BETTER THAN CASH ALLIANCE | Empowering People Through Electronic Payments

BTCA Case Study No.4

EVIDENCE PAPER

August 2015

The response of large corporates and their value chains to government policies to shift to digital payments:

Nigeria's "Cashless" policy

by Brian Loeb, Bankable Frontier Associates

ABOUT THE BETTER THAN CASH ALLIANCE

The Better Than Cash Alliance is a partnership of governments, companies and international organizations that accelerates the transition from cash to digital payments in order to reduce poverty and drive inclusive growth. Shifting from cash to digital payments has the potential to improve the lives of low-income people, particularly women, while giving governments, companies and international organizations a more transparent, time- and cost-efficient, and often safer means of making and receiving payments.

We partner with governments, companies, and international organizations that are the key drivers behind the transition to make digital payments widely available by:

The Better Than Cash Alliance:

a. **Advocating** for the transition from cash to digital payments in a way that advances financial inclusion and promotes responsible digital finance.

b. **Conducting research** and **sharing the experiences** of our members to inform strategies for making the transition.

c. **Catalyzing the development of inclusive digital payments ecosystems** in member countries to reduce costs, increase transparency, advance financial inclusion-- particularly for women-- and drive inclusive growth.

The Alliance's Development Results Focused Research Programme (DRFRP) accelerates the generation and dissemination of knowledge and tools for stakeholders transitioning part of their payments from cash to electronic. The DRFRP has three components: 1) Readiness diagnostics, which compile existing data on the volumes, values, and payment means for each kind of payment made by governments, the private sector, and development community partners, and assess the country's readiness to replace cash payments with electronic payments; 2) Case studies of on-going shifts; and 3) Toolkits to provide practical steps for Alliance stakeholders to plan, measure and implement shifts.

The DRFRP is managed on behalf of the Alliance by a consortium led by Bankable Frontier Associates, a Boston-based consulting firm, with advice from experts from the World Bank Payments Group and the CGAP Technology Team, as well as local research staff.

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THE BETTER THAN CASH ALLIANCE CASE STUDY SERIES

The Better Than Cash Alliance case study series seeks to highlight specific examples of shifts to electronic payments by government agencies, businesses or development partners. Each case study documents the extent of the shift and the factors that have helped or hindered it, in order to provide insights which are relevant to a wide readership interested in how to shift from cash to electronic payments.

AUTHOR

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Note: Exchange rate conversions made at the rate of 1 USD to 162 Naira (as of 3 September 2014).

1 Introduction

Governments around the world are adopting measures to encourage or require their agencies, private businesses and individuals to shift away from using cash towards digital payments. Some have offered incentives, such as rebates on taxes[1] or participation in lotteries based on card usage[2]. Other countries have capped the maximum cash transaction size that businesses can accept[3]. But few countries have gone as far as Nigeria has with its "Cashless Nigeria" policy.

Implemented by the Central Bank of Nigeria since 2012, the Cashless policy[4] imposed penalties on all businesses and individuals who deposited or withdrew cash from their bank accounts in excess of daily limits. These penalties forced large cash users to pay as much as 5% of the value over the limit in fees to their banks.

Large businesses with substantial supply chains or large customer bases that pay in cash were therefore liable for substantial fees unless they shifted to electronic payments — Cashless policy assumed that these large corporates would be incentivized to digitize.

Two years after the launch of Cashless policy in Lagos State, there has been no published independent analysis of businesses' response to the policy. This Better Than Cash Alliance case study analyzes how a sample of four large Nigerian businesses in diverse sectors — a nationwide manufacturer, a large distributor, an international shipping agent and a nationwide insurance company — have responded to the policy, and how far their payment profiles have digitized.

In addition, if Cashless is changing the payment patterns of large businesses, one would expect that it also would be influencing the ways in which these businesses' smaller suppliers and customers are paying or receiving payments. While the smaller businesses in corporate value chains likely do business below the threshold of the daily cash limits, making them less likely to have to pay the fees, their processes may be dictated, to some extent, by their big customers. To test whether Cashless is having this effect, this case study draws on a first-of-its-kind survey of the payment profiles of 600 small business suppliers of intermediate goods in Lagos —

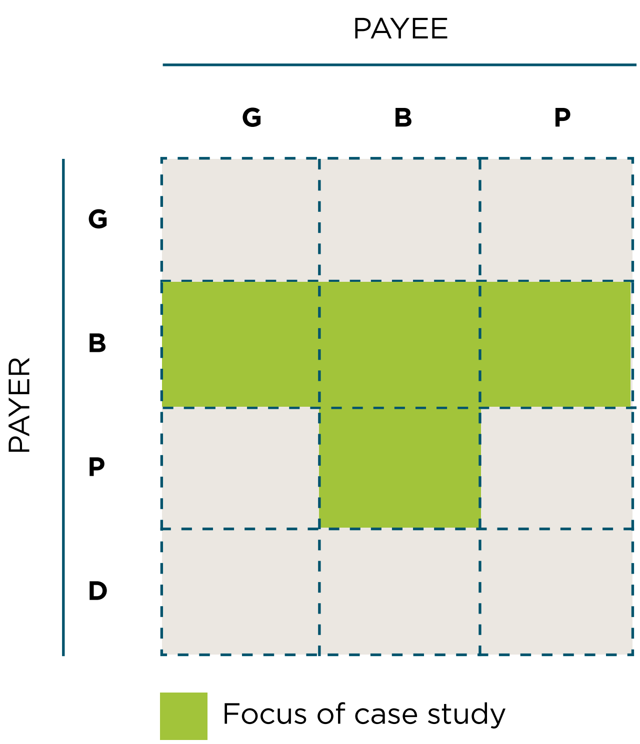
hypothesized to be the most likely to shift their payments after the large corporates.

As Figure 1 below shows, this case study touches on the streams of payments from and to businesses. The case has implications for individual payments and for tax payments but does not address these cells of the payment grid directly.

The evidence in the case is structured as follows. The first section presents the evolution of the Cashless Nigeria policy, including data on key indicators to measure the policy's impact at a macro level. The following section examines four 'mini-cases' of large corporates in Nigeria, each of which is adapting and innovating in its own way in response to Cashless and other business demands, to digitize its payment streams. Then the case study looks at the results of the small business survey and the factors most strongly linked to usage of electronic payments. The final section draws implications from this specific experience for governments interested in strategically digitizing payments.

As a guide to reading the case, Table 1 below maps how this case study extends the information base regarding each of the potential benefits of electronic payments from the perspective of businesses.

FIGURE 1 **Payment grid and focus of case study[5]**



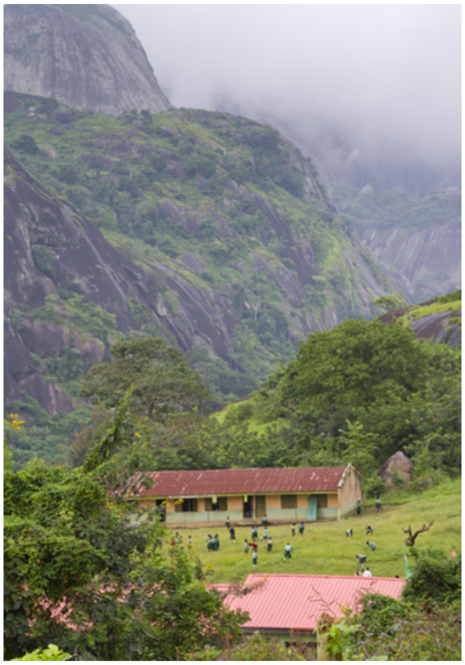


TABLE 1 **Benefits of electronic payments discussed in this case study**

Cost Savings	Transparency	Speed & Security
Several of the corporates interviewed for this case study report cost savings from shifting to electronic payments. However, this is rarely their primary motivation for shifting. And in fact they can even pay a higher price by losing the control over payment timing and the float income that come with cheques.	As described in the Better Than Cash Alliance Country Diagnostic for Nigeria, the Office of the Accountant General of the Federation, which oversees government payments, has made great strides in adopting electronic payments, with obvious gains for transparency. However, transparency was not a major factor for the businesses discussed in this case study, nor was it a major stated goal of the Cashless policy.	Corporates have been able to reduce their security risks when collecting payments. And they have been able to incentivize their payees to accept electronic payments by promising quicker and more predictable payments.
Financial Inclusion	**Economic Development**	**Changing Lives**
This case study shows how intimately linked financial inclusion and electronic payments are. The survey results suggest that if policymakers want to reduce the amount of cash in use (and the cost of cash on the financial system), they can encourage the formalization and the financial inclusion of small businesses that are part of larger value chains.	Because of a lack of clear government rewards and sanctions, businesses are adopting a wide range of innovative approaches to their payments. For example, the partnership between fets, a mobile money operator, and Fan Milk is driving expansion of their agent network.	Electronic payments have not had a substantial impact on the lives of the owners of the small businesses interviewed for this case study. The Nigerian Bottling Company dealers generally already had bank accounts, though NBC's initiative has brought some efficiency to their businesses. There was some variation by gender in the survey results but nothing to suggest a consistent, strong differential impact of electronic payments.

2 Cashless Nigeria: An ambitious national policy to promote digital payments

"Cashless Nigeria" (hereafter referred to as "Cashless") is the name of a national policy initiated by the Central Bank of Nigeria (CBN) and managed by the CBN's Shared Services Office. The CBN wanted to reduce the use of cash and increase the use of digital payments; cheques, too, were considered preferable, since they bring transactions into the banking system and the view of regulators.[6]

Though the CBN has formal legal authority only over banks and other financial and payment institutions, the policy's scope is quite broad, touching on many players in the economy through its influence on banks.

Additionally, Cashless should be seen in the wider policy context of not only the CBN but also other government agencies. Figure 2 below shows the breadth of these policies. This case study focuses on Cashless's impact on payments by businesses — an area where the policy, still in its early stages, could be called a success. Payments by consumers to businesses, however, have been slower to shift, in part due to conflicts or gaps within what could be called the wider Cashless policy universe.

For example, the Nigerian government is promoting consumer demand for card payments through the new national ID card, now in its pilot phase[7], with an optional pre-paid function managed by local banks and processed by MasterCard. And the CBN recently released an incentive scheme that proposes rewards for merchants and consumers that use point-of-sale (POS) terminals[8]. But this same scheme cut the merchant service charge (the per-transaction rate merchants pay to their banks for card purchases) in half, reducing banks' incentives to roll out POS terminals.

FIGURE 2 The Cashless Nigeria policy universe

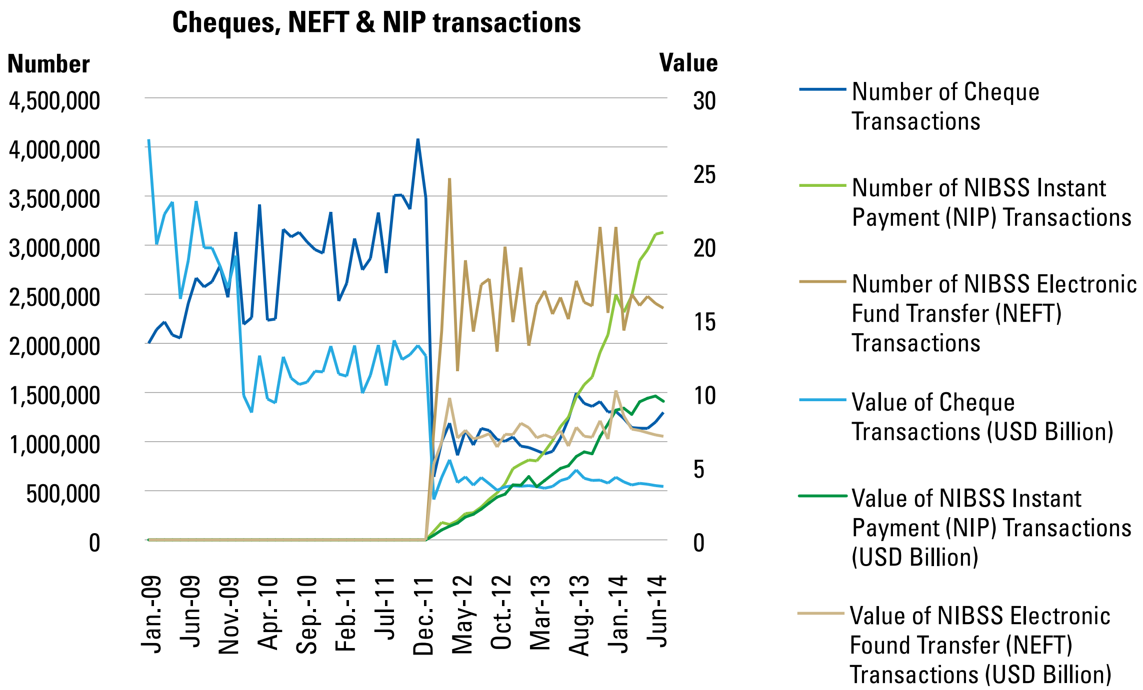
		Cashless Nigeria policy
Central Bank of Nigeria	• Payments System Vision 2020 • Maximum Limit on Cheque Payment • Guide to Bank Charges • CBN Awards • Electronic Payments Incentive Scheme and Awareness Campaign	• Public information campaign on benefits of digital • POS guidelines and restriction of cash-in-transit services • Limits and fees for cash withdrawals and deposits
Other government agencies	Electronic payment of government salaries and suppliers (Office of the Accountant General of the Federation)	National Electronic (e-ID) Card (National Identity Management Commission)

2.1 From concern about risk to concern about efficiency and inclusion

Cashless was launched in 2012, but its roots lie in a 2007 strategy document from the CBN, called Payment Systems Vision 2020[9]. This document, updated in 2013[10], proposed seven initiatives around encouraging a shift to digital payments by and to government, as well as several policies the CBN could adapt to reduce risk in the payments space (including fraud and settlement risks) and provide certainty to payment providers.

The most prominent early action in pursuit of the Vision 2020 goals was the CBN's 2009 policy limiting the value of cheque payments, which were commonly used by businesses and government[11]. As of January 2010, the CBN would only allow cheques less than the equivalent of around $66,000 to be cleared through the cheque clearing house. Any transfers above that amount would have to be made using electronic payment instruments: either Nigeria's real-time gross settlement (RTGS) system, used for high value payments, mostly to settle securities and other payments between banks, or via the Nigeria Electronic Funds Transfer (NEFT) system, a batch retail transfer instrument, or the Nigeria Instant Payment (NIP) instrument, a

FIGURE 3 **Cheques decline, electronic payments take off**[12]



Note: Cheque, NEFT and NIP data represents only inter-bank transfers.
On-us transfer data for each commercial bank is not available from the CBN.
Source: CBN, exchange rates from Oanda.com.

real-time retail transfer instrument, cleared by the Nigeria Inter-Bank Settlement System (NIBSS), the central switch owned by the country's banks.

The goal of introducing the cheque limit was not explicitly to increase the usage of electronic payments in the economy; rather, the stated purpose was to reduce risks in the national payment system.

As Figure 3 above shows, in the two years after the cheque capping policy went into effect, the number of cheques actually increased: businesses and consumers were writing more cheques, but with lower values per cheque. However, after 2011, the numbers of cheques dropped substantially while the number and value of retail electronic payments has increased substantially from a low base.

But in early 2011, this drop in cheque usage had yet to occur. As it waited for its policy to be felt, the CBN broadened its focus. Through a new policy called Cashless Nigeria, the CBN sought to reduce the costs that

cash imposed on the economy as a whole, including on the CBN itself, the banking sector, individuals and corporations. The CBN also saw digital payments as a way to modernize the economy, increase efficiency and promote financial inclusion.

The policy, announced in a circular to banks and the payments industry generally[13], began in June 2012 with a pilot phase in Lagos State, the state with the most economic activity and highest number of financial providers. The policy entailed:

- A daily cumulative limit on free cash withdrawals and deposits by individual and corporate customers of banks.
- A service fee on deposits and withdrawals in excess of these limits.
- Disallowing encashment of third-party cheques above the local equivalent of $900 over the bank counter.
- Ceasing cash-in-transit services for merchant-customers by banks. However, customers could engage the services of CBN-licensed CIT companies to aid cash movement to and from their banks at mutually agreed terms and conditions.
- Changing the operation of the card acquiring market, in part through promoting (with banks' agreement) massive deployment of shared POS terminals, serviced only by licensed payment terminal service providers, with a view to reducing the costs of acceptance to banks and therefore also to merchants.
- Persuading citizens of the benefits of going "cashless" through extensive information campaigns in various media (website, billboard, radio and TV).

2.2 Industry feedback leads to modifications

Before Cashless Nigeria could begin, though, the CBN revised certain aspects of the policy based on feedback. In a circular in March 2012[14], the CBN increased the cash limits and reduced the penalties. Limits were set at about \$3,000 and \$18,000 for free cash withdrawals and deposits by individual and corporate customers, respectively. Fees in excess of the withdrawal limits were scaled down to 3% for individuals and 5% for corporates; fees for deposits were set at 2% for individuals and 3% for corporates, as shown in Table 2 below.

An early evaluation of the Lagos pilot, conducted for EFInA[15] in late 2012 and based on surveys of merchants and consumers, found that banks' retail customers:

- Had begun shifting to self-service banking channels, especially cards & ATMs, to access cash;
- Had increased their use of branch-based electronic transfers, especially the NIBSS Instant Payments (NIP) system, although the volumes remained relatively low; and
- Were (as was to be expected) evading the fees by:
  - › splitting up deposits over several days
  - › 'crossing the state borders' to avoid the Lagos state pilot limits by transacting in neighboring states
  - › opening several accounts to avoid exceeding transaction limits in one.

In early 2013, the CBN decided to roll out the policy to five other states and the Federal Capital Territory (which includes the capital, Abuja)[16]. According to interviews with the CBN staff managing the project, the states — Abia, Anambra, Kano, Ogun and Rivers — were chosen because they were home to major market centers that would likely see lots of transactions. No changes to the policy were made aside from the geographic expansion, though the fees did not go into effect in the new states until the

TABLE 2 Cash limits and fees

	Daily limit	Fee on excess withdrawals	Fee on excess deposits
Corporates	\$18,000	5%	3%
Individuals	\$3,000	3%	2%

second half of 2013.

By 1 July 2014 the CBN had rolled out the Cashless policy nationwide — but with modifications.[17] The CBN's Banking and Payments System Department issued a circular revoking the limits and fees on deposits: "All charges on deposits are hereby stopped with effect from 5th June 2014." [18] Bank customers were still finding ways to avoid fees, and the CBN determined removing fees on deposits would encourage people to take cash out of circulation.

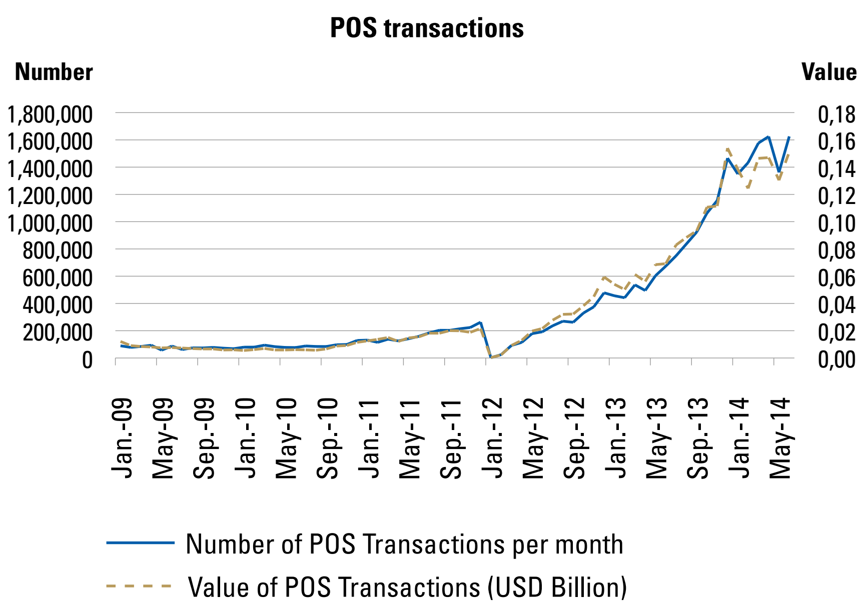
So, today, banks throughout Nigeria are required to charge the Cashless fees only when their clients withdraw large amounts of cash — higher limits for corporates than for individuals — though it is not clear to what extent this requirement is being applied. Banks are also encouraged to continue to deploy POS devices, although beyond the initial commitment to buy and deploy, there is no particular incentive to do so or penalty for failing to do so; and the business case for deployment based on capped merchant discount rates is challenging.[19]

2.3 A national roll-out amid signs of increasing digital payments

Early CBN audits found that banks varied in their enforcement of the deposit and withdrawal limits (and were thus subject to sanctions themselves). Even so, in 2013, the policy's impact seemed to be reflected in the rising usage of electronic payments by consumers. As Figure 4 at left below shows, POS usage also began to rise during 2012, although from a very low base.

The values remained low compared to cash in circulation. ATM transactions provide a proxy for cash usage, at least for individuals who are paid into bank accounts from which they then have to withdraw. If these financially included individuals, a relatively small group in the economy, were using electronic payments more and displacing the need for cash, one would expect transaction volumes at ATMs to decline or to grow less quickly. As Figure 5 below shows, while the number of ATM transactions has been affected

FIGURE 4 **POS transactions**



Source: CBN, exchange rates from Oanda.com.

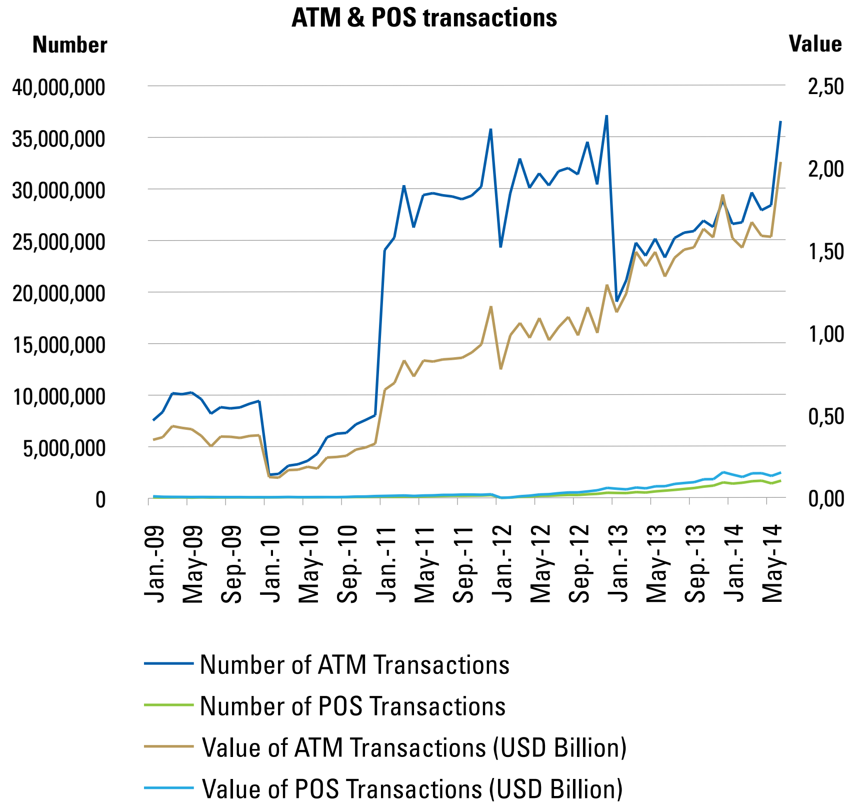
by other measures (including the issuing of EMV cards and charging withdrawal fees, which were abolished in 2013), the number and value of ATM transactions continues to dwarf POS transactions. And since January 2013 at least, ATM transactions have been increasing more quickly than are POS transactions.

Drawing in part on these same data, the Better Than Cash Alliance Country Diagnostic for Nigeria, conducted in late 2013, estimated that just 1% of consumer payments were made electronically by volume and 2% by value. (The numbers were higher for businesses, but that was due entirely to large and medium, and, importantly, formal businesses.) So while Cashless's promotion of POS usage could be said to have had some impact in increasing transactions, it has yet to show up in national macro indicators of the usage of cash. This finding is in line with that of MasterCard Advisors's Cashless Journey, released in 2013[20]. That study of consumer payments at point of sale estimated that less than 1% of consumer payments by value were electronic, placing Nigeria in the "incipient" category alongside a number of other countries with higher per-capita income, such as Colombia, Mexico, Thailand and Malaysia.

2.4 The CBN widens its focus

As it evolved its Cashless policy, which directly targeted only banks and other financial institutions, the CBN also ventured into setting policy for how non-financial businesses pay. The CBN took a small step in this direction with a circular in early 2012, in which it required banks only to accept electronic payment instructions via end-to-end electronic payment platforms, for business payments to suppliers, salaries, pensions and taxes.[21] Specifically forbidden were "unsecured methods such as Flash Drives, Compact Discs or e-mail attachments.

FIGURE 5 Nigerian POS transactions relative to ATM transactions



Source: CBN, exchange rates from Oanda.com.

This was followed by the issuance, in September 2013, of an exposure draft[22] of guidelines for electronic payments of salaries, pensions, suppliers and taxes. The relevant portions were unchanged when the approved guidelines[23] were issued in February 2014. The guidelines explicitly apply to “all public and private sector organisations and entities operating in Nigeria and mandates [sic] adoption, implementation and compliance with the directives on end-to-end electronic payments of all forms of salaries, pensions, suppliers and taxes.”

The guidelines reiterate the requirement for end-to-end electronic payments — though this now only applies to organizations with more than 50 employees, without explanation. Further, it says “paying organizations” are required to:

- Maintain [an] e-payment enabled account with Deposit Money Banks or Other Financial Institutions;
- Adopt a [CBN] approved end-to-end electronic payment platform for all forms of salaries, pensions, suppliers and taxes payment;
- Provide basic infrastructure for making and receiving electronic payments;
- Ensure employees are given basic training to use adopted platform
- use only validated account details of payment beneficiaries at all times;
- Make all forms of salaries, pensions, suppliers and taxes payment on a Central Bank of Nigeria approved end-to-end e-payment platform;
- Remit taxes to tax authorities along with associated electronic schedules on a Bank approved end-to-end e-payment platform;
- Remit contributory pension funds into the bank accounts of pension funds administrators maintained with pension fund custodians with associated electronic schedules, only on a Bank approved platform;
- Bear the cost of electronic payments and ensure beneficiaries receive actual amounts due to them. Where other arrangement exists, it must be mutually agreed between the payer and beneficiary;
- Provide evidence of payment to beneficiaries;
- Indicate compliance with this e-payment Guidelines in annual report;
- Endorse and deliver e-payment compliance document to the [Central] Bank; and
- Report all unresolved e-payment challenges to the Bank.

And employees and suppliers must "maintain e-payment enabled bank accounts with Deposit Money Banks, Other Financial Institutions or any other approved channel of receiving payments such as mobile account or electronic wallet, subject to the Bank's approved limits."

Since the CBN does not have direct authority over these groups outside the financial sector, the guidelines should be taken as non-binding. There are effectively no sanctions for non-compliance, though the CBN is currently developing an oversight mechanism. The only infractions enumerated for paying organizations come when they pass along the costs of payments to recipients, do not obtain verified account details for recipients, do not report unresolved challenges, and do not notify recipients when payments are made. The most serious penalty for banks is a small fine if they actively impose constraints on electronic payments into accounts.

The environment in which Nigerian businesses operate, therefore, is characterized by a strong policy push by the CBN for them to shift to using more electronic payments, but with limited legal capability — enforcement coming indirectly through fees on corporates' banks. So, as the next section describes, Nigerian businesses are beginning to experiment in response to the signals and penalties. Some of them are being led by their banks; others are challenging their banks to adapt.

Cashless today is most likely to impact larger businesses: the smaller the business is, the less formal, the less complex, the less likely it is to be directly affected by the fees on excess cash withdrawals. Smaller businesses may be indirectly affected, however, through receiving more information about digital options, more acceptance of electronic payments and the changing preferences of their suppliers and customers.

3 Digitizing payments at Nigerian corporates

To raise the profile of the Cashless policy, in September 2013, the National Payments System Vision 2020 Joint Working Group on e-payment of Salaries, Pensions, Suppliers and Taxes presented awards to a number of Nigerian government agencies and businesses for digitizing their payments. According to 'Deremi Atanda, the chair of the working group, the goal of the awards was to "recognise, celebrate and promote organisations that had aligned with the Government initiative on e-payment adoption as aspirational and model brands." In the corporate categories, banks nominated their clients, and winners were selected according to the scope of the corporates' shift, the volumes and values of payments made, and any innovative payment methods involved.

Among the winners announced at a gala dinner, Leadway Assurance was first in the corporate category, and Nigeria Bottling Company was the first runner up in the multinational category.

This section contains descriptions of the shifts made by these two companies and two others. Three of the businesses were recommended by Citibank, which has been promoting electronic payments among its corporate clients in Nigeria and elsewhere. All are large formal businesses drawn from four distinct sectors of the economy: manufacturing (NBC), distribution (Fan Milk), shipping (Grimaldi) and insurance (Leadway). Some of these companies have taken the initiative to digitize their payments on their own, while others have been encouraged by their banks. Regardless of the source of the impulse, they should all be seen as relatively early adopters — not necessarily representative of Nigerian businesses generally, but rather as indicators of the impact of the Cashless policy.

3.1 Nigerian Bottling Company helps its vendors become formal businesses

Nigerian Bottling Company (NBC) is the local Coca-Cola bottler and distributor in Nigeria, and it has corporate offices and depots throughout the country. NBC pays its foreign suppliers using bank transfers, its domestic suppliers using a combination of bank transfers and cheques (when the value is under the

CBN's limit), and its employees, even casual laborers, using bank transfers (sometimes with NEFT, other times with NIP, depending on the urgency).

These outcomes are the result of a concerted effort over the past three years to shift NBC's payments to electronic means — an initiative that would not have happened without the Cashless policy, according to NBC's corporate treasury manager, Rotimi Osadare.

The most interesting component of this shift, though, has been in the payments NBC receives from its customers. NBC has four kinds of accounts:

1. Key accounts: These are large grocers, restaurants, and international clients; they pay NBC for products using bank transfers or cheques.

2. Wholesalers, called 'dealers': These dealers are small businesses, in or near a market, with a fixed place of business, a truck, and usually at least a few employees. They in turn sell NBC products to smaller retailers; they, too, pay using bank transfers or cheques.

3. One way pack: These can be businesses of any size, but they only buy a single product from NBC, rather than a wider range of beverages that NBC offers; some of these still pay NBC with cash.

4. Conventional dealers, or everyday marketplace buyers: These are small-time retailers who buy directly from NBC, rather than from wholesalers, and they all pay cash. To avoid paying the Cashless fees on deposits (prior to these fees being discontinued), NBC depots would turn away customers who arrived with too much cash.

The first category of customers, the key accounts, is most likely to be formalized already, most likely to be comfortable with electronic payments. The third and fourth categories are likely the most difficult to reach with electronic payments: cash generally rules their entire economic ecosystem. But NBC sees the second category, dealers, as a prime opportunity for digitizing part of its value chain.

Beginning in 2011, NBC began helping dealers with greater than about $6,000 in turnover to open corporate bank accounts so they could pay NBC for deliveries by bank transfer, rather than by cash or cheque. In January 2014, Mr. Osadare estimated that 99% of dealers had bank accounts; that NBC was collecting 35% by value through electronic payments; and that the proportion would rise to 60% by the end of the year. This is a substantial shift in a hard-to-shift segment.

To achieve this, NBC negotiated with several local banks with large branch

NBC workers load empty bottles into a truck in Ojuelegba Market in Surulere, Lagos.

networks to offer no-fee accounts. NBC now has accounts at seven banks, and the transfers are made "on-us", or from a dealer's account at one bank to NBC's account at the same bank.

Previously, NBC would send a sales representative around to the dealers. The dealers would place their orders and pay by cash, and then the merchandise (cases of bottles) would be delivered separately from the nearest depot. This arrangement was slow. It was risky: NBC drivers were often targeted for robbery — once a month, according to Mr. Osadare. And it was costly: NBC has to pay to store large amounts of cash and high insurance premiums against the risk of losing that cash.

Now, sales reps still visit dealers to take orders, though dealers can also place their orders by phone. Then the dealers issue an instruction to their bank to make a transfer to NBC. And then NBC delivers the merchandise. So the money hits NBC's accounts more quickly; "there's nothing to rob," Mr. Osadare said; and NBC's cash-in-transit costs are down.

NBC recognized that its dealers were unlikely to change the way they made payments without help and without incentives. So NBC and the banks in the program walk the dealers through the process: they help the businesses register with the Corporate Affairs Commission, entitling the businesses to open a corporate, rather than a personal, bank account, and therefore qualify for the higher limits under the Cashless policy. And in many cases bank staff come to the businesses to help them fill out the account-opening forms.

This initiative has so far been driven by NBC's finance team with assistance by the commercial team in reaching and convincing the dealers to adopt this policy. From a commercial standpoint, it took time to prioritize this initiative with the many other objectives of the business such as a focus on increasing sales volumes. The company's senior leadership, though, understands the potential tradeoff and has backed the shift to electronic payments. And one of NBC's frontline staff, Ola Lawal, a sales manager at a depot in Lagos, said the goals of improving efficiency and increasing sales could even be complementary: If dealers spend less time going to the bank to get cash, and if they do not have to pay fees for making payments, then they might be more profitable and could buy more merchandise. The box below describes the experiences of three of NBC's dealers, based on in-person interviews in January 2014. The names are withheld to protect the privacy of the individuals involved.

Box 1 NBC's dealers

Ms. M

Aguda Market, Mushin, Lagos

Ms. M has been in business since 2010. She has 3 employees, all of whom she pays in cash. She sells to about 295 retailers in the market, all of whom pay her in cash.

Every one or two days, she goes to her bank and deposits about $2,000-2,500. While she is at the branch, she uses a paper slip to instruct the bank to transfer money from her account to NBC. The bank notifies NBC of the transfer, so Ms. M does not have to show a receipt to her sales rep.

She already had a personal account at another bank, which she used for her business. She still uses that account and only uses the NBC bank account to pay NBC.

Mr. A

Akerele Market, Surulere, Lagos

Mr. A has been in business since 1991. He has 9 employees and sells to 200 shops, making deliveries with his trucks or a van.

Mr. A also sells products from Nigerian Breweries and Guinness. Those companies gave him several POS devices, acquired by different banks, to put in his shop. When he needs to pay for merchandise, he swipes his debit card from the appropriate bank in the matching POS.

For his purchases from NBC, Mr. A. makes the transfers from an NBC bank branch: he goes there three times a week to make deposits.

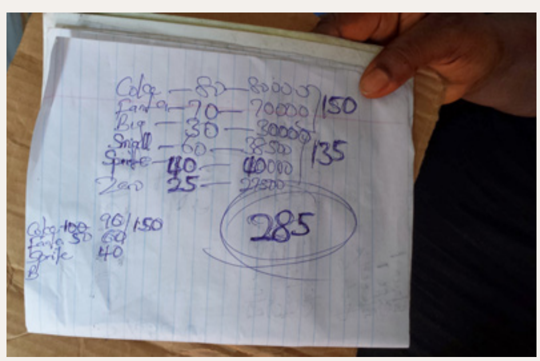
Ms. O

Akerele Market, Surulere, Lagos

Ms. O has been in business since 2011. She has two employees, 50-100 customers, and a daily turnover of about $900-1,200. She has one of the smaller businesses in NBC's dealer network.

Ms. O. has a personal account with a bank, which she uses to pay NBC. NBC helped her register as a formal business in 2013, and she opened a business account at another bank. But she still uses the original personal account, even though she has to pay for each transfer.

She thought the corporate account meant she would have to pay higher fees and did not want to change what she was doing. "Since there had never been any problem with the [personal] account, I just felt comfortable using it," she said.



Ms. O's notepad with her business's accounting.

3.2 Fan Milk takes cash out of the system and builds up a mobile money network

Fan Milk is a national producer and distributor of dairy and other beverages. Like Nigerian Bottling Company, Fan Milk has distribution centres throughout the country, from which it sells to large and small wholesalers.

It sources its milk from abroad, and it pays those foreign suppliers with bank transfers. Local suppliers are paid with a mix of bank transfers, bank drafts and cheques.

For the past two years, Fan Milk has been experimenting with using mobile money to receive payments at its distribution centres and has partnered with Funds & Electronic Transfer Solutions Limited (called fets), a mobile money operator. The process for receiving electronic payment for sales is quite complicated since it requires that fets agents take on the role of converting cash to electronic value for merchants to use.

Fan Milk maintains two e-wallets with fets: a central wallet and a master wallet. There are fets agents at each Fan Milk distribution centre, and each agent has a fets e-wallet of his own.

Each day:

1. A fets agent estimates how many Fan Milk purchases will be made at the distribution centre during the day. He then takes that amount of cash to a bank, transfers it to fets, and gets an equivalent amount in e-value added onto his e-wallet.

2. When a wholesaler — which Fan Milk calls a franchise taker — comes to the distribution centre, he pays the fets agent in cash. The

A Fan Milk vehicle at one of the company's distribution centers.

agent then transfers an equivalent amount in e-value from his own e-wallet to the franchise taker's fets wallet.

3. Then the franchise taker uses his phone to transfer the e-value into Fan Milk's central e-wallet.

4. fets sends Fan Milk an SMS confirming the payment, and Fan Milk credits the franchise taker, who leaves the distribution centre with his merchandise.

5. The franchise taker's cash stays in a safe at the distribution centre and is taken to the bank every two hours or so, sometimes by the agent and sometimes by another driver.

6. At the end of the day, Ahmadu Murtala, a Fan Milk accountant in Lagos, transfers all the value in the central e-wallet to Fan Milk's master e-wallet. And then he uses fets's online platform to transfer the money from the master e-wallet into a Fan Milk bank account at one of four banks, via NIBSS or Interswitch, a private switch company.

There are fets agents in all of Fan Milk's distribution centres. Others are based in markets, sell to wholesalers there, and are also expected to develop fets's business with other local businesses.

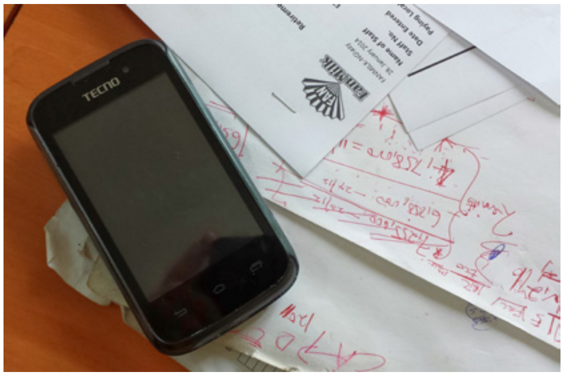
As of early 2014, 80% of Fan Milk's collections at distribution centres by value were received electronically using fets agents; some cash still comes in on Sundays, when there are no fets agents at the distribution centres. (Large corporate clients pay directly by bank transfer.)

This arrangement was designed when there were still limits and fees for deposits under the Cashless policy. And according to Oluwadare Owolabi, fets's CEO at the time this case study was written, because Fan Milk was taking cash out of circulation, it was exempt from the deposit limits. Fan Milk paid fets 1% of the value of collections, at the time it was transferred into a bank account (both companies said this would have been less than Fan Milk's obligation had it continued to collect cash).

Now that, since July 2014, there are no longer limits and fees for cash deposits, there is less of a direct cost incentive for Fan Milk to continue this arrangement. However, other incentives still apply. Mr. Murtala said fets helps Fan Milk avoid bank queues, reduces the risk of robbery and embezzlement, and, importantly, improves Fan Milk's cash flow. "It will reduce the finance costs of the company," he said.

Mr. Murtala in his office.

Mr. Murtala's phone, from which he accesses Fan Milk's master e-wallet.



3.3 Grimaldi brings POS to the port of Lagos to digitize payments from shipping customers

Grimaldi Agency Nigeria is the local subsidiary of an international shipping business, based in Italy. Grimaldi operates a terminal at the port in Lagos, and it acts as an agent for the Italian company in interfacing with the Nigerian government.

Over the past three years, Grimaldi has shifted from using about 90% cash and cheques for its incoming and outgoing payments to doing most business with electronic payments.

The vast majority of Grimaldi's incoming payments, by volume, come from shipping agents who contract with importers to collect containers at the port; some large importers pay Grimaldi directly. Grimaldi collects about $250,000-300,000 daily. In 2011, these payments were be made entirely by cheque or cash.

While some large customers still pay by cheque, as of early 2014, almost 50% of collections were being made electronically using POS devices, according to Nitin Senan, Grimaldi's deputy managing director. Grimaldi installed a POS terminal in the Grimaldi terminal at the port; it also installed a POS terminal in the office of a large agent firm that does lots of business with Grimaldi. However, despite this major shift, Grimaldi still has to accept some cash: on Saturdays, when banks are closed, Grimaldi cannot force the agents to deposit their cash and then use their cards; and also when the POS network is down.

Grimaldi has also found ways to take cash and cheques out of its outgoing payments. Mr. Senan said to pay salaries, the company used to write one large cheque to its bank and

send a schedule of payments, and then the bank would manually enter but electronically execute the transfers to employees' individual accounts. Now all salaries, even for seasonal workers, are paid directly from Grimaldi's account at a local bank into employees' accounts. Grimaldi encourages its 115 employees to bank with that same bank, but it can make the transfers to other banks, too, if needed.

Mr. Senan said there was initially some resistance to shifting from expatriate workers who did not have accounts with Nigerian banks and so preferred to receive cheques. But Grimaldi arranged with a local bank (prior to its relationship with Citi) to open local accounts for these employees and install an ATM in Grimaldi's office at the port.

Grimaldi's suppliers are now paid entirely with bank transfers, as well. The company's local bank had warned Grimaldi that suppliers would resist accepting payments electronically since all their expenses would be paid in cash. To make the case to these suppliers to shift to electronic payments, Grimaldi promised them early and predictable payment. If suppliers submit invoices by Thursday, Grimaldi will pay them the next Tuesday or Wednesday. This contrasts with payment by cheque, where the date of issue often varied, and then the value took three days to clear. With cheques there were also concerns about fraud, as sometimes suppliers would change the amount written on the cheques. "They said, 'Yes,'" Mr. Senan said of supplier's response to the new arrangment. Grimaldi also took advantage of its market size and importance to pressure its suppliers to accept this way: "If you don't have a bank account, I'm sorry."

Grimaldi has to deal with two principal government agencies: it pays fees to the Nigerian Port Authority and the Nigerian Maritime Administration and Safety Agency (NIMASA). While the Nigerian Port Authority has "embraced Cashless," in Mr. Senan's words, and accepts sizable payments via bank transfer, NIMASA has not. Grimaldi must physically take a bank draft from its own bank to a branch of NIMASA's bank. Grimaldi also pays VAT, withholding tax, and pay-as-you-earn tax to the Federal Inland Revenue Service using bank transfers. This method of payment of taxes for large business accords with the Better Than Cash Alliance Country Diagnostic for Nigeria, which reported that among the large corporations that pay federal taxes, most do so electronically.

Despite the significance of these shifts, Mr. Senan said Grimaldi did not do a detailed cost-benefit analysis beforehand. The benefits — speed, safety, security — seemed self-evident. Even still, some top managers were resistant to change, as they had heard about other companies' bad experience with banks losing their money after debiting electronic payments. "The banking trust has (still) to come," Mr. Senan said. The successes have changed Grimaldi's internal dynamics, though.

3.4 Leadway confronts challenges with direct debits to collect insurance premiums

Leadway Assurance Company is a large national insurance company, offering personal and business insurance products, with an annual turnover of around $225 million.

Like Grimaldi, Leadway has recently shifted almost all of its outgoing payments from cash and cheques to electronic means. Now 98% of its 350 employees are paid by bank transfer, compared with just 2% a few years before, and agent commissions are now 90% digital, up from 0%. All but about 20 of 4,150 monthly insurance claims are now paid directly into policyholders' accounts, and those that are not are made by cheque only after some failure with the bank transfer. And like Grimaldi, Leadway incentivizes suppliers to accept payment by bank transfer by emphasizing the speed of payment.

Unlike Grimaldi, Leadway has measured the cost of making payments electronically. The company calculated that the loss of the float income on funds to pay claims cheques can be quite large, especially for cheques to government; some departments wait up to four months to deposit cheques. However, to offset this loss, Leadway's savings came from efficiency: it now takes fewer staff to process more payments.

For receipts like premium payments, Leadway has tried to promote the use of direct debits, but the company has struggled with the reliability and accuracy of this instrument, according to Tunde Hassan Odukale, the executive director for investment and systems.

Leadway has had to turn to multiple banks for new platforms. Mr. Odukale cited frequent turnover at banks and errors in platforms and in the clearing performed by NIBSS as impediments in their shift to digital payments. For example, the Leadway staff mentioned an extreme example of one policyholder whose account was credited rather than debited. Leadway management considers these failures a reputation risk for the company with its clients, which lends credence to the view of some in the company, particularly those processing the payments, who are resistant to using electronic payments. Mr. Odukale suspects other companies' shifts are also being challenged by the payments system's infrastructure. "Whatever we're experiencing, they must be experiencing," he said.

In spite of these challenges, Leadway has managed to substantially reduce its individual and group premiums from about 70% in cheques to 40%.

4 At the next business size down, small suppliers have yet to feel much impact of digital payments

The companies described in the previous section are on the leading edge of large businesses in Nigeria. But the goal of Cashless was also to shift payments farther down, at the level of smaller businesses and consumers.

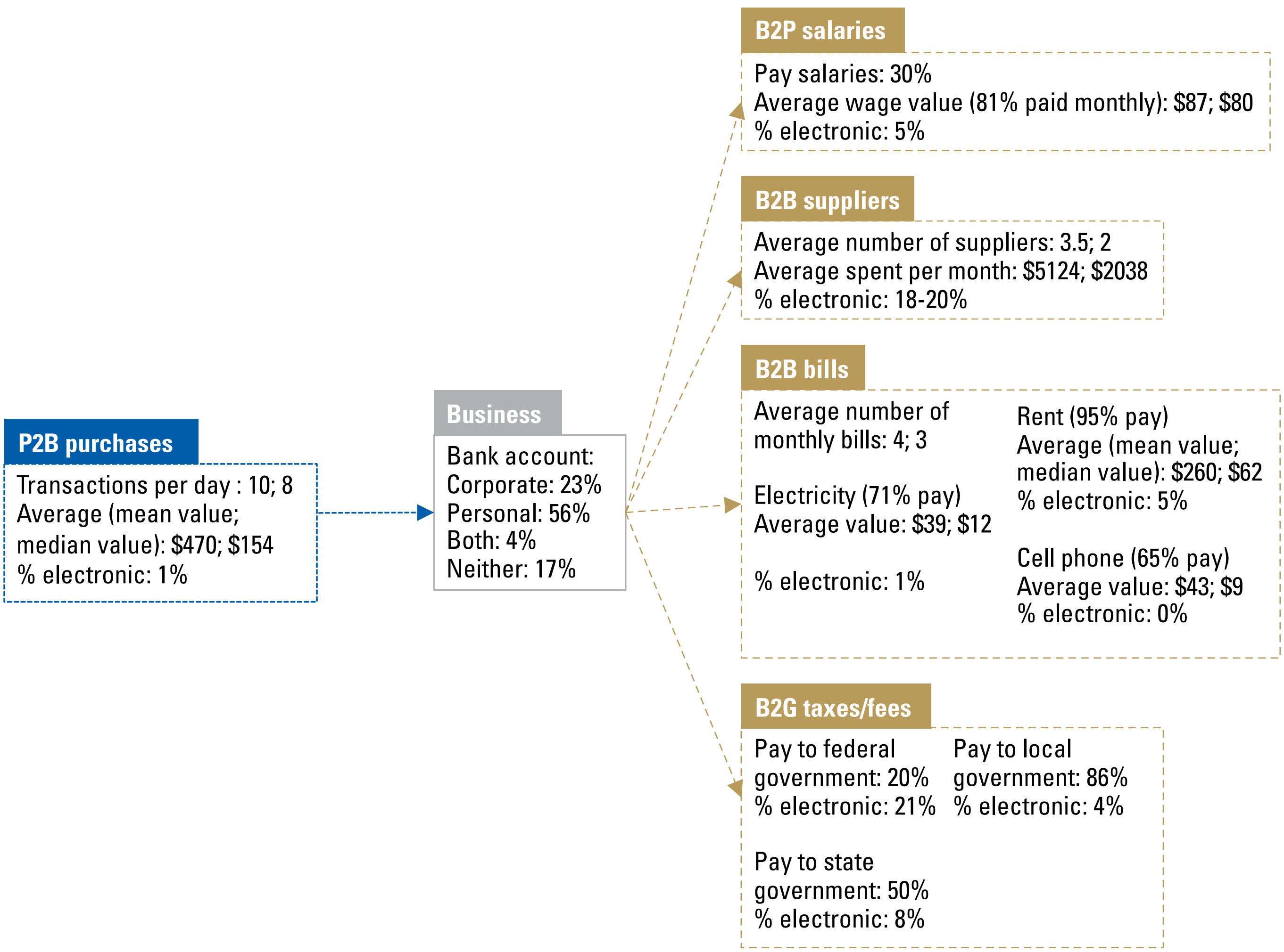
The first section showed that individuals are beginning to use POS for payments, but the levels are still quite low and nowhere near displacing cash at point of sale. But what about small businesses? The most likely subset of small businesses to digitize payments is those businesses that are in the value chains of larger companies, which are more likely to apply pressure to reduce their own cash handling. Businesses that are based in urban areas, where they would not face the challenges of accessing formal financial services (though those services may not be appropriate for their needs), are also more likely to feel the impact of the policy.

To test this hypothesis, BFA, in conjunction with the Nigerian National Bureau of Statistics (NBS), conducted a survey of the payment behavior and preferences of about 600 small businesses in Lagos, all of which were suppliers of intermediate goods (some also had a retail-facing business), each with 25 or fewer employees.

Figure 6 below shows an "X-ray" of the incoming and outgoing payments made by these businesses.[24]

Most payments by and to these businesses are in cash.

FIGURE 6 **Payment 'X-ray' of a typical small intermediate goods supplier in Lagos, Nigeria**



Source: CBN, exchange rates from Oanda.com.

4.1 Formality and financial inclusion seem to be major drivers

Of the business surveyed that have bank accounts (some 83% in total), most have only one or two accounts. Most of these business owners and managers chose their bank because it was the closest to their business or because they have a personal account at that bank, as well. Crucially, few of these businesses opened a bank account because their customers (larger businesses of the kind described in the previous section) required them to do so. Most of the businesses without bank accounts need cash on hand to buy stock or make other payments, or their economic ecosystem is generally ruled by cash, their owners and managers said, so there was no proposition for them to have one.

Just 20% of these businesses say they have made an effort to make payments electronically, and of the businesses that do not currently make any payments electronically, just 11% have tried previously. This suggests that there is a high cost to trying, but that once businesses make the shift, that behavior tends to stick.

Of particular interest in the Nigerian context is the distinction between businesses that use a personal bank account and those that have a corporate bank account. As discussed earlier, having a corporate bank account requires that the business be registered with the Corporate Affairs Commission, and has the advantage of qualifying the business for the higher corporate cash limits under the Cashless policy.

It is not clear from the survey whether businesses tend to formalize — register with the government, open a bank account for the business and possibly a corporate bank account — and see electronic payments as an ancillary benefit, or whether they seek out the benefits of electronic payments and find they can only get those through formalization. What is clear is that the benefits of formalization and electronic payments are mutually reinforcing.

As Table 3 below shows, corporate bank accounts are associated with a greater degree of formalization.

TABLE 3 Bank accounts and formalization

	Among…	Unbanked businesses	Businesses using a personal account only	Businesses with a corporate bank account
Indicator of formality	Part of a chain or franchise	4%	23%	49%
	Registered with an umbrella business body	50%	57%	41%
	Registered with any government	54%	61%	88%
	Registered with the federal government	3%	9%	55%
	Registered with the state government	6%	22%	37%
	Registered with the local government	52%	52%	49%

And Table 4 below shows how this formalization translates into payment behavior. Businesses with corporate bank accounts are not necessarily bigger (i.e. with higher revenue), but each sale tends to be of a higher value than for businesses that just use a personal bank account. This means that the businesses with corporate bank accounts get benefits from formalization — namely, higher Cashless limits — even on the payments they receive in cash. Again, from the survey results alone, it is not clear to what extent this benefit contributed to the businesses' decisions to open corporate bank accounts.

Regression analysis further suggests that bank accounts, and especially corporate bank accounts, are the strongest correlates of receiving payments using electronic means, as shown in the Annex A.

While formalization brings benefits to SMEs — higher Cashless limits, access to formal credit — it has real costs, too: a heightened degree of scrutiny and compliance costs, including the need to pay taxes. The 2013 Better Than Cash Alliance Country Diagnostic reported that outside of large corporates, relatively few businesses pay formal taxes in Nigeria. Senior staff at the Federal Inland Revenue Service said then that the rate of compliance was a secondary concern to establishing a functional electronic payment mechanism for those businesses that do pay. In the SME survey, just 20% of businesses said they paid federal taxes.

Deepening the country's tax base will require creative ways to make the case to SMEs for formalization. Digitizing the processes of licensing and payment may be a step in this direction, and would entail coordination with tax authorities and potentially other government agencies. And as the next section suggests,

TABLE 4 **Customer purchases at suppliers in survey**

Among…	Unbanked businesses	Businesses using a personal account only	Businesses with a corporate bank account
Customer transactions per day (mean, median)	8.2 6.5	9.5 8.0	10.6 8.0
Average value per transaction (mean, median)	$344 $152	$423 $122	$625 $244
Accepts some form of electronic payment	3%	23%	53%
Has a POS device	0%	3%	15%
% of transactions in cash	80%	75%	61%

emphasizing the tools that come with formal financial services, tools that can improve the efficiency and accuracy of business accounting, can be part of donors' approach, as well.

4.2 Businesses see digital payments as helping them reduce complexity, not just cut costs

Not surprisingly, there is a strong relationship between receiving electronic payments and making electronic payments: most businesses that do one also do the other. So the link between formality and receiving electronic payments applies to making electronic payments, too.

But another factor seems to drive businesses to digitize the payments they make: the number of suppliers they have. Businesses that have corporate bank accounts generally have more suppliers than do businesses that use a personal bank account. In turn, those businesses make more payments electronically. The number of suppliers a business has may say something about the degree of the business's complexity and about the greater need for convenient mechanisms to reduce the transaction costs. Table 5 below shows the variation across businesses.

This is not to say that complexity is the overriding factor. As the table in Annex B shows, in the regression analysis the type of bank account is again the strongest predictor of using electronic payments. However, the number of suppliers is statistically significant across all four models tested.

While not many of the suppliers in this survey are yet making electronic payments, the survey results do suggest that those businesses that are making electronic payments are taking advantage of the process and recordkeeping aspects of electronic payment products and platforms.

TABLE 5 Payments made by businesses in survey

Among…	Unbanked businesses	Businesses using a personal account only	Businesses with a corporate bank account
Pay at least one salary	14%	22%	55%
Number of suppliers (mean, median)	2.7 2.0	3.4 2.0	4.0 3.0
Total value of monthly supplier payments (mean, median)	$1,269 $914	$4,464 $1,828	$8,630 $3,047
Number of other bills paid (mean, median)	3.7 4.0	3.5 3.0	3.6 3.0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POLICE

5 Lessons for shifting business payments

Governments active in promoting digital payments have generally adopted one of two approaches:

- Incentivizing digital, such as through tax rebates (e.g. Korea), exemptions or lotteries (e.g. Mexico); or
- Disincentivizing cash, whether through prohibiting cash usage above certain transaction sizes (e.g. certain European countries) or adding to the direct cost of cash for users (as in this case).

The fees on cash in Nigeria's Cashless policy clearly fall into the second approach. Nigeria has not prohibited cash usage, which would be difficult to enforce, but rather added to the private costs of using cash through the one point of control to which government has easy access: withdrawals and, initially, deposits, at banks. For entities outside the banking system, the Cashless fees have no effect at all.

The CBN's policies are not only about penalties, though: the public information campaign seeks to persuade individuals to adopt digital payments; the CBN awards sought to recognize proactive institutions for their efforts; and the newly unveiled POS incentive scheme could provide a compelling case for merchants and consumers to shift to digital payments.

Cashless Nigeria has now been in force for barely two years in Lagos State, and for much shorter in the rest of the country, so it is too early to evaluate its impact as a whole. (Even over a longer time horizon, separating out the impact of Cashless from that of the development the payment infrastructure, increased access to mobile banking, and other government initiatives will continue to be difficult.) Rather, this case has focused on how larger corporates have reacted to the policy.

Based on the interview evidence, the effect of the policy has been less through charging penalties than through shifting mindsets of corporate decision makers. Cashless Nigeria created a sense of inevitability around the shift to digital. Corporates' questions now are about how to shift, not whether or not to shift. As this sentiment spreads among corporates and their banks, it will be that much easier for any individual corporate to consider shifting — they will be less likely to have to persuade or coerce their suppliers, and more payment products will be available to them. This potential network effect could be an important part of reaching a national tipping point in Nigeria towards substantially reducing the usage of cash.

The 2013 Better Than Cash Alliance diagnostic estimated that just 1.6% of all payments in Nigeria were made digitally. As this case study has also shown, from the particular angle of business payments, Nigeria as a whole in 2014 still has a long way to go to pervasive digital payments, even among the larger corporates that have begun to shift. SMEs and individuals clearly have much further to go, even if overall trends already point toward more usage.

The intentionality of the package of measures connected to Cashless will be crucial in this respect. The core policy issue for Nigeria may become whether the "push" momentum towards digital among corporates (and also government agencies) does indeed extend down value chains to reach smaller business and individuals. In the absence of more effective "pull" incentives for small users, supported by a business case for appropriate products and services, Nigeria's progress to date could be at risk of stalling in the future.


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LIST OF ACRONYMS

ACRONYM	RELEVANCE
CBN	Central Bank of Nigeria, the leader of the Cashless Nigeria policy
EFInA	Enhancing Financial Innovation & Access
fets	Funds & Electronic Transfer Solutions Limited, a mobile money operator
NEFT	Nigeria Electronic Funds Transfer system, a retail payments service run by NIBSS that operates in batch
NBC	Nigerian Bottling Company, the local Coca Cola bottler and distributor
NBS	National Bureau of Statistics
NIBSS	Nigeria Inter-Bank Settlement System, a local payment switch owned by the country's banks
NIMASA	Nigerian Maritime Administration and Safety Agency
NIP	Nigeria Instant Payment, a real-time retail transfer instrument, cleared by NIBSS
POS	Point-of-sale devices or terminals, the promotion of which is a key component of the Cashless policy
RTGS	Real time gross settlement system
SME	Small and medium-sized enterprise

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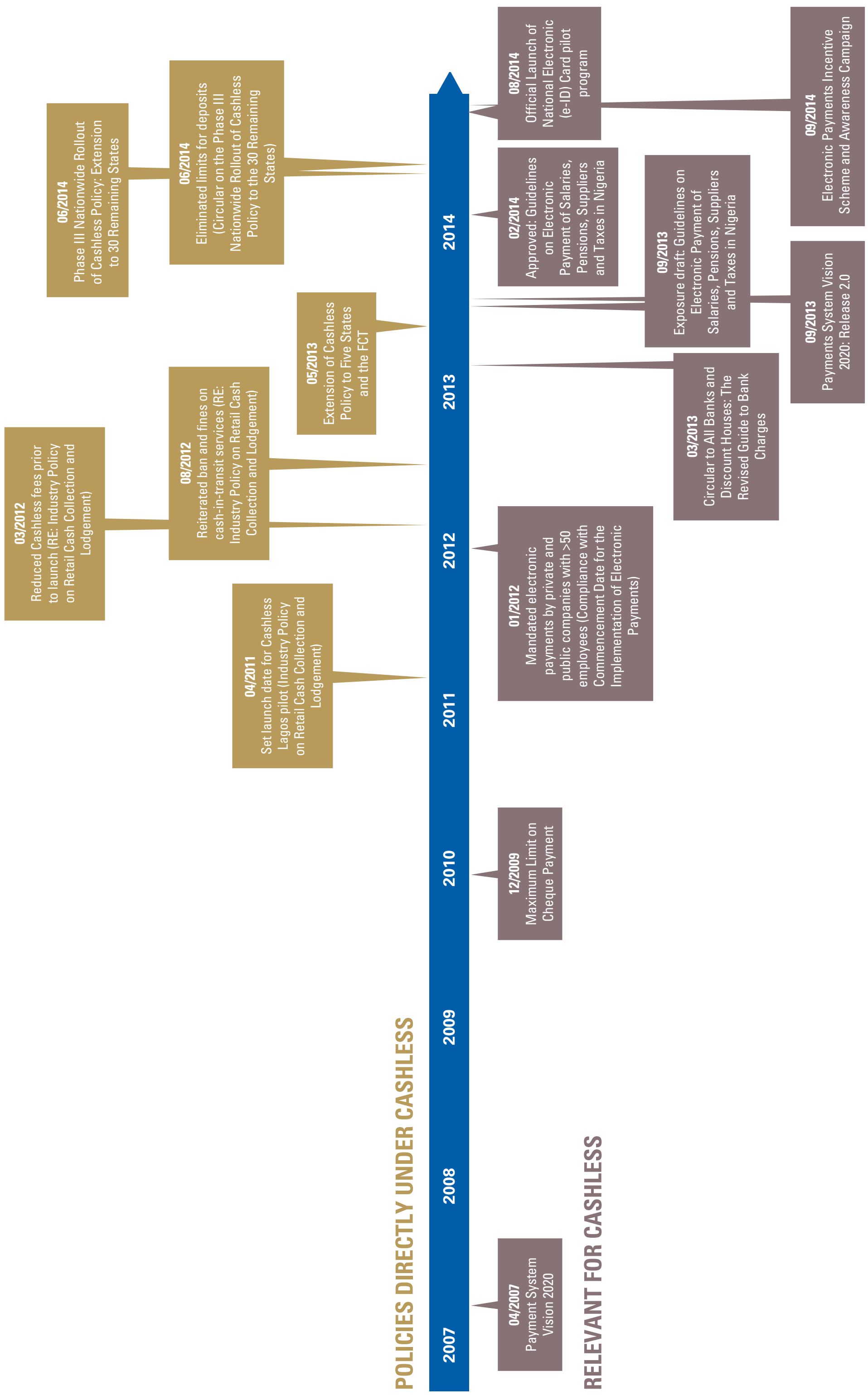
Interviews

COMPANY	INDIVIDUAL(S)
Citibank	Emmanuel Umukoro, Head, Cash Management Olusegun Ogunnowo, Head, Payment
Fan Milk	Ahmadu Murtala, Accountant
fets	Oluwadare Owolabi, MD/CEO
Grimaldi	Nitin Senan, Deputy Managing Director
Leadway	Tunde Hassan-Odukale, Executive Director (Investment & Systems) Raphael Akomolede, General Insurance Adekunle Adebayo, Life Insurance David Onilado, Deputy General Manager (Finance)
Nigerian Bottling Company	Rotimi Osadare, Corporate Treasury Manager Ola Lawal, Sales ManagerFig. A1: Timeline

POLICY TIMELINE

FIGURE A1 Timeline



ECONOMETRIC RESULTS

Summary tables below. More technical information available from Better Than Cash Alliance upon request.

TABLE B1 Factors related to the *probability of accepting* electronic payments

			Owner respondents only
Make electronic payments	2.05***	2.04***	2.31***
Business account	2.03***	2.02***	2.20***
Personal account	1.49***	1.48**	1.67**
Customers transactions	0.00		
Transaction size	0.00***	0.00***	0.00***
Registered	0.17		
Franchise	0.49*	0.59**	0.50
>50% business customers	-0.33		
Large business	0.35		
Old	0.57**	0.54**	0.56*
Daily transactions	0.00		
Pays withdrawal	0.00		
POS	0.29***	1.40***	1.69***
Male			-0.42
Education			0.03
Age			-0.02
Constant	-4.01***	-4.13***	-5.14**
No. obs.	599	599	473

TABLE B2 Factors related to the *probability of making* electronic payments

				Owner respondents only
Accepts electronic payments	1.77***	1.93***	1.9***	2.05***
Business account	3.34***	3.66**	3.90***	3.40***
Personal account	2.33***	2.67***	2.60**	2.35**
Pays withdrawal	0.23	0.27		
Pays withdrawal & business account			-0.14	
Pays withdrawal & personal account			0.63*	
Registered	-0.03			
Registered with the government		-0.38	-0.39	
Franchise	0.14			
>50% business customers	0.27			
Old	0.24			
Daily transactions	-0.00	-0.00		
Large customers	0.08			
Large business	0.12			
Number of bills	0.16*	0.20**	0.20**	0.14*
Number of suppliers	0.11***	0.10***	0.10***	0.08***
Bills and supplier payments	0.00	0.00		
Male				0.39
Education				-0.03
Age				0.03
Constant	-5.76***	-5.62***	-5.64***	-5.28***
No. obs.	527	598	598	472

Endnotes

1 Such as South Korea.

2 Such as Mexico's Boletazo scheme.

3 Including a range of European countries: Greece, Italy, Spain.

4 Note that the name of the policy did not indicate the aim of eliminating cash altogether, but rather reducing its usage —less cash.

5 G: Government. B: Business (non-financial private sector). P: Person (individuals). D: Development community partner. For further explanation of the payment grid, see Better Than Cash Alliance (2012), The Journey Toward 'Cash Lite', available at http://betterthancash.org/wp-content/uploads/2012/09/BetterThanCashAlliance-JourneyTowardCashLite.pdf.

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14 Central Bank of Nigeria (March 16, 2012), RE: INDUSTRY POLICY ON RETAIL CASH COLLECTION AND LODGEMENT, available at http://www.cenbank.org/OUT/2012/CIRCULARS/BSPD/RE%20INDUSTRY%20POLICY%20ON%20RETAIL%20CASH%20COLLECTION%20AND%20LODGEMENT.PDF.

15 Bankable Frontier Associates (November 2012), Cash-less Lagos Pilot Appraisal Report, conducted for EFInA. See also Ademola Alawiye (August 23, 2012), "Cash-less policy: Bank officials ignore penalty charges," Punch, available at http://www.punchng.com/business/business-economy/cash-less-policy-bank-officials-ignore-penalty-charges/.

16 Central Bank of Nigeria (May 17, 2013), EXTENSION OF CASH-LESS POLICY TO FIVE STATES AND THE FCT, available at http://www.cenbank.org/out/2013/bpsd/circular%20on%20cash-less.pdf.

17 Central Bank of Nigeria (June 3, 2014), PHASE III NATIONWIDE ROLLOUT OF CASHLESS POLICY: EXTENSION TO 30 REMAINING STATES, available at http://www.cenbank.org/out/2014/ccd/cashless-rollout.pdf.

18 Central Bank of Nigeria (June 9, 2014), CIRCULAR ON THE PHASE III NATIONWIDE ROLLOUT OF CASH-LESS POLICY TO THE 30 REMAINING STATES, available at http://www.cenbank.org/Out/2014/BPSD/Circular%20on%20the%20Phase%20III%20Nationwide%20Cashless%20Policy%20Rollout.pdf.

19 See Bill & Melinda Gates Foundation (2013), Fighting poverty, profitably, available at: https://docs.gatesfoundation.org/Documents/Fighting%20Poverty%20Profitably%20Full%20Report.pdf.

20 MasterCard Advisors (2013), Cashless Journey: The Global Journey from Cash to Cashless, available at http://newsroom.mastercard.com/wp-content/uploads/2013/09/Cashless-Journey_WhitePaper_FINAL.pdf.

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22 Central Bank of Nigeria (September 25, 2013), Exposure draft: GUIDELINES ON ELECTRONIC PAYMENT OF SALARIES, PENSIONS, SUPPLIERS AND TAXES IN NIGERIA, available at http://www.cenbank.org/out/2013/bpsd/guidelines%20on%20epayment%20of%20salaries,pensions,suppliers%20&%20taxes%20in%20nigeria.pdf.

23 Central Bank of Nigeria (February 2014), Approved: GUIDELINES ON ELECTRONIC PAYMENT OF SALARIES V 1.0, PENSIONS, SUPPLIERS AND TAXES IN NIGERIA, available at http://www.cenbank.org/out/2014/bpsd/guidelines%20on%20electronic%20payments%20of%20salaries,%20pensions,%20suppliers%20and%20taxes%20in%20nigeria.pdf.

24 There is no list of Nigerian small businesses (most are informal and not registered with the Corporate Affairs Commission). This makes it difficult to assess how statistically representative the sample was. However, NBS routinely conducts population surveys and it suggested enumeration areas and the number of businesses to be chosen from each one on the basis that a sample of this size selected in this way would give a good enough representation.

About the Better Than Cash Alliance

The Better Than Cash Alliance is a partnership of governments, companies and international organizations that accelerates the transition from cash to digital payments in order to reduce poverty and drive inclusive growth. The Bill & Melinda Gates Foundation, Citi, Ford Foundation, MasterCard, Omidyar Network, United States Agency for International Development, and Visa Inc. fund the Alliance. The United Nations Capital Development Fund serves as the secretariat.

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