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Abstract

This report is part of a series commissioned by FinMark Trust to examine the retail payments landscape in Malawi, Mozambique, Zambia and Zimbabwe. It distils key findings from research conducted in Zambia in March 2012 and provides tools for understanding key drivers for retail payments system development in the country.

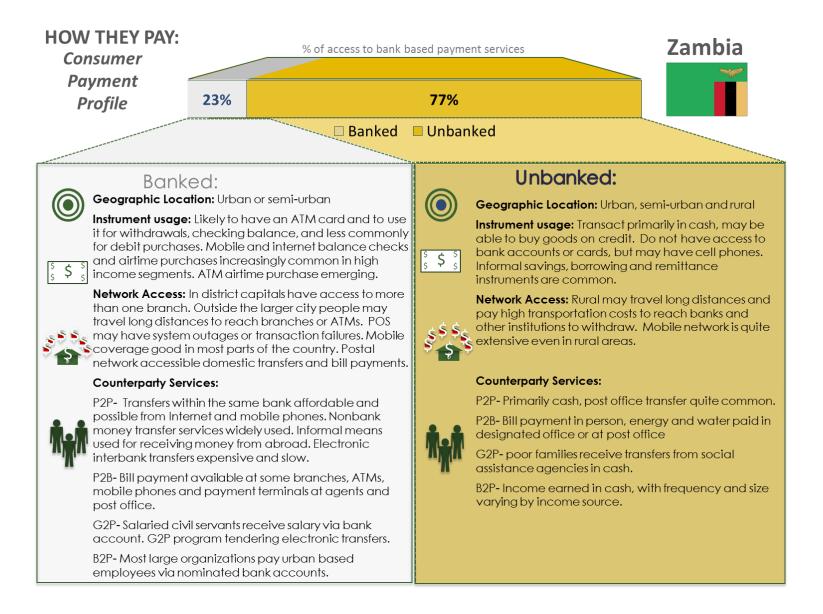
Zambia has made remarkable progress towards modernization of its national payment system, but there is a long way to go until most of the population can benefit from convenient, accessible and affordable electronic payments. This research finds that there is no single major regulatory or policy obstacle limiting progress, despite the fact that the applicable framework can still be improved. The Bank of Zambia is aware of the current regulatory gaps and is working on addressing them. It will need to issue e-money regulations to set minimum standards for existing businesses and provide certainty for new entrants. It will be necessary to create enabling rules for banks to use agents for the delivery of their services in a cost-effective manner, to expand their footprint outside urban areas and to increase convenience in places where they currently have physical presence. It is important that the upcoming regulations allow for a level playing field with nonbanks, which are already allowed to use agents. As the retail payment system expands and relies continuously on technology, the Bank of Zambia will need to create effective risk-based supervision practices to support a dynamic and healthy market. Lastly, it is necessary to improve penalization of fraud in electronic transactions for greater consumer confidence for long-term sustainability.

The local market dynamics and organization create obstacles for the development and adoption of electronic retail payments by the majority of Zambians. First, although there is push for financial inclusion by government authorities such as the Bank of Zambia, few banks seem to be interested in the low-income market, as there is still much room for profitability and innovation at the high-end segments. There seems to be healthy competition in these segments, and only increased competitive pressure, or a development or social mandate would drive substantial incursions by banks into middle-low and low-income levels. For several reasons, banks are reluctant to share retail payment infrastructure, which has motivated the Bank of Zambia to push for the creation of a local switch. Nonbanks such as mobile money providers are also reluctant to increase interoperability of their services. Lastly, despite being subject to a relatively flexible anti-money laundering regulatory regime, banks tend to be overly conservative in their requirements for account opening, which again might be related to the limited interest in, or knowledge of, the low-end segments. Alternatively, this could be linked to the lack of a tiered regulatory framework for account opening and customer due diligence, which could be addressed by Bank of Zambia through future regulations.

The demand side analysis in this report examines consumers' experience with existing payment services, drawing from focus groups and in-depth interviews conducted in rural and urban settings in Zambia. This research found that urban residents and individuals with regular, consistent incomes have access to a greater array of payment options than rural Zambians and those working in informal employment. Across all sectors there is demand for payment services that take less time to use and are more reliable than the options available today. Lastly, basic infrastructure in many parts of the country is an obstacle for the full development of electronic retail payments to support financial inclusion.

The descriptive preface of this report sets the stage for an analytical framework of themes that emerge from a consideration of the underlying conditions for enabling transformational retail payment services, followed by conclusions around the priorities for moving forward.

NOTE: This graphic depicts the varied access to payment services between the banked and unbanked population in Zambia, according to the demand and supply side research. It is not meant to present absolutes, but rather provides an indicative sense of the current state of the market in Zambia.



Abbreviations and acronyms

AMIZ Association of Microfinance Institutions of Zambia

AML Anti-Money Laundering
AMLA Anti-Money Laundering Act
ATM Automated Teller Machine
BAZ Bankers Association of Zambia

BCPD Banking, Currency and Payment Systems Department

BFSA Banking and Financial Services Act

BOZ Bank of Zambia
BOZA Bank of Zambia Act
B2P Business to person

CAZ Communication Authority of Zambia

CBD Central Business District
CDD Customer Due Diligence

COMESA Common Market for Eastern and Southern Africa
CPSS Committee for Payments and Settlement Systems

DDACC Direct Debit and Credit Clearing
DSTV Digital Satellite Television
EFT Electronic Fund Transfer
EMV Europay-Mastercard-VISA
FRA Food Reserve Agency

FSDP Financial Sector Development Plan
GRZ Government of the Republic of Zambia

G2P Government to person
KYC Know Your Customer
LuSE Lusaka Stock Exchange

LWSCO Lusaka Water and Sewerage Company MICR Magnetic Ink Character Recognition

MFI Microfinance institution
MNO Mobile Network Operator
MTS Money Transfer Service

MTZL Mobile Transactions Zambia Limited (currently Zoona)

NPS National Payment System

NPSA National Payment Systems Act

NGO Non-governmental organization

NRC National Registration Card

PIA Pensions Insurance Authority

PIC Physical Interchange Clearing

PIN Personal Identification Number

POS Point of Sale device

PMTA Payment and Money Transfer Association

PSB Payment system business
PSP Payment Service Provider
PSU Payment Systems Unit

PSWG Payment System Working Group

P2P Person to person
RIA Research ICT Africa

ROSCA Rotating Savings and Credit Association

RTGS Real Time Gross Settlement

SADC Southern African Development Community

SCT Social Cash Transfer

SEC Securities and Exchange Commission

SMS Short Message Service
STP Straight Through Processing

SWIFT Society for Worldwide Interbank Financial Telecommunication

TT Telegraphic transfer

ZECHL Zambia Electronic Clearing House Limited

ZESCO Zambia Electricity Supply Company

ZICTA Zambia Information and Communications Technology Authority

ZIPSS Zambia Interbank Payment and Settlement System

ZRA Zambia Revenue Authority

Exchange rate used: USD\$1 = ZMK 5,264



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1 Introduction

This report is part of a series commissioned by FinMark Trust to examine the retail payments landscape in Malawi, Mozambique, Zambia and Zimbabwe. It distils key findings from research conducted in Zambia in March 2012 and provides tools for understanding the landscape for retail payments in the country.

This study hypothesizes that the ability to make payments conveniently and affordably has a material impact on the financial lives of the poor. This hypothesis also assumes that (i) most existing formal payment products are not designed for use by the low-income segment of the population, and (ii) existing distribution networks have a limited domestic outreach. This study presents a "payment profile" depicting how Zambians currently use payment services in order to draw conclusions about the potential greater use of electronic payments, and the necessary steps to get there.

1.1 How to use this report

This report offers a synthesis of the findings by first providing a descriptive overview of relevant Zambian demographics and financial service penetration. This is followed by a supply side review of the current regulatory and market environment for payments in Zambia, concluding with an analysis of the respective regulatory gaps and market barriers to payment system development. A demand side analysis then looks at the consumer experience with existing payment services, drawing from focus groups and in-depth interviews conducted in rural and urban settings in Zambia. Both demand and supply side benefited from a wealth of secondary sources such as the FinScope surveys. This descriptive preface sets the stage for an analytical framework of themes that emerge from a consideration of the underlying conditions for enabling transformational retail payment services.

The analytical framework provides a lens with which to view retail payments in Zambia; a distillation of themes that emerge from the country-specific details uncovered in the course of the research. The thematic section of this report largely combines the discussion of supply- and demand-side factors. The result is a bottom-up approach to the identification of themes and priorities, which allows a thorough view of the retail payments landscape in Zambia.

The comprehensive view of the landscape for retail payment services is then brought to bear on an identification of priorities for the area. Where the analytic and thematic discussions are generally descriptive of the state of play and options for development, the discussion of priorities is oriented around discrete actions that can be taken by policymakers and other market stakeholders.

2 COUNTRY CONTEXT

2.1 Demographics

With a population of over 13 million people¹ Zambia has been experiencing an average GDP growth of over 6% per year since 2005.² Despite the positive trend of its economy spurred by record copper prices

¹ CIA country factbook, www.cia.gov/library/publications/the-world-factbook/geos/za.html.

² Ibid.



and an extraordinarily large maize crop in 2010, poverty remains a serious problem in Zambia. The country ranks 164 out of 187 on the Human Development Index (HDI)³, which, although higher than Malawi, Zimbabwe and Mozambique, highlights that poverty reduction and social development remain great challenges. There is a high birth rate, low life expectancy, relatively high HIV/AIDS incidence and high illiteracy rate. A large proportion of the population does not have access to basic services such as safe drinking water, toilet facilities, and electricity. More than 90% of adults in rural areas still use charcoal or wood as cooking fuel. Over 60% of the population is under the poverty line and almost 80% of the adult population earns less than ZMK400k (USD 156) a month.⁴ At the time of research, unemployment was greater than 15%.⁵ Infrastructure deficiencies seem not to be as profound as in Malawi or Mozambique, but there is potential to improve roads, power grids and reliability of mobile communications.

Figure 1: Zambia Human Development Index

1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 1980 1985 1990 1995 2000 2005 2010

Human Development Index: Trends 1980 - present

Source: http://hdrstats.undp.org/en/countries/profiles/ZMB.html

Figure 2 provides some demographic indicators that expand the above analysis, highlighting some of the challenges for expanding the provision of financial services, including payment services, to the majority of Zambian adults, particularly in rural areas.

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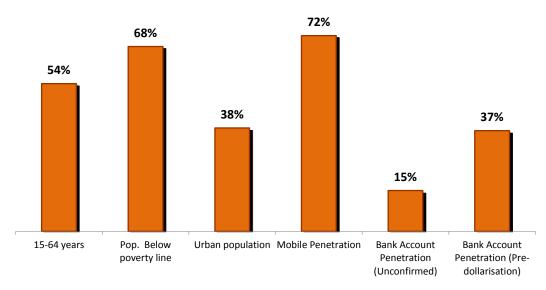
³ http://hdr.undp.org/en/statistics/hdi/, accessed in March 29, 2012.

⁴ Idem

⁵ Source: International Labour Organization, Key Indicators of the Labour Market Database.



Figure 2: Demographic overview as % of population



Sources: Bank of Zambia, CIA Country Factbook, FinScope 2009.

According to the FinScope 2009 survey, the percentage of adults served by formal financial institutions (banks and nonbanks) grew slightly from 22.4% in 2005 to 23.2% in 2009. In total, 66.3% of Zambian adults were financially excluded in 2005, while this indicator reduced to 62.7% in 2009. FinScope shows that the decrease in exclusion might be related to greater uptake of informal products, such as credit, while the number of banked adults decreased from 14.6% in 2005 to 13.9%. A majority 62% of the adult population lives in rural areas, and financial access is markedly lower in rural Zambia. The percentage of adults with bank products was 8.6% for rural adults compared with 22.6% for urban adults (FinScope 2009). The chart highlights that half of rural and 27% of urban adults did not have a regular monthly income in 2009 (FinScope 2009), which can introduce an extra challenge for providers interested in expanding outreach of financial services.

In contrast, Figure 2 shows that mobile phone penetration is relatively high in the country, but also varies from urban (59.9% of adults) to rural areas (27.5% of adults), according to FinScope 2009. The FinScope studies show that cell phone ownership grew from 18% in 2005 to 39.7% in 2008. The gap between mobile phone penetration and access to basic payment services and the speed with which this technology reaches the Zambian population demonstrate a huge opportunity for payment service providers to use this medium as a delivery channel.

2.2 Financial Service Penetration

In terms of physical coverage of financial services, bank branches, ATMs and POS are highly concentrated in Lusaka and a few other urban centres, despite having increased in number in the last few years. This may explain, in great part, why 85% of the urban adults are under 30 minutes away from the nearest financial institution, while only 15.4% of rural adults can claim the same (FinScope 2009). One of the reasons for banks to shy away from rural areas is the high cost of installing a brick-and-mortar branch,



relative to the potential business in these areas. One bank interviewed for this study estimates that it costs approximately USD 355,000 to build a branch in a rural area.

Table 1 shows the number of touch points for the main retail payment services in Zambia, including the number of agents used by the largest nonbank mobile money providers (in number of agents and users), and the number of terminals deployed by Kazang, a nonbank payment service provider (see full description of innovative services in section 3). Because post offices (Zampost) offer domestic and international remittances and are starting to be used by other service providers, such as banks, as an alternative delivery channel, it is an important network of touch points in Zambia.

Table 1: Total touch points in Zambia

Touch point	Bank branches	ATMs	Zampost branches ²	Mobile money agents ³	POS	Kazang terminals
Number	286	537	127	4,700	1,784	1,800
Per 100K inhabitants	2.20	4.12	0.97	36.1	13.67	13.85

Sources: Bank of Zambia, interview with providers.

Note: ²Zampost has just installed 12 new branches in addition to the existing 127, but they were not yet fully operating in March 2012. In addition to the branches, Zampost also has around 50 postal agencies, which are limited in the type of service they can provide

Another measure of service penetration depicted in Table 1 is the number of outlets per 100,000 people. Clearly traditional brick-and-mortar facilities, including the postal branches, fall short of reaching the majority of Zambians, particularly when compared to the number of mobile money agents, POS and Kazang terminals in the country⁶.

Remittances channels

Although all remittance service providers in Zambia are required to report to BOZ on a quarterly basis, BOZ does not publish statistics about the number of agents and their geographical distribution. It is known that part of the agent network overlaps with that of banks (branches and ATMs) and Zampost, but the extent of such overlap is unknown. It is interesting to note that while Western Union has an extensive network of bank and nonbank cash in/out agents (e.g. small shops) covering even larger rural towns, MoneyGram only uses bank branches, limiting its network to 121 locations in larger urban settings. Hence, Western Union is much more popular than MoneyGram for international remittances, which originate mainly from South Africa.

ATMs and POS

³Includes agents of Airtel Money, MTN Mobile Money, Celpay and Mobile Transactions.

⁶ The Kazang terminals, although can be considered POS terminals, are not yet included in the official number of POS in the country.

⁷ Source: Sarah Langhan (2011). Understanding the last mile in cross-border money transfers from South Africa to Zambia. ExactConsult, prepared for FinMark Trust. Available at http://www.finmarktrust.org.za/search/search.aspx?SearchTerm=last%20mile.

⁸ Idem.



ATMs and POS are for the most part available to existing bank customers only, according to our interviews and considering that most of the services available at these touch points are account-based, requiring a bank card for conducting transactions. There are 1,358,711 debit cards issued in Zambia (data on number of credit cards not available), up from only 879,189 in 2009⁹. ATMs are overwhelmingly used for cash withdrawals; only a few allow other services such as bill payments and deposits, which may also be available for non-bank customers. Most ATMs are proprietary and do not interconnect between different banks, with the exception of the 40 ATMs connected to Zamlink, a local switch (see description of payment system participants in section 3.2). Clients of the six Zamlink member banks can withdraw cash in any ATM of the network for about ZMK 2,500 (USD 0.47)¹⁰. For banks not using Zamlink (i.e., the largest banks with the largest client bases), interoperability for withdrawals is only possible using VISA switching outside Zambia, which makes withdrawals considerably more expensive (about ZMK 5,000 to 7,000, or USD 0.95 to USD1.33¹¹).

According to our interviews, POS have very low usage and are more commonly used by foreign visitors. Two possible reasons are low penetration of bank accounts and the fact that POS are regarded to be unreliable. Respondents in demand-side interviews referred to frequent problems such as unsuccessful transactions, misunderstanding about the fees, and lack of connectivity. While a few respondents had paid at the POS "just to see how it works", no respondent paid using this method on a regular basis. Nevertheless, banks have been promoting card transactions for the high-end segment and there are indications from our interviews that the current problems are much less frequent than they used to be a few years back.

Table 2 depicts the volume of ATM and POS transactions, in comparison with cheques and interbank transfers. While all types of transactions have grown, electronic transactions have grown much more than cheque transactions. The table does not include the transactions processed by mobile money providers as there is no publicly available data on them (although these providers are supervised by BOZ). From the interviews with the mobile money providers, we estimate that fewer than 400,000 transactions are being processed every year by them. These providers expect transaction numbers to increase substantially in the coming year. Kazang, a nonbank payment service provider¹², processes a much larger number of transactions in its 1,800 terminals, in the order of tens of thousands per month.

Table 2: Volume of electronic retail payment instruments and cheques

Type of transaction	2011	2010	2009
Card transactionsnumber	27.56 million	25.30 million	18.92 million
Credit transfersnumber	2.55 million	1.67 million	1.03 million
Debit transfers—number	591,231	516,957	475,639
Cheques	2.62 million	2.63 million	2.56 million

Source: Bank of Zambia

Reference exchange rates: 2011: U\$\$1=K5000, 2010: U\$\$1=K4800, 2009: U\$\$1=K4650

¹⁰ Source: Interview with Zamlink, interviews with banks and Bank of Zambia (see bank fee list).

⁹ Source: Bank of Zambia.

¹¹ Source: websites of the banks, Bank of Zambia (see bank fee list) and interviews with banks.

¹² Kazang is currently applying for a license to offer money transfers, in addition to its current services. See description in section 3.2.5.2.2.



Alternative channels

Recent developments in retail payments channels are rapidly expanding the distribution network for basic payments services. Most notably, providers like MTN Mobile Money, Mobile Transactions, Celpay and Airtel Money deploy an increasingly large number of agents to offer their mobile transfer services, hoping to increase usage of their mobile money products. Most stakeholders interviewed for this research believe mobile money agents cover all 90 districts in Zambia (regardless of whether all of them are operational at all times). Another relevant player in alternative payment services is Kazang, which sells payment terminals to a large range of retailers, the post office and even banks. There are around 1,800 terminals in use today, offering mainly bill payments, airtime top ups and (soon) money transfers. Figure 3 shows the approximate number of these newer touch points.

Airtel mobile money Kazang payment MTN mobile money Mobile transactions Celpay agents agents terminals agents

Figure 3: Innovative channels for retail payment services

Source: Interviews with providers, March 2012

Note: In addition to the 180 agents in the figure, Celpay has activated 50 Zampost offices to conduct money transfers

Although less active than nonbanks in increasing service offer outside traditional bank branches, some banks are establishing partnerships for that purpose. For instance, two large banks are in the process of partnering with Zampost to offer deposits in post offices and Zanaco already uses part of the postal network to collect deposits from existing account holders. Some banks are starting to establish partnerships with mobile money providers to allow mobile money users to withdraw cash in the bank's ATMs. This is the case, for instance, of UBA, which will serve as an agent for MTN Mobile Money. Such arrangements may be an interesting opportunity for banks to reach unbanked mobile money users and offer banking services and products for this segment. Another two banks have mentioned plans to link mobile money accounts to bank accounts, allowing interoperability between the two account systems and offering clients banking services such as loans, salary payments and interbank transfers. There is also at

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¹³ According to Bank of Zambia, there were 90 districts in Zambia at the time this report was finalized, in October 2012. However, the number of administrative units is constantly changing.



least one example of partnership between two banks, Finance Bank and Zanaco, whereby Finance Bank clients can use Zanaco ATMs for cash withdrawals, increasing the reach of the ATM network.

Nearly all commercial banks offer internet and mobile banking services to their current account holders, although customer adoption and usage are still in their infancy, according to our interviews. Despite the many developments in retail electronic payments by banks (e.g., debit card facilities, ATMs, electronic clearing of cheques, telephone and internet banking, and foreign currency accounts), there is still a considerable reliance on cash-based transactions conducted at cashiers. Our interviews indicated that most of the current investment banks make is in electronic channels and transactions aimed at providing increased convenience for high-end clients, rather than expanding or diversifying the client base.

2.3 Telecommunications services

Mobile phone penetration, particularly prepaid subscriptions, has grown rapidly in the last few years (see Figure 4). According to the Research ICT Africa (RIA) Household Survey¹⁴, 45.5% of adult Zambians (over 16 years) had mobile phones in 2007. Although the two surveys might not be readily comparable given different research methodologies, the FinScope data shows that only 18% of adults owned mobile phones back in 2005, indicating fast growth. More recent data estimates that there were over 8.16 million subscriptions in 2011. There is no information on the actual number of subscribers; some subscribers might have more than one line. Mobile ownership is higher in urban areas, reaching over 72% of adults, decreasing to only 31.5% in rural areas. As a comparison, only 0.61% of households had internet at home and only 3.3% of adults used the internet (all data from 2007 RIA Household Survey.)¹⁶

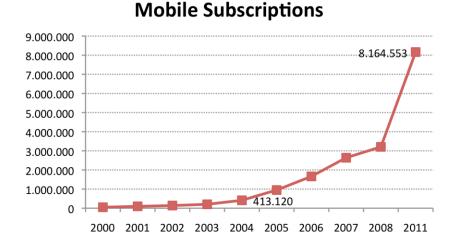
¹⁴ www.researchictafrica.net/countries.php?cid=23.

¹⁵ Source: Zambia Information and Communication Technology Authority.

¹⁶ The FinScope 2009 survey shows lower levels of mobile phone onwership for 2008.



Figure 4: Mobile phone growth trend in Zambia



Source: RIA Household Survey 2007 and ZICTA for 2011 data.

Zambia has three Mobile Network Operators (MNOs): Airtel, MTN and Zamtel. Airtel is the largest of the three in number of subscriptions, followed by MTN¹⁷ and Zamtel (a government owned company¹⁸ and the largest telecommunications operator in Zambia). The market is competitive, with all three operators aggressively pursuing customer acquisition. Zamtel is the only MNO that does not have a mobile transfer service. Table 3 shows the current market share of the three mobile phone companies in Zambia.

Table 3: Market Share of mobile phone companies as at March 2011

Mobile Network Provider	Subscriptions	Penetration (%) of
		population
Airtel	4,229,714	32.42
Zamtel	1,230,991	9.4
MTN	2,703,848	20.73
Total	8,164,553	62.55

Source: Zambia Information and Communications Technology Authority (ZICTA)

3 **SUPPLY SIDE OVERVIEW**

This section looks at the supply side of the payment system environment in Zambia. It reflects on both the composition and dynamics of the retail payments sector and the relevant policy and regulatory environment. The objective of this section is to describe the current state of play in each dimension of the supply side of the market. Section 3.1 and 3.2 describe the most relevant players and their roles, as well the infrastructure in place to support retail payment transactions. Sections 3.3 and 3.4 describe the policy

¹⁷ Source: BOZ, as of December 2011.

¹⁸ Zamtel has been privatized in 2010, but the sale was reversed in early 2012.



and regulatory environment, and Section 3.5 concludes with a discussion of the critical market barriers and regulatory gaps for expanding access to retail payments in Zambia.

3.1 Size and scale of financial services market

The Zambian financial sector is relatively small and is made up of three sub-sectors: (i) banking and non-bank financial institutions regulated by the Bank of Zambia (BOZ); (ii) insurance/pensions providers, regulated by the Pensions Insurance Authority (PIA); and (iii) securities and capital markets, regulated by the Securities and Exchange Commission (SEC).

There are 102 nonbank institutions regulated by BOZ including leasing companies, building societies, microfinance institutions, a development bank, bureaus de change, a savings bank (National Savings and Credit Bank), and one credit bureau (Credit Reference Bureau Africa Limited)¹⁹. The nonbank subsector, especially the microfinance institutions (MFIs), showed a spurt of growth after the closure of bank branches in rural and peri-urban areas. As banks focus on the urban retail market and corporate clients, MFIs filled in part of the gap of providing finance to those that could not access it through the banking sector. Table 4 gives a glimpse of the composition of the regulated financial sector. It does not include regulated payment service providers, which are described in section 3.2.5.

Table 4: Nonbank financial institutions regulated by Bank of Zambia (2011)

Type of Institution	Number of Institutions			
	2009	2010	2011	
Leasing finance institutions ³⁵	12	11	9	
Building societies	3	3	3	
Bureaux de change	44	50	55	
Savings and credit institutions ³⁶	1	1	1	
Microfinance institutions	25	24	32	
Development finance institutions ³⁷	1	1	1	
Credit reference bureaux	1	1	1	
Total	87	91	102	

Source: Bank of Zambia Annual Report 2011

In addition to the regulated microfinance institutions, the microfinance subsector also includes unregulated entities, mostly small community based non-deposit taking non-governmental organizations (NGOs), which undertake microlending and social development activities. They are not supervised by BOZ or any other financial regulator²⁰.

Banks continue to dominate the Zambian financial sector. The nineteen banks, which include several foreign-controlled banks, have a total of 286 branches spread across the country (up from 247 in 2009), but concentrated in the main urban and, to some extent, peri-urban areas. Table 5 lists the eight largest banks, their share in total assets and deposits as at December 2011, as well as their branch network, which account for roughly 82% of all branches of the sector.

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¹⁹ Bank of Zambia website, accessed in April 2012.

²⁰ The microfinance sector has an umbrella entity, the Association of Microfinance Institutions of Zambia (AMIZ), which does not play a supervisory role. Regulated and unregulated MFIs and NGOs are members of of AMIZ.



Table 5: Top eight banks by percentage share of total assets and deposits, and their branch network

Bank	Percentage of total bank assets	Percentage of total bank deposits	Number of branches (2009)	Number of branches (2011)
Barclays	16.4	17.3	54	54
Zanaco	16.6	16.1	54	59
Stanchart	16.5	17.0	20	19
Stanbic	15.1	16.1	13	18
Citibank	5.3	4.3	2	2
Indo Zambi a	4.7	4.7	13	15
Finance Bank	4.1	4.8	48	49
Bank of China	5.5	6.3	1	2
Total	84.2	86.6	205 (83% of total branches)	218 (82% of total branches)

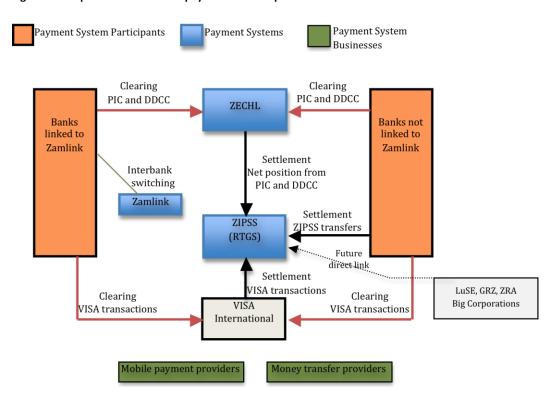
Source: Bank of Zambia Annual Report 2011

3.2 Electronic Payment Infrastructure and Participants

The central components of the electronic payment system infrastructure in Zambia consist of the designated payment systems: Zambia Interbank Payments and Settlement System (ZIPSS), the real time gross settlement system (RTGS) run by the BOZ; Zambia Electronic Clearing House Limited (ZECHL), the privately owned and managed clearing house; and Zamlink, a privately owned and run bank switch. Another important player is VISA International, which switches over 90% of card transactions (using its clearing infrastructure outside the country and BOZ acts as the settlement agent). BOZ has designated payment system participants (the banks), which are allowed to use these systems, and the payment system businesses, that is, the bank and nonbank payment service providers. The main components of the retail payments landscape are depicted in Figure 6, and described in this and the next sub-sections.



Figure 5: Components of the retail payments landscape in Zambia



3.2.1 Payment Systems: Zambia Interbank Payments and Settlement System (ZIPSS)

The RTGS System in Zambia is managed and operated by BOZ. The RTGS is referred to as the Zambia Interbank Payments and Settlement System (ZIPSS) and was launched in 2004 as part of the national payment system modernization process that also included the passing of the National Payment System Act in 2007. As with other RTGS around the world, the purpose of creating ZIPSS was to reduce credit and settlement risks in the banking sector by working on a real time and pre-funded basis, that is, transfers are honoured immediately and against sufficient available funds at the banks' settlement accounts held at BOZ. ZIPSS rides on the SWIFT messaging infrastructure and has three daily operating windows (that is, windows of time during which transactions are settled), as depicted in Table 6. Membership is limited to commercial banks (a nonbank may only use the system by paying a fee to a member bank).

Table 6: ZIPSS Operating Windows

Window			
Window			Operations
number			
Window 1	08:15	10:30	➤ Settle cheque settlement obligations from the clearing house
			➤ Settle Banks' own inter-bank payment obligations
			➤ Effect real time payments on behalf of customers
Window 2	10:30	14:30	➤ Settle Banks' own inter-bank payment obligations
			➤ Effect real time payments on behalf of customers



Window 3	14:30	15:15	➤ Settle DDACC settlement obligations from the clearing house
			➤ Settle Banks' own inter-bank payment obligations
			➤ Effect real time payments on behalf of customers

Source: BOZ website (<u>www.boz.zm</u>), accessed in April 02, 2012.

As a typical RTGS, the system is designed to handle relatively low volumes of high value transfers on a gross basis (i.e. individual transactions), but BOZ informs that bank account holders can make transfers of any value using ZIPSS, by issuing a specific instruction to their banks and paying a fee freely determined by each bank (see Table 8). Such transactions are usually settled faster than using the credit and debit transfer instruments that need to pass through the clearinghouse (see section 3.2.2). However, our interviews suggest there is limited awareness about this service by bank clients, as they are not usually informed about it by branch employees or any other type of information source²¹. Interbank transfers above ZMK 100 million (USD 19,000) must be done using ZIPSS (no need for the client to make a specific request) and cannot be done by cheque any longer, according to BOZ rules.

Another possible deterrent for using ZIPSS for smaller value interbank transfers may be the high fees charged by some banks. This is despite the fixed low charges imposed by BOZ on banks. BOZ fees are not based on cost recovery, but rather meant to promote the use of the system. Table 7 depicts the fees charged by BOZ, which range from ZMK 5,000 (USD 0.95) to ZMK 15,000 (USD 2.85). Table 8 indicates the fees charged by some of the largest banks to customers for ZIPSS transfers, which vary widely from ZMK 0 to ZMK 50,000 (USD 9.50).

Table 7: Cost for banks using ZIPSS

Operating Window	Fee per payment instruction	Value in USD
Window 1	ZMK 5,000	0.95
Window 2	ZMK 10,000	1.90
Window 3	ZMK 15,000	2.85

Source: BOZ website (<u>www.boz.zm</u>), accessed in April 02, 2012.

Table 8: Fees charged to bank clients for ZIPSS transfers

Fee per transaction (ZMK) Value in USD Bank (Reference transfer value is ZMK150,000/USD28.5) Zanaco 50,000¹ 9.50 Stanbic 22,000 4.18 50,000 9.50 **Barclays** Standard Chartered Free Ecobank 20,000 - 50,000 3.80-9.50 BancABC 9.50 50,000 Access Bank 1,500² 0.28 50,000 9.50 Finance Bank Citibank 20,000 3.80 First Alliance Bank 40,000 7.60 Cavmont Bank Free IndoZambia 20,000 3.80

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²¹ It is difficult to estmate the total number small value transfers done through ZIPSS, as BOZ's statistics on ZIPSS transactions are not disaggregated by type or value of transaction.



ICB	50,000	9.50
Investrust Bank	50,000	9.50

Source: BOZ website (www.boz.zm) and institutional websites of each bank

Plans for ZIPSS in the next couple of years include improvements such as linking the system to:

- The Lusaka Stock Exchange (LuSE), to facilitate settlement of trading transactions (planned for 2012);
- The Electronic Clearing House (ZECHL), to implement straight through processing of transactions cleared at ZECHL;
- The Government of the Republic of Zambia (GRZ), to facilitate settlement of intra-government transfers, such as transfers from one government agency to another.
- The Zambia Revenue Authority (ZRA), to facilitate electronic payment of taxes; and
- Large corporate and businesses to allow them to make and receive large real time payments using their own computer terminals.

Among the above initiatives, the most relevant for improving the landscape for retail payments is implementation of straight through processing of transactions cleared at ZECHL. (See further explanation in section 3.2.2)

3.2.2 Payment systems: Zambia Electronic Clearing House Limited (ZECHL)

ZECHL clears cheques through a Physical Interchange Clearing (PIC), which uses magnetic ink character recognition (MICR) technology to process encoded cheques. ZECHL also clears electronic interbank direct debit and credit debit transfers (DDACC). It was originally created and operated by BOZ, which transferred the operations to an independent entity in 1999. ZECHL is now owned by BOZ (50%) and almost all banks.²² ZECHL is a non-profit entity operating on a cost recovery basis.

Technically, interbank transfers are supposed to be cleared by ZECHL and settled at ZIPSS in the same day, but the timing can vary depending on efficiency of the processing, more specifically, the file exchange between banks and ZECHL, and between ZECHL and ZIPSS. ZECHL has one daily interaction with ZIPSS (between 14:30h and 15:15h) and the process has manual intervention, which gives room to errors and delays. The file transfer from banks to ZECHL is also manual, creating the same potential problems. Many of our interviews suggest that the public may perceive interbank transfers as unattractive because they take too long. Inefficient processing, together with lack of a bank switch, is a core reason for this.

BOZ is attentive to these inefficiencies and plans, as noted in the previous section, to implement straight through processing (STP) with ZECHL in the coming year. This would guarantee faster and more reliable finalization of interbank transfers than what is offered to customers today, increasing trust in electronic interbank transfers. Since efficiency can only be achieved with improved processing between banks and ZECHL as well, BOZ is pushing them to implement STP using moral suasion. There is no specific regulation

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¹ The minimum fee charged by Zanaco is 1.5% of the transfer value.

²Access Bank charges 1% of the transaction value, rather than a flat fee.

²² The banks that do not own shares in ZECHL are those that did not exist yet when ZECHL was created. These are: AB Bank, ABC (African Banking Corporation), Ecobank, ICB (International Commercial Bank), Access Bank and UBA (United Bank for Africa). According to ZECHL and the Bankers Association of Zambia, the shares for these banks will be floated in an upcoming Board Meeting in 2012.



setting maximum processing times neither from BOZ nor the Banker Association of Zambia. According to our interviews, banks have been resistant to STP since, among other reasons, they enjoy the float of pending transfers.

Cheque clearing may take from four to 10 days, depending on the origin and destination of the cheque. BOZ has been pushing banks, through moral suasion, to reduce this processing time, and is implementing rules, during 2012, for cheque truncation to increase efficiency in the clearing process. It expects that with these rules cheques settlement will be STP as well.

3.2.3 Payment systems: Zamlink e-switch

Zamlink is a privately owned and operated switch to facilitate ATM withdrawals (and deposits for Finance Bank only), electronic airtime vending, and a VISA Gateway (an interface platform with VISA International) for member banks wishing to offer VISA cards. It does not switch POS transactions, internet or mobile banking, which are some of the improvements planned for 2012. An agency banking solution has also been developed, but so far banks have not used it, since they have not invested in agents. Zamlink is owned by Loite Transactions Services (50%) and Finsbury Investments (50%) and is licensed by BOZ as a payment system. Zamlink processes an average of 450,000 monthly transactions (total value of ZMK 76 billion) although it has, reportedly, capacity to process over 2 million monthly transactions, at about 1,000 transactions per second. As a comparison, the whole banking sector had around 30 million electronic retail payment transactions in 2011 (cards and credit and debit transfers).

Membership is limited to six banks (not the larger banks): 1) Finance Bank; 2) Investrust Bank; 3) Intermarket Bank; 4) Access Bank; 5) Natsave; and 6) BancABC (see section 3.2.4 for further discussion). The cost to join Zamlink is a one-time fee of USD 50,000. The fees per transaction vary according to the volume used by each member bank. Banks processing less than 200,000 transactions per month pay a K800 (USD 0.31) switching fee per transaction and those processing above that pay ZMK 750. For intrabank transactions, the flat fee per transaction is ZMK 1,000 (USD 0.39). Zamlink is seeking to attract the mobile money providers and facilitate interoperability between them and the banks, but no progress has been made so far. Because the larger banks do not participate in it, Zamlink is largely considered only moderately useful by banking sector, which reduces its attractiveness for nonbank players such as mobile money providers as well as for banks themselves.

3.2.4 A Future National Switch?

Sharing of existing electronic payment infrastructure is a formal goal of BOZ as stated in its National Payment System Vision 2007-2011.²³ However, the largest banks have not joined Zamlink and have no plans to join it for reasons that are not entirely clear to the research team. BOZ has not made such membership compulsory and, reportedly, does not plan to impose this on banks. The lack of a shared switch results in expensive and slow interbank transactions, and limits the full potential of partnerships between banks and nonbanks. Taking this reality into consideration and reaffirming the need to facilitate interbank transactions, BOZ is leading the implementation of a national switch, to be housed at ZECHL. The switch would capture acquiring sources such as ATMs, POS, internet and mobile phones. The process

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²³ Available at: www.boz.zm.



is still at an early stage and will probably take several years to be concluded²⁴. While BOZ expects the switch to be fully implemented by 2014, some banks think it might take longer.

Using Zamlink as a platform for an enhanced national switch shared by all banks could potentially signify a saving of money and time (such cost-benefit analysis has not been done by BOZ or the banks themselves). Using existing infrastructure could avoid or at least reduce duplication of investment. However, this seems to have been discarded by banks and BOZ and the new switch would be an entirely new project. The exact reason for the decision of not using Zamlink is not entirely clear to the research team, but some potential assumptions and reasons for not joining were spelled out during a few of our interviews, in addition to some insights from articles in the local media. These reasons include:

- 1) Zamlink is not owned by the large banks and has linkages with a competitor bank (Finance Bank), which discourages support by the large banks in strengthening Zamlink;
- 2) Zamlink, in the view of some, has poor data and physical security, low risk management standards, and could not meet the EMV (Europay-Mastercard, VISA) standards;
- 3) Larger, and even smaller banks, are not interested in increasing interoperability because:
 - They do not focus on the mass market, already provide an extensive distribution network to high-end urban clients and have limited interest in extending geographic coverage to other areas or client segments;
 - They use their own proprietary distribution infrastructure as a competitive advantage; hence, they have no interest in sharing such infrastructure to serve clients of competitor banks;
- 4) There are vested interests by different stakeholders who would benefit from supporting a completely new switch.

As it stands, the national switch project would be housed at ZECHL. The systems, facilities, and personnel would be provided by ZECHL, which would need to make considerable improvements in its own systems and personnel in order to be able to comply with international switching and clearing standards, particularly those imposed by major card companies such as Visa.

Regardless of the reasons why Zamlink is not considered a viable starting point for the switch, all participants have at least agreed on the need to have a common switch where all, or at least the large majority, of banks participate. Moreover, all of the banks we interviewed seem to believe that BOZ needs to lead the process and push for it, otherwise it may fail. For instance, to reduce potential clashes between larger and smaller banks with respect to the amount to invest in the switch and similar points of contention, BOZ has committed a significant amount to the overall financing of the switch, and divided the remaining cost equally among all banks. Five banks have already paid their share. However, there are pending discussions about this cost-sharing arrangement, since the total cost seems to have been underestimated at the outset.²⁵

Technologies, www.bpcbt.com), but the estimation did not take other cost elements into consideration (outside the switch provider).

²⁴ It should be noted that ZECHL, BOZ and banks have already attempted to create a national common switch in the last couple of years. After a tender, a switch provider was chosen, but the hiring process was interrupted due to difficulties with the procurement rules and other reasons. An useful report using this case as a reference is available at http://www.finmarktrust.org.za/search/search.aspx?SearchTerm=switch.



The potential impact of the future switch on Zamlink is likely to be substantial, if its members, or even only its main client, Finance Bank, were to join the switch and stop switching their payment transactions via Zamlink.

3.2.5 Payment system businesses (PSB)

There are a number of bank and nonbank payment service providers (PSPs), or payment system businesses, as formally defined by the National Payment System Act of 2003, that are in "the business of providing money transfer or transmission services or any other business the Bank of Zambia may prescribe as a payment system business". As of March 2012, there were 28 PSPs authorized to operate by BOZ, as depicted in Table 9. The BOZ licenses²⁶ are based on the type of payment system business in which these providers are engaged:

- Money transmission according to the Money Transmission Guidelines, money transmission is a "financial service that accepts cash, cheques, other monetary instruments or other stores of value (monetary value evidenced by an electronic record) in one location and pays a corresponding sum in cash or other form to a beneficiary in another location by means of a communication, message, transfer or through a clearing network to which the money/value transfer service belongs. Transactions performed by such services can involve one or more intermediaries and a third party final payment". In sum, this category does not differentiate traditional remittances services (e.g., provided on behalf of international money transferors such as MoneyGram or Western Union, or Zampost), from e-money or mobile money services such as those provided by MTN Mobile Money. For instance, the banks figure in Table 9 as money transmission service providers primarily for being agents of international money transferors.
- b) **Switching** this service is focused on connecting different networks such as banks' computer networks, in order to facilitate transactions between different banks and other institutions using such networks. Many times, the switching business is combined with clearing services, through which the provider not only captures transaction information from different networks, but also manages the open positions of each institution, assessing the net position between them, until the transactions are settled²⁷; and
- c) **Mobile payment providers** these are providers of payment services solutions based on mobile phones, which could be used for their own services (e.g. MTN Mobile Money) or for a third party provider of money transmission services (e.g., Mobile Payment Solutions).

Note that although the three service categories are used by BOZ in publications and for licensing purposes, there are no official definitions of mobile payment and switching services. The above definitions of these two categories are offered by the authors. Due to the lack of clear regulatory definitions, sometimes it is difficult to clearly differentiate between these categories in practice, or to understand fully of why institutions received the different types of licenses they were granted (listed in Table 9). Our interviews suggest there is some confusion in the market with regard to these categories,

²⁷ The official definition of clearing, found in the the National Payment System Act 2007 is "receipt, exchange, and distribution of payment instructions".

²⁶ Note that according to the National Payments System Act 2003 BOZ issues designations, rather than licenses. The term licenses is used in this report as a synonym for designation.



particularly in the case of entities providing similar services under slightly different licenses. Compare, for instance, MTN Mobile Money Limited and ZMP Limited in Table 9.

Table 9: Payment Service Providers Designated by the Bank of Zambia

	Payment System Business	BOZ designation	Business		
1	Celpay Zambia Limited	Mobile payment services and	Proprietary mobile payments and		
money transmission services proprietary loca		proprietary local money transfers			
2	Mobile Payment Solutions	Mobile payment services	Proprietary mobile payments		
3	ZMP Limited (Airtel Money)	Mobile payment service and	Proprietary mobile payments and		
		money transmission services	proprietary local money transfers		
4	Mobile Transactions Zambia	Mobile payment service and	Proprietary mobile payments and		
	Ltd	money transmission services	proprietary local money transfers		
5	MTN Mobile Money Limited	Money transmission services	Proprietary local money transfers		
6	National Savings and Credit	Money transmission services	Proprietary local money transfers		
	Bank	Na	Cook Addiso local management and		
7	Money Express Limited	Money transmission services	Cash4Africa local money transfers		
8	Zampost	Money transmission services	Cash4Africa local money transfers		
9	Necor Transtech	Money transmission services	Cash4Africa local money transfers		
10	Runnymede	Money transmission services	Cash4Africa international money transfers		
11	Bayport	Money transmission services	Payment Solutions (MPS) local money transfers		
12	United Bank for Africa	Money transmission services	MoneyGram international money transfers		
13	Finance Bank of Zambia	Money transmission services	MoneyGram international money transfers		
14	Stanbic Bank	Money transmission services	MoneyGram international money transfers		
15	Zanaco	Money transmission services	MoneyGram international money transfers		
16	Investrust Bank	Money transmission services	MoneyGram international money transfers		
17	CFB Money Transfer Ltd	Money transmission services	MoneyGram international money transfers		
18	Money Link Zambia Ltd	Money transmission services	MoneyLine UK international money transfers		
19	Ecobank	Money transmission services	Western Union international money transfers		
20	PostDotNet	Money transmission services	Western Union international money transfers		
21	Cactus Financial Services	Money transmission services	Western Union international money transfers		
22	Standard Chartered Bank	Money transmission services	Western Union international money transfers		
23	Access Bank	Money transmission services	Western Union international money transfers		
24	Brookfield Ltd T/A Genesis Global Finance	Money transmission services	WorldLink international money transfers		
25	FX Africa Bureau de Change	Money transmission services	Western Union international money transfers		
26	Calltrol	Switching services	Switching, mobile banking and money transfer solutions ^A		
27	AB Bank	Money transmission services	CelPay local money transfers, RIA international money transfers ^B		



28 Intermarket Bank Ltd Money transmission services Not available

Source: BOZ website, accessed in April 2nd, 2012.

^ASource: Calltrol's website: http://www.calltrolgroup.com/index.php.
^BSource: AB Bank website: http://www.abbank.co.zm/?page_id=175.

3.2.5.1 Remittance services providers

Most licensed money transmission services providers in Table 9 are agents of remittance service providers such as Western Union and MoneyGram. Out of the 26 money transmission service providers, 10 are banks and 16 are nonbanks. It is difficult to estimate the volume and value of small cross-border remittances (as opposed to trade flows) into and out of the country, as the BOZ statistics do not distinguish between large and low value transactions. Likewise, the statistics are not disaggregated into volumes processed by bank and nonbank providers.

Remittance providers are free to price remittance services without any regulatory intervention. As it occurs in some of other countries, the exchange rate used by Western Union and MoneyGram agents are not revealed to the sender, raising transparency concerns. According to a mystery shopping study conducted in 2011, a beneficiary based in Zambia can lose between 8.67% to 9.91% of remittances by value sent from South Africa, only as a result of exchange rate differences.²⁸

Banks, in addition to being agents for money remitters, also offer telegraphic transfers (TT)²⁹, which can, in most cases, only be made when both senders and beneficiaries are banked. Comparative fee information is available at BOZ's website for those sending remittances out of Zambia using TTs, but there is no information on inward fees, that is, fees paid by the receiver. The outward fees can vary from 0.5% to 1% of the value transferred. (Most banks may impose a minimum fee for smaller-value transfers, which could be higher than 1%.) According to the mystery shopping exercise, the beneficiary may pay an inward fee and other explicit charges varying from bank to bank, which together range from ZMK0 to ZMK 56,000 (USD 10.64). Implicit costs due to variation of the exchange rate range from ZMK 16,857 (USD 3.20) to ZMK 46,916 (USD 8.91). It is clear that inward fees and implicit costs are significant in a cross-border remittance.

TT fees are pushed up by correspondent bank fees and the cost of using SWIFT, which is the dominant channel for TTs. Prices may also be impacted by inefficiencies in the transaction processing within banks. According to the Bankers Association of Zambia, most banks have manual processing of foreign exchange transactions, as opposed to using STP. Banks have showed limited interest in small value cross-border remittances.

The speed of service may also vary widely depending on the provider. In the aforementioned mystery shopping study, the transfers were available on the same day for MoneyGram and Western Union transfers, in four to 10 days when using TTs, and up to one month when using the postal service.

Lastly, at the time of research, remittance agents were required to choose between Western Union and MoneyGram, limiting their options and possible potential returns from this business.

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²⁸ Langhan 2011.

²⁹ There is no specific designation for banks to offer TTs, so this service is not reflected in Table 9.



In Zambia, any bank branch can process TTs, unlike other countries where only certain branches may operate foreign exchange.

3.2.5.2 Payment Services Innovations

The relatively unsophisticated offering of electronic retail payment services by banks has opened doors for the emergence of nonbank-based innovations that are changing the landscape of payments in Zambia. These include mobile money services, bill payments using POS devices, and airtime top up using ATMs, POS and mobile phones. Examples of this space include MTN Mobile Money and Airtel Money, both of which are local operations of regional mobile money platforms, have recently launched their services in Zambia and are gradually adding more services to their offers.

The innovations mostly target urban and peri-urban unbanked and banked clients, but may also be reaching larger rural towns. From the perspective of the unbanked client, these offerings are likely to represent access to previously unavailable services. For banked clients, these offerings may introduce greater convenience for basic payment services such as bill payments, airtime top-up and peer-to-peer transfers, or even reduced costs compared to the services their banks might be offering, including increased convenience of a larger number of transaction points. Table 10 gives a snapshot of the most relevant innovations and the remainder of the section describes these and a few other services.

Table 10: Innovative Retail Payment Services in Zambia

Provider	P2P transfers	Bill payments	Bulk payments	Airtime purchase	Store of value ³⁰	Microcredit repayments	Electronic vouchers
MTN Mobile Money	\checkmark	$\sqrt{}$	$\sqrt{}$	V	$\sqrt{}$		
Airtel Money	\checkmark	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		
Celpay	√ (including non-account holder to non-account holder)	V	V		V	Pilot phase	
Mobile Transactions	\checkmark	\checkmark	\checkmark	$\sqrt{}$	\checkmark	\checkmark	$\sqrt{}$
Kazang		\checkmark		$\sqrt{}$		$\sqrt{}$	
Zampost	\checkmark	$\sqrt{}$					
Calltrol	\checkmark	\checkmark	$\sqrt{}$	\checkmark	\checkmark		$\sqrt{}$

Source: Interviews with providers and experts.

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³⁰ Store of value is the functionality allowing a client to leave funds in an account for future use. Although a bank account technically is a stored value account, the term "stored value account" usually refers to accounts that are not considered, by regulation, bank deposit accounts. Therefore, they are not subject to the prudential regulations that intend to protect client funds and the financial soundness of the depository institution. Special prudential and operational requirements usually apply to these accounts to limit their risk profile and allow for a lighter regulatory regime than that applicable to bank deposits.



3.2.5.2.1 Mobile money providers

The term "mobile money", in this report, is used to refer to transactions that can be conducted using mobile phones, and that involve an electronic account (other than bank accounts) where the client can store funds for future use in payment and transfer transactions. The term "e-money" is used as a synonym.

Airtel Money was launched as a pilot early 2011 and was officially launched commercially in mid September 2011. ZMP Limited is 100% owned by Airtel Zambia, operating as a separate company. The platform is available for use across Zambia and offers services such as money transfers across the Airtel network only, bill payments for subscriptions to Digital Satellite Television (DSTV), electricity to Zambia Electricity Supply Company (ZESCO) and water to Lusaka Water and Sewerage Company (LWSCO). Customers can buy goods from Spar supermarkets and soon with other major supermarkets such as Pick & Pay and Shoprite, gas stations, insurance companies, entertainment retailers and other selected service providers such as some health clinics. Airtel Money aims to incorporate all the 4.5 million subscribers on the Airtel voice system onto its mobile payment platform.

In addition, Airtel Money has been piloted in six schools in Lusaka for the payment of school fees. They are also targeting water utility companies across the country, which are moving towards a prepaid system for their services. Airtel plans to convert their 4,000 countrywide distributors and retailers (including small shops in semi-urban and some rural areas) to Airtel Money agents, in the next year or so.

MTN Mobile Money was launched as a pilot early in 2011 and was officially launched commercially in January 2012. Like Airtel, MTN Zambia created a subsidiary company (MTN Mobile Money Ltd) to operate the product. The platform is available for use across Zambia and offers services such as money transfers across all networks, money transfer to someone who does not have a phone; MTN airtime purchase; bill payments for subscriptions to DSTV and electricity to ZESCO.

MTN has an agent network of 370 and has 1,000 direct sales people, opening 1,000 mobile money accounts on a daily basis. MTN Mobile Money has a partnership with BankABC and is working on ATM and bank integration to enable its customers to transfer money between their bank account and their mobile money account and vice-versa. The company aims to get all 2.7 million MTN voice subscribers on to its platform in the next year or so.

Celpay,³¹ unlike the mobile money providers, does not focus on person-to-person (P2P) transfers and the store of value. Celpay's core business is its 4,000 corporate clients. Celpay therefore focuses on electronic commerce, rather than on retail customers. The company has been in operation in Zambia since 2002 and has 180 agents across the country, including 50 Zampost branches. Its platform offers both person-to-business (P2B) and business-to-business (B2B) payment applications. The main C2B function is bill payments using mobile phones (for clients with a Celpay account) at Celpay agents equipped with proprietary POS, or at ATMs of one of the six partner banks. The company estimates that about 30,000 customers pay bills using Celpay. Over K100 billion (USD 19,000) is processed each month, the bulk of which are B2B transactions.

³¹ Celpay Zambia is a subsidiary of Celpay International BV (www.celpay.com), incorporated in the Netherlands. Other regional implementations include Uganda and Zimbabwe. They have been already licensed in the Democratic Republic of Congo (DRC) and Tanzania, but are not yet fully operational in these countries.



The company also has a P2P solution, for people receiving money from the UK and sending/receiving domestically with or without a Celpay account, but these services reportedly are not widely used. Like other PSPs, Celpay reports being interested in making bulk payments such as salaries of government employees and social cash transfers. Celpay is also piloting making its agent available for banks, but has encountered liquidity management challenges and limited understanding of or interest in the agency business by banks. Celpay is not connected to bank switches and it does not provide interoperability with bank accounts. It claims having interest in this area but has not established any alliance with a bank.

Table 11 provides the pricing profile of some of the services described above. Pricing is very similar among the mobile money operators. Xapit (see description in section 3.2.5.2.2) is a bank-based product, while for the others the client account is provided by nonbanks. Celpay is the only one with a flat rate for transfer and Xapit is the only with a flat rate for withdrawals.

Table 11: Price comparison in some innovative payment services in Zambia

	Airtel Money airtel money	MTN Mobile Money	Celpay	Zanaco's Xapit JUST APIT Instant Banking!
Deposit	Free	Free	Free	Free
Withdrawal	ZMK 2,500 -	ZMK 2,500 - 30,000	ZMK 2,500 -	ZMK 3,000
	30,000		30,000	
Transfer	ZMK 250-3000	ZMK 250 – 35,000	K10,000	ZMK 3,500 - 5000
Balance enquiry	Free	Free	Free	K500
Airtime top-up	Free	Free	Free	Free
Monthly fee	Free	Free	Free	Free

A comparison of these with the prices practices by banks can be done by using **Annex 4**, which provides an overview of the fees applicable to basic services linked to savings accounts in the largest banks.

3.2.5.2.2 Other innovations in electronic retail payments

Zoona (former Mobile Transactions Zambia Ltd - MTZL) is an enterprise launched in 2009, which aims to give its customers access to various financial and payment services using mobile and card technology. It has a network of 200 agents called Zoona agents in 57 towns, many of which are located in larger rural towns given the company's initial focus on payment vouchers to rural farmers. Now Zoona offers a wider range of products: P2P money transfers, salary payments (bulk payments in general), bill payments, electronic vouchers (e.g. for purchases at schools and agricultural supplies), supplier payments, microfinance repayments and disbursements. For instance, Zoona pays salaries for the employees of the cotton industry: the salary is deposited in the employee's mobile money account, and the withdrawal is done at Zoona agents. There are approximately 40,000 Zoona money transfer clients today. Zoona is also working with Professional Life Assurance to facilitate microinsurance sales and premium payment. This project is in its initial stages of development. The company has recently closed a USD2 million deal with Acción International to support its operational expansion and diversification, possibly including savings, microinsurance, and cross border payments.

Kazang provides a prepaid terminal for merchants selling mobile phone services, such as prepaid airtime and paying DSTV bills. It also offers top up of Internet wireless connection devices (dongles). Kazang has 1,800 terminals in every major town and post office across Zambia, and also has terminals in some rural



areas. The Kazang platform is also used to make payments for Lusep (a German company dealing in carbon credits). In addition, the company has developed a banking application that allows vendors to credit their airtime accounts with four commercial banks across the country, these are: Zanaco, Finance Bank, Investrust Bank and Cavmont Bank. Soon, Natsave Bank and Barclays Bank will also be using this application.

Lastly, the company has developed a money transfer product with a flat fee of USD 2 for any transfer up to USD 200. This product is being piloted in 200 terminals and is awaiting BOZ approval to be launched officially. Kazang, which is not regulated by BOZ today, would become a payment system business authorized to offer money transfer services. At the time of revision, the licensing is under review by BOZ.

Zampost offers international remittances and domestic postal money transfers and is a Western Union agent. The domestic transfer, called Swift Cash, is widely used by Zambians, particularly those without a bank account. Transfer averages range from about ZMK 50,000 (USD 9.50) and ZMK 100,000 (USD 19) (Langhan 2011). As noted by Hougaard *et al* (2008), "the largest domestic money transfer operator [in Zambia] is Zampost's Swift Cash", with an estimated 80%-90% of the domestic transfer market. According to our interviews, only mobile money services could offer competition to Swift Cash for domestic remittances.

With a network of 127 branches covering most of the 90 districts in Zambia and a widely recognized brand, Zampost represents a great potential for partnerships with other providers looking to expand outside the main urban centres. Zampost has already established partnerships with Celpay, Zanaco (for deposits only) and it has acquired Kazang terminals to offer bill payments in some of its branches. A few banks, as well as MTN Mobile Money and Airtel Money are in negotiations to use Zampost's network to distribute their services. However, no partnerships have been forged so far. The main difficulty is defining a per-transaction fee structure that is satisfactory for both Zampost and the partners. Moreover, Zampost recently created its Post Bank (registered as a microfinance company), with the purpose of diversifying activities to improve its corporate performance. Post Bank will operate through Zampost's branches to reach unbanked and under-banked communities. The bank will start operations once it has completed the licensing process with BOZ.³²

Mobile Payment Solutions (MPS) is a software company that focuses on payment solutions and transaction processing services. MPS's clients include corporations, banks, mobile money operators and other financial institutions in Zambia. It does not provide services directly to retail clients. The company has recently partnered with a microfinance institution (Bayport Financial Services) to offer a domestic money transfer service, called Kwacha Mover available to any person with or without an account at Bayport. The role of Bayport is providing the brand and its 40 branches as transaction points. Kwacha Mover is expanding out of Bayport branches and will become available through mobile phones in 2012. To make that happen, Bayport is working on building an agent network through which to offer the service.

Zanaco's Xapit Instant Banking is a product aimed at low-income earners. Opening a Xapit account is almost as straight forward as buying a SIM card. All one needs is a National Registration Card (the government issued identification document) or passport and ZMK 35,000 (USD 6.60) to purchase a Xapit pack, which includes a VISA card, a card PIN and mobile banking PIN. It can be purchased at any Zanaco branch or sales agents. Xapit can be used to transfer money to other accounts, pay utility bills, buy airtime

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³² Source: Times of Zambia newspaper 28/03/12.



and purchase goods on-line. As the know-your-customer (KYC) procedures are simplified, BOZ has imposed a ZMK 10 million (USD 1,900) limit on Xapit account balances.

Calltrol is designated as a switching services provider, but it has other business such as card production, ATM and POS network and merchant acquiring. Probably due to Calltrol's initial stage of development, BOZ has not classified it as a "payment system". Calltrol is a private company established in 2005 in Zambia, but its operations only effectively started in 2009 after BOZ designation. It focused on prepaid airtime top up vouchers in the beginning and now it also includes merchant acquiring for POS deployment. The business currently focuses on the unbanked outside the larger urban areas, as to avoid competition with large merchant acquirers such as Zanaco and Barclays. To support its switching business in such areas, Calltrol entered into debit card production. Its largest debit card client is Pan Africa Credit Union, which offers Calltrol low-cost (USD2 per month with all free transactions) debit cards to its 700,000 members. Calltrol is establishing similar relationships with other credit unions and expects to increase the number of cardholders to 16,000. Two hundred ATMs will be installed (50 during 2012) and there are 150 card merchants equipped with POS. both ATMs and POS are prepared to conduct cardless transactions and they will start with Airtel Money transactions (MTN negotiations still underway). All of Calltrol's network is non-exclusive and may be used by other interested participants.

3.3 Broad Policy Environment

This section discusses policies and policy goals impacting retail payment services development in Zambia, while section 3.4 focuses on the regulatory framework, detailing the rules governing the sector.

3.3.1 The Financial Sector Development Plan (FSDP)

The Financial Sector Development Plan (FSDP) provides the framework for initiatives and public-private partnerships with the purpose of developing the national payment system³³. The FSDP is the programme created in 2004 by the government in consultation with a range of stakeholders, to cover various areas of financial sector reform over a five-year period. It has been extended since then and is currently in Phase II (2010-2012). The plan has three components, all of which include elements that are important for increasing access and usage of retail payments: a) market infrastructure, b) enhancing or increasing competition, and c) aligning access to finance with the real economy.

The FSDP implementation structure is comprised of a Steering Committee, housed at and chaired by the Ministry of Finance and National Planning, and an Implementation Committee housed at and chaired by BOZ. At the operational level, FSDP is implemented through six working groups, including the Payment Systems Working Group (PSWG),³⁴ which is headed by a representative of Airtel Money. Until the end of Phase II of the FSDP, the PSWG will focus on supporting and overseeing key activities such as:

- a. Issuing branchless banking regulations (advanced stage);
- b. Designing and establishing a national switch (initial stage);

³⁴ There are also other working groups relevant for financial inclusion, namely: the Access to Finance Working Group and the Financial Education Working Group. There some overlap between the goals of these Working Groups.

³³ Detailed information about FSDP can be found at BOZ's website: www.boz.zm.



- c. Finalizing rules, directives, regulations and guidelines stemming from the National Payment Systems Act, 2007 (advanced stage);
- d. Establishing online clearing function for designated payments providers (initial stage);
- e. Harmonizing the Banking and Financial Services Act, 1996 and the National Payment Systems Act, 2007 (advanced stage); and
- f. Creating a Financial Identification System (initial stage).

Regional integration and coordination mechanisms such as SADC and COMESA are also relevant for the purposes of this report, as they influence how large and small value payment infrastructure will develop in Zambia in terms of operational, security and interoperability standards. For instance, BOZ is pushing for 1-day cheque clearing and settlement, to comply with the goals established by the SADC Payment Systems Committee. The COMESA project³⁵, which is in advanced stage, has led to RTGS integration of member countries. Also, BOZ states that any payment infrastructure in Zambia should be multi-currency to support cross-border trade and integration, to comply with standards set at the regional level. These policies, as well as country-level regulations, may also impact cross-border transfers at the retail level, creating challenges or opportunities for users. For instance, SWIFT membership fees and foreign exchange regulations in South Africa (main origin of inward remittances to Zambia) may increase costs for Zambians sending money home. Such issues may be addressed at the regional level or through bilateral consultations.

3.3.2 Key institutions involved in implementing the FSDP

It is important to note the dynamics between three major stakeholders with relevant roles in advocating and implementing payment system development initiatives, particularly those planned in the FSDP: BOZ, the Bankers Association of Zambia (BAZ) and the Payment and Money Transfer Association (PMTA). There seems to be extensive informal consultation among BOZ, BAZ and PMTA to address topics concerning payment systems and services. The interaction between these organizations may happen on an *ad hoc* basis or may be part of an official schedule determined by the PSWG. In addition to attempting to implement the activities assigned to the PSWG, these three entities deal with other issues concerning payment services, such customer due diligence requirements (see Section 3.4.1.3).

Some discussions relevant to this study, such as those relating to mobile payment service providers, may also have the participation of other institutions, such as the telecommunications regulator, Zambia Information and Communication Technology Authority (ZICTA).

3.3.2.1 Bank of Zambia (BOZ)

The current legal framework (see description of such framework in section 3.4) gives BOZ very solid powers to set and enforce rules governing payment systems, businesses and providers. BOZ is the sole regulator and supervisor of payments systems, with a mandate set in the National Payment Systems Act, 2007 (NPSA). The NPSA states that "the Bank of Zambia shall regulate and oversee the operations of payment systems in order to ensure the integrity, effectiveness, efficiency, competitiveness and security of the payment systems so as to promote the stability and safety of the Zambian financial system". This mandate is reinforced by the Bank of Zambia Act, 1996, which states that BOZ "shall promote efficient

³⁵ The COMESA clearinghouse was created in the 1980's and COMESA members agreed to restructure it to support RTGS integration for cross-border transactions in local currencies.



payment mechanisms". In addition, BOZ is the regulator and supervisor of financial institutions that may participate in payment systems or provide payment services, as per the Banking and Financial Services Act, 1994 (BFSA).

According to the NPSA, BOZ may:

- 1. Regulate entry criteria of participants to a payment system;
- 2. Issue and vary guidelines to participants with respect to payment orders;
- 3. Prescribe rules and arrangements relating to the operation of payment systems;
- 4. Give directives to participants to ensure integrity, effectiveness, efficiency and security.

The NPSA focuses on systemically important systems (such as the RTGS) and does not deal explicitly with low-value payments, but BOZ's mandate on retail payment systems is definitely unchallenged by the industry. The industry has formally recognized BOZ's role by committing to the National Payment System Vision 2007-2011 (the Vision)³⁶, and none of our interviews gave signs of uncertainty about BOZ's authority in retail payments.

According to BOZ, the primary objective in this arena is maintaining the stability of the national payment system, followed by increased efficiency and greater access to retail payments. Such positioning is depicted in Figure 7.

Figure 6: BOZ priority objectives in payment systems

Objectives in order of importance

1

Maintaining the stability of the NPS

2

Increasing efficiency of the NPS

3

Increasing access to the retail NPS

4

Increasing competition in the NPS

In line with these broad objectives, and deriving from the FSDP and the principles of the international Committee on Payments and Settlement Systems (CPSS)³⁷, the Vision has identified specific measures (or

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³⁶ Available at BOZ's website: www.boz.zm.

³⁷ The Committee on Payments and Settlement Systems (CPSS) is an international standard stetting body for payment, clearing and securities settlement systems. It also serves as a forum for central banks to monitor and analyse developments in domestic payment, clearing and settlement systems as well as in cross-border and multicurrency settlement schemes. It is housed at the Bank for International Settlements (BIS) in Basel, Switzerland and consists of the Reserve Bank of Australia, National Bank of Belgium, Central Bank of Brazil, Bank of Canada, The People's Bank of China, European Central Bank, Bank of France, Deutsche Bundesbank, Hong Kong Monetary Authority, Reserve Bank of India, Bank of Italy, Bank of Japan, Bank of Korea, Bank of Mexico, Netherlands Bank, Monetary Authority of Singapore, Sveriges Riksbank, Swiss National Bank, Central Bank of the Russian Federation, Saudi Arabian Monetary Agency, South African Reserve Bank, Central Bank of the Republic of Turkey, Bank of England, Board of Governors of the Federal Reserve System, Federal Reserve Bank of New York. See http://www.bis.org/cpss/index.htm



strategies), depicted in Table 12³⁸. BOZ is responsible for the implementation of the Vision, in coordination and collaboration with the regulated sector. The Vision is currently being extended and reviewed.

Table 12: Main strategies set in the National Payment System Vision 2007-2011

Theme	Strategies
Risk management	Linking of strategic institutions to ZIPSS
	Introduction of continuous processing at ZECHL
	Introduction of final and irrevocable same day settlement for PIC and DDACC
	Improvement of collateral management processes at ZECHL
	Development and implementation of risk management and monitoring tool at
	BOZ
	Enhancement of BOZ oversight function
	Enhancement of backup facilities for important payment systems such as ZECHL
Sound legal framework	Enactment of the NPSA
	Enactment of regulations to the NPSA
	Establishing enforceability of agreed rules and regulations
Efficient payment practices and	Introduction of regulatory framework for providers of payment services
public awareness	Educate payment system participants
Effective management of the	Establishment of payment system working parties under the National Payment
national payment system	System Committee (the Committee has not been established)
structures	
Payment instruments and	Encouragement of banks to develop a variety of payment instruments
infrastructure	Promotion of the use of electronic payments
	Developing and sharing of small value payment infrastructure, including encouraging banks to link to Zamlink.
	Introduction of cheque truncation, verification services and code line clearing
	Development of centralized banking systems by banks to allow straight through transaction processing
	Alignment with regional integration objectives by complying with international standards
	Promote cross-border/foreign currency market practices and mechanisms
	Encourage development of banking solutions to the rural and unbanked populace

Were the strategies defined in the Vision implemented, Zambia could see significant improvement in the supply and outreach of electronic retail payments. Unfortunately, progress has been rather slow on some fronts, which is also true for the specific actions laid out in the FSDP. This is partly due to limited capacity at BOZ. BOZ's Payment System Unit (PSU)³⁹, which is responsible for these programmes (in addition to ongoing monitoring and supervision), is comprised of only seven employees. As an example, BOZ has not yet been able to create a complete regulatory framework for payment service providers, including corrective powers to deal with regulatory non-compliance. Also, although mobile money has been in operation in the country since 2002, BOZ has not completed e-money regulations to govern this type of service. BOZ has also not succeeded in including mobile money transactions in its published statistics,

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³⁸ See BOZ's responsibilities in implementing the Vision in **Annex 5**.

³⁹ Although there seems to be a good level of information sharing with the Bank Supervision Department (BSD), the PSU is the leading team for payment system development issues. The BSD has a tangential role, as it oversees banks and is currently drafting rules governing the use of retail agents by banks, which can be highly relevant for allowing partnerships between banks and nonbanks to extend the reach of electronic retail payments and other services to urban and rural areas. All new regulations, including those affecting retail payments and branchless banking, are discussed within the Supervisory Policy Committee, in which both departments participate.



despite the fact that it receives monthly returns from providers. A similar situation is observed with data about remittance agents.

Considering such constraints and the goals of the FSDP's PSWG, a new Vision for the next years is being drafted. Although the overall goals of the new Vision are likely to remain unchanged, BOZ plans to focus on two immediate priorities:

- 1. Issuing regulations and guidelines covering nonbank payment providers, including corrective powers;
- 2. Implementing the national switch.

3.3.2.2 Bankers Association of Zambia (BAZ)

The Bankers Association of Zambia (BAZ) represents and advocates for the interests of the banking sector. It is quite active and involved in the discussions about payment systems and broader financial sector development, and is in constant contact and negotiation with BOZ. BAZ recognizes the need to improve POS and ATM services, which sometimes can be frustrating for the clients and may discourage adoption of, and reduce trust in, electronic channels. In addition, the use of VISA International for switching card transactions makes this payment instrument expensive for the average Zambian. Reportedly, BAZ believes that a common national switch would solve many of the current problems and encourage use of interbank electronic transactions.

It is worth noting that, in the past, BAZ has initiated a fund that would be sponsored by member banks to support rolling out of branches in rural areas. However, the project has not prospered, mainly due to the realization that brick-and-mortar branches may not be the best option to reach rural areas. Our interviews suggest that rural branches are not considered economically viable in the opinion of banks (one bank estimates a rural branch to cost between USD 300-400,000), particularly if there is limited economic activity in the area. Also, BAZ has spearheaded an initiative for banks to negotiate as a block with ATM service providers, to reduce the cost of servicing the ATM network. However, the Zambian Competition Commission deemed this as collusion and the initiative has stopped.

BAZ has no official view regarding mobile money services and potential partnerships between banks and nonbanks, nor on the sector's strategy regarding the use of retail agents and the upcoming branchless banking regulation.

3.3.2.3 Payments and Money Transfer Association (PMTA)

The PMTA was recently established as a merger of the Money Transfer Association and the Payment Systems Association in 2012 with the purpose of providing its members with educational and networking opportunities and lobbying on their behalf to create an enabling environment whereby PMTA's Vision can be achieved. The PMTA has three founding members – Mobile Payment Solutions, Mobile Transactions and Celpay.

PMTA's Vision, established in its bylaws is to, "Be the leading organisation dedicated to expanding financial access and improving the quality of life in Zambia through mobile payments and transactions".



It is interesting to note the emphasis on interoperability and mobile payments among PMTA's specific objectives, as stated in its bylaws:

- 1) To improve and promote electronic transactions and mobile payments for more efficient transactions at lower costs;
- 2) To educate consumers and to expand adoption by companies and by the general population;
- 3) To speak for the payment systems industry on matters of importance to the industry as a whole;
- 4) To work with the regulator to support and develop a mutually beneficial and conducive regulatory environment;
- 5) To promote payment systems interoperability and integration in Zambia;
- 6) To establish a strong mobile and electronic payment systems industry in Zambia;
- 7) To work with the banking and financial companies, institutions and associations to expand access to the financial sector and financial products.

PMTA's priority for its first year of operation was to obtain recognition from BOZ, which seems to be have been achieved given PMTA's involvement in the policies described earlier, and the fact that relevant draft regulations (e.g. the retail agent regulation) are submitted for PMTA's comments. Moreover, PMTA participates in the FSDP's PSWG. Now the attention turns to monitoring the developments regarding the national switch, to ensure the future switch caters to the needs of PMTA members. Were the final arrangements for the national switch to clash with the interests of PMTA members, independent parallel switching systems may be created by them.

With the merger between the two previous associations, PMTA has now broad membership, including money transferors such as Airtel Money and MTN Mobile Money. PMTA charges a small monthly fee and welcomes bank and nonbank members.

3.3.2.4 Other relevant public policies: cash transfer programme

The Ministry of Community Development, Mother and Child Health (MCDMCH) is in the process of procuring the services of a payment service provider to offer a system to guarantee the delivery of regular cash transfers to disadvantaged families targeted in some districts of Zambia. The social cash transfer (SCT) scheme has been identified as a viable strategy to respond to the needs of the extremely poor and its possible shift to electronic transfers could potentially have a significant impact on the level of access to basic payment services in Zambia, and possibly other basic financial services in the future, such as bank accounts.

There are three different SCTs in operation, reaching 50,365 beneficiaries: Child Grant (children under five); Incapacitated Poor Households; and Pension (adults over sixty) at the time of research.

The winning payment provider(s) would expand the delivery of cash transfers, in a phased manner, to cover and deliver cash transfers to 99,284 beneficiaries by 2015 in 15 out of 90 districts in Zambia. In addition to providing the regular transfers, the payment provider will also be encouraged to offer additional financial services for recipients and non-recipients in the beneficiary districts. The future new payment arrangement could offer an opportunity to increment the current level of access to retail payments in Zambia vis-à-vis the poor and unbanked in less developed areas.

3.4 Overview of relevant regulatory framework



This section explores the key laws and regulations affecting retail payments development. Rather than trying to exhaustively describe the regulatory framework, it focuses on the most relevant aspects necessary to achieve an enabling environment for greater innovation and inclusion. Basically, the national regulatory framework (depicted in Figure 8) is comprised of four major laws and their related regulations, which are discussed in this section.

Payment Systems Payment System Participants Payment System Businesses Remit of the Anti-Money Laundering Act Remit of the National **Payment ZIPSS** Remit of the Banking Systems Act **Payment** and Financial Services System ZECHL Participants Subsidiary regulations (banks) --Pending branchless Subsidiary regulation: banking regulation -Money Transfer Zamlink Guidelines* Money transfer providers Subsidiary regulation: -Pending Regulation on: Subsidiary regulation: Payment Instruments -Pending Regulation on Mobile payment providers E-Money*

Figure 7: National regulatory framework for payments and covered markets

*These regulations also apply to banks when they are designated money transfer providers, or (in the future) emoney providers

3.4.1 National Payment Systems Act, 2007 (NPSA) and related regulations

Summary analysis: The NPSA provides a strong basic framework for modernisation and innovation of retail and wholesale payment systems. It furnishes BOZ with clear regulatory, supervisory, corrective and investigative powers, which is essential for a safe environment towards more inclusive retail payments. The NPSA is broad with respect to the types of entities who can participate in payment systems, allowing participation of nonbanks. This is one of the key enabling factors for innovation. The framework for money transmission (remittance) services, which includes basic rules for agents used by mobile money providers, is proportionate, non-discriminatory and relatively predictable. It provides flexibility with regard to the use of remittances agents and in general does not pose obstacles for innovations. The framework is not adequate for e-money (stored value payment instruments such as mobile money) business, but in practice BOZ has imposed additional requirements on providers. There is no comprehensive framework for electronic instruments (e.g. debit cards), which would establish rules such as maximum time to conclude a payment transaction. BOZ is working on such draft regulations, which we have not analysed.

The NPSA is the overarching, all-encompassing law in the payments arena. It has the standard provisions commonly found in NPS laws elsewhere, including rules for settlement and clearing of payment



instructions, and provides BOZ with the authority to license, regulate and supervise payment systems, payment system businesses and participants in the payment systems. BOZ has the power to issue Directives, adopt corrective measures and investigate ⁴⁰. BOZ also has the authority to exempt any class of participants from any provision of the Act. BOZ's decisions on any matter shall remain in force unless set aside by a Tribunal or a court.

The NPSA lays out standard provisions for risk management in payment systems and clearinghouses (e.g., the need of constituting collateral by clearinghouse participants; finality and irrevocability of settlements; need to have failure-to-settle arrangements; and rules for using collateral in case a participant is wound-up). The rules of clearinghouses such as ZECHL are subject to prior BOZ approval. The law also permits electronic transaction records, which is very relevant to enable cost-effective retail electronic transactions. Lastly, the NPSA requires participants to attempt to settle disputes between them in seven days. If this process fails, participants are required to refer the dispute to arbitration ⁴¹.

Although payment instruments are not defined in the NPSA (they are defined in the Money Transmission Guidelines, described in section 3.4.1.1), the NPSA gives BOZ plenty of authority to create or other definitions in regulations and guidelines, when necessary. An example is the definition of money transmission services (remittances), which has been established in a regulation.

BOZ has issued several regulations setting minimum entry requirements for designated payment systems, participants in these system, and payment system businesses, including minimum risk management standards. In general, these requirements do not form a barrier for the development of innovative business models that could cater to the underserved population, and our interviews suggest that the authorization process is not burdensome or disproportional. Such regulations, including several application forms, are made available on BOZ's website, bringing transparency and certainty for new entrants and the general public.

The NPSA also sets the stage for fully electronic cheque clearing, something that is already being pursued by BOZ⁴².

3.4.1.1 Money Transmission Services (MTS) Guidelines

The Money Transmission Services (MTS) Guidelines govern local and international money transfer (remittance) operators and their agents, giving BOZ clear powers to regulate and supervise this market. According to the Guidelines, conducting MTS requires prior BOZ approval (designation), after meeting fit and proper and other entry standards. Contraventions to the Guidelines are subject to fines⁴³, and

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⁴⁰ Breaching provisions of the NPSA for which no specific offense has been created is subject to a fine not exceeding 100,000 penalty units (as defined in the Feed and Fines Act) and/or imprisonment for up to 2 years.

⁴¹ Arbitration rules are set in the Arbitration Law.

⁴² For instance, BOZ issued the CB Circular No 14 in August 16th 2012, directing all commercial banks to send samples of cheques to BOZ for validation as to their compliance to the cheque truncation system, indicate the date from which bank's truncation compliant cheques will be ready, and attend to weekly meetings with BOZ to assess progress on the matter.

⁴³ A fine of up to 1,000 fine units and an additional fine of up to 500 fine units per every day during which the breach continues. A fine unit is a reference measure whose value in ZMK is constantly updated through amendments to the Fees and Fines Act. This "indexation" practice is quite common in other jurisdictions and allows the legislator to update currency values in several laws by simply changing only one law.



revocation or suspension of the designation. Conducting MTS business without prior BOZ authorization is subject to stricter penalties.⁴⁴ A MTS provider shall not open a new place of business without prior written approval from BOZ.

MTS is defined as a service that accepts cash, cheques, other monetary instruments or other stores of value in one location and pays a corresponding sum in cash or other form to a beneficiary in another location by means of a communication, message, transfer, or through a clearing network to which the money/value transfer service belongs. In other jurisdictions, this service may be known as remittances. The individual transaction limits are not set in these Guidelines, but MTS transactions must comply with the limits set by BOZ for AML/CFT controls.

MTS providers are required to report financial statements quarterly, audited statements annually, and all receipts and payments and a list of outstanding transfers, monthly.

A *MTS agent* is a person appointed by a MTS provider to offer MTS on its behalf. MTS agents may include: a) a bank or financial institution or their subsidiaries; b) a MTS provider; c) the power to exercise directly or indirectly a controlling influence over a MTS provider or a controller of a MTS provider. The agency relationship must be based on a contract and the provider must hand written policies and procedures to each agent. BOZ has the power to revoke a designation if an agent violates the MTS Guidelines or does no collaborate with BOZ inspections, making the provider effectively liable for the agent's acts. BOZ may carry out inspections in any place where the MTS business is conducted and an inspection at agent premises upon prior notice to the MTS provider or without notice if BOZ believes the agent is engaging in unsafe and unsound practices. Offsite examinations may be conducted quarterly based on regular returns.

It is not necessary to seek prior BOZ approval for every agent, but providers are required to keep an updated list of agents at all times, and report this list with the number and location of agents to BOZ, every quarter.

The Guidelines set various consumer protection rules that, if enforced, could help encourage the adoption of formal remittances services in Zambia. These rules include:

- The premises where the services are rendered must be clearly identified as such by way of sign post;
- Each transaction shall produce a written receipt (no prohibition to use electronic receipts) with minimum required information to the client and the provider must keep a copy;
- The length of time it takes to remit funds to all areas where the service is provided, as well as fees and exchange rates, must be displayed in conspicuous places;
- The exchange rate must be rated and quoted by the provider's banks;
- Providers must put in place rules and procedures for dispute resolution and ensure consumer disputes are solved in reasonable time;
- Providers must ensure that funds received but not yet transmitted are not used in an income generating manner;

Lastly, providers are required to keep records (for at least six years), including:

- Each instrument sold;
- General ledger;

 $^{^{44}}$ A fine of up to 100,000 penalty units and/or imprisonment of up to two years.



- Outstanding payment instruments and stored-value obligations;
- List of designated agents (name and addresses).

According to our interviews, the record keeping requirements are not considered an obstacle for providers, in terms of costs. This is seen as a measure to protect their own businesses. Moreover, there is no prohibition to use electronic files instead of paper. Some providers choose to keep client identification documentation in hard copy while others keep records in electronic form. Service providers mentioned that if there were a specific law on electronic documents perhaps all files would be digitalized.

3.4.1.2 Foreign exchange regulation

In Zambia, there are no foreign exchange controls. Some rules are set for banks in the banking law and in the currency regulations. For instance, any branch of an authorized bank is allowed to conduct foreign exchange transactions, which enables a more extensive network of cash in/out points for remittances. For MTS, the transactions with clients can only be made in local currency, and this limitation has been extended in May 2012 to all transactions conducted within Zambia, such as purchases at hotels and any contract signed within Zambia. The objective of this new regulation is to reinforce the Kwacha as Zambia's legal tender, in line with international common currency management practice. The rule does not impact foreign currency denominated loans, deposits and bonds, according to the findings of this research.

Although there is no obvious obstacle offered by the above framework for the development of cross-border small-value payments, the prohibition on using foreign currency as legal tender in domestic transactions has been drawing the attention of businessmen and the local media, perhaps due to the implications of the measure on contract administration and currency risk management, or due to its misinterpretation of the rule by the market. The measure does not seem to affect workers remittances, as these were already being done in local currency (i.e., foreign exchange transactions were paid and received in physical local currency, when done in cash).

3.4.1.3 Electronic money regulation

Although it has allowed nonbank to issue e-money, BOZ is currently preparing a specialized regulatory framework for e-money products and issuers. Such framework is necessary because e-money services go beyond money transmission to include storage of funds in electronic wallets, for indefinite time, making providers fall in between the deposit-taking (see section 3.4.3) and the payment business. The MTS Guidelines mixes remittances with stored-value instruments such as e-money, but it does not create a comprehensive framework for this type of service. BOZ, in practice, has imposed additional requirements (in line with international practice) on mobile money operators such as Airtel Money and MTN Mobile Money. For instance, it has required the provider to keep an equivalent of 100% of the e-money issued in a trust account.

3.4.2 Bank of Zambia Act, 1996 (BOZA)

⁴⁵ Statutory Instrument No. 33 of 2012,

⁴⁶ See "Clarifications on the implementation of Statutory Instrument Number 33 – The Bank of Zambia (Currency) Regulations 2012", available online at http://www.boz.zm/.



With respect to payment systems, the Bank of Zambia Act, 1996 (BOZA) reinforces BOZ's powers and responsibilities spelled out in the NPSA. Particularly, it gives BOZ the power to license, supervise and regulate the activities of banks and financial institutions so as to promote the safe, sound and efficient operations and development of the financial system; promote efficient payment mechanisms; and support the efficient operation of the exchange system.

The act also specifies that BOZ may determine the classes of liabilities that qualify to be liquid assets for the purpose of determining liquidity ratios, and liabilities against which the reserve requirements are calculated. These provisions give support to eventual e-money regulations or any other future regulation covering payment services in Zambia.

3.4.3 Banking and Financial Services Act, 1996 (BFSA) and related regulations

Summary analysis: The BFSA is open and strong enough to allow innovations in retail payments, including e-money business, while preserving BOZ's authority to issue regulation and conduct supervision. BOZ is working to harmonize the BFSA and the NPSA to deal with overlaps and inconsistencies and increase clarity around remedial tools. It is also working on a draft e-money regulation and a draft agent banking regulation. The definition of agent could be confounded with the existing definition of "branch", which would require agents to follow the rules given for branches. Given the high turnover of agents and the need to keep costs down, this would be impractical and constitute an obstacle for the development of agent networks. The definition of a "deposit" is specific enough to exclude nonbank e-money issuers from the full prudential framework applicable to banks. At the same time, the definition is broad enough to protect for e-money users, as even pooled accounts at banks (with funds equivalent to the e-money issued) may be considered "deposits" for purpose of deposit insurance and to receive priority over "other claims" against the bank in case of liquidation, winding up or dissolution.

The Banking and Financial Services Act, 1996 (BFSA) applies to all banks and financial institutions. The Act does not deal explicitly with outsourcing or the use of agents, which will be dealt with in a specific agent banking regulation currently being drafted by BOZ. It does, however, define "branch" as "any place of business of a bank or financial institution that is open to the public, and includes a mobile office and a banking machine installation." It also requires institutions to display its name prominently at the entrance to every place where it carries out its business, which would apply to agent locations. Lastly, it gives BOZ authority to permit opening hours for business with the public. In addition, Circular 04/2012 urges banks and other financial institutions to invest in enhanced security features for their branches. This may increase the cost of expanding the brick-and-mortar network of financial institutions, which would in turn require more attention, by providers, to develop innovative delivery modes, as well as establish partnerships with existing retail infrastructure.

We have not seen the agent banking draft regulation to see how and if it exempts agents from the existing definition of branches and what physical security requirements it imposes on providers.

It is important to understand the BFSA definitions of deposit and the business of prudentially regulated entities as these set the fine boundaries between banking business and e-money business in Zambia.

A "Deposit" is defined as:

1) An amount of money paid to a bank or a financial institution in respect of which a) an equal



amount or any part thereof is repayable with or without a premium, with or without interest;

- 2) Trust funds received from or held by a bank or financial institution;
- 3) Money received or held by a bank or financial institution for a special or specific purpose regardless of the legal relationship thereby established;
- 4) Outstanding draft, cashier's cheque, money order, and other
- 5) Such other obligations of a bank or financial institution as BOZ may prescribe.

The BFSA established priority of credits in the case of liquidation, winding up or dissolution of a bank or financial institution, in this order:

- 1. Expenses incurred in the process by BOZ;
- 2. Taxes and rates due to the Government or local authorities;
- 3. Wages and salaries;
- 4. Fees and assessments due to BOZ;
- 5. Claims covered by a deposit protection scheme;
- 6. Other deposits;
- 7. Other claims.

"Deposit-taking financial institution" is defined as a financial institution that, in addition to carrying on financial service business, accepts deposits.

"Financial institution" means a person other than a bank conducting a financial service business. The definition of "financial service" includes:

- a) Deposit brokering; or
- b) The issue and administration of credit cards, debit cards; or
- c) Money transfer or transmission services or the payment of cheques or other demand payment orders drawn or issued by customers and payable from deposits held by the payer.

No person or entity without a BOZ license shall conduct or appear to conduct financial service business. Although money transmission service providers are financial institutions according to the BFSA, they are governed by the NPSA and are subjected to much less strict requirements. Table 13 gives a non-exhaustive list of the entry and ongoing requirements applicable to the categories of deposit-taking and non deposit-taking financial institutions most relevant to understand the framework for the retail payment services providers, according to the BFSA and the NPSA. The upcoming e-money regulation would include a mix of the requirements applicable to deposit-taking institutions and money transmission providers, as well as additional ongoing requirements typical of e-money regulations, such as requiring a trust account to hold the an amount equivalent to the e-money issued.

Table 13: Main requirements established by the BFSA and the NPSA, and related regulations

Laws	Type of entity	Entry requirements	Ongoing (including prudential) requirements
BFSA	1) Deposit-taking	- License by BOZ. Information	- BOZ supervision
BFSA and BOZA	1) Deposit-taking financial institutions (e.g., banks) 2) Nonbank financial institutions (excludes non deposit-taking financial institutions covered by the NPSA)	- License by BOZ. Information requirements are much more detailed than in the designation of NSPA-covered entities (see next row), e.g., detail on the governance structure - Pay application fee (ZMK5.4 million for most nonbanks and ZMK9 million for banks) - Pay clearance fee for Directors	- BOZ supervision - Comply with branch security requirements, disclosure and consumer protection rules (e.g., rules on unclaimed funds, conflict resolution mechanisms), the Risk Management Guidelines 2008, international accounting standards, and corporate governance, record keeping and auditing requirements - Comply with prudential limits: minimum liquid assets, liquidity ratio, reserves, maximum unsecured borrowing, prohibition from insider lending, investments, maximum immobilization
		- Minimum initial capital	limit, and capital adequacy ratio



	(source of funds must be demonstrated to BOZ): 1.Banks: ZMK104 billion to ZMK500 billion 2.Nonbanks, for example, non deposit-taking microfinance institution (ZMK25 million) and deposit-taking microfinance institution (ZMK250 million)	- Comply with anti-money laundering regulations - Comply with other rules in the BFSA, such as rules against anti-competitive behaviour (e.g., price collusion), and ownership standards - Banks: comply with rules on bounced cheques - Annual and monthly prudential returns - Pay annual fee: ZMK2.7 for most nonbanks and ZMK4.5 million for banks
NSPA 1) Non deposit-taking institution payment system and payment system and payment system system and payment system and payment system system system system system in providers; mobile payment providers)	already licensed under the BFSA must present extra documentation, such as audited statements. Pay application fee (ZMK1 million for payment system)	- BOZ supervision - Keep a compliance officer - Pay and receive in local currency only - Ensure funds received but not yet transferred are not used in income-generating operations - Comply with basic rules of the NPSA: be effective, efficient, competitive and safe; have adequate risk-sharing, management and control mechanisms; ensure finality and irrevocability; address operational and financial soundness and failures. - Comply with transparency and consumer protection rules, e.g., having dispute resolution mechanisms - Pay annual designation fee (ZMK500,000 for payment system business and ZMK1 million for payment system) - Comply with anti-money laundering regulations - Monthly reports to BOZ on transferred/received, outlets and system availability

3.4.4 Prohibition and Prevention of Money Laundering Act, 2001 (AMLA) and related regulations

Summary analysis: Although AML requirements were mentioned in nearly all of our interviews as a contentious issue, the regulation does not seem to place a particular burden on account opening and one-off transactions as well as in customer due diligence. It gives flexibility for client documentation, especially considering that the NRC is quite ubiquitous even outside the larger cities according to FinScope 2009. However, the law does require verification of client information, which can be a significant burden in practice, particularly for low-value accounts, in rural areas and when serving low-income clients. There is no reliable means or national database to facilitate such verification in a cost effective manner. BOZ has issued a Practice Note in 2011 to urge banks to adopt a risk-based approach to account opening including not verifying address information, but the market continues to be conservative in their controls, particularly in the documentation and procedures required to open an account. This might be related to the lack of a tiered framework establishing clear and differentiated account value limits for different levels of AML controls, particularly KYC procedures. No industry representative interviewed for this study was able to specify exactly what in the regulation creates a burden and what could be done to reduce such burden.



The Prohibition and Prevention of Money Laundering Act, 2001 (AMLA) sets basic controls to prevent and penalize money laundering, creates the Anti-Money Laundering Investigations Unit and the Anti-Money Laundering Authority. It applies to all entities covered by a supervisory authority in Zambia, such as BOZ. It does not cover Mobile Network Operators (MNOs) for their communication services, but their mobile payments business is subject to the law and regulated by BOZ. According to the AMLA, businesses must keep transaction records for 10 years after the conclusion of the transaction, report suspicious transactions, train their staff, and comply with any applicable AML regulations. Our interviews suggested that this is not seen as an obstacle by providers, in terms of cost. They are also not prohibited from keeping such records in electronic form.

The Anti-Money Laundering Directives, 2004 (AMLD) provide detailed AML requirements for financial institutions. The know-your-client (KYC) requirements are described below, as this issue was raised in nearly all of our interviews for this research as a potential cost for payment service providers and for opening bank accounts.

"Opening an account" in the AMLD means entering a relationship to operate current, deposit, savings and loan accounts, and includes investments and money transmission. When opening accounts for individuals, regulated entities must:

- 1) Produce a National Registration Card (NRC) or Driver's License (in case of nationals); or a NRC and valid passport with duly issued visa (in case of foreigners).
- 2) Identify the beneficial owner of an account and any person using remittance and safe custody facilities (bureaus de change exempted)
- 3) Verify the customer's name and address by:
 - a. Obtaining a reference from known persons or authorities; or
 - b. Obtaining bank references; or
 - c. Checking credit bureau records; or
 - d. Requesting recent utility bill payment (original or certified true copy); or
 - e. Using an address validation service, if available; or
 - f. Other means deemed necessary.

The AMLD also requires regulated entities to train their employees on AML controls, but is silent with regard to employees of agents and outsourced staff.

BOZ limits non-bank-based transactions and accounts to ZMK 5 million per transaction, and ZMK 5 million in daily balance. BOZ Circular 14/2003 establishes similar transaction limits for bureaux de change: USD 1,000 per client per day for over-the-counter transactions and traveller cheques (combined). With regard to bank accounts, there is no balance or transaction limit, and no framework establishing different limits for accounts with different levels of risk depending on the complexity of the KYC procedures. However, BOZ has imposed a ceiling on Zanaco's Xapit account, as it uses a simplified KYC process to facilitate opening.

3.5 Key Regulatory Gaps and Market Barriers to Payment System Development

This section looks at the current gaps in the existing regulatory environment and market context that inhibit further development of the payment system ecosystem in Zambia. These gaps form the foundation



of the issues that impact Zambia's development of an effective and efficient NPS that is sufficiently open to innovation and provides the incentives for investments for services to reach the majority of the population.

3.5.1 Regulatory Gaps

There are few regulatory or policy constraints for retail payment services development, despite the fact that the current framework has not yet been fully finished. The existing framework gives enough room for innovation and is comprehensive and predictable in most areas. The legal basis is strong for providing BOZ with clear powers over payments, and introduces basic protections for consumers using electronic payments and alternative delivery channels. Our interviews confirm this assessment on the BOZ, as well as affirming BOZ's openness to, and promotion of, innovative services with potential to increase financial access in Zambia⁴⁷. The licensing of bank and nonbank payment service providers is transparent, non-discriminatory and based on pre-established common criteria. BOZ's vision and positioning are generally well understood by the market, which is reinforced by the existence of formal policy documents such as Vision 2007-2011 and the FSDP. There is wide consultation with the industry and other stakeholders. This environment provides a good level of certainty and clarity, which are key for private sector investment.

Nevertheless, more needs to be done. We highlight the regulatory gaps below, noting the instances where BOZ has already started to consider or address them.

No regulatory framework for electronic money (work in progress). The service of nonbanks such as Airtel Money, MTN Mobile Money, Celpay and Mobile Transactions have one distinctive characteristic: they allow the storage of monetary value for an indefinite time in an electronic account (sometimes called "e-wallet"), for future use outside their closed network (e.g., the funds can be used to pay bills). This works just like in a bank account. This is a key difference from an ordinary payment service (be it mobile or not) in which the time for settlement of an outstanding transfer is usually short. ⁴⁸ In fact, mobile money in other countries tends to evolve from simple money transfers towards storage of greater amounts of funds for longer periods of time in the mobile money accounts (e.g. M-Pesa in Kenya, MTN Mobile Money in Uganda). This is desirable from a financial inclusion standpoint and could even function as a gateway for banking services should the market organize itself towards partnerships between banks and nonbanks. Given the existence of at least a couple of major mobile money schemes in Zambia with potential to reach a large number of clients, it is necessary to issue e-money regulations.

Although this report does not give detailed recommendations for such regulation, the authors feel the regulation should cover at least the protection of client funds, by prohibiting their use for incomegenerating purposes and requiring the deposit of the equivalent to 100% of the e-money issued in a trust account or similar arrangement that shield those funds. This regulation would also need to make it clear that e-money issuers are not deposit-taking institutions, consequently exempting them from the full prudential requirements applicable to deposit-takers. On the contrary, an e-money regulation in Zambia would be under the NPSA, not under the BFSA. Given the definition of "financial service" in the BFSA, it

⁴⁷ The clearest example of BOZ's openness is the fact that it allowed Celpay to operate from 2002 while the regulation only came into effect in 2007.

⁴⁸ Some regulations around the world define a maximum amount of time between receiving the funds from the client and transferring the funds to the payee. Zambia does not have this type of regulation and the market has not self-regulated on this area.



seems that e-money issuers would be subject to both BFSA and NPSA, unless the contrary is expressly stated in the e-money regulation. We have not seen BOZ draft e-money regulation to conclude over its alignment with international practice.

No rules for banks to use agents (work in progress). There is no regulation setting minimum standards for banks to use agents, despite a few banks starting to establish partnerships with payment services providers and retail networks for the distribution of their services, particularly deposit collection. It is timely to create a clear, risk-based but open regulatory framework for this business, differentiating this distribution mechanism from bank branches, which are subject to much stricter requirements. We have not seen the draft regulations which BOZ is working on.

BOZ would need to make it clear that rules for branches do not apply to agents, and craft an authorization/notification process flexible enough to allow timely opening and closing of agents. The draft would also need to make it clear that the BFSA's provisions on price disclosure and information on complaint mechanisms apply to agent locations, as they specifically mention "branches" in the text of these rules.

No clear level playing field between banks and payment service providers using agents. Related to the previous gap, the NPSA has some basic rules for the use of agents by MTS providers, which are quite broad and open. The upcoming rules for banks using agents should not deviate substantially from the standards set in the MTS Guidelines. In fact, standards across different types of providers should be similar as the risks stemming from the operations are similar and will only vary inside individual institutions depending on quality of their risk management practice and their internal controls. Some particular requirements would need to be created for agents handling client accounts such as mobile money and bank accounts, for instance, to protect the privacy of client data and security features of the account-based transactions. BOZ should pursue a level playing field for the use of agents, although making it clear in all cases that the provider remains liable for services and the acts of its agents (as it is done in the MTS Guidelines). A level-playing field would more easily facilitate investment by a range of providers in retail agent networks, which would in turn increase the incentives for agents to accept such partnerships.

No tiered KYC rules to lower barriers for account opening and clarify accepted practices. Although the current regulation is relatively flexible (with the exception of the verification requirement), it lacks an explicit risk-based or tiered approach, in which lower requirements would be applicable for lower risk accounts, clients and transactions. Stricter requirements would be set for riskier, higher value accounts, including transaction accounts of larger agents used by payment providers or banks. The current regulation does give a good sense of the need for institutions to implement risk-based AML controls to allow financial inclusion, and this is reinforced by the BOZ Practice Note 2011. BOZ has also exercised some flexibility by allowing simpler KYC for Zanaco's Xapit account, counterbalanced by account limits. However, these ad hoc actions have not had great impact on market practices, which continue to be overly conservative, something that is quite common in other countries. Also, the market continues to pint to AML regulations as one of the most important burdens for financial inclusion, without having pin pointed what exactly is a burden. BOZ could consider issuing specific regulation to clarify this further, by exempting low-risk accounts from some requirements such as verification. Ideally, BOZ should consider creating a tiered AML/CFT framework, which would be applicable to banks and nonbanks. An explicit



tiered approach would give the market more confidence to implement lower controls for low-value accounts, and address the argument that AML is an obstacle.

No common minimum standards for electronic payment instruments. Although the current regulation provides some basic risk management and market conduct in payment services, there is no specific framework with rules such as those defining payment instruments in general, setting security and operational standards such as timing parameters for finalizing a payment transaction, or creating standards for conflict resolution. As electronic payments increase in importance in Zambia, BOZ should consider creating such a framework, based on international best practices and the reality of the country context (for instance, the available enforcement and supervisory capacity).

No supervision standards for retail payment service providers (in progress). The sustainable and safe growth of a diverse and dynamic electronic retail payment market needs to be supported by effective supervision. However, BOZ has not yet created supervision and monitoring procedures for this market. It will need to create supervision manuals and other guidance for its staff, following a risk-based approach for overseeing of retail payment providers, particularly considering the limited number of human resources available in the relevant units or departments at BOZ. Using resources wisely would require a focus on market monitoring rather than routine examination of individual institutions on an annual basis. To make risk-based supervision a reality, BOZ will need to improve the quality and the use of statistical returns by retail payment providers, and maybe review the existing reporting requirements.

Inadequate penalization of ATM fraud. Although we have not delved deep into this topic and have not collected data about fraud in electronic payments in Zambia, the banking sector seems to be concerned about frequent and increasing ATM fraud. Reportedly, the problem is that light penalties are imposed (maximum of ZMK 4 million, or about USD 760) on convicted criminals and, according to our interviews, such penalties do not disincentive criminals.

3.5.2 Market Barriers

In the case of Zambia, market barriers and dynamics seem even more relevant than regulatory gaps at present. There is not much BOZ and policy makers in Zambia can do to change business dynamics and the mindset of banks, but in its leading role of developing the national payment systems, BOZ could potentially catalyze industry dialogue and greater learning, through workshops, seminars and policy papers. It can also channel international assistance towards these activities, acting as a coordinating body, which is in line with its role as an implementing agency for the FSDP.

Most banks are not interested in getting out of their comfort zone. Although there are some exceptions, a general finding of this research is that most banks have limited interest in reaching out to low-end users as a primary line of business. This is related to the high profitability of the narrow segment currently being served (corporations and high net worth clients) and the fear of entering an uncertain, probably less profitable segment while having to meet shareholder return targets. As a result, most do not see enough business incentives for investing in the growth of the client base, product innovation, and expansion of the distribution network. There seems to be only one large commercial bank (Zanaco) clearly innovating and establishing partnershps to reach new client segments. Other larger banks, although clearly innovating to provide more convenience to existent clientele with services such as electronic means of payment, are not used to dealing with lower-income clients and would need to change their business strategy, their skills and their mindsets to enter this market. For example, there is not a single bank



investing in building a retail agent network and only a few fully understand the potential of such strategy⁴⁹. This would require capacity building and exchange with institutions from other countries, which have achieved some degree of success in serving lower-income populations. Also, a clearer regulatory framework that creates a level-playing field as suggested in the previous item, could help in setting the stage for greater innovation.

Most banks are reluctant to establish partnerships with nonbanks. Our interviews suggest that there is an industry-wide perception that mobile money providers are competitors of banks, as opposed to being potential allies for gaining increased market share in new client segments, or simply to provide greater convenience to existing clients who could, for instance, transact between the mobile money and the banking platforms. This perception is not shared by all banks (as shown by a few emerging partnerships), but it limits the potential for adding value to the market innovations introduced by nonbanks in a larger scale. Capacity building, dialogue between the MNOs and banks (including BAZ) and BOZ and peer learning could help. This could be done by taking advantage of the FSDP's PSWG, which could facilitate such activities.

Large banks and nonbanks are reluctant to share existing retail payment infrastructure. There is limited interoperability among banks and no interoperability between banks and the mobile money services such as Airtel Money, MTN Mobile Money, Mobile Transactions and Celpay. There are only a few examples of shared infrastructure, such as using ATMs to withdraw mobile money funds. Larger banks are not going to join Zamlink to facilitate interbank transfers and ATM interoperability, and there is little incentive for them to share their own installed distribution network. In addition, our interviews suggest that mobile money providers may also be reluctant to share infrastructure, to protect their own business interests. Competition in the mobile money market is reportedly too strong to give way for increased interoperability based on cooperation. This situation has made BOZ push for the creation of a national switch, which could be the starting point for greater cooperation. However, the switch is not a project for the short-term and intermediary actions are necessary. These could include, for instance, workshops where partnership models inside and outside Zambia, are discussed.

Interests of nonbank retail payment providers are not clearly considered in the national switch project. Although there is a good level of interaction and consultation between BOZ, BAZ and PMTA, the discussion about the national switch has been so far biased towards the bank sector, which will be the one putting down the money to pay for the switch. It is not clear how much attention will be given to the interests of nonbanks, and the potential benefits of linking future payment infrastructures to the innovative platforms operated by nonbanks, at least the larger ones. Disregarding nonbank participants in the national switch project may encourage the nonbanks to create their own switch, or several parallel switching structures. This could result in more market fragmentation, duplication of infrastructure, and further disconnect between the bank and the nonbank sectors. It is key to be clear about the potential role nonbank payment service provides will play in the future and what that entails for the switch project.

There is limited understanding of the benefits of electronic payments by clients and banks. Demand side interviews revealed that some Zambians feel their incomes and expenditures are too small to merit

⁴⁹ Although the agent banking regulation is still in draft form, BOZ woud most likely allow banks to start hiring agents before the regulation is issued, as it has done with e-money issuers. This approach is highly consistent with the G20's Principles for Innovative Financial Inclusion (available at http://www.gpfi.org/knowledge-bank/publications/g20-principles-innovative-financial-inclusion).



switching from cash to electronic payments. Until there is better mobile and internet network coverage to ensure that electronic transfer products will be reliable, customers are unlikely to view electronic payments as convenient and sufficiently liquid. Similarly, banks and even some government bodies do not understand the need to reduce the use of cash and increase convenience for clients to fully benefit from a wide distribution network where electronic payment instruments can be accepted and work well. Some say that familiarity with electronic payments has improved considerably as a result of MTN Mobile Money's and Airtel Money's mobile money services, given their strong brand and their reach to large numbers of people, including unbanked Zambians.

Banks tend to be overly conservative with identification and verification requirements for account opening. Although the regulation provides some room for flexibility in identification requirements and BOZ has allowed flexibility of verification requirements, most banks require several documents to open any type of account and apply verification of some information such as address, regardless of the client risk profile. FinScope 2009 shows that the large majority of adults in both rural and urban settings have a National Registration Card (NRC) but lack other documentation such as utility bills to confirm address, but most banks require other documents in addition to the NRC. It is worth noting that the FSDP has two initiatives that could minimize such problems in the long term: the creation of a financial identification system and a new addressing system. Both projects are in initial stages and are likely to take long to be completed. BOZ could, in addition to considering issuing specific regulation on this topic, facilitate industry dialogue to encourage more proportionate practices, according to its Practice Note.

There is some uncertainty regarding reliability and quality of telecommunication services. Some of our interviews with the private sector suggested there is some concern with Zamtel's service quality and continuity (fiber optic and leased line connections). This is related to the uncertainties created by the recent government takeover of the company, which had been previously privatized. Some say that this could hinder investment in expensive infrastructure that needs to rely on Zamtel's services, such as the bank switch, though others say this is not a major problem. ⁵⁰ This could be a topic to be discussed within the FSDP's PSWG, with active participation of ZICTA.

4 CONSUMER PERSPECTIVE

4.1 Overview of research

To provide deeper insight into customers' use and impressions of retail payment services in Zambia, we conducted six focus group discussions and six individual interviews throughout Zambia from March 21 to 31, 2012. The focus group discussions included primarily people sending and receiving payments and people using financial products targeted at the low-income segment of the market. These discussions took place in Lusaka, Livingstone, Gwembe in Southern Province, Luangwa in Lusaka Province, and Ndola and Masaite in Copperbelt Province. These locations were selected to provide insight into attitudes

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⁵⁰ BOZ has talked about the issue in the local media. According to former Banking Currency and Payment Systems Director, Morris Mulomba, "electronic payment systems of any kind need very good telecommunications network and computer system" and that "the country faced a lot of challenges in the technology and communications world, [and that] these problems will be minimised as Zambia Telecommunications Limited (Zamtel) improves it communication links and the Communication Authority of Zambia (CAZ) intensifies its regulatory implementations systems that help the industry grow". See www.balancingact-africa.com/news/en/issue-no-298/computing/zambia-effective-ele/en.



towards payments in different regions of Zambia, and in both urban (Lusaka, Livingstone, Ndola) and rural (Gwembe, Luangwa, Masaite) settings. Livingstone and Luangwa are close to international borders, facilitating access to remittances senders and receivers, as well as traders. In Ndola we spoke with migrants who were attracted to copper and other industries there. In the urban areas where this research was carried out, all major Zambian banks are present, as well as Western Union, Bayport, and other money transfer services. In the areas where we held the focus groups and recruited in these cities, proximity to financial services was not a constraint, although some respondents told us that they live in parts of the city without bank branches. In Luangwa there is a Post Office offering Swift Cash and one bank branch without an ATM. Gwembe and Masaite represent very low areas of access, with residents having to travel hours to get to a bank or other financial service point.

Despite the proximity challenges in some of these areas, by selecting respondents who send and receive money and recruiting people who are found around commercial centres, we selected a sample that is richer and more financially included than a nationally representative sample would be. As FinScope shows, use of financial services in Zambia as a whole is low, with 62.7% of the population being financially excluded in 2009. Nonetheless, in order to understand how services are working and what challenges users face, it is important to speak with active clients, which justified this selection.

Focus group respondents were selected using a screener questionnaire that identified groups of interest, banked individuals in Lusaka, those receiving remittances in Livingstone, those sending remittances in Ndola, farmers in Masaite, and a general focus on those who have some interaction with payments. Respondents were randomly intercepted and asked to complete the screener questionnaire, and then call backs were made to those selected to participate. Men and women participated in focus groups separately (3 groups of men, 3 groups of women) to facilitate conversation and conform to local customs. One participant from each focus group was then selected to participate in a more in-depth individual interview that asked about income, expenses, and payments in detail. Tables 14 and 15 summarize key characteristics of 54 focus group respondents who completed a screener questionnaire.⁵¹

Table 14: Characteristics of focus group respondents

Summary statistics of focus group respondents	
Per cent female	50%
Per cent urban	57%
Mean age	30.72 years
Median education reached	Grade 12
Read easily in mother tongue	87%
Read easily in English	92%
Has access to a cell phone	90%
Mean number of household members	5.09 people
Mean number is household earning income	1.96 people
Per cent of households with at least one person with a regular salaried job	17%
Mean time in minutes to the nearest bank	79 minutes
Median time to nearest bank	20 minutes
Mean transport cost to nearest bank	ZMK 12,150 (US\$ 2.30)
Median transport cost to nearest bank	ZMK 7,500 (US\$ 1.40)

50



Table 15: Percent of focus group respondents owning assets

% own house	% own land	% own Bicycle	% own Cell phone (not family member's)	% own TV	% own Radio	% own kitchen furniture	% own sofa	% own bed	% own jewellery	% own other assets, including livestock
28%	24%	20%	85%	60%	67%	60%	65%	100%	40%	63%

More details about the focus group sites, their locations, and the recruitment target groups are available in Annex 1. The focus group discussion guide is available in Annex 2.

This section on the consumer perspective continues as follows: section 4.2 explores income patterns encountered among focus group respondents and how they are paid. Section 4.3 discusses expense patterns and how respondents make payments. Section 4.4 addresses remittances and other person-to-person transfers, while section 4.5 considers savings, credit and insurance products used by focus group respondents. In section 4.6 we synthesize the attitudes toward financial services and electronic and innovative payments and in section 4.7 we reflect on consumer priorities for payment system usage. A summary concludes.

4.2 Getting money into the house: How are people paid?

Research on financial behaviour around the world suggests that successful payment and stored value products should be matched to the frequency of income.⁵² This section explores the income types and modes of payments we encountered in the focus groups.

4.2.1 Income patterns

As in many low-income countries, in Zambia there is a rift between the financial options available to households with at least one person working in formal employment or with a regular salary in the informal sector, and those working in diverse kinds of informal employment. The income categories of respondent households, characterized by the main income earner in the family, can be categorized as: formally employed; vendors and small business owners; casual and piecework labourers; and farmers and fisherman. Figure 9 summarises the frequency and common mode of payment for these four groups.

⁵² See for example: Mas, Ignacio. 2012. "Making Mobile Money Daily Relevant." Available at SSRN: http://ssrn.com/abstract=2018807 or http://dx.doi.org/10.2139/ssrn.2018807.

⁵³ The majority of Zambians in rural areas work in the informal sector and those that are in formal employment are mainly civil servants or work in commercial farms or crop marketing companies like cotton giants Dunavant or Cargill. In urban areas informal workers are mainly in the trading business. It is rare to meet people with permanent employment even at private companies, where contracts may be for a few months or a year. Many perceive the government as the best employer in terms of providing job security.



Figure 8: Income categories encountered during research

Employed in Vendors, small Casual workers, Farmers and formal sector business owners agricultural fishermen pieceworkers Frequency: Frequency: Frequency: Frequency: Daily but few times per can get work Mode: Mode: Mode: Mode: Direct deposit Cash, offer Cash. Cash. can be cash in kind in kind

Although these categories are helpful in understanding what payment options will be most useful for different customer segments, it is important to remember that household incomes are not monolithic. In fact, focus group participants reported that it is common to patch together income from diverse sources, such as rearing livestock or renting a small room on the side to supplement income. A respondent in Luangwa town explained the multiple income generating activities she is involved with:

Respondent (R): "I go to Mozambique to order fresh fish and resell them here in Zambia, and I do gardening and sell the vegetables to the local people. I also take care of my parents at home." – Woman in Luangwa

For respondents receiving a regular salary—including truck drivers, secretaries, insurance saleswomen, civil servants, and security guards— the stability and predictability of income is what makes these types of jobs particularly desirable. In contrast to formally employed individuals, casual workers and those doing piecework face profound uncertainty surrounding their next income inflow:

R: "Sometimes it takes me four to five days before I find another piecework job." – Man working in weeding in Masaite

R: "Sometimes I find one job in a month and sometimes a month or two can go without finding a job." -Renovations and maintenance man in Lusaka

Box 1 provides a case study of a carpenter who must manage not only without work, but also when clients take time to pay.

Under this uncertainty, remittances and loans from family, friends, and neighbours help people make ends meet. Many respondents said that remittances and gifts are an important income source:

Moderator (M): "What do you do when you don't have any sale in a month?"

R: "I borrow from friends. I borrow a little to keep me running: for transport, groceries, and soap... And why should they charge me interest? Next time it will be them who will come asking for money when they are not paid." - Woman working on commission in Livingstone



In rural areas like Gwembe, Luangwa, and Masaite, most respondent families we encountered work in some combination of farming, fishing and rearing livestock. Reselling fish, including *kapenta* (small, sardine-like fish), is common around Zambia's large lakes and rivers. Many farmers are also involved in the production of maize, the country's staple crop. While these farmers may receive income only a few times a year, those working in fishing or cultivating other fruits and vegetables reported having a longer harvest season with more frequent opportunities to sell their goods.

R: "If I grow my tomatoes well, I harvest 3-5 boxes, or about 20 kg, every three days." – Masaite farmer

Although respondents mentioned that sporadic income is a challenge for farmers, vendors, and those involved in casual work, things are not always easy for those with formal jobs either. While the regularity of income adds certainty for

Box 1: Income uncertainty of a Luangwa carpenter

"Jesiah" works as a carpenter doing renovation, roofing, and other construction jobs in the Luangwa boma area. Jesiah is the village head of his village, Chidada, which is home to 103 households. He is a widower and the sole provider for his two secondary-school age children. He saves up little by little for the ZMK 700,000 (US\$ 132) per student per term, plus the ZMK 40,000 and ZMK 25,000 (US\$ 7 and 4.75) for uniforms for his daughter and son respectively. The school is 12 km away, so his children must board during the week to avoid walking every day.

Jesiah gets new jobs through word of mouth, and although he might get one or two jobs a month, when he will be paid for this work is also uncertain. He can get ZMK1.5- 1.6 million (about US\$ 290) for a roofing job, but then must pay the two men he contracts. He allows his clients to pay in installments, paying approximately every two months, and he will sometimes let them skip months if they do not have the money. His son goes fishing when he is home, and sells any surplus fish. His family also grows maize for their own consumption. Jesiah raises goats, and would sell them in case of an emergency.

many formally employed and facilitates access to bank accounts and other regulated financial services, this is not the case for all people with stable jobs. As we heard from a woman employed by a government-sponsored guest house in Gwembe:

R: "Ideally I am supposed to be paid [by the district council] monthly. But sometimes—let me say most of the time—I am not paid on time. Sometimes five months can pass without being paid." — Woman running a district council hotel in Gwembe

Just as we found variation in the frequency of payment, there is considerable variation in how people are paid and their attitudes and preferences regarding payments. The next section explores how Zambians in different lines of work receive their wages and profits.

4.2.2 Getting paid

Referring again to Figure 9, it is clear that payment mode is closely tied to income-generating activity and income patterns. The majority of focus group respondents reported being paid in cash. But for those with formal jobs, especially through the government or large companies, monthly salary payments are often made through direct deposit into a bank account. In our sample, 17% of respondents lived in a household in which at least one person had salaried job. FinScope 2009 found that 19.8% of urban Zambians and 6.9% of urban Zambians earn salaried wages from a company or the government, so the



representation of formal employment is similar, although FinScope data gives individual, not household-level income sources. About four respondents in Lusaka and Livingstone reported that they opened their bank account in order to receive their salary payment.

Cash: The liquidity- security trade-off

Regardless of income, all users of financial services want to both keep money safe and away from temptation, and also ensure that it is easy to access when the funds are needed. When banks are far away and difficult to access, the lack of easy liquidity deters people from using bank accounts. But respondents reported that it is also hard to amass lots of cash in the house or through informal savings mechanisms, because of insecurity due to theft, many legitimate claims on cash on hand from family and neighbours, and the temptation to spend when cash is easily accessible.

With respect to the security of payments and vulnerability of money to theft and misuse, respondents largely agreed that cash is not a secure mode of payment. Even in focus groups in which only one or two respondents had bank accounts, the majority in all groups agreed that the best way to be paid is through a deposit into a bank account. One woman in Livingstone recounted how she got paid in cash at the end of the month, but was robbed in the crowded mini bus on her way to buy groceries for her family. Another woman recounted how she feels unsecure about keeping cash in the house:

R: "Some of us have thatched roofs, so if your house catches fire you will lose all your money. The bank is safer."- Woman in Luangwa

Losing cash or being robbed is a common phenomenon, and people developed interesting explanations and coping mechanisms for this. In Luangwa, we heard that, when women lose cash to fraud, theft, or misplacement, they attribute this poor fortune to magic:

- R: "I am still confused up to now...I think I lost that ZMK 300,000 (US\$ 57) to magic."
- **R:** "But no magic can be practiced when your money is at the bank...it is safe." Women in Luangwa

In Ndola, men working in different sectors told us that they receive weekly or monthly cash payments in an envelope.

R: "Most casual workers- guards, farm labourers, are paid through the cash envelope. Only those people with big positions, the bosses, get paid through the bank." - Man in Ndola

The envelope carries loaded meaning, attracting both thieves and needy family members like moths to a flame:

- R: "When people see an envelope, they know you have been paid and may attack."
- **R:** "If I owe someone money and they see that envelope they immediately pounce on me. Even if I did not want to repay them just at that time, I have no excuse." Men in Ndola

In contrast to the lack of security with cash, respondents were divided as to whether the liquidity and easy access of cash is a benefit or a hindrance. Some respondents felt that cash is the most accommodating method of payment for low-income individuals.

R: "We are poor. We are too poor to have bank accounts. This is why cash is just the best for people like us."



R: "Cash is better for small payments less than 50,000. If I am paid 5,000 do you expect me to go to the bank?" – Men working in agriculture in Masaite

Another man in Lusaka highlighted the tension between the accessibility of cash and the facility with which it can be spent:

R: "There is a saying, "what you have in your hand, it is yours." So if you are paid in cash you can be sure you have all of your money... but if you do not have proper plans for what you want to do with this cash you will just waste that money." – Man in Lusaka

This was a common sentiment expressed by many focus group respondents. A Livingstone woman also described the extra self-control required to hold on to cash:

R: "When you are paid in cash, you end up spending money on things that are not necessary, things you did not plan to buy and had not budgeted for. On your way home you will meet people selling treats and goods in the street, and since the money is right there, you allow yourself to buy. — Woman who recently lost her job, Livingstone.

Respondents in Masaite who reported taking almost any piecework job they are offered said that employers take advantage of their lack of bargaining power and employment options to pay them less than promised when paying cash. They explained how employers often renege on the amount they had agreed to pay the worker, claiming either that they don't have small notes, or they don't have enough money. For example, one man was paid ZMK 30,000 (US\$ 5.66) instead of ZMK 50,000 (US\$ 9.44) for clearing a $lima^{54}$ of land, and another man in Ndola only received ZMK 200,000 (US\$ 37.75) out of the ZMK 208,000 (US\$ 39.26) they had agreed on for a week of work since his boss had no change.

Cheques

Focus group respondents rarely reported using cheques, which are used almost exclusively by those with large contracts or when selling maize to the Food Reserve Agency (FRA).

R: "I only get cheque payments when I undertake contract jobs for the government and other big companies" – Lusaka business man

Generally, cheques were not viewed very positively:

R: "You have to deposit the cheque and wait a long time to get your money." — Woman in Livingstone.

Respondents also expressed doubts about the security of cheques:

R: "And what if you lose that cheque? Could someone else cash it in your name?" — Woman in Livingstone

Other payment methods

A few respondents also mentioned using in-kind payments.⁵⁵ In rural areas, poorer farming families are permitted to pay for some goods and services in maize. One family we met in Gwembe owns a hammer

⁵⁴ Local name for a parcel of land measuring 50 square metres. This is the most common way to describe land area and division used and the unit of work and payment for agricultural piecework in Zambia.

⁵⁵ Farmers reportedly use second hand clothes (popularly known as *salaula*) to pay for labour in the farms. Food or maize grains are also used to pay labourers. For labour, the unit of measurement for the exchange depends on the



mill to grind maize so it can be used to make the mealie meal that is used for *nshima*. When people can't afford to pay to grind their maize, this family takes a little ground maize as payment for the service. People adapt economic transactions to fit their needs, and money is not always the most needed commodity for the poor. For example, one man was offered transportation in exchange for work weeding and clearing the land, and he said he accepts this exchange when he needs to get to town.

R: "Sometimes when I do a small weeding job people offer to pay me with transportation- if they have a car they will drive me to Ndola and back, especially if I have an urgent issue to sort out there." – Man working in weeding in Masaite

In the rural areas, trading crops that are more valuable in areas where that food is not produced offers a mutually beneficial economic activity for traders. This was the case for one woman, "Beatrice", in Chipepo who travelled to exchange kapenta fish for maize in Munyumbe. Beatrice takes the kapenta caught by her husband to Munyumbwe village, which is 68 kilometers from Chipepo. Because kapenta is more of a delicacy inland, she is able to get five kilograms of maize for each cup of kapenta.

Credit at the shop: a benefit and a curse for low-income Zambians

Respondents who are selling goods through a small business offer their clients— either those with monthly salaries or friends who they know well and with whom they have reciprocal relationships— the opportunity to take the goods now and pay later. In addition to this informal credit at shops, we encountered the practice of "pay slow", or instalment payments. ⁵⁶ For those who are in need of food and toiletries to tide them over until the next payment, the option of informal credit at the shop makes it easier to cope with periods of tight budget.

But for those selling items on credit, this practice makes income less predictable and creates additional work to chase down clients whose accounts are in the red.⁵⁷

R: "When I sell salaula (second hand clothes), I anticipate the profit I will get... but it is rarely what I go home with because people I know ask me for discount and for goods on credit. And I cannot refuse." – Woman business owner in Livingstone

R:"My family sells chickens on credit and cash. But my mum wants to start selling with cash only because people have difficulty to repay the debts." – Man in Ndola

Zambian focus group respondents largely receive payments through cash and informal mechanisms, although when salaries are paid through bank accounts, customers have greater options to leave savings behind, borrow, or even get informal credit guaranteed by the next pay cheque. Now we turn to common expenditures and how payments are made.

perceived value of the item by the buyer. In trades for maize, the seller usually dictates how much maize he thinks he should get for the item he or she wants to trade.

⁵⁶ As Edwin Banda from Lusaka Probe Market Research explains, "With pay slow, both the buyer and the seller agree to collect the money for the item(s) in installments on intervals over an agreed period. The repayment can be made daily, weekly or monthly depending on the agreement between the buyer and the seller. The nature of the goods involved will also determine the payment period, for example, perishable goods like relish may require a prompt payment agreement as compared to household goods like an electric kettle. Normally the goods sold under such terms are priced highly, sometimes more than double the original price."

For more information on supplier credit in Zambia, please see Beggs, Mary. 2010. "Value Chain Finance in Zambia." USAID and Profit report.



4.3 Transaction patterns: How do people pay?

4.3.1 Expense patterns

As is the case with the way people are paid, expenditure patterns are also closely tied to how often Zambians are paid and whether or not they are able to plan ahead with stable future income. Respondents were asked about their largest expenses over the previous week, month, and year. Although responses varied, Table 16 summarises the most important expenditures for Zambians in the four income categories introduced in section 5.

Table 16: Common expenditures among focus group respondents

Expenditure frequency	Formally employed with regular income	Vendors, small business owners	Casual labourers, piece-workers	Farmers or fishermen
Weekly	Transportation, talk time for cellular phone	Mealie meal, relish, other basic food stuffs	Mealie meal, relish, other basic food stuffs	Mealie meal
Monthly	Groceries, utility bills, loan payments	Business stock, rental payments, savings group contributions	Rental payments, water in the cities, kerosene, transportation	Cooking oil, toiletries, labour for farm, grinding maize to make mealie meal
Yearly	School fees, buying plots of land, building materials	School fees, school uniforms, health shocks or funerals	School fees, school uniforms, repaying informal debts, health shocks or funerals	School fees, livestock, fertilizer and/or seed, repaying informal debts, health shocks or funerals
Access to informal shop credit?	Yes	Rarely	No	No

Groceries, rent, school fees and uniforms, and business and farm investments are important expenditures for many respondents across income categories. As one woman explained, rent is expensive and in the cities, landlords often ask for three months payment at once:

R: "I have to pay ZMK 1,500,000 (USD 284) for my rental. Landlords in Livingstone ask for three months of rent." – Woman in Livingstone

Those with formal jobs manage to do one big grocery shop for staples once a month when they are paid at what respondents report as being high-status South African grocery stores like Shoprite and Pick'n'Pay. Other families buy food when they have run out, or when they have earned a little money. One luxury of having regular income is being able to budget and buy in bulk. And the stability of income is what makes budgeting possible, as one woman in Gwembe explained:



R: "For us in the informal sector, it is very difficult to make a budget, because our income is not stable. Other people can take a notebook like this, make a list, and tick what you have bought. But people like me do not have the luxury of shopping and ticking." — Woman working in agriculture in Gwembe

Although powerful, this distinction between formal and informal is not always clear-cut. One savvy woman who runs a *ku ntemba* (informal shop) in Luangwa explained that even though her business is small and she is the only employee, she organizes her revenues so that she can pay herself a regular salary and group her expenditures together as a result.

R: "I put myself on a regular salary from my business...When I get paid I buy groceries that my family needs for the month." – Business woman in Luangwa

School fees and uniforms are a major source of stress and hardship for Zambians who see immense value in educating their children, but struggle to cobble together expensive school fees. We encountered significant variation in the reported costs of schooling. Price variation is likely to be due to regional differences and extra fees levied by certain schools for materials and repairs. Some of the more expensive prices may also have been for private schools. The reported costs for different levels of government schools are reported in Figure 10.

Reported school fees by level of school 1,000,000 900.000 Primary 800,000 Basic 700,000 Secondary- day 600,000 School fees in ZMK ▲ Secondary- boarding school 500,000 400,000 300,000 200,000 100,000 O Secondary-bording Primary Basic Secondary- day school school

Figure 9: Reported cost of school fees, Zambia

Note: Secondary fees are per term, primary and basic are per year.



As mandated by the government, primary school is free and only involves minimal charges put in place by the school, though uniforms can still range from ZMK 25,000- 60,000 (about USD 4.75 to 11.00). But sending a child (or in some cases many children) to secondary school, especially boarding school, is an expense that seems out of reach for many, with some parents paying about ZMK 850,000 (USD 161) per child per term for secondary school. For many respondents, school fees were their biggest expenditure over the course of the past year. Many people reported borrowing or asking extended family to cover the school fees for their children. One respondent described how for those who are lucky, the school administration may offer some flexibility in the payment schedule.

R: "We can never manage to pay school fees in full. So we negotiate with the administration and they allow us to pay in instalments." – Man in Ndola

Some schools offer discounts to parents who have more than one child at the school. A parent in Gwembe explained that since she has two children at the same high school she was able to negotiate a ZMK 100, 000 (US\$ 36) discount on school fees.

Others try to increase their labour supply and take on extra jobs to pay for their children's schooling. In Luangwa we met a woman who only earns enough money selling fish to pay for the school fees of one of her two children. She has been alternating the terms for which she sends each one to school because times are so hard, meaning that it will take her twice as long to help her children finish school.

4.3.2 Making payments

For most of the weekly and monthly expenses mentioned in Table 12, cash is the primary mode of payment, preferred because it is on hand and easily available. Buying groceries and fresh foods from local markets is almost always done in cash, although three or four respondents had tried using their ATM card to pay at the POS at a large grocery store (discussed in section 5.6). While cash is common, respondents mentioned the risky lack of a record when making large payments in cash. One man in Lusaka had a personal experience with this challenge:

R: "When I bought a plot of land for ZMK 65,000,000 (USD 12,269.80), the civic centre asked me to pay in cash. But I insisted that I be able to do a bank transfer. If I paid cash there would be no evidence that I paid for the plot and tomorrow they could come back and claim I never paid for the land. This happened to me once before." - Man in Lusaka working in real estate

Payments to utility companies and schools are an exception to the widespread dominance of cash payments in Zambia. The parastatal Zambia Electricity Supply Corporation (ZESCO), DSTV, and other services with monthly charges and large customer bases, have succeeded in implementing systems to accept payments through mobile money accounts, ATMs, and Xapit accounts. Respondents spoke about the convenience of paying in these ways, especially through Xapit, which allows SMS-based payments linked to a simplified Zanaco bank account. However, not everyone is a fan of utility companies and their billing:

R: "The utility companies send you bills even when they have not delivered the services. They send the bills, yet there is no water running, or you just have water at night and none in the day, but you still pay full price." – Man running school and working as a farmer in Lusaka

4.4 Person-to-person transfers and remittances



Remittances, gifts, and small loans between family and friends were common among focus group participants. FinScope 2009 found that 10.9% of households send money and 13.9% receive money. In our research we found that although some families are either net senders or receivers, many do both at different times. In groups in which people receiving remittances were specifically recruited, there were still at least a few people in every group both sending and receiving. From this small sample of focus groups, Zambians, especially those slightly better off, seem to have reciprocal risk sharing agreements through social networks. Table 17 highlights the different remittance channels focus group respondents use and the strengths and weaknesses they mentioned about these methods. As a reminder, information about experience with bank accounts comes from individuals selected to participate in the research because they had experience with formal payment products, like bank accounts. This is not a representative of the national situation; FinScope 2009 found that only 13.9% of rural Zambians and 22.6% of urban Zambians have a bank account.

Table 17: Advantages and disadvantages of remittance channels

Method of sending money	Advantages	Disadvantages
Inter-bank transfer	Secure, banks execute the transfer.	Takes 24 hours to transfer to different banks
Depositing in recipient's bank account	Potential for savings: •"When someone sends you money at the bank or deposits in your account, you have the choice if you want to take everything or leave some to save in your account."	Many respondents used this, but reported long wait times to withdraw from their own accounts and then go to the recipient's bank and wait to deposit there at the counter.
Swift Cash	• "For school children who don't yet have an NRC, Swift Cash is the best way." – Luangwa • "Swift Cash is very fast, the forms are easy to fill out and don't require many details." – Ndola	 "It is not everywhere. There is no post office here." – Gwembe "That is for rich people." – Gwembe "The problem I've had with Swift Cash is since the electricity often goes out, you have to wait for a long time." – Luangwa "Sending is done in the morning and receiving in the afternoon. You can't do the service outside these hours." –Ndola
Bus drivers	Some buses have advanced bus courier system, known in Nyanja as ku tumiza ndalama pa bus: • "Sometimes sending through the buses works well. I would just go to the Intercity bus station and give the money to a person in a booth. That person will call his counterpart in Nakonde and tell them I have paid to send money through that bus service. That person would call the recipient to collect the money The two offices just sort themselves out." - Lusaka	But people worry and can lose money without possible recourse: • "If he pockets 50,000 of the 250,000 you cannot take the driver anywhere because there was no formal agreementyou cannot even blame him." – Gwembe • "The problem is you won't sleep. You will be worrying about that money you sent with the driver. And then the recipient should be there at 5 am to collect the money." – Luangwa
Family or friends	• "I gave my friend 400,000 ZMK (USD 82) to send to my brother in Luanshya. I only gave him 10,000 (USD 2) to buy a drink. So instead	While family and friends don't often charge for this service, money may be lost or stolen, and senders must adapt to the

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⁵⁸ The term "remittances" was well understoon among respondents who speak English (in Lusaka and Livingstone). In Nyanga, people understand the term, "ku tumiza ndalama."

⁵⁹ FinScope Zambia 2009. "Presentation of Top Line Findings." Available: http://www.finscope.co.za/zambia.html.



	of wasting money on charges, I just spent 10,000." – Masaite	schedule of the person who is going.
Mobile money transfer	 "You can send money to anyone who has a phone." – Ndola "They charge a small and affordable fee. For example 5000 to send 150,000." (USD 1 to send USD 30) – Ndola 	• "I think the transaction numbers are confusing to those using the service for the first time. A lady in the market came to me and asked me to read her the number on her phone. If I had not been honest I would have gone to the agent to collect her money." - Ndola
Money transfer services (Western Union, MoneyGram) ⁶⁰	 "Western Union for is the best way to receive and send money because it is fast and they have good servicesI think it is the best." Livingstone 	Confusion about transfer services: • "MoneyGram? I have seen the sign but I don't even know what type of animal that is!" - Luangwa
Kwacha Mover (Bayport financial services)	Customers remember their marketing: • "I saw the ad on TV a bus driver who was given money to deliver had a breakdown along the way, and the money didn't arrive to the villagethey were trying to portray that there is a more efficient way to send money, and that is Kwacha Mover." - Luangwa	But few if any had used the service: • "But here in Luangwa we don't have the Kwacha Mover service." - Luangwa

Many respondents had experience sending or receiving Swift Cash. The service is popular among respondents because of the wide reach of the post office network and the democratic, no-accountneeded-to-receive approach:

R: "The Post Office is ideal when you are sending money to the country side, for example, if you send money to your grandparents. There is no way you would expect them to have a bank account, so Swift Cash is the best in that case." – Remittance senderin Lusaka

Neither senders nor receivers that we met knew precise information about the Swift Cash tariffs. The tiered pricing implies that the fee varies somewhat unpredictably from the senders point of view. Additionally, liquidity in the post office network was a common problem.

R: "With Swift Cash they tell you the network is down, so you have to wait for the network to come back." – Woman in Livingstone

R: "[The post offices] run out of cash and it takes people two days to collect their money. They sometimes have to hire a car and go to Luanshya to get cash and bring it here. People will wait in the post office for four hours." – Man in Masaite

People who are in urgent need of the money they have been sent pay to travel to surrounding towns to find a post office that might have cash. For example, from Masaite people spend the time and money to check the post offices in Luanshya and Mufumbwe. The Airtel Money "Makwacha" service is plagued with the same challenge, according to respondents:

R: "I was sent Airtel money, but the agent near my place had no money. I went to another agent in my township, and they also didn't have money. I really needed the cash, so I borrowed from my neighbours to take the bus to town and go to the Airtel Shop. There they said they could not pay me. Imagine, they are the owners of the service!" – Woman in Livingstone

⁶⁰ A useful source for understanding problems senders and receivers face in international remittance transactions is Langhan, S. 2011. "Understanding the last mile in cross-border money transfers to Zambia."



We encountered a former Airtel employee who described how she received her monthly payment through Airtel money:

R: "When I used to work for Airtel as a sales agent, we used to be paid through "Makwacha" (Airtel Money). When it was time to get paid, I would just receive the message informing me that I have received my salary. Then I would go to any Airtel agent to collect the money. It was funny, we never used to receive pay slips, we would just receive text messages." – Woman in Livingstone

Demand for a remittance product for boarding school students

One common transfer made across Zambia is parents or other family members sending money to students in boarding school for supplies and for transportation to come home at the end of the term. For some respondents, making such transfers is fraught with difficulties. In Chipepo one student was still receiving her transport money to return home from school holidays mailed in cash in an envelope. The money had been lost twice, but for reasons we can only speculate about, the family has not switched to Swift Cash. One woman also travels three hours to Monze, or has a friend who makes the trip more regularly go, in order to meet the bus driver who will take the cash to her daughter who is studying in Chivuna (Monze rural). The bus only goes on Tuesday, but it does not charge anything since the transportation is associated with a Catholic school. An innovative and agile provider may want to consider tailoring payment products to family members sending to boarding schools.

While remittances help many families cope with emergencies and pay for essential needs, other respondents described how they can't count on this money, and are often at the mercy of the sender.

M: "How often do [those who send you money] send? Is it every month?"

R: [Laughing] "They only send money once in a while, when they remember you...maybe after two months, or more." – Women in Luangwa

The next section looks at other strategies Zambians to save money and reduce exposure to economic risks.

4.5 Savings, credit and insurance options

Use of payment products is inextricably linked to the broader financial portfolios of the client. Our research suggests that payment systems that link with stored value, savings and credit services are likely to be successful in offering a one-stop shop for financial services to clients.

As supported by FinScope data, there is a large divide between savings and borrowing options and practices in the urban and peri-urban centres versus rural areas in Zambia. FinScope 2009 found that 31.8% of urban Zambians use at least one formal financial product, as compared with 17.9% of rural Zambians surveyed. Many respondents save at home or in their businesses:

R: "I save some money in my house. I put under the pillow, in my bedroom" - Woman in Gwembe

⁶¹ FinScope Zambia 2009. "Presentation of Top Line Findings." Available: http://www.finscope.co.za/zambia.html. See also FinMark Trust and Cenfri. 2008. "The Landscape of Remittances in Zambia."



R: "I invest (the money) in my business as one way of keeping and saving the money" – Man in Ndola

In rural areas, saving in livestock and other physical assets is pervasive:

R: "We save money in livestock: cattle, pigs, goats, even chickens." - Man in Masaite.

Funding emergencies

We asked respondents where they would turn if they faced an emergency and urgently needed to come up with twice their monthly income. In the rural areas, many respondents reported that they would sell livestock. In Gwembe, women's families in this group owned 7, 30, 30, 25, 3, and 5 head of cattle respectively, which the women said they would sell in an emergency. Rearing livestock can also generate significant income if the animals do not get sick or die. Another woman in Gwembe raised 60 to 80 pigs in a year (at the time of the interview her family had 32 pigs). Once a year she brings the pigs to Lusaka to sell them and each pig sells for 600,000 to 700,000 ZMK (US\$ 114 - 133, if 60 pigs are sold this could be a one-time revenue of 36 million ZMK, or US\$ 6,879.90). Finding a safe place to store this money discretely in the village must be a challenge.

Others report that they would try to work more in order to cover the costs of an emergency:

R: "If I had an emergency I would do more piecework, like washing cars." – Man in Ndola

Moneylenders who lend at high interest rates on short-term paybacks are known as *Kalobas* or, occasionally, shylocks, and appeared to be present in all the communities we visited. ⁶² Getting a loan from a Kaloba seemed to be more prevalent among men than women in our small sample.

R: "I went to the Kaloba. It is not a secret. I had to go because my family did not send me money. I borrowed ZMK 100,000 (\$19) and had to pay ZMK 150,000 (\$29). This was too much interest for me, to tell you the truth." - Man in Ndola

A man in Masaite explained that he had to turn to the Kaloba to pay school fees, and that he is also indebted from microfinance loans:

R: "I borrowed ZMK 250,000 (US\$ 47) in January from the Kaloba to pay school fees for the children. I have to repay ZMK 500,000 (US\$ 94), and this was my biggest expense last month...I had to go to the shylock because my pay slip is dirty. I have already borrowed from the two microfins (microfinance organisations in Masaite)." – Man in Masaite

To make payments on these other two loans, this man started renting out a room in his small house, moving his family all into one room. This man did not know the interest on his microfinance loans, but he thought it was equally high, also close to 50%. He thinks he will have the loans paid off in four years.

Sickness and funerals are important costs that families, whether urban or rural, formally employed or not, face. As in South Africa⁶³ and other countries, funerals are costly in Zambia. A coffin alone can cost between ZMK 700,000 and 5,000,000 (US\$ 133 and \$955).⁶⁴

⁶² We did not encounter any other indigenous name for Kaloba, this is the term used in Nyanja, Bemba, and Tonga.



Focus group respondents reported that neighbours often help with gifts of food and help preparing for a funeral. Extended family or church members may make financial contributions in some cases, but in other cases, poor families are left to have a humble burial, which can be a source of pity and shame in the community:

R: "For the families that don't have food, they bury the body almost immediately. For example just yesterday we lost an old lady and she was buried that very day because the family could not afford to host a funeral. They used a bicycle to carry the coffin because they are very poor and could not afford to hire a car." – Man in Masaite

Saving in groups and with money guards

Many respondents use reciprocal lending and borrowing arrangements to save. ⁶⁵ In individual interviews and focus group discussions, respondents often reported giving money to a mother, aunt, sister, or other family member who would keep it safe for them. A young man in Ndola gives his savings to his mother whenever he has extra money. He trusts her to keep it safe, and in return she uses this money as a loan to invest in her small shop, injecting her small business with periodic bursts of interest-free credit.

Chilimbas

By far the most common informal savings mechanism we encountered was the ROSCA (rotating saving and credit association), locally referred to as *chilimba*. Such savings groups are common in many countries, but whereas in some places they are mostly available to women, among focus group respondents in Zambia both men and women seem to participate equally. Respondents described their motivations for joining chilimbas:

R: "When I have extra money I think of joining a chilimba so I don't just keep it in the house and can save." – Man in Ndola

R: "Chilimba is just a way of giving each other small loans because we have nowhere to borrow."-Woman in Luangwa

⁶³ See Collins, D. and M. Leibbrandt. 2007. "The financial impact of HIV/ AIDS on poor households in South Africa." Available: http://bankablefrontier.com/assets/pdfs/CollinsLeibbrandtAIDS217.pdf

⁶⁴ See Katebe, John. 2011. "A guide to a Zambian Funeral." Available: http://kitweonline.com/kitweonline/discover-kitwe/culture/a-guide-to-conducting-a-zambian-funeral.html

⁶⁵ When "savings" is mentioned, many respondents think first about keeping money in the bank. However, in group discussions we explained that we also meant different ways of keeping money, even for a relatively short time. Respondents mentioned keeping money in the house, giving someone that you trust, like family members, teachers or trusted community members, giving the money to shop owners who have cash on hand to keep for them, investing in livestock like chickens, cattle, goats and pigs, and buying household items which they can sell later if needed. Building a house for the family is a main goal of savings, and this is also seen as an investment that can be passed on to family, or rented or sold if needed.

⁶⁶ We did not encounter any other indigenous name for Chilimba, this is the term in Nyanja, Bemba, and Tonga.

⁶⁷ See Anderson, Siwan and Jean-Marie Baland. 2002 "The Economics of Roscas and Intra-household Resource Allocation," *Quarterly Journal of Economics* and Gugerty, Mary. 2005. "You Can't Save Alone: Commitment in Rotating Savings and Credit Associations in Kenya." For more information on the microeconomics of Roscas.



R: "There is no interest so there is no money benefit. I just do the chilimba to save for my business. The money I have been saving is my own money that my friends have been keeping for me. In the 6^{th} week I will get that money to invest in my business." – Woman in Luangwa

Chilimbas can also be used to generate a large enough lump sum to buy household goods:

R: "Last time I got [a payment from] the chilimba I bought an electrical iron and food." – Man in Masaite

In addition to using chilimbas to save and as a mechanism to sop up extra liquidity in the house, friends, neighbours or colleagues can call for a chilimba to get money for business, school fees, or medicine, naming themselves as the designated first recipient.

R: "Here we don't even have those Microfins (microfinance organisations), so when I need money for my business- I cannot borrow from the bank, they will ask for collateral- so I call for a chilimba. – Luangwa

Some chilimbas are even smaller amounts:

R: "I even started a small chilimba of 10,000 a week with my friends, and we want to increase to 20,000. It works well if you trust each other." – Man in Masaite

But respondents also commented that the chilimba is not for everyone:

R: "If a person is not doing business and is just waiting for her husband to give her something, she will not manage to participate in the chilimba." – Woman in Luangwa

Although it is tempting to idealize informal savings groups as well-functioning group and self-insurance, they result in significant losses and theft. ⁶⁸ One man in Masaite explained that he was in a random order chilimba and was the last one picked. When his turn came one man had lost his job and another had an illness in his family, so they couldn't pay him. Instead one gave him a cell phone, and the other is paying him back little by little.

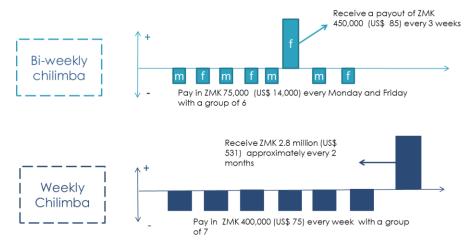
Figure 11 illustrates two different chilimbas that we encountered in the field.

Figure 10: Examples of Zambian savings groups used by focus group respondents

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⁶⁸ Wright, G. and L. Mutesasira. 2001. "The Relative risks to the savings of poor people." MicroSave-Africa studies the economic costs of savings group in detail in Uganda.





Insurance

We also asked about knowledge and use of formal insurance. While there was at least one person in every group who could explain more or less how insurance worked, many rural respondents were not familiar with the concept, and only two people were using any kind of insurance, mostly funeral or life insurance, or car insurance. ⁶⁹ In the FinScope 2009 results, insurance is the least-used instrument in the landscape of access, with no more than 4% of the population using any insurance. Once respondents understood more about insurance, many were interested in insuring their small businesses.

R: "I have not insured anything, but I sure would like to insure my shop." – Small business owner in Luangwa.

As with insurance, focus group respondents expressed interest in expanding the repertoire of payments that they use. These conversations also revealed that customer service and complaint resolution in the formal systems they currently use are of poor quality. Although customers did not complain excessively about these inconveniences, there is room in the market to offer more efficient reliable services. The next section addresses attitudes towards payment systems.

4.6 Attitudes toward financial services and electronic and innovative payments

Respondents trust banks, although the fee structure is not seen as transparent

Zambians participating in our focus groups, even people who do not have bank accounts, generally agreed that banks are trustworthy and secure. Although respondents complained of lack of transparency with

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⁶⁹ In Chipepo (Gwembe) only two people had some general knowledge of insurance; in Livingstone about five people spoke comfortably about insurance because a few people were working or had worked in that sector. In Lusaka about three people had some knowledge about insurance and the rest had some general information; In Luangwa only one person had some information about car insurance. In Ndola, about three participants had some knowledge about insurance, and in Masaiti about three people had some knowledge about insurance and linked it to minimizing risks in business at the farm, and also mentioned car insurance. Interestingly, only one person in Lusaka had insurance cover over his properties-vehicles and real estate at the time of the study; in Gwembe, a respondent said that she had a life assurance cover that was paid by her father.



fees, the level of trust seemed higher than among similar focus groups using the same discussion guide in Zimbabwe or Mozambique.

Some respondents liked the modern technology banks use:

R: "You can trust the bank because everything has been computerized. The moment you deposit money, it will reflect quickly in another person's account. Where safety is concerned, the bank is the best because of computerization." - Man in Lusaka

Others started banking to save for a specific purpose, and have seen that banks help them to achieve their goals.

R: "I opened the bank account to save money for buying a TV and speakers. But I also use that money to buy food when I am broke." – Man in Ndola

But many respondents also mentioned that they had been surprised by various bank charges, either when they leave little money in their account and then pass a limit for the number of withdrawals, or other charges that they were previously not aware about.

When asked what the best bank in Zambia is, respondents were divided, with opinions often coming down to the divide between international and Zambian banks. Some felt that banking with a Zambian bank or using the national company, Cell Z, is a good way to show your patriotism and pride while supporting local companies. But others thought that international banks are more stable and less likely to fail:

R: "The Zambian banks are not doing fine...[one local bank] is on the verge of collapsing. We should be very cautious about leaving our money at that bank." – Woman in Luangwa

ATMS are growing in popularity

For banked individuals, many prefer to withdraw at the ATM instead of going to the counter. While respondents, especially in rural areas, did not always know the term "ATM", with some explaining most seemed to identify what we were referring to. Accounts that charge customers to transact at the counter, and low-minimum balance accounts such as Zanaco's Xapit account and Barclay's Tonse account that do not allow withdrawals at the counter, have likely contributed to this preference.

R: "I mostly use the ATM. I only withdraw at the counter when the ATM machines have a problem." – Teacher's wife in Gwembe

The Xapit and Tonse accounts, as well as other products targeting the mass-market, were popular among respondents. Many respondents appreciated the mobile link to Xapit and the ease of transfers. ATM cards are viewed as convenient since ATMs have shorter queues and more convenient locations than the bank branch. However, very few respondents have used their card to swipe at a POS. Respondents did not seem to know the term POS. Using the term "swipe" or explaining paying with a card is the way to introduce this payment method.

A few respondents had tried using their card to pay, for example when they had run out of cash. While some respondents had used the "swipe" function, they reported just trying this once and did not adopt this practice as a routine.



R: "Yes, I used it once or think twice at Shoprite. I just wanted to try it. I used it out of curiosity." – Woman in Livingstone

R: "I only used swipe once. I just wanted to see how it works." – Man in Ndola

Additionally, respondents were concerned about—and did not seem to clearly understand— the charges for paying at the POS.

R: "When you pay at the POS I think [the bank] charges you the fee instead of charging the merchant. So you end up paying extra." - Men in Lusaka

In general, Zambians are excited about new products, and many exhibit enthusiastic curiosity, and not fear of new technology and products.

R: "We haven't heard about the store value card, but in case it is available in Zambia, we can use it!" – Woman in Luangwa

Mobile products taking off

Mobile phone penetration was high among respondents, and access to phones is viewed as commonplace:

M: "How many of you have mobile phones?"

R: "Ha, that was a valid question 20 years ago... we all have phones now." - Man in Lusaka

Even in Gwembe, where there is only Cell Z coverage in a few high places by the lake and in trees, three focus group respondents still had cell phones to use when they travel. Some Zambians shared the excitement often exhibited by wide-eyed observers who are fascinated by the transformative role of mobile technology in finance in Africa:

R: "In the past we used to send money through the bus drivers. It is amazing that today you can just send money using your phone." – Man in Ndola

We suspect that the trend towards mobile payments is especially powerful among younger, urban Zambians. In the group of young men sending and receiving payments in Ndola, all had sent airtime, and many had tried mobile money. In this group of nine young men in Ndola, all had cell phones while only two had bank accounts.

Some shrewd respondents exhibited a sophisticated understanding of mobile banking and remembered precise information and pricing of mobile transfers, such as this man from Masaite:

R: "Oh yes, I've used this service before. You register with your NRC and they give you a PIN number to use whenever you want to transact. It costs ZMK 2,500 to send ZMK 100,000, and it costs ZMK 3,000 to send between ZMK 100,000 and 300,000. You can also withdraw from your account and you will be charged the same fees as when sending."- Man in Masaite

However, even recipients who may not know the details of how to send money through mobile agents appreciate the service once they have had positive experiences of being easily able to claim the money. One Masaite man described his experience receiving money from a family member:



R: "She sent me money from Lusaka through her mobile phone. I don't know how she sent it, but I received the money. She sent me a text and told me to present it to the agent, which I did, and I was given ZMK 200,000 (US\$28)." — Man in Masaite

Another Masaite resident shared his desire to switch from branch-based to mobile banking in order to reduce the time he spends travelling to and waiting in the bank.

R: "I am a welder, but I have never made a profit of more than ZMK 400,000 (US\$ 75) in a month. I used to have an account with Stanbic bank, but there is no branch here, so that account is just dormant. That is why I am considering opening a mobile money account." – Man in Masaite

A woman who we interviewed in Ndola was using mobile money as an easily accessible and secure way to save money. Her story is described in Box 2.

Box 2: How mobile money fits into a secretary's financial arsenal

"Lenshina" works as a secretary for a security company. Her monthly salary is about ZMK 1.4 million (US\$ 265). On the side she buys and resells duvets and other bedding to co-workers and friends. At night she is taking an human resources course, which costs ZMK 650,000 (US\$ 123) per term. She is paid through a bank account that she had before getting this job, but she is thinking of switching to a bank that is less crowded. Lenshina lives alone with her three-year-old daughter, and her nanny often stays. Lenshina is paid once a month and goes to the ATM to withdraw money about five to six times a month.

In addition to her bank account, Lenshina has a mobile money account, participates in a chilimba, and deposits some of her savings with her mother who acts as a money guard. She also has funeral insurance and an insurance product called the "baby policy" in which you deposit money monthly, and when her daughter is 10 years old she will get a payout for her daughter's school fees. Her total monthly insurance payment for these two is ZMK 131,000 (US\$ 25). Her job also offers a pension policy. Lenshina uses her mobile money account as a smaller savings bucket for her main savings that she keeps with her mother (currently ZMK 6 million, US\$ 1,138), and the insurance. This money is easily accessible in an emergency or when she can't get to the ATM. Prior to the interview, Lenshina had been traveling to a village without ATMs, and was able to withdraw money from the mobile agent for transportation when she ran out of cash.

Attitudes towards personal identification and security

There has been commentary in the financial literacy and financial capability literature suggesting that poor and illiterate clients have trouble remembering their PIN numbers, are reluctant to do so, and that only under-educated households need financial education. To learn more about how clients perceive

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⁷⁰ See for example: Zia, Bilal. 2009. "Valuing Financial Literacy: Evidence from Indonesia." Available:



remembering PIN numbers and attitudes towards biometric identification techniques, we included questions on these topics in focus group discussions.

The majority of banked respondents reported that remembering the PIN number for their debit account is a normal habit, and is not particularly difficult.

- **R:** "[Remembering your PIN number] is just normal. It doesn't feel any different. It's just like mastering your NRC number."
- R: "It brings me a happy feeling of prestige." Men in Lusaka

Others write their number in secret places or actively practice to remember them:

- R: "I have the numbers in my head and I wrote it on the wall of my bedroom".
- R: "Mine is hidden in my Bible— there is nobody who would steal the Bible!"
- **R:** "When I go to town to do all my business I use my account twice in a day or more. This helps me to remember my two PIN numbers even more." Women in Gwembe

However, there was some confusion among respondents about the difference between the PIN number and the account number:

R: "I keep my PIN in my head and I have no problem remembering it. Only once I switched the digits on my number and had to wait in the queue for one hour before I could get the number from the teller to make a transfer. But actually I think that was the account number." – Woman in Luangwa

Thoughts on biometric identification

We also asked respondents if they would accept to use their fingerprint as identification to access their account instead of PIN numbers. In general, the response to fingerprint identification was positive, and respondents expressed the sentiment that it would increase security and access:

- **R:** "I think using fingerprints is a good idea, because then you are the only person who can access your account. No one can possibly steal your money." Man in Ndola
- **R:** "It is good for old or illiterate people that won't have to remember or sign. For example, when MTN came here to introduce mobile money, there were some older people who really wanted an account, but they were afraid they would be asked to sign their name so they stayed away." Man in Masaite.

When discussing biometric identification, the main concern respondents mentioned repeatedly is the need to access one's account in times of sickness or emergency. Interestingly, while men reported being much happier about the prospect of additional privacy and limits on family members accessing their account with biometric identification, women in our focus groups were quicker to speak of the benefits of sharing financial instruments.



R: "With the pin numbers, if you need money urgently but do not have the money for transport to go to Monze, you could tell someone you trust your pin number and have them withdraw money on your behalf. This would not be possible with fingerprints." – Woman in Gwembe

R: "But when you die someone could cut off your finger and start using your account?" – Woman in Luangwa

Indeed, under certain circumstances granting a family member access to your funds is profoundly beneficial, and biometric identification tools will likely need to adapt to address this legitimate need. One respondent had an idea to combine identification mechanisms to help solve this problem:

R: "Maybe fingerprints can be used in addition to the pin number. So when you are sick or cannot travel to the bank you can still tell someone your pin." – Woman in Luangwa

Although the Zambians we met are generally open to new and improved payment systems and products, FinScope data reminds us that much of Zambia still operates in an entirely cash economy in which options for further diversification in payment mechanisms are few and far between.⁷¹ One respondent in Gwembe, which is nearly a four-hour drive along a bumpy gravel road to the nearest bank, a journey that costs ZMK 30,000 (US\$ 6) for a one-way ride, reminded us:

R: "You are talking of fancy tools. We are poor. We are too poor to have bank accounts. Cash is just the best for people like us." – Woman in Gwembe

So what factors determine take up of regulated products? The next section explores the characteristics of payment systems that respondents reported as important to them.

4.7 Consumer priorities for payment system usage

Focus group participants described a number of different compelling factors that influenced their decisions about what payment products to use. Commitment mechanisms for saving, accessibility, availability of services, reliability, and access to clear information about the product are important. Four of these dimensions that directly influence consumer perception of the value of payment products will be referred to again in the thematic Section 5, and merit definition here:

- **Availability** existence of payment services within a reasonable physical distance. This could also include the existence of agents, mobile banking products, or other services;
- Accessibility extent of transaction costs, wait times, requirements for account opening, and inclusiveness of informal instruments;
- Affordability in money terms, including transaction costs;
- **Reliability** Frequency with which services fail to deliver their supposed purpose, including delays, connectivity and network problems, and financial losses.

Discipline and commitment

Respondents reported valuing the discipline enforced by banks, which keeps money secure while keeping it further out of reach than under the mattress and a little harder to get to when needy family members

⁷¹ FinScope 2009 found that 96% of rural Zambians and 87% of urban Zambians receive income in cash. Available: http://www.finscope.co.za/zambia.html.



and friends ask for money. A few respondents proudly recounted how they were able to use their accounts to build up useful sums and accomplish their goals:

R: "I was saving at the bank, and that is how I raised the money to buy a bed frame and a mattress worth ZMK 1,000,000 (US\$ 189) including transport for the bed."

R: "I also saved at the bank- up to ZMK 1,200,000 (US\$ 227) for my child's birthday party. It took me four or five months to raise this money, but I did... and the party was nice!" — Women Livingstone

Poverty and distance are the main constraints to opening formal payment accounts

Being too poor and living too far away from the bank were the main reasons given not having a bank account. We heard more about the proximity challenge in these six focus groups than in the FinScope 2009 data, which found that not seeing the need to open an account because of not having enough income (53.4%), or that not enough income was left over after expenses (23.2%) to merit opening a bank account, were more common reasons for not having an account, than physical access.⁷² According to the focus groups:

R: "I think the bank is only for those people with a regular source of income."

R: "My source of income is not reliable and so there is no way I can open an account." – Women in Gwembe

While FinScope found 7.2% of people list proximity as their biggest challenge, it seems to be an important secondary constraint for many focus group respondents⁷³:

R: "We like our bank, only it is very far from here. They should consider opening a branch in Masaite." – Man in Masaite

Despite the long distances and high cost of travel to get to the bank that some respondents face, they are still seriously committed and endure these inconveniences to use financial services, because of the security of storing and transferring money, and perhaps some prestige associated with going to the bank. Residents in Gwembe must travel by bus about four hours along a bumpy gravel road, a trip that costs ZMK 30,000 (USD \$6) each way, in order to get to the bank. But three out of eight respondents had accounts and travelled to the bank approximately every month. Perhaps respondents have never known a more efficient service, and so this time investment is considered normal. A woman in Livingstone shared this commitment to banks, despite the long wait times:

R: "When I am really broke I walk to the bank and it takes me about three hours. Then when you get to the bank there are many people in the queue, you can even spend five hours there." – Woman in Livingstone

Affordability

Respondents did not mention high charges as being particularly prohibitive or debilitating for those who have an account, consistent with FinScope. The very poor have a perception that the bank is "not for

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⁷² FinScope Zambia 2009 Brochure. Available: http://www.finscope.co.za/zambia.html.

⁷³ Ibid

 $^{^{74}}$ 5.3% of respondents reported bank charges being to high as the main reason they do not have an account. *Ibid.*



them" largely because they perceive high costs, or do not know other people who have had experience the with the bank. Instability of incomes contributes to this feeling. Such people often have an income threshold at which they would consider switching to formal financial services, as we heard in Ndola.

R: "If I earned ZMK 50,000 (US\$ 9.46) a day or more I could open a bank account. But I would have to be able to count on that money." – Men in Ndola

Availability

Banks and other formal financial services are not available in many parts of Zambia. Agents, such as the Zoona, Kazang, and mobile money agents are expanding availability for money transfer services, but take-up of such products is still in its early stages. With the expansion of Xapit and Tonse accounts, banks became more accessible to a new segment of the Zambian population. These accounts are popular, due to their small minimum balances and the fact that it is well known that Xapit is linked to the mobile phones and transactions are possible via SMS. There is still some confusion about the rules for these accounts, but they seem to be a welcome and well-tailored response to a consumer need.

Reliability

Focus group respondents said that they cannot count on service providers, and that customer service is generally poor. People find long and unpredictable waiting times at banks, and cope with ATMs that are offline, out of cash, and deduct money without dispensing it. Liquidity at post offices and agents is also a problem.

There is clear room for improvement in how market participants provide information about services and address problems as well. To attract new customers, financial service providers will want to make information simple, unintimidating, and encourage staff to willingly answer questions. One woman's comment about elites using MoneyGram is indicative of the intimidation many feel when coming into contact with new financial and payment products:

R: "There was a day I was in the bank and I just saw a new advert for MoneyGram and I overheard a group of people talking about it. They were elite. I think they may have been Tanzanian. I couldn't ask them about the service because they would have thought that I am an ignorant person." – Woman in Luangwa

Many respondents told stories of being unable to solve problems and mistakes made related to their accounts. One man had meant to leave money in a long-term savings account, and after a few months he found that ZMK 255,000 (US\$ 48) was missing. The bank could not explain this and wanted to charge him to get a bank statement. As he explained:

R:"I told them to close my account right away, but they told me I'd have to pay a fee to close my account right away. I'd have to apply and wait for two weeks if I didn't pay a fee." — Man working in real estate in Lusaka

⁷⁵ As mentioned in the supply side section, many banks offer these services, but focus group respondents knew more about Xapit mobile features. No respondent mentioned familiarity with internet banking.



Another retired civil servant switched accounts, and it took him two years of working with the bank and government offices to get his pension deposited in the correct account. Because of lack of transparency about bank fees, clients are frequently surprised and are not sure how much money they can expect to find in their accounts. Focus group participants articulated a demand for more user-friendly, dependable payment services.

4.8 Summary of demand side findings

Although FinScope tells us that a majority of adults are excluded from the formal financial system, this does not mean that people's financial lives are inactive. Many Zambians recruited to participate in focus groups use a diverse range of formal and informal financial tools for payments. Our research suggests that those with jobs in the formal sector use more formal products to store value and transfer money, and also have greater access to credit. For focus group respondents with informal jobs, mobile money accounts and simplified, low-minimum balance accounts provide payment services that are better targeted to their needs and financial ability.

While young, urban Zambians we met are enthusiastically using more innovative payment products, awareness about these services is generally still in a nascent stage outside of the urban centres. Informal systems such as sending money with friends, family, and bus drivers, rely heavily on social networks and word of mouth. Knowing others that use the same system most likely increases trust, and there is reciprocity in carrying and delivering remittances and other gifts, which may explain some of the perceived advantages of informal payment tools. Furthermore, informal systems are often integrated into the quotidian trips and errands people do. Using a new and institutionalised product can often involve an extra trip or extra learning to use the tool successfully, and this can be a deterrent.

Perceiving that one's income is too low or not dependable enough is a main reason for hesitancy to move to formal products, including electronic payment products. Bad experience with electronic systems that are frequently offline and are perceived as unreliable is another important— and understandable—deterrent from adopting "cash-lite" payment products. On a more positive note, customers are curious and engaged in discussions of new products and ways to diversify the options in their financial toolkits. Respondents largely have no problem remembering PIN numbers, and many look favourably on the possibility of biometric identification for financial products, as long as a family member could access their funds in an emergency.

Payments such as electricity bills, school fees, and remittances to students in boarding school are common in Zambia, and are therefore a target for innovative, efficient products that can capture market share. Providers that can develop more efficient and reliable systems, in which customers spend less time waiting to do basic transactions, and are able to easily obtain information, support, and dispute resolution if there is a problem with their account, will be responding to a demand we heard clearly in these six focus group discussions.

5 THEMATIC ANALYSIS OF NPS DEVELOPMENT

This section of the study takes the context of the current environment in Zambia and applies a thematic lens to the issues that enable the development of transformative payment services. The specific



categories were chosen because of their respective role in facilitating the development of transformative services, based on evidence highlighted in this report and external research⁷⁶ regarding the use of new technologies to extend financial services. The thematic approach allows policymakers to determine a holistic course of action, avoiding the risk of a lopsided approach to enabling payment system development. From this perspective three main thematic categories emerge to frame the context in Zambia:

- 1) Government Policy. The first of these thematic clusters relates to the development of retail payment systems by the public sector. This includes the issuance and development of policy and regulations as well as the role governmental authorities play in encouraging the market to develop affordable and accessible products and services.
- **2) Market Barriers.** The second cluster treats the main barriers to access. This theme pays particular attention to the conditions necessary to extend distribution networks beyond urban centres as well as the state of the payment infrastructure to support a broad range of products across multiple distribution channels.
- **3)** Consumer Perspectives. Our third thematic cluster examines the behavioural aspects of payment services usage and addresses how consumers prioritize the services available to them. Generally, focus group discussions revolved around the availability, ease of access, affordability, and reliability of payment services.

A number of framing categories can be used to understand each theme, as summarised in Table 18 helow:

Table 18: Thematic categories

Theme	Framing Category		
	1.	Holistic NPS strategy	
	2.	Coordination strategy with regulatory bodies	
Government	3.	Position on the use of stored value and e-money	
Policy Measures	4.	Participation in the NPS	
Policy Weasures	5.	Exchange control rules	
	6.	Level playing fields for MNOs and banks	
	7.	Promotion of interconnection	
	8.	Competition	
	9.	Business rules and incentives for interconnection	
Market Access	10.	Flexible account opening	
Barriers	11.	Agent network development	
	12.	Market for third-party providers	
	13.	Cost of expanding distribution network	
Consumer	14.	Perceptions of formal financial institutions	

⁷⁶"The Enabling Environment for Mobile Banking in Africa" (Porteous 2006)

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[&]quot;Use of Agents in Branchless Banking for the Poor: Rewards, Risks, and Regulation" (Lyman, Ivatury, and Staschen 2006)

[&]quot;Transformational Potential of Mobile Transactions" (Vodafone Group Plc. 2007)



Perspectives	15. Attitudes toward electronic payments
	16. How are most frequently used payment systems
	performing?
	17. Use and nature of informal tools

In this section, each issue is coded with a symbol indicating whether each issue is characterized by barriers to development, some limitations, or a favourable environment. These codes are defined in Table 19.

Table 19: Explanation of symbols

	BARRIERS TO DEVELOPMENT	There are significant blockages that limit the development of retail payment services. From the consumer perspective, respondents report that barriers make it impossible to use a service, or the tool is not working for them.
\bigvee	SOME LIMITATIONS	Although some progress has been made and favourable conditions may be developing, key limiting factors may be hindering progress. From the consumer perspective, payment systems are working reasonably well in this area, but full potential is not met.
	FAVOURABLE ENVIRONMENT	Although further improvements might be possible, generally positive conditions for improved retail payment systems and access are in place. For clients, products are meeting needs.

Table 20 discusses the issues for each thematic category listed in Table 18 and allocates a code for each.

Table 20: Assessment and discussion of each of the key framing questions

5.1 Category 1: Government policy measures		
1. Is there a holistic NPS strategy that identifies regulatory		
priorities?		
There is a clear strategy laid out in the National Payment Systems Vision 2007-2011	Favourable	
(a new version for the coming years is being drafted), and also in the work plan of Environmen		
the FSDP. Sharing of retail infrastructure, greater efficiency and interoperability, and		
expansion of coverage are formal goals of BOZ and retail payments is fully integrated into a holistic strategy. A major priority for the coming years is the implementation		
of a national switch to increase efficiency and interoperability of payment services.		
There is a good level of certainty and transparency regarding BOZ's priorities and		
positioning in retail payments. BOZ has made important progress, particularly with		



the creation of a solid legal framework, which is now being followed by the improvement of the regulatory and supervisory framework. There are no critical regulatory obstacles, although improvement is possible and is already underway, as BOZ prepares complementary regulation. A potential bottleneck for the safe expansion of electronic retail payments might be BOZ's limited capacity in terms of human resources.

2. Coordination strategy: Does the NPS development impact other areas of regulation (e.g. banking supervision, telecoms)?

There is a formal coordination structure under the FSDP, which brings policy makers, BOZ and the industry together, specifically under the FSDP's PSWG. BOZ is responsible for implementing and overseeing the payment system strategy, whose priorities are defined in the FSDP. There is limited impact on other areas of regulation outside BOZ, but there is coordination with ZICTA, which participates in some of the discussions of the FSDP, specifically in the PSWG. There is formal coordination and information sharing channels with both the bank and the payments industries, through their respective industry associations, BAZ and PMTA. BOZ has taken a very hands-on approach with nonbanks that have been designated as payment service businesses, and has been able to impose good practice requirements that are not yet fully incorporated in the regulations, e.g. the creation of a separate entity to conduct mobile money business. Overall, the private sector seems to be well informed about regulatory and policy priorities, and participates in the crafting of national strategies and regulations, including BOZ's National Payment Systems Vision and the work plan of the FSDP's PSWG. One limitation of the discussion about the national switch is that the implementation plans do not clearly include the priorities and the role of the nonbank payment services providers, which would need to connect to the switch to provide interoperability between their platforms and the banking platform.





Lastly, there is a formal and well-functioning coordination mechanism inside BOZ for issuing new regulations that may impact several areas, e.g. the upcoming e-money and branchless banking regulations.

3. Position on use of stored value and e-money: Is there "space" for institutions to develop stored value instruments as a solution to low threshold accounts?

There is space for the development of stored value instruments as a solution to low threshold accounts. There are no serious obstacles for such solutions. The current regulation and BOZ's test and learn approach have allowed the creation of several innovative nonbank-based models. These businesses have a transformational potential, as they cater to banked and unbanked customers within and outside larger urban areas and they adopt a risk-based approach to account opening procedures. BOZ has imposed basic risk mitigation measures on providers to allow

Some Limitations





their growth while ensuring safety, which is desirable. However, there is room for improvement in the supervisory practice (including the collection, analysis and even publication of statistical data) and in the know-your-customer (KYC) requirements for account opening, particularly with regard to verification of the information provided by the client, which may not be fully justified for low-value accounts and transactions. Within the FSDP, BOZ is working on clarifying the need and acceptance of more flexible requirements for banks, and is open to consider specific rules creating a tiered approach to account opening documentation requirements. BOZ is also working on a draft agency regulation to set rules for banks wishing to use retail agents to distribute their services, and an e-money regulation to formalize and fine tune the minimum requirements applicable to stored value instruments. Lastly, the FSDP has projects to create a financial identification system and a new addressing system, which would facilitate KYC in the long term.

4. Participation in the NPS: Who can play in the NPS? 3rd party providers? Settlement? Clearing? Networks?

The National Payment Systems Act, 2007 (NPSA) is quite open with regard to the participation in the payment systems. It is silent on the types of entities that are allowed to participate, providing great flexibility for BOZ's implementation. BOZ's approach is to allow banks and nonbanks to participate in any retail payment infrastructure. To date, only banks participate in the clearing house, ZECHL, and the private switch, Zamlink, due to market dynamics rather than regulation. BOZ has restricted participation in the wholesale payment system (ZIPSS) to banks, which is a common approach in many countries. This may be a prudent decision while BOZ learns more about the risk management standards of these innovative nonbanks and while the services do not move a substantial amount of money in their systems that would justify their linking to ZIPSS. However, BOZ may consider allowing participation in ZIPSS in the future to support real time transactions between nonbank and bank platforms. Both banks and nonbanks are allowed to use agent retail networks, and there is no impediment to exclusivity or sharing arrangements with the exception of the exclusivity required by international money remitters such as Western Union and MoneyGram. The regulatory framework for nonbanks is in place and is quite permissive while setting some basic risk mitigation measures, while a draft regulation will govern agent networks in the bank sector in the future. It is not clear whether these two frameworks will be aligned to provide a levelplaying field for banks and nonbanks. BOZ is working on an e-money regulation, which is required to provide a specific and solid framework for store of value instruments.

From the client perspective, there seems to be little awareness of ZIPSS transactions, which technically could be done by any bank account holder for any transfer amount.

5. Exchange control rules: Under what conditions does foreign

Some Limitations





exchange enter/exit the market? How does this impact the availability and accessibility of services?

Environment



Zambia has an open foreign exchange regulation that does not impose controls or barriers to international remittances. The regulation permits nonbanks to provide international remittances, not requiring them to work through banks and allowing any bank branch to operate foreign exchange. Most recently, BOZ has prohibited domestic transactions (e.g., selling/buying contracts) to be conducted in foreign currency, but this measure seems to pose no obstacle to remittances, which already had to be conducted in local currency, by regulation. The current regulation allows affordability and availability of remittances services through a wide range of channels, from bank branches to post offices. Domestic remittances have also benefited from this openness. The recent emergence of mobile phone-based services which deploy a larger number of cash in/out outlets has the potential to increase competition in the domestic remittances markets, which could eventually drive prices down and quality and accessibility up.

6. Level playing field for MNOs and banks: Is the market environment open to all players regardless of nature, size, scale and complexity?

f a wide mplexity. OZ may gulatory nsparent

As noted above, there are no regulatory obstacles for the participation of a wide range of players in retail payment systems, regardless of size, scale and complexity. The participation in the RTGS is limited to banks, an approach that BOZ may reconsider in the future if the market conditions justify such a step. The regulatory entry requirements set by BOZ for payment service providers are clear, transparent and non-discriminatory. This is particularly clear considering the money transfer market, which comprises a wide range of institutional types and sizes.

7. Promotion of interconnection: How involved is the regulator in promoting interconnection amongst financial institutions?

BOZ has so far not mandated interconnection and has taken a hands-off approach to the issue. However, it is now pushing for greater interconnection and persuading banks to invest in the creation of a national switch. This could bring substantial benefits for clients and for increased access and adoption of electronic retail payments. It is not clear, however, how the national switch project will take into consideration the need to interconnect the nonbank electronic retail payments platforms, particularly the mobile money providers, in addition to other similar offerings. If the new switch is fully owned by BOZ and the banks, clear and fair rules for access and use should be carefully designed in consultation in the all stakeholders involved. Also, the technical capabilities and the business model of the new switch must be in line with the needs of the nonbank sector and allow for a full range of services to accommodate innovative payment services and refrain from

Some Limitations

Some





competing with the market.

5.2 Category 2: Market Access Barriers

8. Competition: What role does competition play in driving innovations, product design and pricing?

In the banking sector, product innovation and price strategies resulting from competition are more clearly noted in the high-end segment, while more limited innovation has been achieved in the low-end segments. The perceived competition offered to banks by the new mobile money services may have the potential to change this reality, and drive new product design with focus on affordability and convenience to cater to new client segments. Competitive considerations have in part prevented banks from sharing their retail infrastructure and joining Zamlink, a bank switch, to provide interoperability. It is also limiting the partnership potential between banks and nonbanks such as Airtel Money and MTN Mobile Money. Competition may also have some adverse effects in the mobile money market itself, which is still far from achieving interconnection between the different mobile money platforms.

Enhancing competition is a key objective of the FSDP, which is expected to be achieved through a) greater market efficiency, b) greater transparency, c) human capital development, d) streamlined role of state financial institutions, and e) improved financial literacy. BOZ is involved in all these activities. Particularly, to increase efficiency and also minimize the adverse consequences of greater competition from other fronts, BOZ is advocating for collaboration among banks and other market participants, for instance, by pushing for a national bank switch and providing incentives (i.e. sharing costs) for banks to invest in it.



9. Business rules/incentives for interconnection: how prepared is the market to organize and agree on an interconnected retail payment system across all e-channels?

Despite the fact that the market is relatively well organised around industry associations that provide consolidated voices for the bank and the payment industries, there is a good level of consensus that, if BOZ does not push for it, the market forces will not naturally lead to an interconnected retail payment system across a variety of electronic channels. Banks are not prepared to cooperate on their own towards interconnection, and are not fully open to partnerships with nonbanks to allow interoperability between bank and nonbank platforms. Most banks (there are a few exceptions) are not focused on such issues, but rather protecting their own interests, which is often related to preserving their high-end customers. For instance, despite the existence of a private bank switch, the largest banks have not joined it. The situation is not very different in the mobile money market. The large





providers do not seem prepared to interconnect to provide more convenience and options to customers. There a only a few examples of interconnection in the financial sector and between this and the nonbank payment service providers.

10. Flexible account opening: are there barriers to opening of low value accounts?

Although the AML regulatory requirements offer some flexibility, providers tend to be overly conservative and shun away from a risk-based approach to accommodate the needs of lower-income potential clients. This is particularly true with regard to the verification of address information, with which most Zambians are not able to comply.

A couple of banks have expressed desire to partner with nonbanks such as the mobile money providers to facilitate account opening for mobile money account holders, by leveraging on the customer due diligence already conducted by the nonbank. Maybe in the near future Zambia will see such type of partnerships with the purpose of facilitating account opening by the majority. BOZ seems to be open to this possibility if account values remain low.



11. Agent network development: is there a framework to support the deployment of a broad network of cash merchants and agents?

Banks are not yet deploying nonbank agents in Zambia, with the exception of very small-scale pilots. In general, there is limited knowledge about the benefits of using retail outlets to expand the reach of bank services, and how to set up such networks profitably. As the market reaches a higher level of maturity and understanding about this business, it will be possible for banks to reach agreements over fee structures for agency relationships with nonbanks such as Zampost. Lastly, banks and nonbanks will need to overcome competition instincts to be able to collaborate through strategic partnerships. The fact that Zampost is creating its own bank may cast some shadow over the potential for other players to use the postal network as a distribution channel, but there are opportunities to explore other retail networks, such as those of the mobile money providers.



There is a basic regulatory framework governing the use of agents by money transmission services, but none for banks using or planning to use agents. BOZ is working on a draft branchless banking regulation to govern this issue. It is not clear whether there will be harmony between the two frameworks.

12. Market for third party providers: are third party providers enabled to capitalise on the opportunities in the market?



From a market perspective, there might be some difficulties for new entrants to change prevailing mindsets, particularly in the banking sector, which is quite protective towards sharing installed capacity for retail payments. The same might happen with respect to the large mobile money providers, since there is little incentive for them to share their own infrastructure with new entrants and even with banks. The existing designated retail payment systems are partially open to new entrants. In terms of market acceptance, although it would be difficult to overshadow the larger mobile money brands, there is room for competition from new entrants, as the existing services can still be considered to be in their start up phase. ZIPSS is only open to banks but it is possible it will be accessible to nonbank mobile payment providers, when they have fully established their business and proved to BOZ the robustness of their risk management practices.



From a regulatory standpoint, there are no clear obstacles for third parties to capitalise on market opportunities, with the exception of direct access to ZIPPS.

13. Cost of expanding distribution network: is there a perceived return on investment in expansion of distribution channels?

In the banking sector, the prevailing perception is that there is no clear value in investing in expanding the distribution channels out of larger towns, due to the cost of building new branches, and the uncertainties and suspicions banks still carry about agency agreements with nonbanks. There is no major concern with regard to basic infrastructure, although this is naturally more deficient in rural areas. Also, banks are somehow worried about the reliability of the telecommunication services provided by Zamtel given its reintegration to the government shortly after being privatized. Moreover, most banks are not focused on the low-income market, which makes investing in larger distribution networks targeting this segment a difficult proposition. Most innovations by nonbanks are also focused on the most important urban centres, with a few exceptions which are only at their initial stages of development. The two MNOs offering mobile money have more ambitious plans and the potential capacity to cover the whole country and integrate their MNOs' client base to the mobile money services.



Category 3: Consumer Perspectives

14. Perception of formal financial institutions: Do customers trust the banks and telecommunication providers? Are impressions generally more positive or negative?

Focus group and interview respondents reported trusting the banks and telecom providers working in mobile financial services. They appreciate the services they are offering, and many poor respondents aspire to have a formal account. However, banks are perceived as being inaccessible outside of the city, requiring many documents to enrol and, in some cases, having fees that are not



transparent. Hence, the perception is characterised with "some limitations" for availability, accessibility, and reliability.

But bank accounts are seen as unreliable, not only due to long queues and computer problems, but due to the lack of transparency and understanding around fees. As one Lusaka respondent described: "I left ZMK 1,000,000 (US\$ 191) for savings. When I needed the money I found there was only ZMK 745,000 (US\$ 142). When I asked about this, the bank did not even admit it was fees. They thought I had let someone use my ATM Card. If I want a bank statement they will charge me. I think the process is so tedious that one can just give up." — Lusaka. Therefore we see "barriers" for customer perceptions in the reliability category. The problem with price transparency is also noted in the international remittances services, where there are many hidden charges, usually related to the exchange rate.

Another weaknesses frequently attributed to financial institutions is the time taken to process a bank transfers and remittances (when done outside the international money transfer providers), which is related to the manual processing of such transactions, inside financial institutions and also between them and the clearing facilities (in this case, ZECHL).

Availability	Accessibility	Affordability	Reliability

15. Attitude towards electronic payments: What are customers' impressions and preferences around electronic payment methods?

Many Zambians are leapfrogging past traditional payment tools to mobile and mobile-linked accounts, which were popular among many focus group respondents. Zampost's Swift Cash product is also a valued service for remittances throughout the country, and is generally liked, creating some competition for mobile and agent-based remittance payments.

Respondents mentioned that enrolling in mobile accounts is easy, giving the thumbs up to a favourable environment in terms of accessibility, and that the charges are reasonable (hence the favourable environment for affordability). Respondents reported having no trouble remembering PIN numbers, but were somewhat divided on the idea of fingerprints or other biometric identification. However, the agent networks for most mobile payment services do not seem to be widely available and reliable yet. Respondents reported now knowing about mobile phone agents, and users complained about lack of liquidity and reliability of agents, resulting in the "some limitations" rating for reliability.

Availability	Accessibility	Affordability	Reliability

16. How are most frequently used payment systems performing? What are current behaviours and requests from customers in remittance, G2P, and B2P payments? Are the methods currently in use available, accessible, affordable,



and reliable?

While some financial products are well-loved and meeting needs, focus group respondents face a number of problems accessing and reliably using electronic payment means, instead relying heavily on cash and informal means to transfer money. Zanaco's Xapit and Barclays Bank's Tonse accounts are popular, and when asked about companies generically, the responses are positive. However, people experience long waiting times and customer service that is not likely to retain clients once the financial sector grows and develops, giving the 'stop' sign rating in reliability. Respondents did not complain much about the costs of these services (hence the 'limitation' rating in affordability), although bank fees that are not explained can be problematic. But respondents did wish that bank branches were closer to home and had more convenient hours, implying the 'stop' sign for availability.

Many banked respondents reported problems that they could not resolve at the bank: one man wanted to upgrade from a restricted account, and the process has taken more than a year and is not yet completed. Another pension recipient in Lusaka changed bank accounts and it took two years for his direct deposit payments from the government to properly appear in his account.

Availability	Accessibility	Affordability	Reliability

17. Use and nature of informal tools: Which informal payment and financial instruments are working, and which are not, along key dimensions?

Respondents said that they commonly use informal savings and credit options, giving these tools the 'favourable' symbol for availability and accessibility. Chilimbas, or rotating savings groups, are commonly used among those with frequent income. For many, these savings groups are effective in helping people save for more expensive assets, help consolidate money to buy business stock, and a fixed-order chilimba can be called by an individual who needs an urgent inflow of funds. However, these savings groups offer no interest for savings, and members may leave the group without paying their dues, giving them the 'some limitations' rating for reliability. Savings groups are often not available to the poorest, or to those who receive income infrequently, such as farmers.

In the absence of formal credit options, some respondents turn to moneylenders, called Kalobas. These shylocks often charge high interest rates and require repayment over a very short time frame, implying that informal services get slapped with the stop sign, conveying the barriers to affordability.

Availability	Accessibility	Affordability	Reliability



6 PRIORITIES AND THE WAY FORWARD

This report has noted many initiatives underway – both in the public and private sectors - to increase the level of access to affordable payment services in Zambia. Promising opportunities for partnerships arise with the introduction of innovative and far-reaching nonbank-based payment services that cater to urban and rural unbanked and banked populations, even though most innovations target the larger urban centres, at least in their first stages of development (a couple of projects already focus on semi-urban areas). Interconnection among banks and between banks and nonbanks is key to encouraging adoption and usage of electronic instruments by Zambians. Interconnection will be crucial to advance BOZ's stated goal of reducing the use of cash and increasing interoperability, and passing pending regulations. There is consensus that BOZ will need to play a leading role to make interconnection a reality and set the rules governing access and pricing for third parties, including those accessing the payments infrastructure indirectly, through member participants. There are only a few obstacles in the regulatory framework that will need to be addressed. It generally provides a good level of certainty, transparency and openness to current and new players. The market dynamics are, however, not ripe to allow rapid expansion of electronic retail payments through interconnection and strategic alliances targeting low-end segments.

From the BOZ side, there is some work to do. BOZ's role in changing market dynamics and perceptions is limited, but there are some regulatory and policy initiatives that could help progress. From the market side, there is a lot of work to be done, and BOZ and other institutions, including development organizations, could offer support. The next paragraphs suggest next steps for moving forward, and are divided into Policy Priorities and Market Priorities.

Policy Priority #1: Push for the implementation of the national switch

BOZ should push for fast implementation and continue to lead the process. It should consider compulsory membership in the switch as a possibility. The project should also cater to the needs of the nonbank payment service providers, which are already serving a large number of customers. The governance, access and use rules should not prevent new entrants from using the upcoming infrastructure.

Policy Priority #2: Issue E-money regulations and create supervisory framework

BOZ is working on draft e-money regulations, which are necessary to create a solid and clearer framework for mobile money and other types of store of value instruments that could eventually work as a gateway to more sophisticated products offered by the bank sector, such as savings accounts. It should push this work forward to ensure a solid regulation is soon in place to set common standards for existing and future e-money providers.

Policy Priority #3: Adopt a risk-based approach to anti-money laundering requirements to facilitate small value accounts and transactions

Current regulations are already relatively flexible, but there is room for improvement, particularly with respect to creating a clear risk-based, tiered approach for documentation and verification requirements. BOZ is open to providing such a framework and has already worked on a Practice Note to signal its openness to more flexible practices by the bank industry. The Practice Note has showed little result in practice, indicating that a regulatory measure is necessary.

Policy Priority #4: Issue rules for payment instruments and payment providers

BOZ has not yet issued its framework for risk management and the operation of payment system businesses in each category of payment instrument (e.g., cards, mobile-based accounts, internet-based accounts). The only related regulation under the NPSA today is the Money Transmission Guidelines, which is not sufficient to deal with risk sharing, management, transaction security and reliability. In addition, there are no industry-based regulations,



codes or minimum standards in this regard. As retail payments rely more and more on cashless transactions, such rules an their effective enforcement by BOZ will be crucial for sustaining public confidence in the system.

Policy Priority #5: Issue agent banking rules (branchless banking)

Although it is not clear whether banks will take full advantage of enabling regulations immediately, it is timely and appropriate for the BOZ to issue specific rules governing the use of agents as a distribution channel of banks. BOZ is working on a draft. It is important that such draft provides a level playing field by establishing similar rules for banks and nonbanks using agents.

Policy Priority #6: Improve public information about electronic retail payments

BOZ receives regular reports from payment system businesses such as remittance providers and mobile payment providers (e.g., the number and location of remittances agents, the volume and value of mobile payment transactions, the volume handled through mobile money accounts, etc.). However, there is very little public information on this sector, which makes the assessment of the market growth and the gaps in supply and physical coverage difficult. More information would help potential entrants, investors and even the public, as the disclosure of market information by the regulator may support increased market confidence. It may also contribute to increase competition and to achieve other goals set forth in the FSDP.

Market Priority #1: Design and offer down-market products with appropriate marketing and client support

There is a demand for payment products that are easy to use and accessible for the down-market segment. One example is the demand for a secure way to send money to boarding school students. While simplified accounts are beginning to fill this gap, there is still a market for add-on payment services. Furthermore, poorer respondents reported feeling intimidated by what they perceive as complex or sophisticated retail payment products. Providers marketing products should appeal to all Zambians, including poorer segments, and work on simple, inviting product presentation.

Market Priority #2: Improve reliability of payment channels and improve client support

Focus group respondents reported trying out ATM card payments or mobile transfers to see if they work, but they do not continue using such services habitually. Part of the reason is unfamiliarity with ATMs, whilst part is lack of reliability. There are also many accounts of lack of connection in POS devices for electronic purchases. Providers should invest in walking new customers through how electronic products and devices work when new customers enrol. Investing in functioning and easy-to-use customer support available after adoption would be helpful. Doing so is likely to have high returns for client retention and increasing continuous usage, resulting in commensurate profit gains to providers that succeed in such outreach. In this regard, the Payments and Money Transfer Association and the Bankers Association of Zambia should play a role in setting some minimum standards for the industry, and in contributing to client education and support.

Market Priority #3: Improve efficiency of electronic payments processing

This report has mentioned a study indicating that cross-border remittances are processed in the same day for MoneyGram and Western Union, in four to 10 days when using telegraphic transfers (TT), and up to one month when using the national postal service. Electronic payments processing within Zambia could be improved through the implementation of straight-through processing, that is, with higher levels of automation to reduce or even eliminate manual intervention in some instances. This measure, which is being pursued by BOZ, would reduce the processing time of remittances, and debit and credit transfers. Again, the industry associations could have a role in pushing for such improvement to support BOZ's efforts, and even adding this type of improvement to the industry practice codes.

Market priority #4: Improve price transparency



Many respondents in our research noted the difficulty they have in understanding prices in payment services. Price transparency is not only a problem for bank transfers, ATM and POS transaction, but also in cross-border remittances. In remittances, the exchange rate is sometimes not disclosed to the sender, raising transparency concerns and making price shopping a very difficult exercise for people sending money to their families. The industry associations, again, should play a role in this regard, although BOZ may consider making this a regulatory issue should the market not improve its practices. In this regard, BOZ may also consider publishing the inward fees charged by banks, in addition to the outward fees, which are already published on its website.

Market priority #5: Improve knowledge about business with down-market segments

To overcome the prevailing perception that there is no business proposition in expanding the service supply to lower-income clients, particularly out of the larger towns, and to minimize the resistance to partnership between banks and nonbanks, all relevant market participants may benefit a great deal from learning more about how to deal with the down-market segments. Greater knowledge could be fostered by workshops and other types of learning events organized or sponsored by development partners and key local stakeholders such as BOZ and the industry associations. These could involve in-depth discussions, and knowledge exchange with industry leaders from other countries. The topics of relevance include, among others, sustainable agent networks, partnership models, profitability of low-value accounts, opportunities created by government bulk payments, security and reliability of mobile payments.



ANNEX 1: LOCATION AND DESCRIPTION OF FOCUS GROUPS

Figure 11: Focus Group Locations

	Focus group locations, Zambia				
Location		Urban/ rural	Gender	Target population	Date
1.	Lusaka Pilot	Urban	Men	Men sending and receiving remittances	20 March 2012
2.	Lusaka, Lusaka Province	Urban	Men	Men using financial and mobile banking products	21 March 2012
3.	Livingstone, Southern Province	Urban	Women	Women sending and receiving international payments	23 March 2012
4.	Chipope, Gwembe, Southern Province	Rural	Women	Women working in agriculture and receiving payments	25 March 2012
5.	Luangwa, Boma, Southern province	Rural	Women	Respondents sending and receiving payments	27 March 2012
6.	Ndola, Copperbelt province	Urban	Men	Migrants using financial products	29 March 2012
7.	Masaite, Copperbelt province	Rural	Men	Mine workers and farmers using financial products	30 March 2012

Description of locations

Lusaka - Lusaka is the Zambian capital and is home to an estimated 2.1 million people. Nyanja and Bemba are the main languages spoken. In Lusaka we held the focus group discussions at the Golden Bridge Hotel. Participants were recruited in the downtown area in and around the Central Business District (CBD) of Lusaka City.

Livingstone - Home to Victoria Falls, Livingstone is called the tourist capital of Zambia. It is also a main artery into the country from Zimbabwe and other southern African countries. For a relatively small town with an estimated population around 110,000, (97,488 in 2007), Livingstone has a bustling, cosmopolitan feel, with many people passing through- coming and going to tourist and trade sites alike. The group was held at Armadillo-Oriental in Livingstone. Tonga and Lozi are the primary indigenous language used in Livingstone.

Chipope, Gwembe - Chipope is the name of a small Village in Gwembe District, home to a rural secondary school where we held the focus group discussion. Gwembe, which is about a 3-4 hour drive down a gravel road after turning from the Livingstone Road - at Chisekase, borders Lake Kariba, and as a result fishing is an important economic activity in the community. *Kapenta* (small fish similar to sardines) are caught at night using lights to attract the fish. Kapenta, as well as larger fish, can be sold locally or at markets in larger towns such as Choma and Monze. Tonga is the main Zambian language spoken in this area.

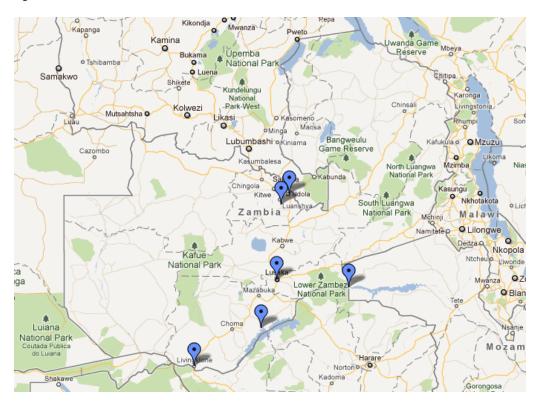
Luangwa - The *boma*, or town centre in Luangwa is the main economic centre for many villages and rural communities in the corner of Zambia bordering both Zimbabwe and Mozambique. Small-scale trade between the three countries at this intersection seems to flourish, with control at the border more porous than in other places. Home to a warm, dry climate, farming and fishing are the main economic activities. Nyanja is the main language used in the area.

Ndola - Zambia's second city with a population near 400,000 in 2007, Ndola is the hub in the Copperbelt province and a jumping-off point for the provinces many mineral mines (copper and limestone are important ones) and other points of industrial activity. Ndola is known for being carefully planned and well-organized. Nyanja and Bemba are spoken in the region, with Bemba being a more common mother tongue.



Masaiti - Is a rural district bordering Ndola Town. It is a mainly a farm block district that was deliberately created by the government in order to encourage people from formal employment to engage in agriculture after retiring. Most retired workers from the mines and civil service settled here and engage in agriculture activities, mainly on small scale (peasant farmers) but there are also a few commercial farmers. The main language used in this region is Bemba. The interview was conducted at Masaiti Lodge.

Figure 12: Field sites visited





ANNEX 2: FOCUS GROUP DISCUSSION GUIDE

Background

In September and October, 2011, Bankable Frontier Associates undertook a study of retail payment systems in Mozambique, Malawi and Zimbabwe, commissioned by FinMark Trust. These studies are innovative in combining supply and demand perspectives with regulatory analysis to produce a holistic picture of the impediments to innovative payment product development and usage in these three countries. Another distinguishing feature of this project is a country workshop held with market participants and government officials to discuss existing and proposed regulations, product development, and partnerships. The workshops offer a rare opportunity for industry players and the regulator to have frank discussions in the context of an independent country report. We have found that this consumer perspective is especially interesting to payment providers who attend the workshop.

Based on the success of the Mozambique, Malawi, and Zimbabwe studies, and to get a more comprehensive picture of the Southern African region, FinMark Trust has asked Bankable Frontier Associates to repeat the study of the retail payments landscape in Zambia, to take place in March 2012. The research will consist of a supply side analysis, including meetings with the Bank of Zambia, and with major banks—with a special focus on banks interested in extending services to lower-income Zambians— meeting with MNOs, and with companies offering remittance services, including the post office and others.

To gauge the consumer perspective of the landscape, we will carry out six focus groups and six individual interviews in both urban and rural areas in and around Lusaka, Livingstone, and Ndola. In the focus groups we aim to understand the main income sources and expenses in respondents' portfolios, and then to explore perceptions of financial institutions and payment products, with a focus on understanding what is working for Zambians, what is not, and why. Because it is not appropriate to ask about balances and levels of income and expenditures in a group setting, the individual interview complements the group discussion by allowing us to ask about more detailed personal information. In the individual interview we seek to understand the respondent's household in detail, including all the income sources in the household, major expenses and their values, and discussion of all formal and informal financial instruments used. A reconciliation that traces the last amount of income received to a zero balance allows us to see how payments are made, with what frequency, and what values. This research approach is described in more detail below, and is followed by the draft focus group instrument for Zambia.

Demand Side Research Objectives.

- 1. How do people pay and transact? What are the available options?
- 2. What features of the payment options shape peoples' preferences? How important is cost? Where are the problems and pain points?
- 3. What other formal and informal financial products are people using?
- 4. What habits, attitudes, fears, etc. may need to be overcome to introduce innovative payment mechanisms?

Sampling. In each country, we distributed the sample to capture the general population of people who are engaged in relatively large movements of cash over distances who may be using formal or informal mechanisms to make those transactions right now. This helps us identify people who may benefit from e-payment mechanisms.



Country	Sample Size and Distribution	Explanation
Mozambique	12 Focus Groups of 8 people:	In Mozambique the research costs were
·	Site 1: 6 Maputo	shared between FMT and DfID
	• 2 groups of market traders (including remittance senders)	Mozambique, which commissioned a
	• 2 poor, urban youth	study to understand the financial
	2 groups of workers with regular jobs (including remittance	behaviour of low-income Mozambicans
	senders)	who would be targeted for a cash
	Site 2: 2 Chokwe (town in Gaza)	transfer program. We have tried to
	1 traders/market women	distribute the sample to cover
	1 general population (hopefully with some remittance	populations relevant to FinMark (traders
	recipients)	and remitters) and DfID (very low income
	Site 3: 4 Rural Gaza	likely beneficiaries of the cash
	2 (1 male; 1 female) in low income community A (no one	transfer/workfare program). As more
	w/regular job)	information becomes available about the
	• 2 (1 male; 1 female) in low income community B (no one	DfID targeting, we may need to adjust
	w/regular job)	the sample.
Malawi	Six Focus Groups of 8- 10 people	With only six focus groups we thought it
	Site 1: Lilongwe	best to concentrate discussions in
	1 Government or aid transfer recipients	Lilongwe and one rural area. In order to
	• 1 OIBM users	understand how people receive
	1 domestic remittance senders	transfers, the sample is split between
	Site 2: Mangochi	recipients of government or aid transfer
	1 town government to person transfer recipients	
	1 rural government or aid transfer recipients	
	1 remittance receivers	
Zimbabwe	Six Focus Groups of 8- 10 people	With an estimated one million
	Site 1: Harare:	Zimbabweans living in South Africa, the
	2 respondents sending and receiving money	South Africa- Zimbabwe remittance
	1 respondents operating bank accounts targeted at the low	corridor represents an important market
	end of the market	for payment systems. Therefore we will
		focus our research on urban and rural
	Site 2: Seke	remittance recipients, as well as
	1 respondents sending and receiving money	exploring the domestic remittance
	1 respondents receiving financial or other assistance	channels in Zimbabwe.
	Site 3: Chiweshe	
	Respondents receiving money	
	Respondents receiving assistance from the government/	
	NGOs	
Zambia	Six Focus Groups of 8- 10 people	In Zambia, focus is on domestic and
	Site 1: Lusaka	international remittances and the impact
	Respondents using bank and mobile money and use (University Augs)	of the Copperbelt region on money
	products (Urban- Men) Site 2: Livingstone	transfers. We also did not want to neglect the financial lives of rural and
		agricultural households. We may decide
	 Respondents receiving money internationally (urbanwomen) 	to focus one group on users of certain
	Site 3: Gwembe	payment products that comes up from
	Respondents working in agriculture and receiving	supply side information.
	payments- Chipope (rural- women)	
	Site 4: Luangwa	
	Respondents receiving remittances Luangwa district	
	(Rural- women)	
	, , , , , , , , , , , , , , , , , , ,	1
	Site 5: Copperbelt	
	Site 5: Copperbelt	



Site 6: Masaite
Mine workers using financial products- Masaite
District (rural, men)



ANNEX 3: FOCUS GROUP DISCUSSION GUIDE

A. Introductions and Warming Up		
Topics	Probes and specific questions	
Introduce the objectives of the focus group	 This study is commissioned by FinMark Trust because they want to help improve financial services in Zambia. FinMark Trust is an organization that is trying to help financial service providers to offer more appropriate products and services for Zambian individuals, families, and businesses; To do so, it is best to start by understanding how people like you manage their money, where and why you save and borrow, how you earn, how you spend, how you send money when needed. 	
Initiate some discussion to help respondents feel comfortable	 Can you tell us a little bit about your community? What is your community known for/famous for? Where does the name come from? 	

B. Earning money						
B. Earning money						
Topics	Probes and specific questions					
Sources of income	 Can we go around the room and each person tell me a little about yourself and how your family earns a living? Who in the family earns money, if anyone? How do they earn money? About how often do they get paid for each activity? 					
How income is paid	 When you earn money [in each way], how do you actually get paid? Does your employer [your spouse's employer]/client/etc. give you cash in person? Do you have to make a special trip? Has anyone ever been paid in another way? [bank account, voucher, check, in kind etc.] Which ways are most common? What are the advantages and disadvantages of being paid in these different ways? How far do you have to go to collect your payments? Has anyone ever experienced a problem getting paid with one of these methods? (What happened? Did you have to go back again? How long did it take to resolve the problem? What is the best way to be paid? Why? 					
Government to person transfers (Only apply if respondents receive cash transfers, pensions, or other government payment.)	 Do you receive assistance from the government or an NGO? How often does the payment come and how is it paid? Do you have to travel to get your money? What are the costs? Have you ever had a problem with the payment being late, feeling insecure, risk of theft etc? If so, were you able to resolve this problem? What are your impressions of the agency that gives these transfers? 					



C. Uses of Money						
Topics	Probes and specific questions					
Expenditure frequency	 How often do you buy your big groceries? (Maize meal, cassava, oil, etc?) Where do you normally do a big shop? How do you normally buy your main groceries (cash, etc.)? Can you buy on credit at the store? 					
Weekly or monthly expenditures (regular, recurring expenses)	 What was your biggest expense in the last month? How did you pay for it? Do you pay an energy or water bill? If so, how do you pay it? How long does it take? Have you ever had a problem? Was it resolved? 					
Infrequent/occasional	 What was your biggest expense in the last year? How did you pay for it? Have you ever had any problems making these payments or you try to make the payment and run into a problem completing the transaction or being charged too much? What happened? Is this common? How was it resolved? How much do you pay for school fees? How much would you pay for a funeral? 					

D. Financial instruments, savings, credit							
Extent of remittances	 Does anyone send money to family and friends to help out, maybe they are working or living in Lusaka, the Copperbelt, Jo'burg, South Africa, or elsewhere? Who sends money? Is this common in this community? How often does (the person) send and about how much each time? Does anyone receive money? How do people send money? [probe for many ways] How do these systems work? How much do they cost? Are they reliable and trustworthy? Has anyone ever lost money using this? Has anyone experienced any other problems, like a delay or other problem? What happened? How was the problem resolved? What types of problems are associated with these systems? Are they convenient? How far do you have to go to get the money? How long does it take to get it? How much time do you spend waiting in line? Has anyone used Zampost Swift Cash? What do you think of the service? Has anyone used MoneyGram, Cash Mover, Transcash, Cash 4 Africa, Money Express Limited, or Natsave transcash? What do you think of these services? What is the best way to send/receive money? Why? 						
Financial instruments/ institutions	 How many of you have bank accounts (raise hands and count)? What do you know about bank accounts? Where do you have an account? How far away is the nearest 						



	bank? How do you normally take money out? How long does it take to transact? Do you ever use a debit function? What do you mainly use the accounts for? Why did you open them? What do you like/dislike about bank accounts? Have you ever lost money using a bank account? [if yes, probe for story] Were you able to resolve the problem? What types of people use bank accounts? Do you know about the ATM card? Do you know what a point of sale device? If you do not have a bank account, why not? Can you trust banks? Why? Why not? What is the best bank in Zambia (everyone answer, even if they do not have). Why do you like this bank?				
Savings and credit	 Are you saving money, even a little? How do you save? How many of you have ever used a savings group/ Chilimba? What other names are there for chilimbas? What type of person uses a savings group? For what purpose? Why do you use them? How often do you contribute? Have you ever lost money or heard of someone who lost money in a group? What happened? Is this common? How many of you had to pay school fees? How much? How did you get the money together to pay for them? (what instruments?) If you had an emergency and needed to come up with twice your monthly income, where would you get the money? (what instruments?) What other financial instruments are people using? Saving with another person (money guard) Saving with a deposit collector (they pay someone to collect and hold their money) Borrowing from a moneylender/ Kaloba? Is there another word for Kaloba? Credit at local shops or from suppliers Loans from banks, MFIs, other institutions Buying things on instalments Any type of insurance Any type of long term investment 				
Insurance	 Does anyone have any insurance product, like funeral insurance, health insurance, or crop insurance? If no, have you heard about insurance? Do you know what it means? Would you like to use it? If yes, how did you get this product? From which organization? Have you ever made a claim? Have you ever had a problem with the product, including understanding how it works, or a problem getting money? 				



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	How many of you have cell phones?
Mobile banking, electronic payments	 How many people have access to a phone in the household?
	Have you ever sent airtime (credit) to someone else, or paid for
	a good or service in airtime?
	Have you heard about Me2u, Airtel Money, MTN money, Celpay,
	XAPIT (Zanaco Bank) or Talk Time, Me 2 You, Celpay, Zappit,
	Airtel money similar services?
	Would you like to use a service that allowed you to transfer
	money through your cell phone? What do you think of such a
	, , , , , ,
	service?
	 Do you trust the mobile service providers?
	What is the best mobile phone company in Zambia, why?
Payment security and identification	
	How would you feel about having to remember a 4-number pin
	to access financial information?
	For those who do have bank accounts, have you ever had
	trouble remembering the pin number? What do you do in these
	situations?
	How would you feel if you had to give your fingerprint in order
	to receive a payment from the government, or access an
	account such as a bank account or mobile money account?

Individual interview guide available upon request.



ANNEX 4: BANKING FEES AND ACCOUNT OPENING REQUIREMENTS, ZAMBIA⁷⁷

Banks	Zanaco	Barclays	Finance Bank	Standard	Stanbic	Investrust	IndoZambia	Cavmont
Documents required to open an account	Proof of residence, copy of ID, Passport photos.	Proof of residence, copy of ID, Passport photos.	Proof of residence, copy of ID, 2 Passport photos.	Proof of residence, copy of ID, Passport photos. Minimum Salary of USD300.	Copy ID, Proof Residence, 2 Passport photos, Pay Slip	Copy of ID, Registered Cellphone/\$5 Deposit	Copy of ID, Registered Cellphone	Copy of ID, Registered Cellphone
Minimum balance to open an account	\$5.00 Blue Card/\$25 Gold Card	\$10.00	\$10.00	\$5.00	\$5	0	\$5.00	Nil
ATM withdrawal	\$1	1.5%	1% minimum of \$3/\$20	1%	\$1	1	3% registered user, Free Non Registered User	0.01
POS Purchase	\$0.15	1.5%	0.5% up to maximum \$10	\$0.00/ Zimswitch Charge	\$0.1	\$0.30	N/A	0.08
Withdrawal at the counter	1% Min \$2	1.50%	1% minimum of \$3	1%	0.25%	0.75% (Min \$0.10 Max \$1.00)	3% registered user and free for non-registered	1%
Same bank transfer	\$0 counter/\$0.20 Online	\$0.20	\$2.00	\$1	\$2	\$3.00	2%	\$0.20
Transfer to another bank	\$5.00	\$5.00	\$10.00	1% min \$5/ Max \$10	\$2	\$3.00	7%	N/A
Monthly fee	\$180 Platinum/\$36All other Cards	\$2.80	\$24	NIL	\$60	\$15.60	Nil	Nil
Balance Inquiry	0.25 Cellphone	\$0/\$0.2 statement	\$0.25	\$0/\$0.5 mini statement	NIL	0.01	\$0.03	Nil

⁷⁷ Reported by banks or encountered in mystery shopper exercises.



ANNEX 5: RESPONSIBILITIES OF BOZ AND COMMERCIAL BANKS IN THE PAYMENT SYSTEMS VISION 2007-2011

Role of Bank of Zambia

- Ensuring that the National Payment System serves the interests of all stakeholders
- ➤ Guiding the reform and modernisation of the National Payment System, focusing on the overall soundness and effectiveness of the National Payment System
- > Ensuring sound legal framework to support the reforms
- Overseeing the application of National Payment System risk management measures (oversight of the payment system)
- Ensuring the smooth functioning and conclusion of the settlement process
- > Defining the nature of adequate collateral and negotiating the extent of collateral which needs to be held by banks to suffice as sufficient collateral to support settlement arrangements
- Ensuring that National Payment System roles are defined unambiguously and that responsibilities are properly delegated to appropriate organizations
- Ensuring that appropriate systems, infrastructure and the necessary interfaces are in place to support the National Payment System
- > Facilitating the handling of specific occurrences of systemic crisis and promoting the resolution of disputes, without in any way prejudicing the ability of the National Payment System to continue functioning
- Overseeing the creation of National Standards and ensuring that these standards are in keeping with international principles and best practices
- Enforcing the agreed National Payment System principles, policies and practices
- Liaising with other central banks as well as commercial banks to promote the use of the country's financial system
- > Encouraging banks to develop credit push and electronic payment instruments
- > Implementing public awareness campaign in collaboration with banks and other stakeholders
- Promoting measures to improve operational capability of all participants
- Ensuring that infrastructure relating to the settlement process is in place
- Ensuring that payment finality is clearly and expressly stated in all payment stream rules and regulations to provide certainty
- Designation of Payment System Operators upon recommendation of the Bankers Association of Zambia.

Role of Banks

- > Act as settlement bank, settling its own Interbank payment obligations and effecting real-time payments
- Act as a settlement bank, sponsoring another clearing bank for settlement
- Act as a clearing bank, clearing payment instruments by joining one or more Payment Clearing Houses for the various streams
- > Serve as a customer payment service provider, providing payment related services to its customers. In its role, the bank acts as an agent, similar to any other Service Provider
- > Serve as a Service Provider, making its infrastructure available, on a bureau basis, to other bank, although such arrangements do not necessarily imply financial guarantees
- Act as an end-User, issuing payment instructions on its own behalf, or as the beneficiary of payment issued by someone else.