatives coming from the financial regulators, the government and the banking industry.

Financial inclusion (and exclusion) has significant impact on the welfare of all stakeholders within an economy – individuals, firms and communities. Financial products and services enable citizens to meet their needs as it facilitates day-to-day living and helps families and businesses plan for everything - from long-term goals to unexpected emergencies. This chapter widens the lens of financial inclusion reporting, providing macro-level insights and policy implications based on explorations of the relationships between financial inclusion and socio-economic indicators such as job creation and other macro-economic indicators like economic growth and income, liquidity, fiscal policy and cost of funds. Finally, the macro-economic impacts of digitising government payments are also presented.

Figure 3.1 National financial inclusion trends (source: compiled by author)



Data from EFInA (2008 - 2016)

Legend ■ Formal Financial Inclusion ■ Informal Financial Inclusion ■ Financial Exclusion



# NEXUS OF FINANCIAL INCLUSION & ECONOMIC DEVELOPMENT

## ECONOMIC GROWTH & INCOME

### Introduction

Economic growth measures the relative change in a country's output (production of goods and services). Economic growth measures outputs across periods, using a value-added approach.

The most used measure of national economic output is the gross domestic product (product (GDP) which measures the monetary value of all the finished goods and services produced within a country's borders within an accounting or financial year. The 'real GDP' focuses on the actual volume of output adjusted for inflation. Other variables that aid economic growth include: the increase in capital stock, advances in technology, and improvement in the quality of labour force. In recent years, the Sustainable Development Goals (SDGs) have brought environmental and social concerns into focus as essential considerations when measuring growth and development of nations.

### Economic Growth & Income Trends

Figure 3.2 shows that nominal gross output diminished between 2011 and 2015, but increased in 2016. Between 2011 and 2014, real gross output was stable around 4 percent but has declined since 2014 when the economy began to have consistent negative growth in real GDP.

Discussions on economic growth are incomplete without examining sectorial sources of goods and services produced. There are three broad output classifications:

- a) Primary (extractive) sectors: outputs derived from natural endowments (agriculture and mining)
- b) Secondary sectors: industries that transform natural endowments into other states (manufacturing, construction and utilities);
- c) Tertiary/service sectors: industries that support production processes.

Reported in Figure 3.3 is the trend in the different sector classifications between 1981 and 2016. Between 1981 and 2003, the extractive sector was the most dominant in Nigeria, followed by the service sector and the processing industry. From 2007, the structure and composition of outputs changed, with the service sector as the dominant output source, followed by a declining extractive sector, and a flat secondary sector.

Figure 3.4 breaks down real disposable income. National disposable income (NDI) is the sum of:

1. Domestic factor income – represented by employee compensation (salaries and wages), operating surplus and consumption of fixed capital;

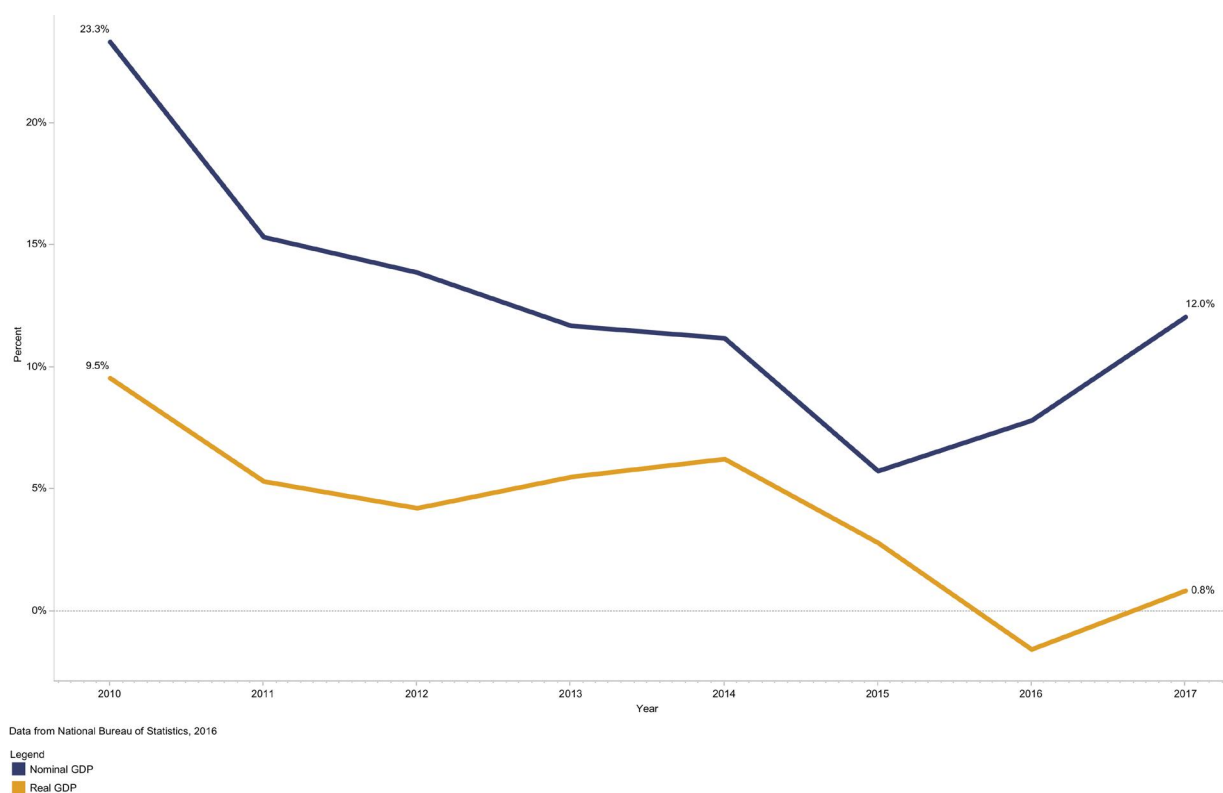
1. Income from abroad (net compensation of employees, net property income and other income and net other transfers from the rest of the world); and
2. Net business taxes.

Domestic factor incomes are accountable for about 96 percent of NDI. The external income reduced disposable income by roughly 4 percent each year between 2010 and 2015 while other transfers from the rest of the world brought in over 6 percent of NDI as shown in Figure 3.4. Decomposing the figures further shows that 'operating surplus' accounted for 69 percent of inflation-adjusted disposable income.

The average growth in real income was 5.22 percent between 2010 and 2015 while disposable income grew by 6.01 percent over the same period. Significant improvements of 'net other transfers from the rest of the world' were clear in 2014 and 2015. Reviewing the growth performance of various components of disposable income shows that while domestic factor income rose at an annual average of 4.54 percent, the wages and salaries sub-component contracted at an annual average of 1.9 percent – and shrank by almost 9 percent in 2015. In contrast, the operating surplus sub-component showed a yearly increase of 6 percent.

## Economic Growth Chart

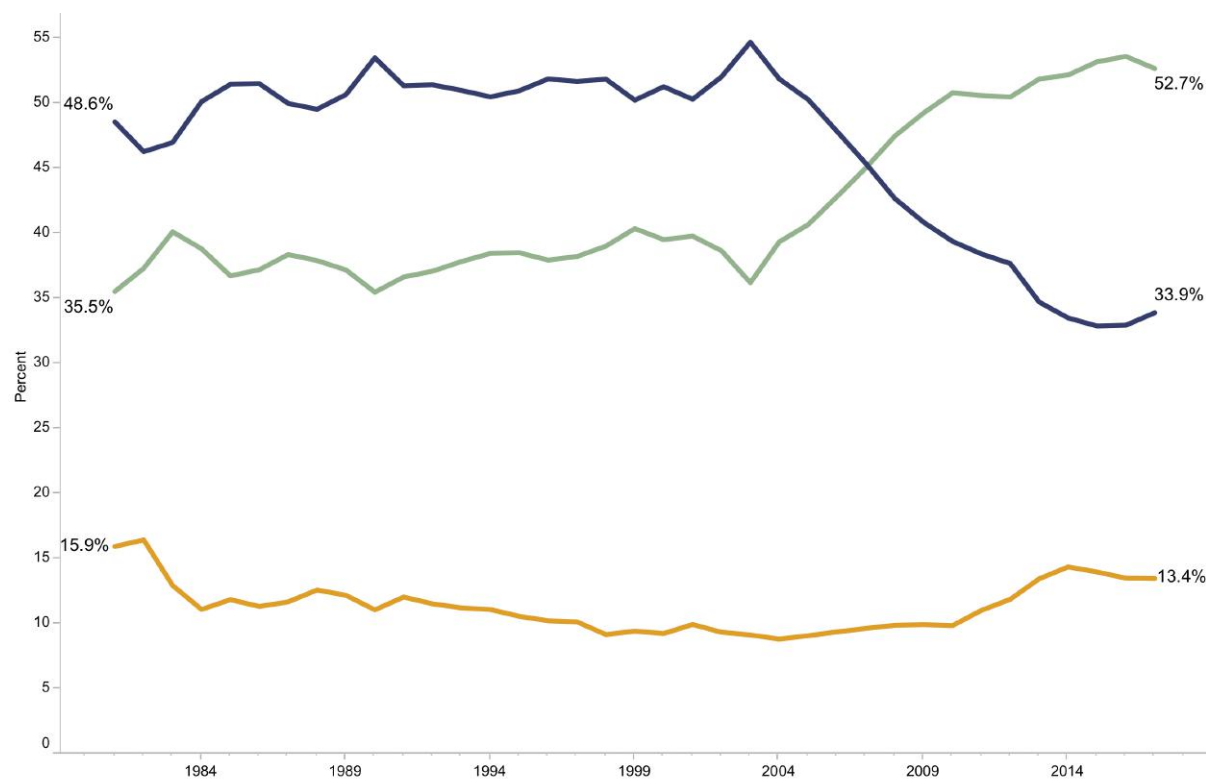
Figure 3.2 Economic growth (source: compiled by author)





## GDP by Output Sector

Figure 3.3 GDP by broad output sectors (source: compiled by author)

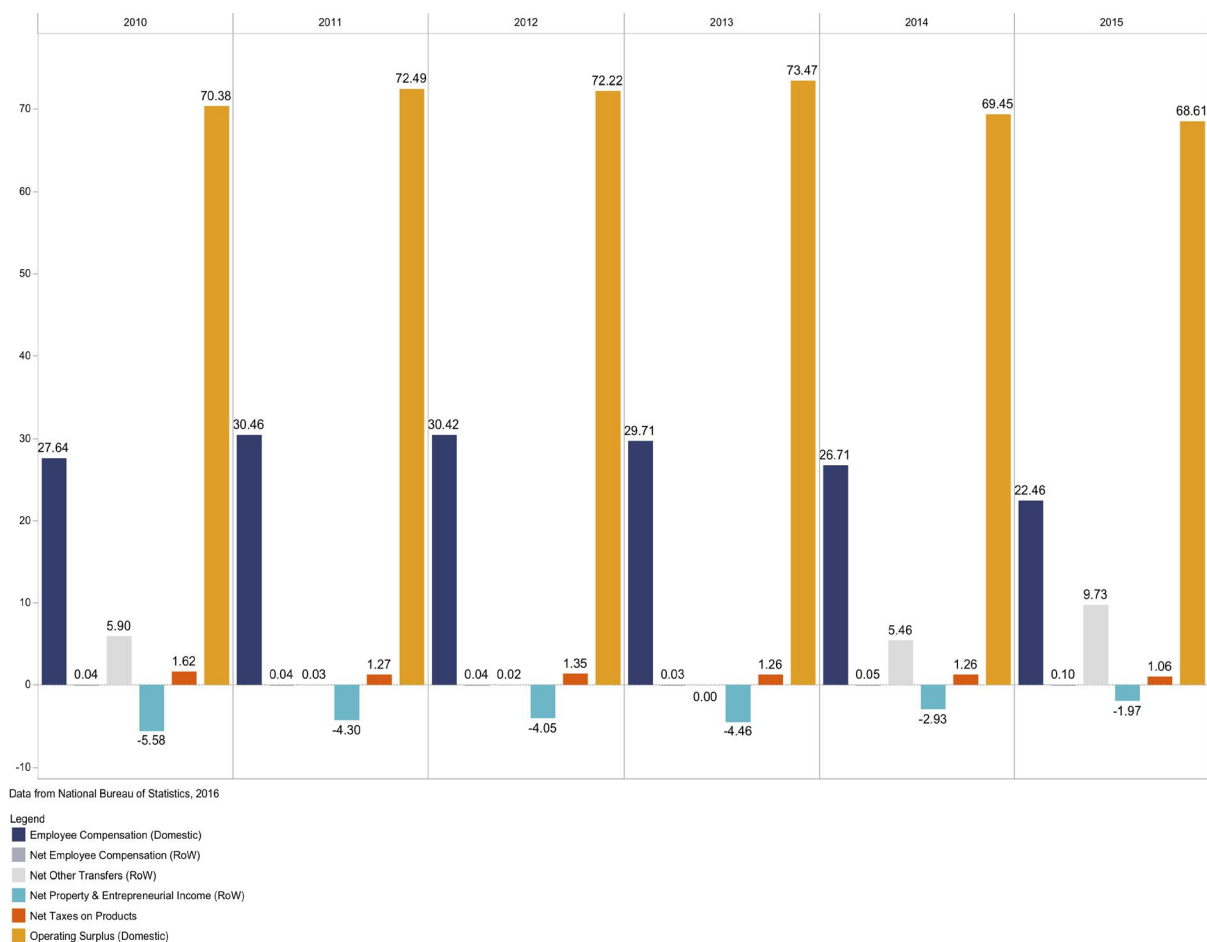


Data from National Bureau of Statistics, 2016

Legend  
■ Extractive/Primary  
■ Processing/Secondary  
■ Services/Tertiary

## Real Disposable Income Composition

Figure 3.4 Composition of real disposable income (source: compiled by author)



## Summary

Improvements in the provision and use of financial services will mobilise loanable funds, improve access to credit and may lower the cost of credit. These will lead to economic growth and higher income. Higher levels of investment will increase employment, income, savings and transaction volumes and thus increase the use of financial services.

## Recommendations:

- Policies and interventions that reinforce and sustain the drive towards improving financial inclusion and contribute to job creation. This drive will foster sustained economic growth and efficiency in liquidity management.
- All tiers of governments should prioritise policies and interventions that raise lower- and middle-class income and close the inequality gap.
- Recognise informal financial institutions as essential to financial inclusion and seek mechanisms to incorporate them into the financial services ecosystem.
- Expand the financial services portfolio beyond banking and payments.
- The government should drive infrastructure diffusion in the financial sector.

# GOVERNMENT PAYMENTS

## Introduction

Through government payment types, Nigeria's payment system comprises government payments recipients and the channels through which the government disburses payments. Each year, the federal, state and local governments outline proposed revenue and expenditure figures for the fiscal year. Payment flows - government-to-government (G2G), government-to-business (G2B) and government-to-person (G2P) - include direct disbursement of salaries and wages, grants, payment for goods and services rendered and subsidies. The payment channels used include traditional (non-electronic) means such as cash or cheque or electronic platforms like card payments (credit and debit), internet banking, point of sales transfers, mobile money, electronic fund transfers and instant payment.

## Government Payments Trends

Government spending across three tiers - federal, state and local (see Table 3.2) shows the decomposition of government spending in billions from 2011 to 2017. On the average N7,675.57 billion (about 74 percent) is recurrent expenditure and represents the lion's share of the total spend. Capital spending and transfer payments over the same period account for N2,629.50 billion (26 percent) and N359.89 billion (4 percent) of average total expenditure, respectively.

More emphasis on transfer payments which have a direct impact on the use of financial services will advance government payments and the maximisation of the social welfare of the state. The conditional cash transfer initiative (CCT) spearheaded by government can create an avenue for the financial inclusion of the poor given the monies paid are deposits into beneficiary bank accounts as opposed to cash disbursements.

The framework for payments using financial institutions follows two approaches: traditional and digital payments systems. Data on the value of transfer payments in Nigeria from 2004 to 2017 (Figure 3.5) reveals a decline in 2017 where the number of transfer payments stood at N183.70 billion – the lowest since 2010 and a roughly 47 percent decline from N347.34 billion in 2016. Ensuring that cash flows (regardless of platform) occur through financial institutions produces a multiplier effect of further value creation by financial intermediaries.

These payments flow through financial institutions, enhances access to loans (for consumption and enterprise) for non-beneficiaries of CCT payments. The financial intermediation process enhances optimal funds mobilisation from surplus spending unit (SSU) to deficit spending unit (DSU) for efficient use of funds. Thus, through the securitisation of funds, financial intermediation plays a pivotal role in the payments flow within the society.

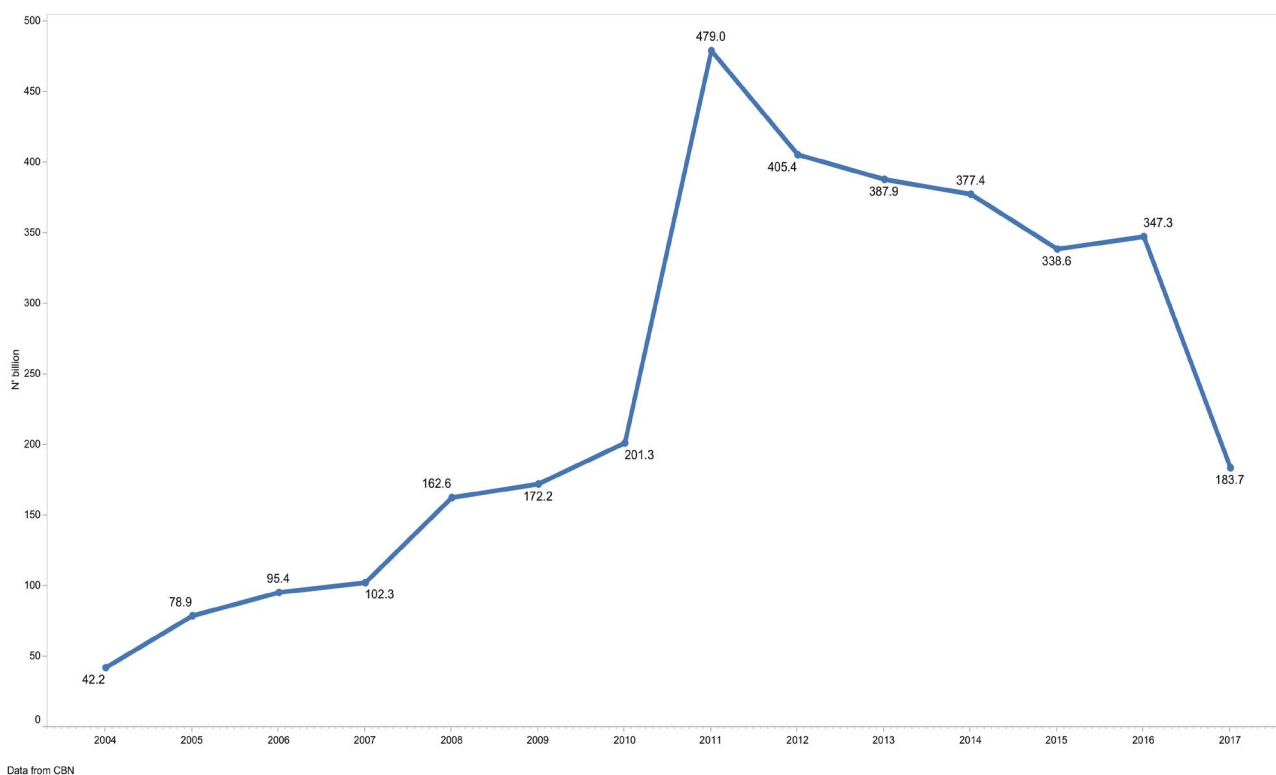
## Disaggregated Government Spending

Table 3.2 Disaggregated government spending (source: compiled by author with data sourced from CBN)

	Federal Govt. (N' billion)		State Govt. (N' billion)			Local Govt. (N' billion)		
	Recurrent	Capital	Transfers	Recurrent	Capital	Extra-budgetary	Recurrent	Capital
2011	3314.51	918.55	479.00	2055.70	1375.20	111.00	1279.77	352.15
2012	3325.16	874.83	405.40	1664.40	1965.30	215.40	1345.42	299.39
2013	3689.06	1108.39	387.87	1948.43	1890.41	207.97	1413.97	392.95
2014	3426.90	783.12	377.37	2120.48	1862.52	0.00	1432.60	181.23
2015	3831.95	818.37	338.55	2267.34	1201.82	0.00	1150.437	95.90
2016	5762.70	634.80	347.34	2399.24	970.61	69.32	980.56	77.28
2017	7138.90	979.50	183.70	1930.33	1521.76	202.88	1251.16	102.45

## Value of Transfer Payments

Figure 3.5 Value of transfer payments (source: compiled by author)



## Summary

The provision and use of financial services enables the effective distribution of the government payments using DFS. Government payments lead to higher income and will thus increase the use of financial services.

### Recommendations

- Digitise payment of government salaries and wages to speed up formal financial inclusion, increase efficiency and transparency.
- Promote and develop digital payment platforms across public and private sectors.
- Increase capital expenditure budgetary allocations and engage the private sector (including the firms that execute government capital projects) on the need to digitise payments to individuals and businesses involved in various projects (contractor-executed). This would require amendments to current government procurement policies that mandate contractors to provide evidence of full implementation of digital payment systems before the award or payment for government projects.
- When foreign loans aid infrastructure development, the government should negotiate enhanced local content participation to ensure that Nigerians take part in these projects and (as above) access financial services from payments received from the projects.
- The Federal and State Governments should work with the Local Government on the implementation of capital projects and transfer fees. Being at the edge of the market, local government spending has the most impact on financial inclusion.

## FISCAL POLICY

### Introduction

Fiscal policy refers to a government's deliberate actions of spending money and generating revenue towards influencing economic activities. Fiscal policy gained theoretical prominence in the years following the Great Depression as macro-economic thinking expanded to include the possibility of governments' interventions in markets to moderate economic cycles and check macroeconomic shocks.

Governments in the major economies stepped in to prop up financial systems, restore and sustain economic growth and ease the impact of economic crisis on vulnerable groups, offering a history lesson on the usefulness of government intervention in moderating the boom-bust cycles inherent in market-driven economies. The essential tools of fiscal policy include public revenue (tax and non-tax), public expenditure (recurrent and capital) and direct government financing.



## Fiscal Policy Trends

### A range of peculiarities characterise Nigeria's fiscal landscape:

- It excludes ministries, departments and agencies (MDAs)
- It restricts sub-national governments to domestic financing.

Until recently, revenue generation and expenditure depended on the monetisation of the economy's principal revenue source (crude oil) which accounted for over 75 percent of gross federal income in 2014 (see Figures 3.6 and 3.7).

Figure 3.6 shows federal collected revenue and movement in international oil prices from 2010 to 2016 while Figure 3.7 shows the structure of Federal Government expenditure in the same period. Evidence from the trend line shows that despite a steep decline in the price of crude oil and the Federal Government's efforts towards a more diversified revenue base, revenue from oil sales still makes up over 53 percent of government revenue in 2016 compared to 77 percent and 83 percent in 2010 and 2011, respectively. It is conceivable that a return to familiar levels of the structural dominance of oil over non-oil revenue may accompany a resurgence in increased oil prices in the international market.

Consistent fiscal deficits are a regular feature of Nigerian public sector finances. In 2016, the federal government spent N5.32 trillion against retained revenue of 2.97 trillion, leading to a deficit of N2.35 trillion (over 2 percent of Nigeria's 2016 GDP). Considering the diminished revenues, spending adjustments averted a shortage. Consistent deficits are also a regular feature of the finances of sub-national governments in Nigeria.

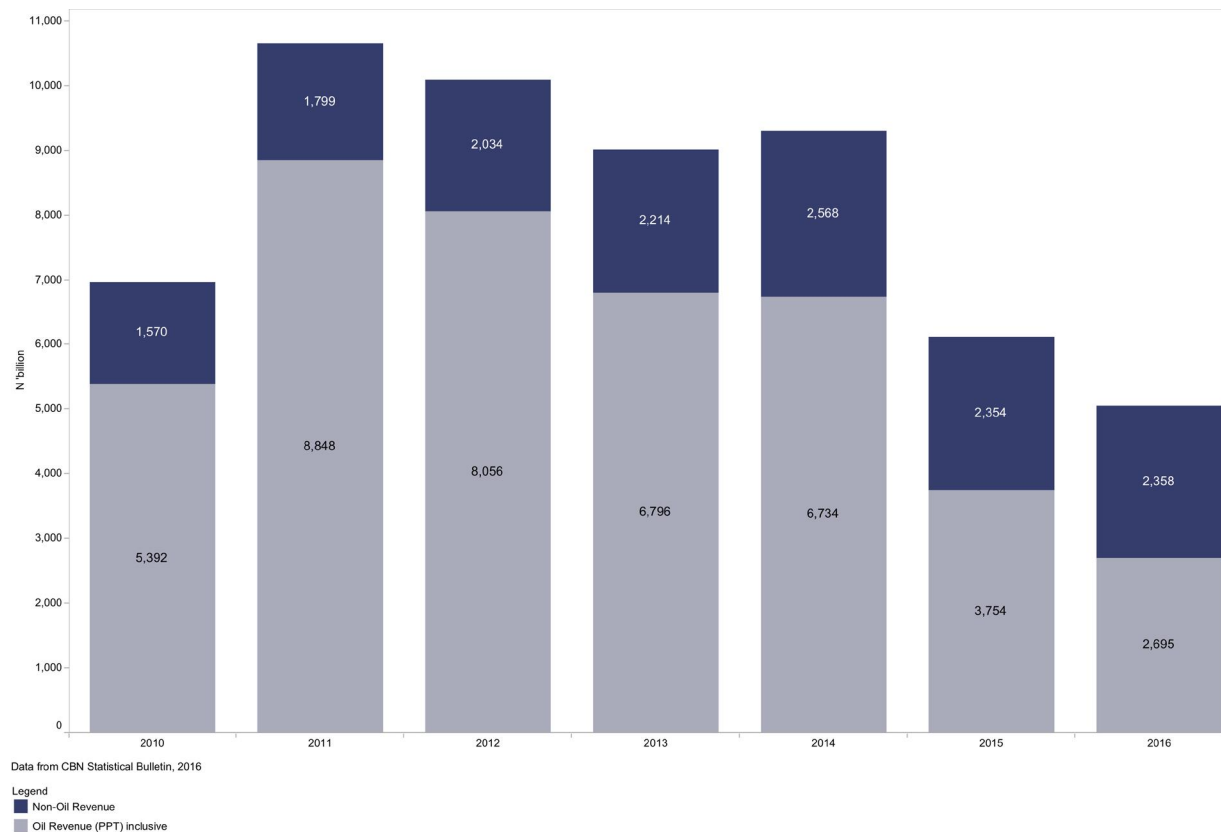
Recurrent expenditure (made up of public sector wage bills, overhead costs and debt servicing) is a dominant feature in government spending as against capital expenditures (CAPEX). The ratio for the fiscal year 2016 was 79 percent recurrent expenditure to 21 percent capital expenditure.

Figure 3.8 shows the trends in government revenue, expenditure and fiscal deficit over the periods 2000 - 2016. On the aggregate, the pattern shows a rising budget deficit driven by sustained increases in government expenditure, accompanied by the recent decline in revenue associated with the slump in oil prices. Over the last decade, the domestic environment makes up 40 percent of financing of which deposit money banks (DMBs) contribute 78 percent of local finance.

There is an obvious need to intensify efforts towards diversifying Nigeria's public sector revenue base, and improving financial institutions and payment systems to increase the enumeration and collection of non-oil taxes.

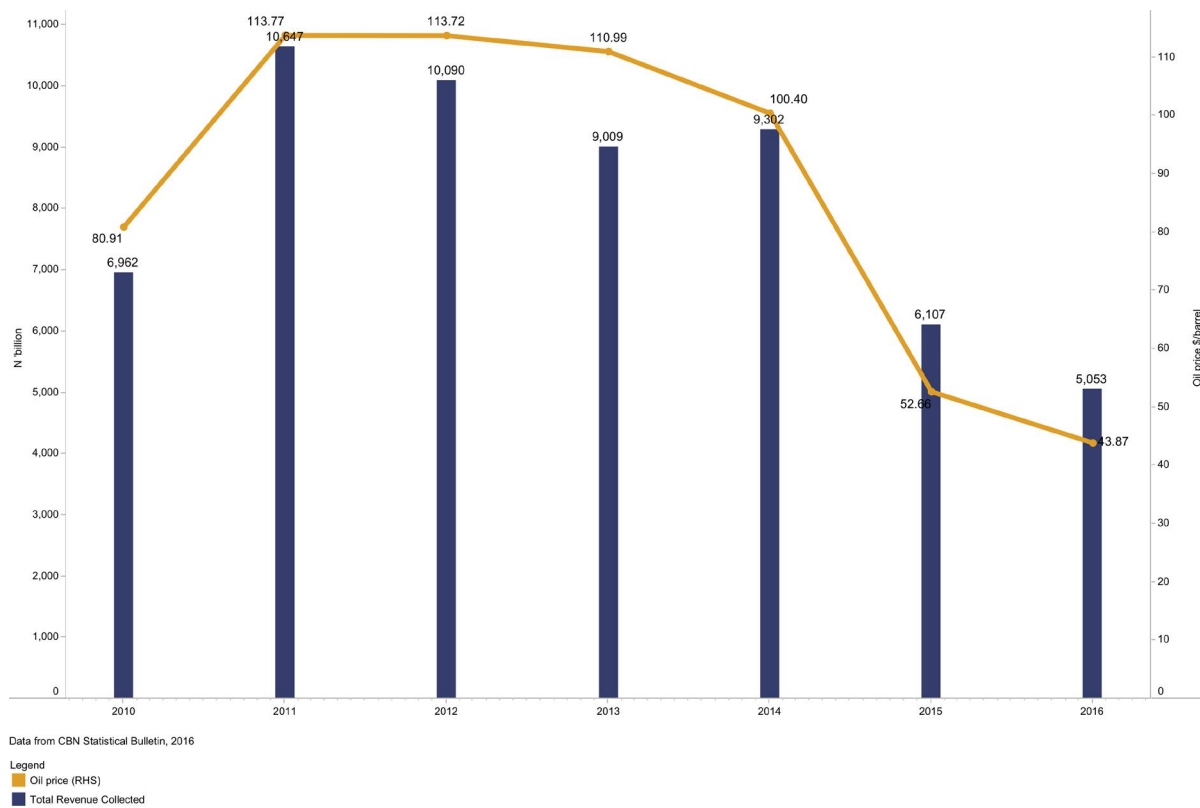
## Federal Revenue Composition

Figure 3.6 Composition of Federal Government revenue (collected)  
(source: compiled by author)



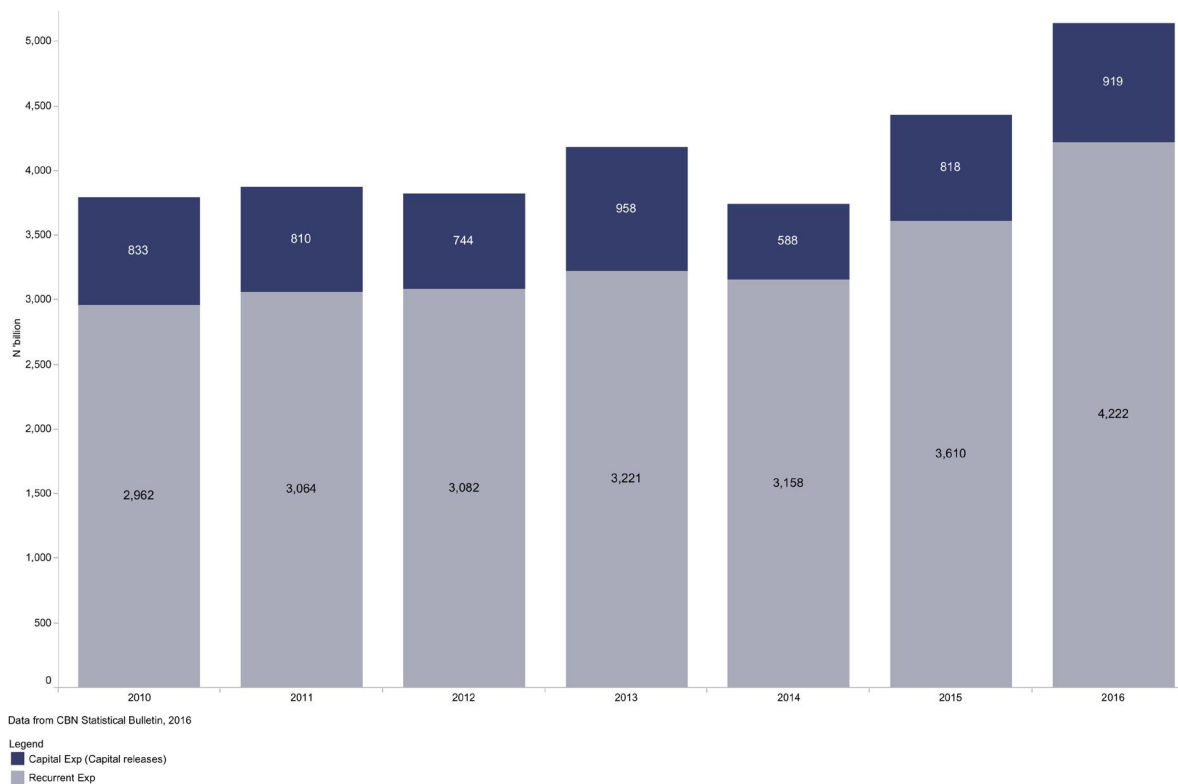
## Federal Revenue Composition vs. Oil Price

Figure 3.7 Composition of Federal Government revenue (collected) and oil price (source: compiled by author)



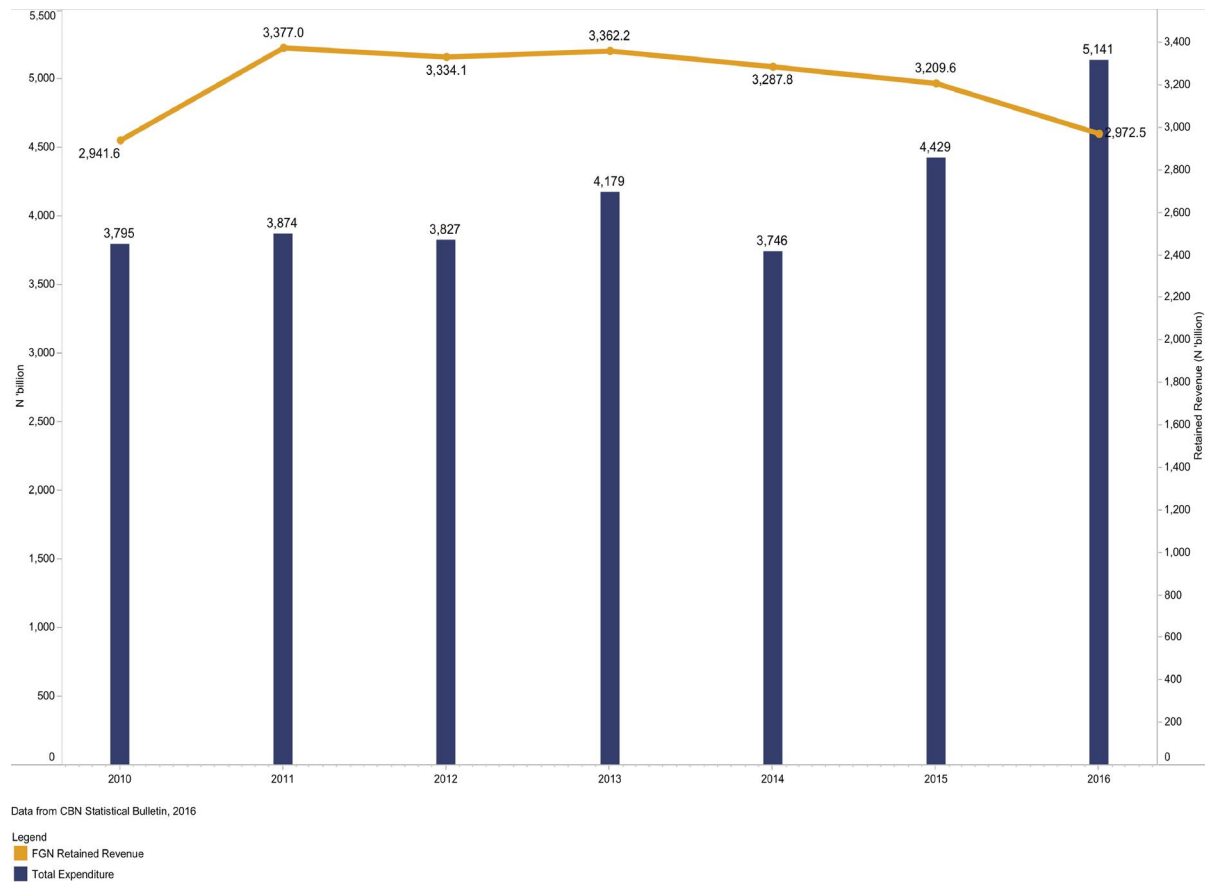
## Federal Expenditure Composition

Figure 3.8 Composition of Federal Government expenditure (source: compiled by author)



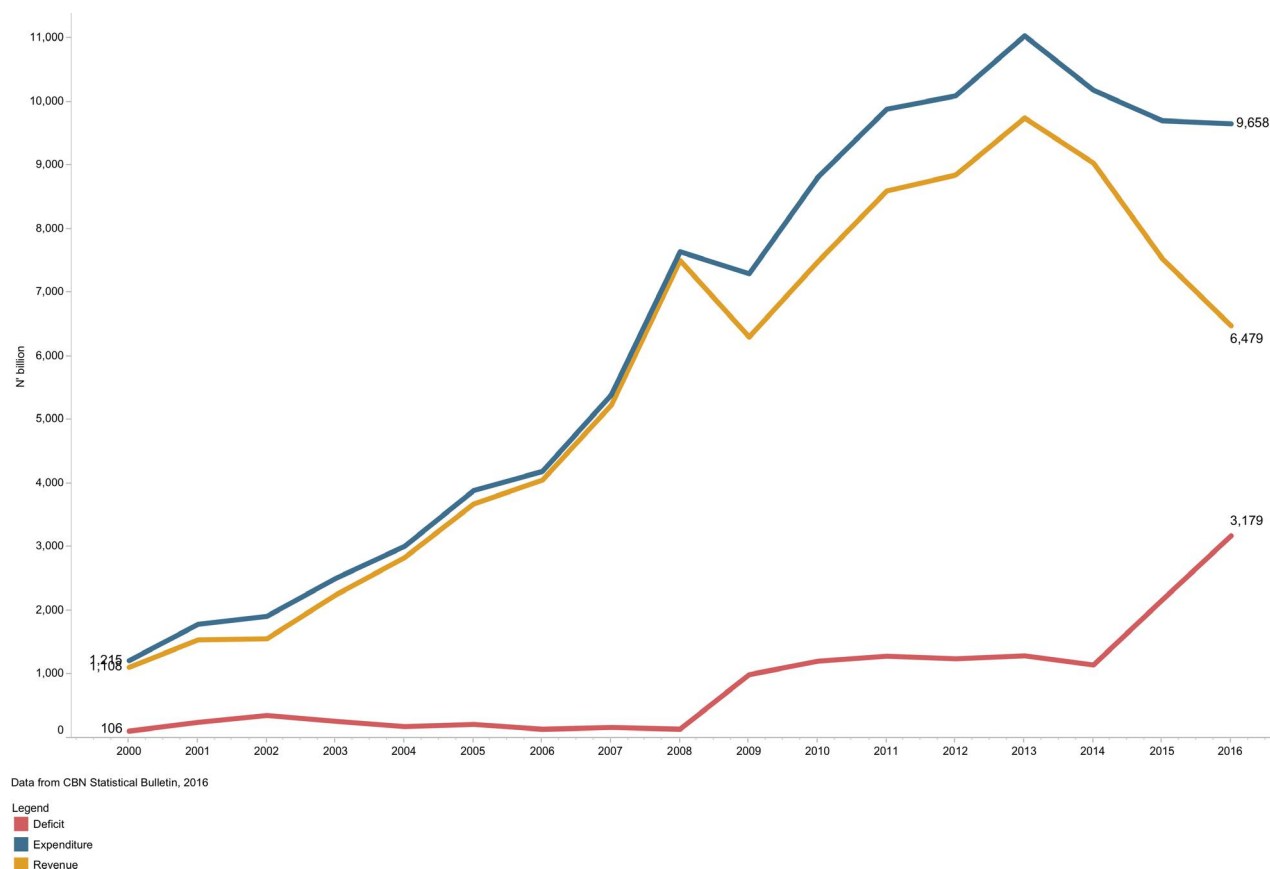
## Federal Expenditure Composition vs. Retained Revenue

Figure 3.9 Composition of Federal Government expenditure showing retained earning (source: compiled by author)



## Aggregate Fiscal Policy Landscape

Figure 3.10 Aggregate fiscal policy landscape (source: compiled by author)



## Summary

The relationship between financial inclusion and fiscal policy follows from the expectation that an increase in government spending leads to a rise in aggregate demand (increase in economic activity (output), employment and an increase in income) and thus an increase in financial inclusion. However, fiscal policy interventions that lead to increases in the taxation rates on bank transactions will cause a rise in financial exclusion.

The final element of fiscal policy identified in our framework is debt financing, which includes both domestic and external borrowing.

An increase in domestic borrowing, from DMBs will lead to higher interest rates and a decline in private investments as hypothesised in the “crowding out” effect.

The supply side hypothesis suggests that financial inclusion interventions that focus on socio-economic activity which produces outcomes such as higher literacy levels, infrastructure improvements and higher levels of education among the youth will increase the access and use of credit facilities. This will further support growth in economic activity and job creation, boost tax revenues and reduce government leakages as well as tax avoidance. However, financial inclusion interventions that produce more informal jobs may create more government leakages in the system.



## Recommendations

- Policy makers should intensify the drive towards bolstering financial inclusion to strengthen non-oil revenue generation.
- The CBN should discourage excessive taxes on financial transactions while canvassing conditions that engender competitive pricing of financial services. Keeping the costs of financial services from rising in ways that inhibit tangible adoption of financial services should be a priority.
- Government financing should be such as to “crowd in” (not “crowd out”) private sector investment.
- Government spending on transfers, from enhanced revenues, should be more accommodating of the unbanked and the informally served.

## COST OF FUNDS & INFLATION

### Introduction

Cost of funds is a term used in the financial service sector to describe the interest rate paid by financial institutions for the funds they deploy in their business and the funds received by financial institutions for rendering services (providing loans and advisory services) to the public.

With deposit money banks, this represents the interest paid on deposits and the lending rates charged on loans. For other institutions, it could be the cost of wholesale funds or a subsidised price for loans provided by government or donors. Other micro-finance institutions (MFIs) might have inexpensive funds from charitable contributions.

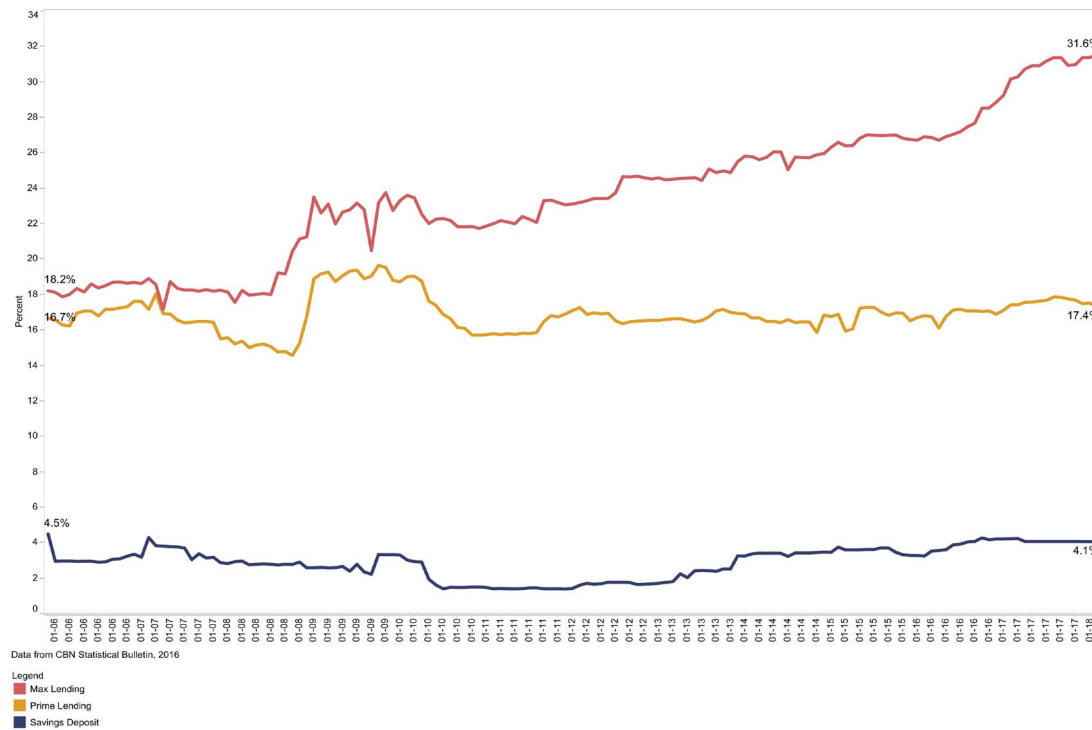
### Cost of Funds Trends

In Nigeria, there are two principal lending rates in the financial services sector: the prime lending rate (PLR) and the maximum lending rate (MLR). PLR represents the average lending rate charged to customers perceived as a minor risk while MLR represents the average lending rate charged to customers perceived as high risk, and with or without a history of generating consistent cash flows.

## Interest Rates

### Interest Rate Trends

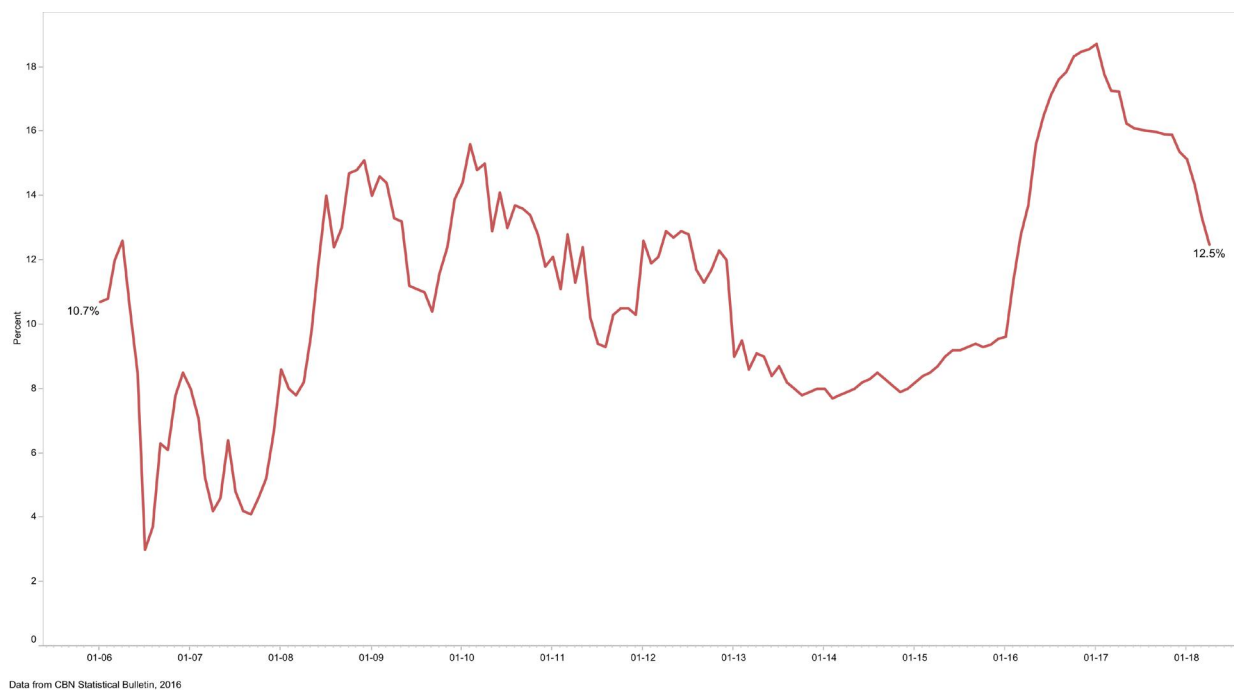
Figure 3.11 Interest rate trends (source: compiled by author with data sourced from CBN Statistical Bulletin, 2016)



## Inflation

### Inflation Trends

Figure 3.12 Inflation rate trends (source: compiled by author)



## Summary

Financial inclusion interventions such as financial literacy campaigns and improving financial infrastructure to enhance access to financial services will:

- increase the deposit base within the formal financial sector which may reduce the cost of credit, subject to supply and demand dynamics of loanable funds.
- encourage individuals active in the informal sector to open and maintain bank accounts. The cash-centric nature of the informal sector will encourage economic activity.

Basic economic theory suggests that a reduction in lending rate will lead to an increase in output and therefore a decline in inflation rate. However, it is possible that the lending interest rate (specifically MLR) will not change because of the uncompetitive nature of the Nigerian banking environment.

Thus, if the net supply of loanable funds is zero, output and price levels (inflation) remain unchanged. Autonomous changes in interest rates (lending and deposit) will impact financial inclusion. Increases in deposit rates and decreases in lending rates combined with a reduction in the requirements for accessing credit will attract more savings within the formal financial sector and cause a shift from informal to formal financial services.

## Recommendations

- Sustain credits to MSMEs through development institutions - Central Bank of Nigeria (CBN), Bank of Industry (BoI), Bank of Agriculture (BoA) and Development Bank of Nigeria (DBN)
- Encourage financial service providers, through existing and new policy guidelines, to adopt low-cost channels including electronic, mobile and agency banking in the delivery of credit to customers. This approach reduces the cost of providing credit resulting in a reduction in lending rates and improvements in financial inclusion.

# LIQUIDITY

## Introduction

The monetary policy stance of the CBN influences the current liquidity position of the economy. This action has sustained a monetary policy rate of 14 percent in a bid to check inflation and exchange rate volatility. This monetary policy disposition is taking a toll on the currency in circulation amidst growth in aggregate liquidity defined by the broad money supply (M2). The primary M2 monetary aggregates increased in March 2018, relative to the levels at the end of February 2018 and the corresponding month in 2017. On a month-on-month basis, M2, at N24,303.1 billion rose by 1.2 percent due to the 8.5 percent increase in foreign assets (net) of the banking system. Over the level at December-end 2016, M2 increased by 3.0 percent, reflecting the 70.7 percent increase in net foreign assets. Narrow money supply (M1), rose by 1.7 percent on a month-on-month basis in March 2018 due to the marginal increase in demand deposits. At December-end 2016, M1 fell by 3.2 percent, compared with the rise of 6.6 percent at March-end 2018 due to the 7.8 percent increase in demand deposits of the banking system.

While currency outside bank accumulated a 4.7 percent growth, money in circulation recorded a 13.9 percent decline month-on-month in March 2018. Over the corresponding month in 2017 and December-end 2016, while currency in circulation declined by 23.4 percent and 15.9 percent respectively, currency outside bank fell by 8.4 percent and recorded a marginal increase of 0.4 percent respectively. Bank deposits increased by 0.8 percent to N22,634.67 billion at March-end 2017 of which demand deposit was 41 percent while quasi-money (time and saving deposits) represents 59 percent. Over the corresponding month in 2017 and December-end 2016, banks' deposits increased by 9.6 percent and 4.0 percent respectively.

## Summary

This relationship between financial inclusion and liquidity is based on the premise that increased access to financial services leads to: 1) increases in utilising non-cash payment platforms; 2) greater utilisation of formal financial products and services; 3) increases in using informal financial services; and 4) less utilisation of money boxes (piggybanks) and other self-storage mechanisms (money kept under mattresses) will increase liquidity (economic and bank).

The demand side hypothesis suggests that liquidity drives financial inclusion. This establishes the nexus between financial inclusion and income. An autonomous increase in liquidity (increase in money supply) or movement of cash stored in money boxes (piggybanks) and other self-storage mechanisms (money kept under mattresses) to the financial sector will: 1) depress interest rates, increase investment, employment, economic activity (output); and 2) increase income, creating an increase in expenditure and saving which in turn will lead to an increase in financial inclusion.

## Recommendations

- CBN should curb the increase in cash holdings that may hinder price stability as increases in informal financial services could increase liquidity.
- Strengthen payment systems and channels to foster growth in both financial services access and adoption since evidence shows that digital payment platforms are a viable alternative tool for managing liquidity.



# NEXUS OF FINANCIAL INCLUSION & SOCIAL DEVELOPMENT

## LABOUR, EMPLOYMENT & JOB CREATION

### Introduction

The dynamic nature of the Nigerian population and the structure and composition of the labour market provides an entry point to assess the magnitude of challenges toward job creation and financial inclusion. Nigeria's population has been growing at an average of about 2.6 percent yearly since the early 2000s. With the regularisation of labour market statistics in Nigeria in recent years, data on labour market conditions are now available on a quarterly basis.

### Labour

Data from the NBS shows that the labour force, (individuals within the age bracket 15-64 - representing about 54.94 percent of the total population) recorded an average growth of 1.2 percent between Q1-2014 and Q3-2017. Figures 3.13 and 3.14 shows the trend in the economically active population and labour force dynamics where the economically active population surpasses the labour force. In Q3-2017, (the period for which the latest data is available) of an active population of 111.1 million, the productive labour force is about 85.1 million people. This suggests a resulting labour force participation rate of 76.6 percent.

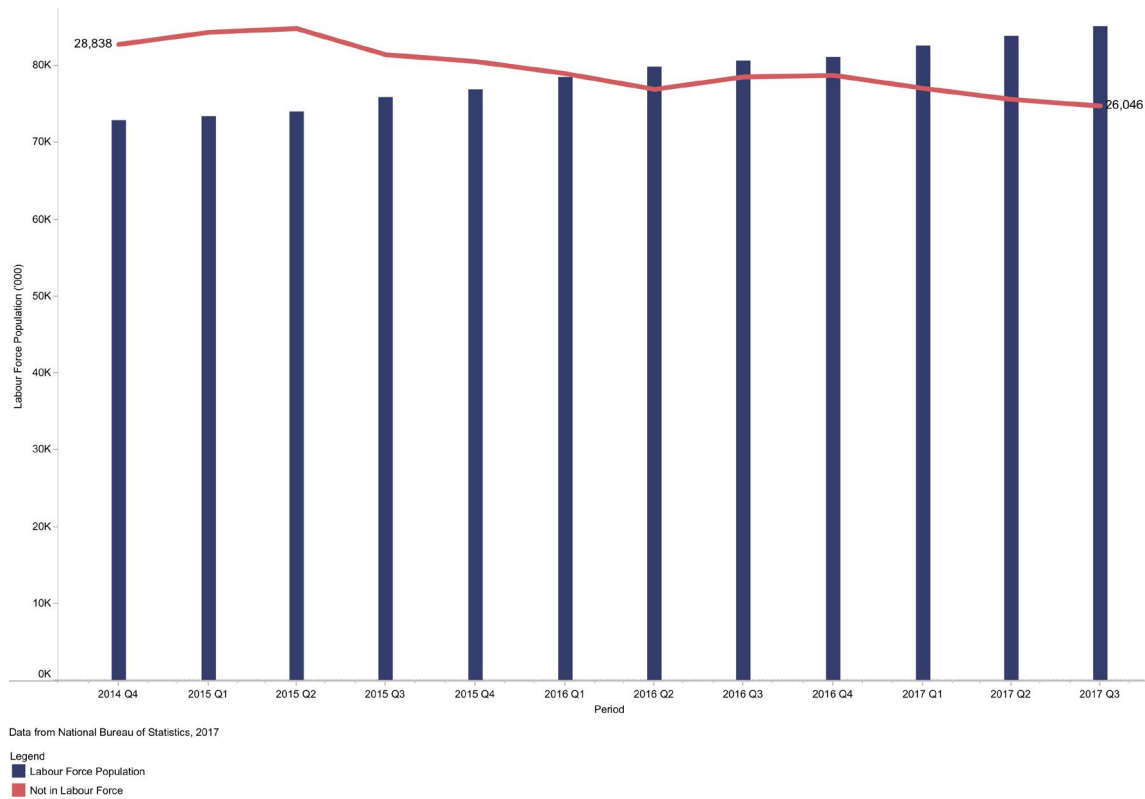
The number of hours worked per week defines the three sub-dimensions of unemployment: 1) those working 0 hours per week (doing nothing); 2) those working less than 20 hours per week; and 3) those working 20 - 39 hours per week (referred to as the underemployed). The group of persons classified as employed are individuals working 40 or more hours per week. From Figure 4.1, in Q3-2017 unemployment rate (those doing nothing and those that work less than 20 hours per week) as a ratio of the total labour force was 18.8 percent while underemployment rate was 21.2 percent.

The trends in employment and unemployment (Figure 3.15) suggests that employment rate has continued to decline, to 60 percent in Q3-2017 from 76 percent of the total labour force in Q1-2015. The percentage of underemployment and unemployment within this same period has increased to 21 percent from 17 percent and 19 percent from 8 percent, resulting in a combined unemployment and underemployment rate of almost 40 percent. While underemployment remains prevalent in the country, the rate of increase in unemployment is alarming.



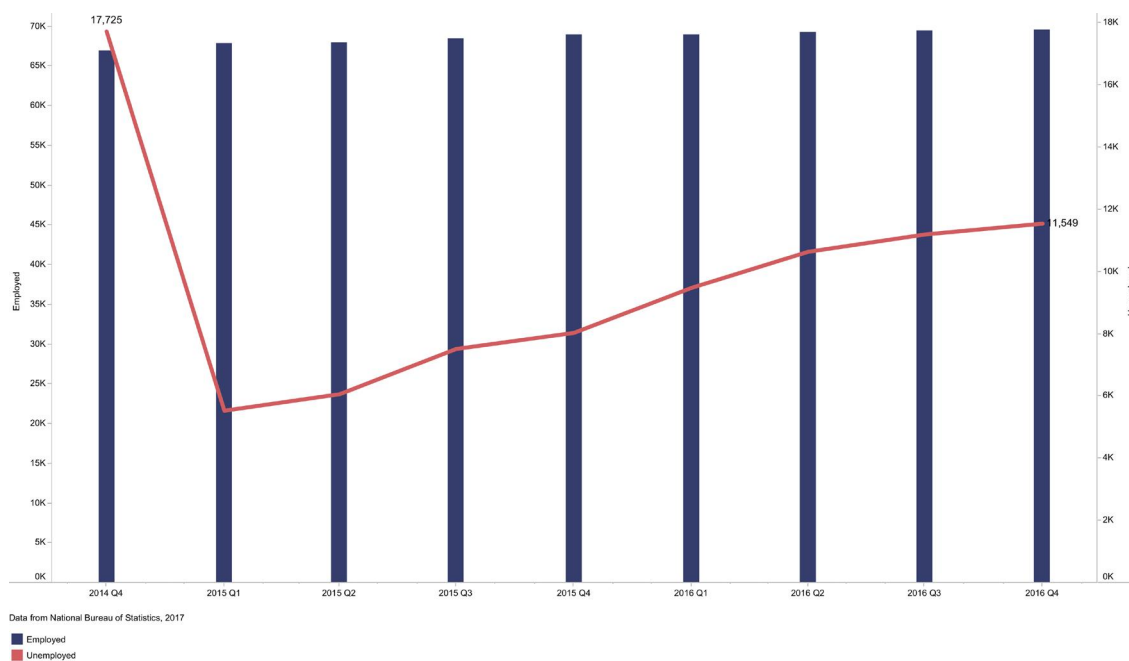
## Disaggregated Active Population Trends

Figure 3.13 shows the economically active population disaggregated  
(source: compiled by author)



## Labour Dynamics

Figure 3.14 Labour dynamics (source: compiled by author)



## Employment

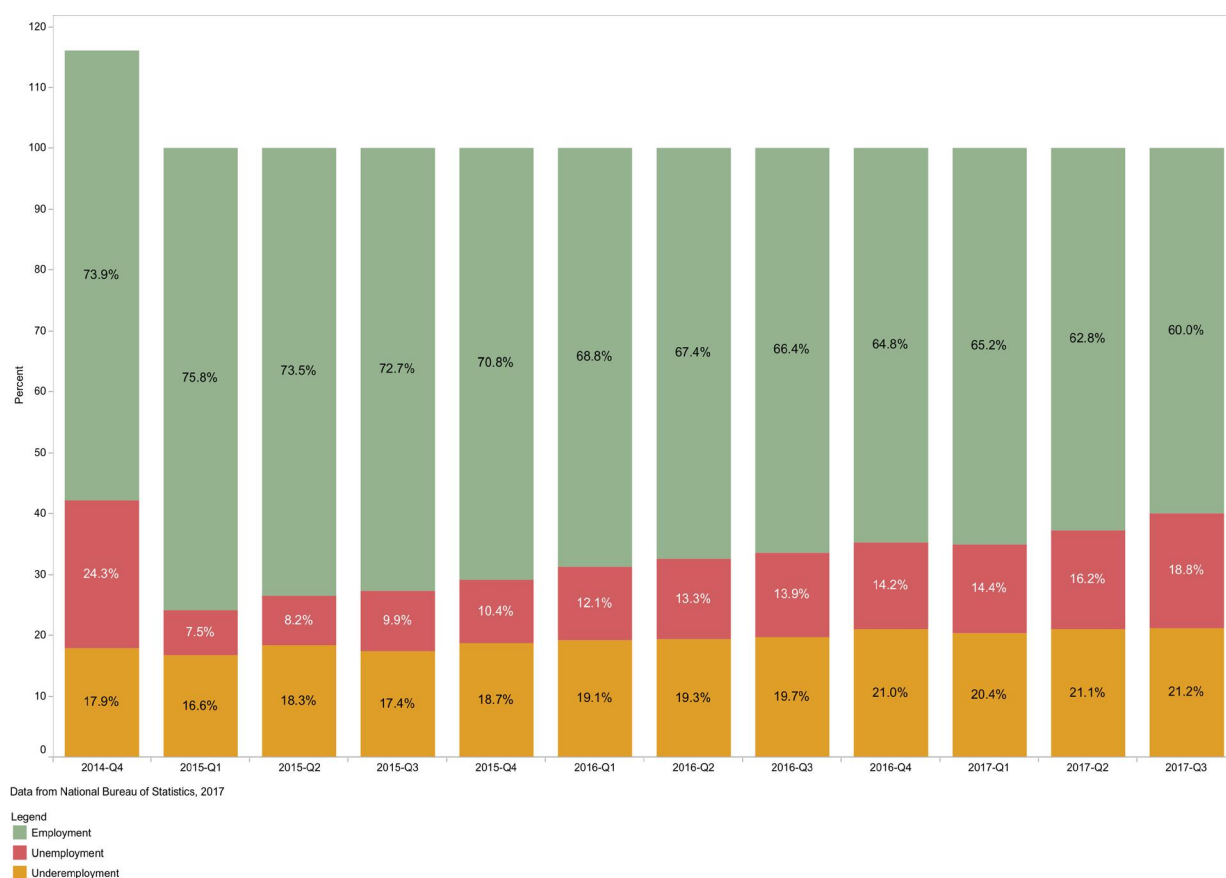
Nigeria has a history of experimenting with diverse employment strategies. Several economic growth and development strategies focused on job creation expecting it would facilitate increased attainment of the targets set under the different employment policy regimes. For example, Operation Feed the Nation (OFN) and the Green Revolution focused on the agriculture sector as a job creator.

The creation of the agencies: Directorate for Food, Roads, and Rural Infrastructure (DFRRI) and the National Economic Empowerment and Development Strategy (NEEDS), with employment generation as implicit objectives. The 1986 creation of the National Directorate of Employment (NDE) sought to address the unemployment challenges arising from the economic dislocations of the 1980s. More recent is the National Employment Policy (NEP), first proposed in 2002, and overhauled in 2016. There have also been interventions targeted at employment generation, such as the Federal Government-directed Youth Enterprise with Innovation in Nigeria (You-Win).

The dearth of or data reliability dating back to several decades complicates any attempt to assess prior employment policy thrusts. Recent and more reliable data paints a grim picture for employment generation, considering the job creation imperatives created by Nigeria's demographic characteristics.

### Unemployment Trends

Figure 3.15 Employment trends (source: compiled by author)



## Job Creation

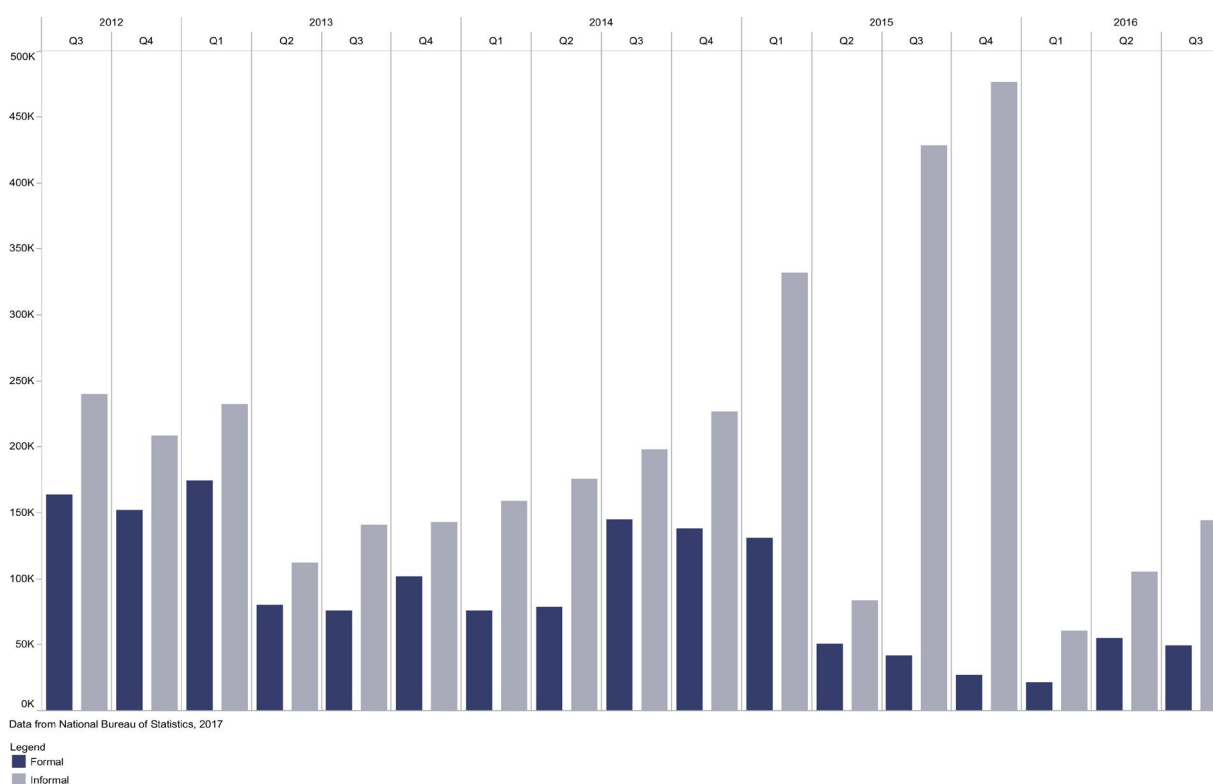
Figure 3.16 and Figure 3.17 illustrates the job creation trends between 2012 and 2016. The pattern shows that the new jobs created in each quarter do not match growth in the labour force.

Hence the continuous rise in the level of unemployment in the country which stood at 18.8 percent in Q3-2017 from 16.2 percent in Q2-2017. The data also reveals job creation concentration in the informal sector. Informal sector jobs (those generated by individuals or businesses hiring less than ten people or those businesses operating with little or no structure, e.g. those in agriculture, light manufacturing, trade, etc.) contribute over 77 percent of jobs created in Q3-2016.

Job creation slowed beginning from 2015 as the Nigerian economy plunged into a full-scale recession in 2016. Even though job creation statistics are not available beyond the 2016-Q3, the trend depicts a significant decline in the number of new jobs created in 2016 compared to 2015. The non-availability job creation data inhibits any inference about the elasticity of job creation concerning economic growth deceleration or increase. However, the challenge of slow job creation unfolds more severely when tested against the growth of Nigeria's labour force.

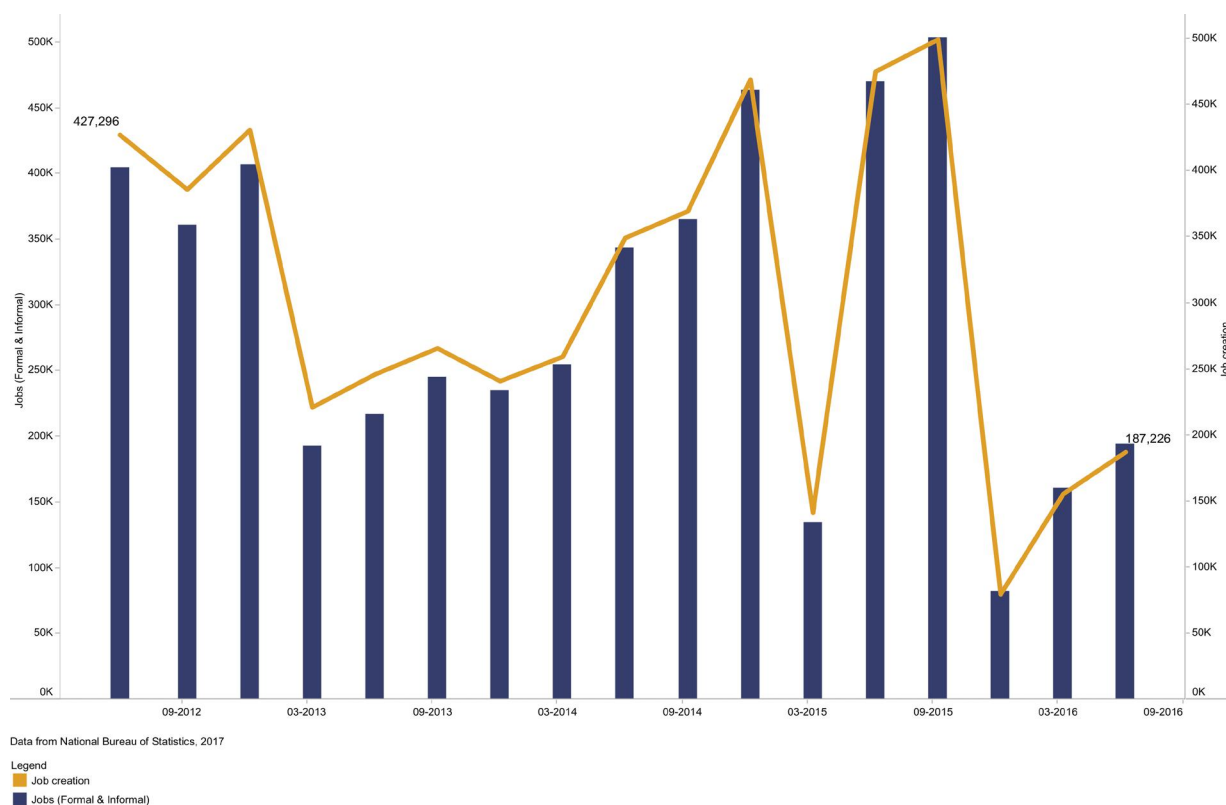
The population of the Nigerian labour force has increased by an average of about 1.2 million new entrants each quarter between Q2-2015 and Q3-2017. The observed steady and significant increase in unemployment over the last three years mirrors the failure of job creation to keep up with the pace of growth in the labour force. If unemployment levels remain constant at 18.8 percent, the economy must generate the equivalent number of jobs as the number of entrants into the labour force on a quarterly basis to close the gap.

### Job Creation Trends by Job Type



## Job Creation Trends

Figure 3.17 Job creation trends (source: compiled by author)



## Summary

The supply-side hypothesis suggests that financial inclusion leads to job creation. The relationship between financial inclusion and job creation will occur as a result of economic activity (output and income) being a channel to job creation. Although the precise mechanisms are unclear, the hypothesis is that increases in capital financial infrastructure will increase financial inclusion and access to credit and increases in investment will increase employment/job creation.

The demand-side hypothesis (reverse relationship) shows that economic activity is a channel to financial inclusion. Again, although the precise mechanisms are unclear, the hypothesis is that increases in labour-intensive economic activities which increase job creation and employment of employable youths will increase incomes and thus financial inclusion. However, increases in income may not increase financial inclusion where jobs created are in the informal sector.

## Recommendations

- The government should blend job creation policies at the grassroots level to stimulate and grow informal financial inclusion.
- The government should pursue strategies which complement the existing job creation framework, social support and conditional transfers, with a guard against leakages which can undermine expected and positive policy effects.
- The government should sustain credits to SMEs through development institutions - CBN, BoI, BoA and DBN.

## CONCLUSION: FINANCIAL INCLUSION, A DEVELOPMENTAL IMPERATIVE

This study postulates that the theoretical relationship between finance and economic growth in developed and developing countries portrays a mix of conflicting perspectives. While we propose finance-led growth hypothesis or supply-leading responses which argue that financial sector development drives the real sector of the economy and causes growth. Others support the demand-following responses which suggest that real sector development speeds up financial development.








A useful feedback effect that runs from macro-economic parameters to financial inclusion and vice versa may also be visible and these may be in the relationships:

- i. Financial Inclusion, Economic Growth and Income
- ii. Financial Inclusion and Government Payments
- iii. Financial Inclusion and Job Creation

The supply side hypothesis suggests that financial inclusion leads to job creation. We expect that the relationship between financial inclusion and job creation passes through economic activity (output and income) as a channel to job creation. Although the precise mechanisms are unclear, the hypothesis is that increases in capital financial infrastructure will increase financial inclusion and access to credit. Also, an increase in investment will increase employment/job creation. It shows that the demand-side hypothesis, also referred to as the reverse relationship, should pass through economic activity as a channel to financial inclusion.



Again, although the precise mechanisms are unclear, the hypothesis is that an increase in labour-intensive economic activities that increase job creation and employment of employable youths will increase incomes and thus financial inclusion. However, increase in income may not increase financial inclusion if the jobs created exist only in the informal sector.

This virtuous circle is visible because an increase in job creation will increase income, thus making the formal financial sector a more attractive option for the unbanked. This is because people not only want to place their wealth in formal financial institutions with fiduciary responsibilities, but also because they can afford financial services.

Increased financial inclusion leads to increase in access to and use of financial services, which has the direct impact of creating or boosting employment levels. The impact level is in the relationships between:

- i. Financial Inclusion and Fiscal Policy
- ii. Financial Inclusion, Cost of Funds and Inflation
- iii. Financial Inclusion and Liquidity

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DIGITAL FINANCIAL SERVICES





# APPENDICES

EXPLORATORY FRAMEWORK

METHODOLOGY

ROUNDTABLE PARTICIPANTS



# EXPLORATORY FRAMEWORK

## 1. Financial Inclusion, Growth and Income

Figure A: Supply-side hypothesis: relationship between financial inclusion, economic growth and income

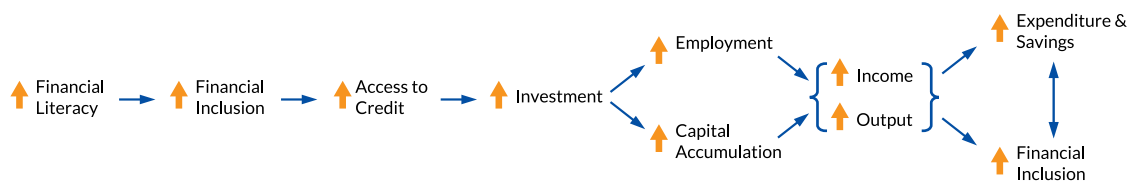
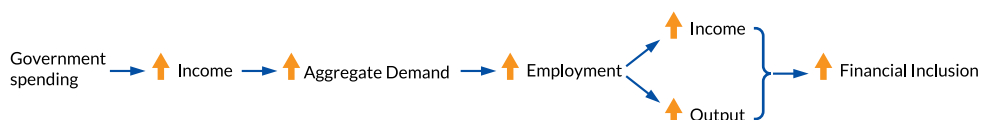


Figure B: Demand- side hypothesis: relationship between financial inclusion, economic growth and income



## 2. Financial Inclusion and Government Payments



## 3. Financial Inclusion and Fiscal Policy

Figure a: Demand side Hypothesis : fiscal policy leads financial inclusion

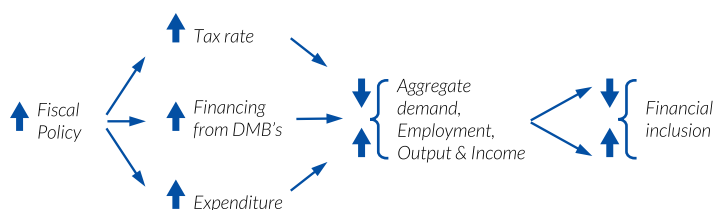


Figure b: Supply side Hypothesis – financial inclusion leads fiscal policy





## 4. Financial Inclusion, Cost of Funds and Inflation Rate

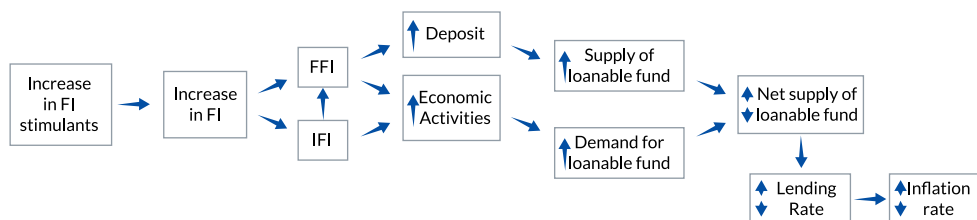


Fig. a: Supply side Hypothesis: Financial inclusion leads cost of funds and inflation

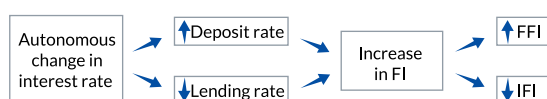


Fig. b: Supply side Hypothesis: Cost of funds leads financial inclusion

## 5. Financial Inclusion and Liquidity

Fig. a: Supply side Hypothesis: Financial inclusion leads Liquidity

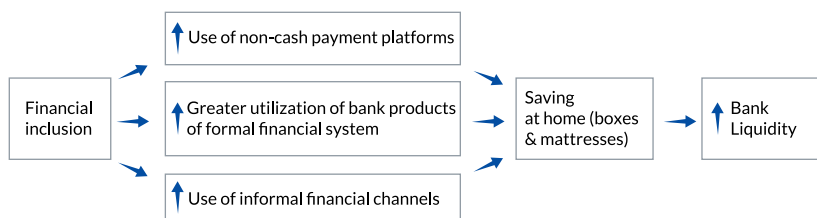
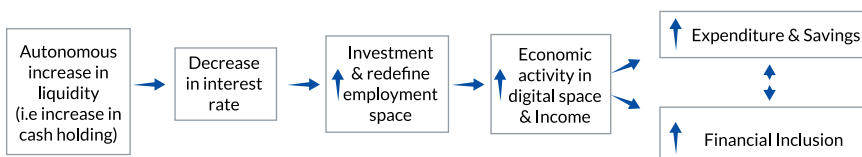


Fig. b: Supply side Hypothesis: Liquidity leads financial inclusion

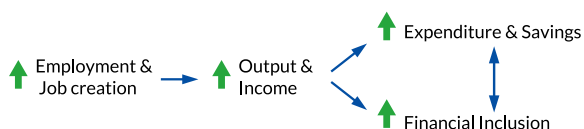


## 6. Financial Inclusion and Job Creation

Figure a: Supply-side hypothesis: relationship between financial inclusion and Job creation



Figure b: Demand-side hypothesis: relationship between Financial inclusion and Job creation



## METHODOLOGY

The frequency of the data used in the state of the market report is quarterly data spanning over the period 2008-Q1 to 2016-Q4. The data is sourced directly from the World Bank database (WB), the Central Bank of Nigerian Statistical Bulletin (CBN), the National Bureau of Statistics (NBS) and EFInA.

The scope of the study was influenced by the availability of bi-annual demand side financial inclusion data since 2008 with the most recent being 2016. With the aid of appropriate data splicing techniques, the study overcame the challenge posed by limited data coverage. In nearly all the cases, the vector auto-regression (VAR) is applied to ascertain the nature of the relationship and the direction of causation between financial inclusion and some macroeconomic parameters (economic growth, income, government payments, job creation, fiscal policy, inflation, interest rate and liquidity). The VAR modelling technique was selected based on its flexibility in allowing for endogenous interactions between financial inclusion and the economic indicators while displaying the delayed effects and assuming the existence of a feedback causal relationship between financial inclusion and the economic indicators (see Appendix for detailed equation and modelling framework).

## ESTIMATION MODELS

$$\beta(U)Z_t = \mu_t$$

Where

$$\beta(U) = \sum_{i=0}^i \beta_i U_i \dots\dots\dots 1$$

$Z_t$  is a column vector of the endogenous variables.

$$Z_t = \alpha + \sum_{i=1}^n \beta_i Z_{t-1} + \varepsilon_t \dots\dots\dots 2$$

$\alpha$  is the intercept of the autonomous variable

$\beta$  is the coefficient of all variables in the model

$Z_{t-1}$  is the vector of the variable after one lag and

$\varepsilon_t$  is the stochastic error term.

### Model 1: Financial Inclusion, Economic growth and National income

To assess the link (nexus) between financial inclusion, economic growth and income in Nigeria, we employed four (4) variables Vector Autoregression (VAR) which contains the disaggregated components of financial inclusion (FI) defined from the demand side, real gross domestic product (RGDP) and the national disposable income (NDI)

$$Z_t = [FFI, IFI, RGDP, NDI];$$

$\beta(U)$  is a  $4 \times 4$  matrix polynomial in the lag operator  $U$  and  $\mu$  is a column vector of serially independent errors:

$$\mu_t = (\mu_t^{FFI}, \mu_t^{IFI}, \mu_t^{RGDP}, \mu_t^{NDI})$$

Where **FFI** represent formal financial inclusion and IFI is the informal divide of financial inclusion.

### Model 2: Financial Inclusion and Job Creation

The multivariate VAR contains three variables in a linear form. These are financial inclusion (FI) defined from the demand side, net jobs created (NJB) derived from the change in employment between two periods and per capita income (PCI). Financial inclusion and job creation are the key variables of interest.

$$Z_t = [FI, NJB, PCI];$$

$\beta(U)$  is a  $3 \times 3$  matrix polynomial in the lag operator  $U$  and  $\mu$  is a column vector of serially independent errors:

$$\mu_t = (\mu_t^{FI}, \mu_t^{NJB}, \mu_t^{PCI})$$

### Model 3: Financial Inclusion and Fiscal policy

Our model is specified as a 4-variable VAR equation in which financial inclusion and the three (3) indicators of fiscal policy (revenue, expenditure and deficit) are used as a ratio of economic activity. Granger causality tests are also employed to test for the direction of causality in the case of each of the aforementioned elements of fiscal policy versus financial inclusion. The VAR model specified is:

$$Z_t = [FI, AR, AE, AD];$$

$\beta(U)$  is a  $4 \times 4$  matrix polynomial in the lag operator  $U$  and  $\mu$  is a column vector of serially independent errors:

## Model 4: Financial Inclusion, Cost of Funds and Inflation Rate

The multivariate VAR contains four variables in a linear form. These are aggregate and disaggregated financial inclusion (FI) defined from the demand side, headline inflation rate measured by the month on month change in the consumers price index (INF), average deposit rate (ADR) and lending rate (specifically maximum lending rate (MLR)) of Deposit Money Banks (DMBs) in Nigeria. The MLR was used as a proxy for high rate at which fund is accessed in the informal financial sector. Rates in the Microfinance banks (MFB's) would have been appropriate but the average is not a true reflection to proxy informal financial service rate because the MFB's rate are staggered.

$$Z_t = [FI, INF, ADR, MLR];$$

$\beta(U)$  is a  $4 \times 4$  matrix polynomial in the lag operator  $U$  and  $\mu$  is a column vector of serially independent errors:

$$\mu_t = (\mu_t^{FI}, \mu_t^{INF}, \mu_t^{ADR}, \mu_t^{MLR})$$

## Model 5: Financial Inclusion and Liquidity

The trivariate VAR was in a linear form and contains financial inclusion (FI) defined from the demand side, aggregate and disaggregated liquidity (M2) components in Nigeria and volume of payment platforms (VPP) transactions acting a control variable.

$$Z_t = [FI, M2, VPP];$$

$\beta(U)$  is a  $3 \times 3$  matrix polynomial in the lag operator  $U$  and  $\mu$  is a column vector of serially independent errors:

$$\mu_t = (\mu_t^{FI}, \mu_t^{M2}, \mu_t^{VPP})$$

## FINDINGS

### Going from the empirical estimates, the findings suggest:

1. The existence of a bi-directional relationship between informal financial inclusion (INFI) and 'real' economic growth. In other words, informal financial inclusion Granger causes real economic activities and vice-versa. There appears to be a greater level of certainty in the flow from informal financial inclusion to economic activities and vice-versa. The relationship between changes in 'real' income and informal financial inclusion (INFI) runs from informal financial inclusion to 'real' income. Hence, there is a 99 percent degree of certainty that INFI Granger causes real income (NDI).

2. Formal Financial Inclusion is positively related to government recurrent payments at the three tiers of government but negatively associated with government capital payments for the three tiers of government.
3. Causation runs from Job creation to Financial Inclusion meaning that job creation will increase financial inclusion, without a feedback impact. Furthermore, a feedback causation was established between informal financial inclusion (IFI) and NJB suggesting that job creation will increase informal inclusion and vice versa.
4. The existence of a feedback relationship between fiscal policy and financial inclusion. This feedback relationship suggests that fiscal policy specifically, the share of government revenues and expenditure in economic activity drives financial inclusion; however, the impact is stronger on formal financial inclusion. In turns, financial inclusion, especially formal financial inclusion, plays a pivotal role in shrinking the shadow economy and plugging government leakages.
5. The existence of a feedback relationship between financial inclusion, cost of funds and inflation. This feedback relationship suggests that costs of funds and inflation drives financial inclusion however the impact is stronger on formal financial inclusion. Thus rising inflation may leads to increase in cost of credit (lending rate) and therefore discourage formal inclusion and even leads to exclusion. Furthermore, activities on the informal financial sector are likely to increase inflation. Whilst some articles conclude that interest rate does not spur saving however cost of funds (increase in deposit/decrease in lending rate) may overtime increase inclusion.
6. The existence feedback relationship between financial inclusion and liquidity. This feedback relationship suggests that liquidity drives financial inclusion however the impact is stronger on formal financial inclusion. Thus rising liquidity may leads to increase in employment, productivity and income thereby encouraging formal inclusion. Also, activities on the informal financial sector also increase liquidity and this makes liquidity management difficult for central banks since it may thwarts effort towards price stability whereas formal inclusion increase bank liquidity and banks' ability fulfil its obligations.



## ROUNDTABLE PARTICIPANTS

1. Adamgbe Emmanuel, Central Bank of Nigeria
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# NOTES

# NOTES

CREATIVE DESIGN: LEVITATE CREATIVE

EDITOR: STRATUM PAGES



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