

#### Mapping the Retail Payment Services Landscape

# Regional Survey: Malawi, Mozambique, Zimbabwe, and Zambia

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#### **Abstract**

This report is part of the series commissioned by FinMark Trust to examine the retail payments landscape in Malawi, Mozambique, Zimbabwe and Zambia. It builds on four country-specific reports, each informed by desk-based research, interviews with regulators and service providers, and, in a novel supplement to standard practice in country diagnostics, focus group meetings with consumers. This regional report summarizes and distills key findings from each of the four countries, but it can be read independent of the country reports as well.

This research methodology 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) 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 therefore presents a "payment profile" depicting how customers in each of the four markets currently use payment services as well as the conditions in which current mechanisms are used.

The approach taken by this study divides the environment into supply and demand components to understand the current context for payment services. The demand side research looks at how the poor pay from a behavioural perspective and documents the various transaction profiles in use. The supply side research assesses the policy environment around payments, the current payment products available in the market and assesses how the current regulatory framework impacts access and usage of payment services. The report further provides a thematic view of how enabling the existing market conditions are to the development of transformative payment services.

The goal of this synthesis is to provide tools for understanding the regional context for retail payments (both domestic and cross-border) in Malawi, Mozambique, Zimbabwe, and Zambia and to identify future reform priorities.



#### **Acronyms**

AML/CFT Anti-Money Laundering / Combating Financing of Terrorism

ATM Automatic Teller Machine

B2P Business to Person

BM Bank of Mozambique

BoZ Bank of Zambia

CEL Compensação Electronica

ECCH Electronic Check Clearing House

G2P Government to Person

HDI Human Development Index

KYC Know Your Customer

MITASS Malawi Inter-Bank Transfer and Settlement System

MNO Mobile Network Operator

MPC Malawi Postal Corporation

MTO Mobile Transfer Operators

MTR Metical em Tempo Real

NPS National Payment System

POS Point of Sale Device

RBM Reserve Bank of Malawi

RBZ Reserve Bank of Zimbabawe

RTGS Real Time Gross Settlement

SADC Southern African Development Community

SIMO Sociedade Interbancária de Serviços de Moçambique

STF Sistema de Transferencia de Fundo

ZECHL Zambia Electronic Clearing House Limited

ZETSS Zimbabwe Electronic Transfer and Settlement System

ZIPSS Zambia Interbank Payments and Settlements

#### 1 Introduction

This report is a synthesis of findings across the four country studies. To present this synthesis, we identify an analytical framework that can be applied broadly and a set of themes that emerge from a consideration of all four countries. We situate this analysis with a brief overview of the retail payment context of each of the four countries and conclude with an identification of regional priorities for retail payments development.

Section 2 introduces the country-level contexts of Malawi, Mozambique, Zimbabwe and Zambia. In addition to highlighting elements of the demographic and market contexts in each country, we use Section 2 to introduce the themes from consumer focus groups that inform the thematic discussion in Section 4.

Section 3 develops an analytical framework for understanding the general policy forces that influence the state of retail payments development in a given jurisdiction. We argue that legal environments can be characterized by the ways in which they influence the **openness** of the retail payments market to new entrants and the policy **certainty** concerning retail payments in those countries. This approach enables the comparison of Malawi, Mozambique, Zimbabwe, and Zambia to other jurisdictions that are not necessarily regional reference points. The strength of this approach is that it enables broad comparisons that inform prospective action. Its weakness is that, like any analytical framework, it glosses over some of the complexity and detail of a more descriptive approach. This weakness can be partly mollified by greater details available in each country-level report.

Section 4 presents a second lens through which to view retail payments in Malawi, Mozambique, Zimbabwe, and Zambia: a distillation of themes that emerge from the country-specific details we uncovered in the course of our research. Whereas the country-level reports are divided into sections that treat supply- and demand-side factors independent of one another, the thematic section of regional report largely combines the discussion of supply- and demand-side factors.

We hope that both approaches—one schematic and globally applicable (Section 3), one emergent and locally informed (Section 4)—will offer a thorough view of the retail payments landscape in Malawi, Mozambique, Zimbabwe and Zambia.

Section 5 begins the discussion of regional payment system integration and reform by examining the particular context of cross-border payments.

Section 6 concludes our analysis by identifying priority areas for retail payment system development reform in Malawi, Mozambique, Zimbabwe and Zambia as well as discrete actions to effect reform.

#### 2 Previewing the Country Context for Retail Payments Development

Greater use of electronic means of payment in an economy has widespread benefits for businesses and clients alike: greater transaction efficiency, lower transaction costs, new payment channels and business opportunities, and the potential for greater financial inclusion. However, strategies for the successful promotion of electronic money are sensitive to the baseline characteristics of a target market. For this reason, it is important to calibrate electronic retail payment system development strategies to country-level characteristics and understand them in context.

It is in this spirit that we review the local contexts in which retail payment systems in Malawi, Mozambique, Zimbabwe, and Zambia operate. For each country, we offer a succinct review of economic-, human-, financial services-, and telecommunications-related development indicators. We pay special attention to rates of poverty, bank account prevalence, and mobile phone penetration because they are particularly salient for a thorough consideration of efforts to develop inclusive financial services. We summarize each in Figure 1.

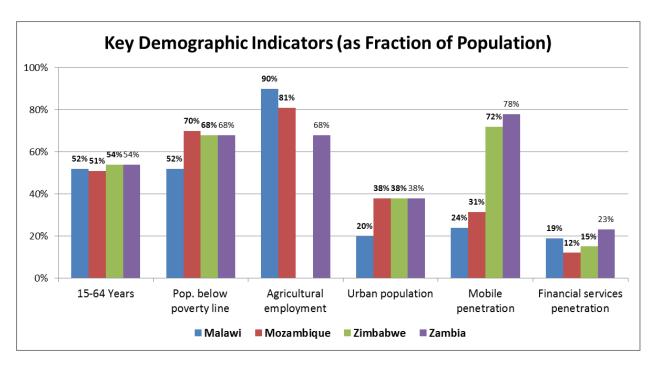


Figure 1: Key Demographic Indicators (percentage of total inhabitants).<sup>1</sup>

Broadly construed, Figure 1 presents Malawi, Mozambique, Zimbabwe, and Zambia as high-poverty countries with large fractions of the populations of working-age and employed in agriculture. Financial services penetration is generally low, and is outpaced by mobile phone penetration in each jurisdiction. We provide a historical view of the increasing prevalence of mobile phones in Figure 2.

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<sup>&</sup>lt;sup>1</sup> Source: CIA Factbook, 2011

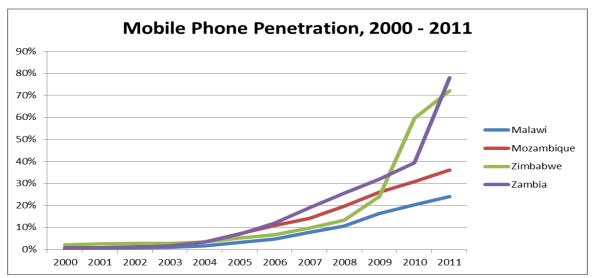


Figure 2: Mobile Phone Penetration (International Telecommunications Union data, 2011).

Recently, there has been a marked increase in mobile phone penetration in all four countries. The rise of mobile connectivity establishes the mobile phone as a promising channel for financial services access.

Finally, Figure 3 presents a composite view of the state of overall development in each country based on the United Nation's Human Development Indicators (HDIs). All four countries trail the rest of Sub-Saharan Africa and the world in terms of human development.

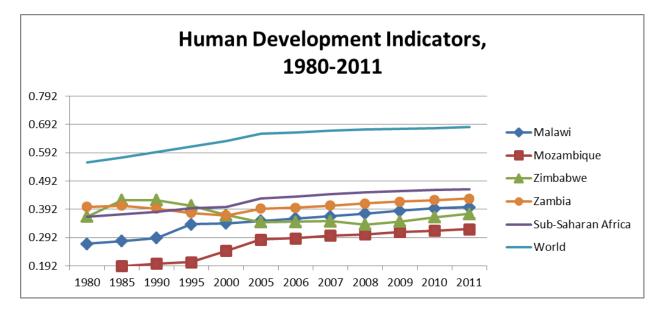


Figure 3: Human Development Indicators (United Nations, 2011).

Next, we consider the context of each country in greater detail by outlining a) the prevalence of financial and mobile phone services and b) key elements of the electronic payments infrastructure. The discussions of financial and mobile services provide general background information on the relative

appeal of various payment channels within each country and inform the regional priorities for retail payment system development discussed in Section 5. The overview of electronic payments infrastructures is germane to the thematic discussions of Section 4.

#### 2.1.1 Malawi

#### **General Overview**

Malawi's population is largely rural and agrarian, but the country has one of the highest population densities in Africa<sup>2</sup>. Eighty percent of this population lives outside the main urban centers and is largely beyond the reach of essential services located in the cities.

**Financial services prevalence is low.** By and large, the financial services industry has viewed the comparatively small urban market as the ambit of its commercial ambitions. Consequently, the vast majority of Malawians have had little access to formal financial instruments for savings, payment, credit and insurance. The FinScope *Access Strand* reports that over half of the population is completely unbanked, and another fifth of the population has access to informal services, only<sup>3</sup> (see Figure 4):

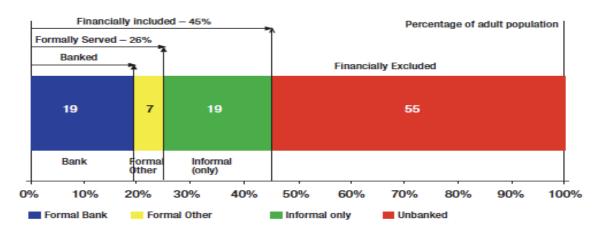


Figure 4: FinScope's Access to Finance assessment of Malawi.

<sup>2</sup> http://www.nationsencyclopedia.com/Africa/Malawi-POPULATION.html#b

Anyone who is not financially served is financially excluded which means they are not using financial products (formal or informal) to manage their financial lives.

<sup>&</sup>lt;sup>3</sup> One of the key access indicators developed by FinMark Trust is the Financial Access Strand. The access strand focuses on the financial system of a country in its broadest sense and places the adult population into one of three broad segments: formally included, informally serviced and financially excluded.

The formal sector is divided into a banked segment (the percentage of adults with a bank account), and a formal other segment (the percentage of the adult population with one or more formal financial product, such as insurance or a microfinance loan, but no bank account). Together, these two groups are defined as formally included.

The informal sector comprises all the organisations that provide financial services but are not legally registered to do this business – for example, savings clubs, burial societies and moneylenders. The informally serviced category in the access strand represents the percentage of adults with one or more informal product but with no bank account or a product from another formal financial institution. While the formally served may also have informal products, those who are informally included have no formal products. It is necessary to add the informal segment to the formally included segment to derive the percentage of the adult population which is financially served.

Bank branch, ATM and POS channels are only available to existing bank customers, who are largely concentrated in urban centers and account for some 19% of the population. By contrast, the Post Office emerges as an important channel for financial services access in the rural areas. It has a presence throughout Malawi and provides some financial services (principally bill payment and domestic remittances) to customers without accounts at banks or other formal institutions.

**Mobile phone penetration is low, but exceeds financial services penetration.** In 2011, approximately 24% of Malawians had mobile phones.<sup>4</sup> Mobile phone penetration has grown rapidly over the past five years. For reference, only 0.44% of Malawians had mobile phones in 2000, and that fraction had increased to only 3.28% in 2005.<sup>5</sup> The ensuing years of rapid growth in mobile penetration make the phone and its network a promising channel for payments and other retail financial services.

The Malawi Postal Corporation (MPC) is a significant non-bank financial service provider. The postal network's core business of courier collection and postal services has allowed it to develop a vast network of service touch points. In addition to their primary uses for mail delivery, the postal corporation offers a remittance product, FastCash, which is enormously popular for urban-to-rural remittances due to the location of a MPC outlet in every district in Malawi. Although FastCash is popular among some remittance senders, focus group discussions revealed that informal social networks and hawala networks<sup>6</sup> are perhaps more important in Malawi, especially for international money transfers, which are not available through FastCash. Focus group participants in Malawi reported having fewer problems with these informal systems than respondents in other countries, although the transaction costs are still high.

#### **Overview of Electronic Payments Infrastructure**

The electronic payments infrastructure in Malawi has three primary pillars:

- 1) Malawi Inter-Bank Transfer and Settlement System (MITASS), a real time gross settlement (RTGS) platform
- 2) Electronic Cheque Clearing House (ECCH)
- 3) Malawi Switch Centre (MALSWITCH), a (largely) wholesale switch

MITASS and MALSWITCH set access criteria, and any entity that meets those criteria may participate in either system.<sup>7</sup> Participation in the ECCH is limited to clearing banks.

Wholesale, interbank payments are effected through MITASS and administered by MALSWITCH. Technically, retail payments can be processed over MALSWITCH, but it processes only low volumes of

<sup>5</sup> Source: International Telecommunications Union

<sup>&</sup>lt;sup>4</sup> Source: CIA Factbook, 2011

<sup>&</sup>lt;sup>6</sup> Hawala networks: meaning that there are two traders, one near the sender and one near the receiver, and the one near the receiver pays him or her, and settles their own accounts between the traders separately, without physically transferring the senders cash

<sup>&</sup>lt;sup>7</sup> MITASS is owned by the Reserve Bank of Malawi, and the ECCH is owned by the Bankers Association of Malawi. Technical administration of both systems is outsourced to MALSWITCH.

retail payments posted by newer, smaller, and less well-established entrants to the financial services market. Older, larger, and better-established banks drive most of the retail payments volume through proprietary switches.

#### 2.1.2 Mozambique

#### **General Overview**

Despite demonstrable advances made toward reaching the Millennium Development Goals<sup>8</sup>, Mozambique is still one of the poorest countries in the world. Half of the country's inhabitants live in poverty, and its country-wide averages for human development indicators are low. Furthermore, these averages obscure wide urban-rural disparities. For example, 42% of rural adults have never been exposed to *any* formal education, yet 33% of urban adults have at least some *secondary* education.

**Financial services penetration is very low.** The 2009 FinScope Mozambique survey showed that country-wide formal financial services penetration is a low 12%, but this average obscures differences between urban and rural regions. According to the FinScope Mozambique (2009) findings, eighty-seven percent of rural Mozambicans lack access to financial instruments, whereas this figure drops to 61% in urban areas:

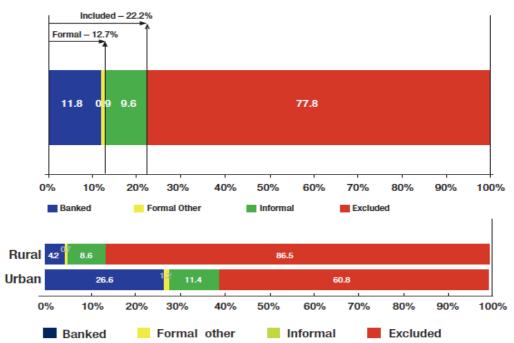


Figure 5: FinScope's Access to Finance assessment of Mozambique.

**Though low, mobile phone penetration has increased substantially.** Roughly 30% of Mozambicans own mobile phones, a tremendous increase over the decade ending in 2011. Mobile phone penetration also

<sup>&</sup>lt;sup>8</sup> See World Bank, 2008 *Beating the Odds: Sustaining Inclusion in Mozambique's Growing Economy.* Poverty, Gender and Social Assessment for Mozambique, Washington.

exceeds financial services penetration by a factor of two. This suggests that mobiles can play an important role in the expansion of financial access. There is particular potential for mobile services in Mozambique because the distances people travel and time spent to access formal financial services are especially high in parts of this large, sparsely populated country. Costs spent on transportation accounted for a significant percentage of transactions commonly done by the Mozambicans that participated in the focus groups undertaken as part of this research.

#### **Overview of Electronic Payments Infrastructure**

There is no national bank switch/clearinghouse in Mozambique. The only nonbank multibank switch is Interbancos, which is used by only eight of the 15 commercial banks, with more than 90% of transactions over Interbancos accounted for by one bank. The central bank, Bank of Mozambique (BM), is clearing some transactions such as VISA cards and clear checks. American Express and Mastercard card transactions are cleared abroad. Interbank transactions that do not use Interbancos are cleared bilaterally, which usually means high cost for the client. All transactions from the different networks are ultimately settled in the RTGS operated by BM.

The payment systems operated (all in local currency) by BM are:9

- a) Electronic Settlement (CEL)<sup>10</sup>: a systemically important system<sup>11</sup> that settles cheques of all values. BM is considering setting minimum value limit on checks to encourage use of electronic transactions.
- b) Money and foreign exchange Interbank system
- c) Government's electronic fund transfers system (STF)
- d) RTGS (called MTR): a pilot was completed with two banks<sup>12</sup> now having operated on a permanent RTGS platform for over six months. Two other banks are about to join. 13 Once all banks adhere, BM will set minimum transaction values and apply norms established in the pilot. The BM is already offering intraday liquidity facilities at no cost.

SIMO, the future national switch. The BM revived an old project of the bank sector and, based on a consultant's recommendation, created a new entity called Sociedade Interbancária de Serviços de Moçambique (SIMO) to become the future national switch. BM is the majority shareholder of SIMO, whose Chairman is a BM's senior staff member. BM has successfully gathered commitment from banks (through Memorandums of Understanding) to invest and participate in the switch. The project is expected to cost \$ 17 million. BM intends to provide free interbank transactions.

<sup>10</sup> Regulated by Aviso 09/2005.

<sup>&</sup>lt;sup>9</sup> All systems run SAP.

 $<sup>^{11}</sup>$  Systemically important systems are those which, due to the volume or the nature of their businesses, can create risk to the solidity and normal functioning of the financial system. <sup>12</sup> Standard Bank and Milleniumm BIM.

<sup>&</sup>lt;sup>13</sup> Mauritius Commercial Bank and First National Bank.

#### 2.1.3 Zimbabwe

#### **General Overview**

The Zimbabwean population is characterized by high poverty, underemployment, and high measures of human capital, such as literacy. When viewed in light of the country's recent bout of hyperinflation, these factors suggest that sound policy and macroprudential environments could mobilize economic development and financial inclusion.

**Utilization of financial services in Zimbabwe is limited, but low utilization does not issue exclusively from limited access.** Pre-dollarization prevalence of bank accounts in Zimbabwe was 37%<sup>14</sup>, but current estimates place bank account penetration at 8%<sup>15</sup>. The period of hyperinflation from 2007 – 2008 resulted in a widespread lack of trust in financial institutions to be reliable stewards. Consequently, the decline in bank account penetration is largely the result of Zimbabweans opting out from participation in the formal financial system. There is therefore a significant portion of the population that most likely has access to financial services, but chooses not to be users of such services. As one focus group participant in Harare put it, "we Zimbabweans have lost our love of the banks."

Much financial infrastructure is limited to bank customers. Bank branch, POS, and ATM channels are only available to existing bank customers. The inaccessibility of payments infrastructure to unbanked customers is likely to further depress financial inclusion.

Mobile phone penetration in Zimbabwe is high relative to other countries in the region. There are roughly 72 mobile phones per 100 inhabitants in Zimbabwe. Given many Zimbabweans' distrust of the financial sector, financial services mediated by mobile phone may provide a level of transparency that can restore a measure of trust; alternately, Zimbabwean consumers may be wary of financial instruments issued in conjunction with banks.

#### **Overview of Electronic Payments Infrastructure**

Zimbabwe's major payment platforms are:

- Zimbabwe Electronic Transfer and Settlement System (ZETSS), an RTGS platform
- 2) ZimSwitch, a retail payment switch

ZETTS is owned and operated by the Reserve Bank of Zimbabwe and serves as a platform for interbank settlements. ZimSwitch connects the retail payment channels of 19 banks in the country and operates as a private entity. At present, ZimSwitch transactions are settled on ZETTS, but there are plans to introduce a dedicated retail payments platform, the ZimSwitch Instant Payment Interchange Technology (ZIPIT).

<sup>&</sup>lt;sup>14</sup> GSMA Mobile Money Tracker

<sup>&</sup>lt;sup>15</sup> As estimated by the Zimbabwe Deposit Protection Board. The soon to be released FinScope Zimbabwe 2011 survey findings will provide an updated, representative figure.

Notably, Zimbabwe at present still lacks an electronic cheque clearinghouse. Hyperinflation saw profound reductions to the utility and use of cheques, as they would lose most of their value during the time it took them to clear. Today, cheques are little-used and it is unlikely that they will return at scale.

#### 2.1.4 Zambia

#### **General Overview**

Zambia's has higher levels of human development when compared to Zimbabwe, Malawi and Mozambique, but poverty reduction remains a great challenge for the country. Nearly 70% of the largely rural and agrarian population is below the poverty line, and another large proportion has no access to essential services that are more prevalent in urban areas, such as drinking water and electricity.

Access to financial services is low. The financial sector and informal providers of financial services have together reached only 37.3% of the adult population<sup>16</sup>. The financial services industry has so far focused on corporate and high net-worth clients in urban areas. This is partly explained by the costs of doing business in rural areas, given the poor infrastructure, but also the comfortable profitability of urban high incomer earners.

There has been a slight improvement in the level of financial inclusion from 2005 to 2009 according to FinScope surveys, but the majority of adults remain with no access formal products to meet their savings, payment, credit and insurance needs. The FinScope *Access Strand* reports that nearly 63% of the adult population is completely excluded, and another 14% has access to informal services only (see Figure 6). Bank services are largely available to account holders only.

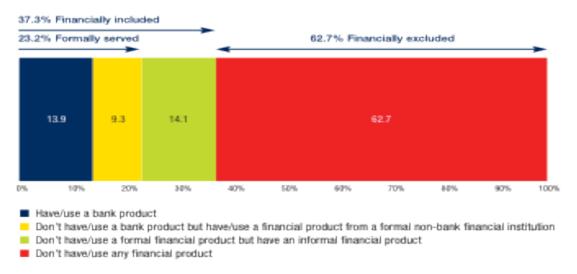


Figure 6: FinScope Access Strand - Zambia

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<sup>&</sup>lt;sup>16</sup> Zambia FinScope 2009.

Emerging innovations have the potential to change the financial inclusion landscape. They have been increasing access to basic payments and transfer services to unbanked users and improving convenience to the previously banked. These innovations are offered mostly by nonbank entities, and include mobile money, bill payments through POS devices, and airtime top up through ATMs, POS and mobile phones. The two largest mobile network operators (Airtel and MTN) have launched their mobile money services recently. Their commercial efforts concentrate on urban areas, but they are growing their agent networks to reach extensive areas across the country. They are also exploring partnerships with banks to expand their product offer. Celpay, another mobile money provider, has been in operation for longer but focuses on corporate clients rather than individuals. An array of similar or complementary payment services is provided by other nonbanks such as Zoona (formerly Mobile Transactions Zambia Ltd, which provides several electronic payments to individuals and small enterprises), Kazang (airtime and bill payments<sup>17</sup>), Mobile Payment Solutions (mobile payments applications), and Calltrol (card services, ATM network mainly in rural areas).

Banks have shown limited interest in serving lower-income segments, with the notable exception of Zanaco, one of the largest banks. Zanaco offers Xapit, a simplified account operated through mobile phones. In general, there is still a considerable reliance by the bank sector on cash-based transactions conducted at cashiers.

Bank branches, ATMs and POS are highly concentrated in Lusaka, Zambia's capital, offering a relatively good physical access to urban bank clients and potential clients, while leaving the majority of rural dwellers underserved. POS and mobile money agents are the most ubiquitous touch points in the financial services industry today. There are 36.1 mobile money agents per 100 thousand inhabitants, and only 2.20 bank branches<sup>18</sup>. The post office (Zampost), with 127 branches<sup>19</sup>, also provides some financial services. Its Swift Cash is the preferred domestic remittance product in Zambia. The use of other nonbank agents by banks is still in infancy stages. In additional, nearly all banks provide mobile and internet banking to their existing customers.

**Mobile phone penetration is much higher than that of financial services.** Mobile phone penetration has grown steadily over the last few years. In March 2011, there were 8.1 million mobile subscriptions<sup>20</sup>, and 72% of urban adults owned a mobile phone in 2009 (against 31.5% in rural areas)<sup>21</sup>. Mobile phones are seen by nearly all financial service providers surveyed as the instrument with the highest potential to tap the currently unmet demand for financial services by the majority of the population.

#### **Overview of Electronic Payments Infrastructure**

The electronic payments infrastructure in Zambia consist of the following systems:

<sup>&</sup>lt;sup>17</sup> Kazang also plans to provide domestic money transfers.

<sup>&</sup>lt;sup>18</sup> Source: Bank of Zambia and interviews with providers in Lusaka, April 2012.

<sup>&</sup>lt;sup>19</sup> Source: interview with Zampost, April 2012.

<sup>&</sup>lt;sup>20</sup> Source: Zambia Information and Communications Technology Authority.

<sup>&</sup>lt;sup>21</sup> Source: Zambia FinScope 2009.

- 4) Zambia Interbank Payments and Settlements (ZIPSS), a real time gross settlement (RTGS) platform run by Bank of Zambia. Participation is limited to banks.
- 5) Zambia Electronic Clearing House Limited (ZECHL), the privately owned and managed clearinghouse. Only banks participate.
- 6) Zamlink, a privately run and managed bank switch.

Although Zamlink does not offer any particularly undue entry or operating obstacles, the majority of banks have not joined it for a variety of reasons. Rather, they use their own proprietary switches to conduct interbank transfers on a bilateral basis. ZECHL also presents inefficiencies related to the lack of automatic straight-through processing, which affects the speed of interbank transfers. Many of our interviews suggest that the public may perceive interbank transfers as unattractive because they take too long. Inefficient processing at ZECHL and the lack of a bank switch that is used by the majority of banks are obstacles for increasing access to and adoption of electronic payments by retail customers.

The Bank of Zambia is working with the industry to address these weaknesses. It plans to implement straight through processing for transactions cleared at ZECHL in the coming year. In addition, it is also leading the implementation of a national common switch to be housed at ZECHL, which would have great potential impact on the cost, efficiency and availability of electronic retail payments.

#### **2.1.5 Summary**

The foregoing information is the backdrop against which the markets for retail payments in Malawi, Mozambique, Zimbabwe, and Zambia can be evaluated. What emerges from background information presented here is a view of four different countries with certain common characteristics, namely:

- 1) High levels of financial exclusion
- 2) Concentration of financial services offerings in urban areas
- 3) Explosive growth of mobile telephony as a service and a platform

A telling comparison is the prevalence of mobile phones to the prevalence of bank branches. Figure 7 plots these rates against each other for Malawi, Mozambique, Zimbabwe, and Zambia, and a sample of additional countries in the region. Each country appears as a bubble whose area is defined by the size of its adult population. A bubble's position on the chart is given by the number of mobile subscriptions per 100 inhabitants<sup>22</sup> and the number of bank branches per 100,000 inhabitants.<sup>23</sup> Malawi and Mozambique lag behind the region in mobile phone penetration, and its recent surge in mobile subscriptions places Zimbabwe near the regional median. Low bank density throughout the region suggests that successful regional strategies for financial inclusion will not rely solely on extensions of bank branch networks.

<sup>&</sup>lt;sup>22</sup> International Telecommunications Union, 2011 data

<sup>&</sup>lt;sup>23</sup> The International Monetary Fund's Financial Access Survey, 2011 data

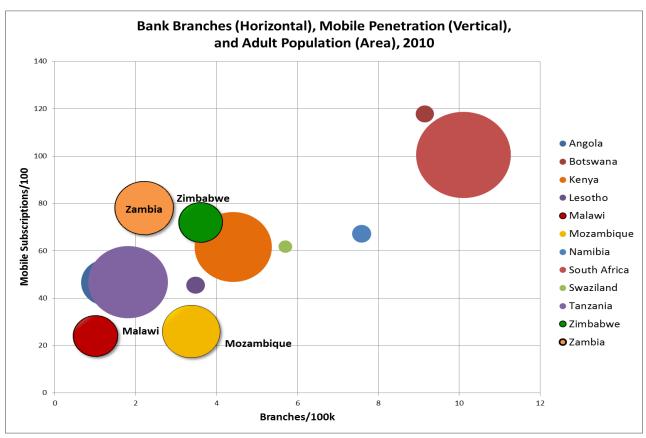


Figure 7: Comparison of bank branch and mobile phone penetration, by adult population in a regional sample.

With a sense of baseline measures, we now discuss the environmental factors that, if managed carefully, can enable development of inclusive finance. Section 3 develops and applies a framework for thinking about the levers of market development.

### 3 Openness and Certainty: Tools for Assessing the Regulatory Landscape for Retail Payments

#### 3.1 Introduction to Openness and Certainty

We can identify two factors of particular salience to subsequent market development in new sectors: openness and certainty. In broad terms, **Openness** is a measure of the policy environment's receptivity to the entry of new providers and products. **Certainty** concerns the clarity of the legal environment in which market actors operate.

This section assesses Openness and Certainty in the context of national payment system (NPS) development and retail payment system innovation. To that end, it:

- 1) Explains each dimension for retail payment systems,
- 2) Situates Malawi, Mozambique, Zimbabwe, and Zambia within the Openness and Certainty framework, and
- 3) Identifies the policy levers to be used to advance development of the retail payments landscape within each country.

The Openness and Certainty framework provides us with useful tools with which to consider retail payment system development, but, for the framework to be robust in a cross-country comparison, it requires measurable proxies that are common across each country under consideration. The World Bank's Global Payment Systems Survey (herein referred to as "the Global Survey") is one of the only standardized, holistic assessments of financial markets infrastructure. The survey is fairly comprehensive and it was completed in 2007 by central bank staff from 142 respondent countries, so it presents a broad view of payment system development at the time of the survey. This section uses data from the Global Survey and from other sources to characterize regulatory environments along the dimensions of Openness and Certainty.

#### 3.2 Defining Openness and Certainty for Retail Payment Systems

For the present study of retail payments, we have defined Openness and Certainty in such a way as to make reference to measurement proxies as directly as possible.

#### **Openness**

Openness is an assessment of the ease of market entry by non-banks. We calculate openness as a function of

- 1) Licensing requirements for different types of nonbank payment activities
- 2) Nonbanks' ability to issue e-money in stored-value accounts
- 3) Regulatory proportionality in the application of Know Your Customer (KYC) rules

#### Certainty

We assess national payment system regulatory certainty as the comprehensiveness of legal provisions to manage payments risks. Salient elements of the measure concern:

- 1) the breadth of legal concepts covered by existing law and regulation; and
- 2) the degree to which the central bank's powers of payment system regulation are defined explicitly in law.

Each of the sub-dimensions of Openness and Certainty is explained in fuller detail in the Annex.

<sup>&</sup>lt;sup>24</sup> One shortcoming of the Global Survey is its age. It was published in 2008 using data collected primarily in 2007. At the time of writing, a 2010 update to the survey is expected to be published within a few days.

#### 3.3 Application of the Openness and Certainty Framework

Application of our scoring methodology for Openness and Certainty (detailed in the Annex) produces the content in Figure 8. For reference, we include a sample of reference countries that have pursued divergent regulatory regimes.

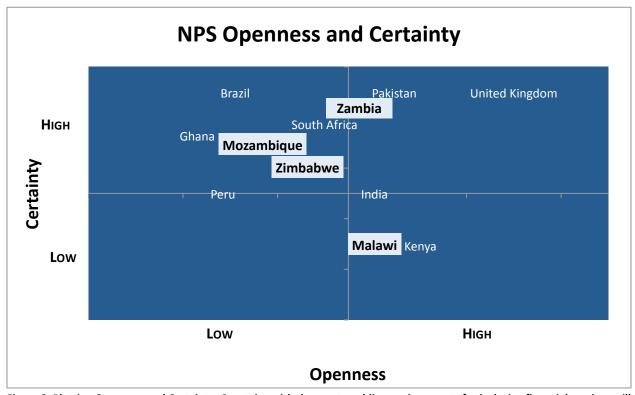


Figure 8: Plotting Openness and Certainty. Countries with the most enabling environments for inclusive financial services will be located in the top-right quadrant.

Reference countries help to place Malawi, Mozambique, Zimbabwe, and Zambia along continua of Openness and Certainty. It is useful to examine some of the characteristics that influence the placement of reference countries on this plot. For example:

- South Africa, Pakistan, and the United Kingdom have all given their central banks explicit powers to operate, regulate, and oversee their countries' payment systems. This explicit empowerment, coupled with the breadth of legal concepts concerning insolvency and contractual relationships between parties to a transaction, results in a high Certainty score across these three countries.
- The position of these three countries in different quadrants is a function of their openness to market entry by nonbanks. For example, the UK does not require specific licenses for nonbank financial institutions, clearinghouses, central counterparties, central securities depositories, money transfer operators, and payment card operators. The situation in South Africa is quite different, as all but payment card companies are required to obtain a specific license in order to do business. In both

the UK and Pakistan, nonbanks are permitted to issue e-money, while they are prohibited from doing so in South Africa.

• Just as South Africa, Pakistan, and the UK form an upper bound on Certainty along a continuum of Openness, Ghana, and Peru form a lower bound on Openness along a continuum of Certainty. Ghana is awarded a moderately high certainty score because it has passed a payment system law that gives its central bank explicit powers to operate, regulate, and oversee payment systems within the country, even as the existing law does not cover the full panoply of legal concepts germane to settlement finality, securities custodianship, and electronic payments. By contrast, Peru's low Certainty score issues primarily from the central bank's lack of any formal authority to oversee payment systems<sup>25</sup>. Both countries have low scores on the Openness measure due to their restrictive licensing regimes, proscription against nonbank issuance of e-money, and faint-hearted embrace of proportional KYC requirements for account opening.

The utility of the Openness and Certainty scoring lies in its placement of countries within quadrants rather than the precision of the scoring. While the goal for any country is to have an NPS environment open to innovation while providing sufficient regulatory certainty, a country's location in a given quadrant (e.g. Low Certainty, High Openness) offers a clear indication of the thrust of reforms.

In the remainder of this section, we describe the present positions of Malawi, Mozambique, Zimbabwe, and Zambia and chart options for their further development.

#### Malawi is characterized by its low Certainty and moderately high Openness.

*Openness*. Malawi permits MNOs<sup>26</sup> to issue e-money, but it has not implemented a tiered KYC requirements regime proportionate to the risk posed by customer and account type. These factors work in opposition to each other and contribute to the country's moderately high Openness score.

Certainty. Malawi scores low on the Certainty measure because it at present still lacks clear provision of oversight. While there are guidelines on legal concepts such as settlement finality and third-party claims to posted securities and collateral, they are not issued by a regulator with clear legal authority to do so (e.g., via a Payment Systems Law). Instead, the rules are effected by the payments platforms themselves (e.g., MALSWITCH). Consequently, these rules could be subject to change based on new staff or administrative procedures at these bodies. This lack of payments certainty situation could be improved by the passage of NPS legislation. Malawi is making progress towards improving its openness score: a National Payment System Bill has been submitted to parliament and draft agent banking guidelines have been developed.

<sup>&</sup>lt;sup>25</sup> It is important to note that due to different jurisdictions over market activity the Bank Superintendence in Peru is developing a law on e-money, expected to be issued in 2012.

<sup>&</sup>lt;sup>26</sup> For our purposes, the permissions accorded to MNOs are salient due to the companies' status as nonbanks.

#### Mozambique is characterized by moderately high Certainty and low Openness.

Openness. There are a variety of licenses required of nonbanks that wish to provide payment services; indeed, each type of payment service identified in the Global Survey requires a separate license. Additionally, nonbanks are not permitted to issue e-money. Finally, Mozambique pairs a lack of risk-based KYC requirements for account opening with low levels of identity documentation prevalence among the public at large. These factors combine to depress the country's Openness score.

*Certainty*. Mozambique has a relatively strong law on payment systems that explicitly grants the Bank of Mozambique powers to operate, regulate, and oversee payment systems.

#### Zimbabwe is characterized by moderate Certainty and moderately low Openness.

Openness. Zimbabwe requires specific operating licenses for nonbank financial institutions, clearinghouses, central securities depositories, money transfer operators, and payment card operators, suggesting less openness to new services and market entrants. While there are no formal e-money rules on the books, the Reserve Bank of Zimbabwe (RBZ) has authorized some nonbank service providers to offer stored-value accounts on a case-by-case basis. Despite the lack of formal e-money rules, RBZ's consultative engagement on e-money issuance decisions raises the country's score on this sub-dimension. However, Zimbabwe's overall Openness score is depressed by the lack of risk-based KYC rules for account opening.

*Certainty*. Zimbabwe has a law on payment systems that explicitly grants RBZ powers to operate, regulate, and oversee payment systems. Zimbabwean law covers some, but not all, of the legal concepts concerning settlement finality detailed in the Annex. Combined, these factors result in a moderate Certainty score.

#### Zambia is characterized by its moderately high Certainty and moderately high Openness.

Openness. Zambia permits a variety of nonbanks to issue e-money and there is a framework for them to use nonbank agents. There is also a lack of level playing field between banks and nonbanks, since the former is not yet allowed to use agents. Lastly, there is no tiered KYC requirements regime applicable to both banks and nonbanks. These characteristics combined contribute to the country's moderately high Openness score.

Certainty. Zambia scores high on the Certainty measure because a NPS law furnishes the Bank of Zambia with clear regulatory, supervisory, corrective and investigative powers. The licensing of bank and nonbank payment service providers is transparent, non-discriminatory and based on pre-established common criteria. The regulator's vision and positioning are generally well understood by the market, which is reinforced by the existence of formal policy documents. However, there are no clear provisions on oversight of payment systems and providers and specific operating and prudential requirements for

the e-money issuing business and other electronic payment instruments. The Bank of Zambia is currently working on draft regulations to address these gaps, in consultation with the industry.

#### 3.4 Using Openness and Certainty to Chart a Way Forward

Having plotted countries' starting positions within the Openness and Certainty framework, we can now outline some basic steps that can be taken to move in the direction of the high-openness and high-certainty quadrant. Generally, most of the actions implied by this framework concern Openness and how it might be improved.

**Payment systems laws increase certainty.** Mozambique, Zimbabwe and Zambia have relatively strong laws on payment systems that delegate broad authority to their central banks to *operate, regulate, and oversee* their countries' payment systems. As their placement on the Openness and Certainty plot in Figure 7 suggests, the clarity of their payment systems oversight rules improves the Certainty scores in the four countries.<sup>27</sup>

Here, Malawi is an outlier. Arguably, the greatest spur to certainty in the Malawian payment services market could be achieved by the passage of a law on payment systems – currently at bill stage. While the law on the central bank confers authority for the RBM to provide for the safety and soundness of the country's NPS, this type of vague authority is an inferior substitute for a payment systems law that provides the central bank powers to operate, regulate, and oversee payment systems within the country.

**E-money standards increase openness.** Malawi, Mozambique, Zimbabwe and Zambia all scored in the middle of the e-money sub-dimension of Openness, and this score can be improved with the adoption of clearer positions on the e-money developments taking place in-country. For example, Malawi permits MNOs to offer e-money services, but there is no standard definition of e-money itself in regulations or laws. Likewise, there is no explicit regulatory framework for electronic money or stored value in Zimbabwe and Zambia. While e-money is defined in Mozambique, the legislation that established this definition of e-money deferred to future legislation for the scope of nonbank institutions that would be permitted to offer e-money instruments. At the time of writing, no such legislation has been passed. Until a legal framework for non-bank institutions is introduced, Mozambique's initial work on e-money will be less effective. This thus reduces the country's Openness score.

**Tiered KYC rules can increase openness.** By reducing the identity documentation and verification requirements for a class of low risk accounts, regulators could grow the market for payments services by a) decreasing the cost to providers of supplying such accounts and b) increasing the population of eligible accountholders. Neither Malawi, Zambia nor Zimbabwe have such a graduated KYC scheme, and, while Mozambique permits tiered KYC requirements, the general dearth of identity documentation in the country blunts the salutary effects of the country's position on KYC. In Zambia, the KYC regime is

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<sup>&</sup>lt;sup>27</sup> Please see the Annex for a fuller enumeration of the concepts included in the Certainty measure

relatively flexible, but requires verification of client information, which can be a significant burden in practice, particularly for low-value accounts, rural areas and low-income clients. BOZ issued a Practice Note in 2011 to urge adoption of risk-based approaches, but the market continues to be conservative in their controls, due to the lack of a tiered regulatory framework.

#### Summary

Applying the Openness and Certainty framework to Malawi, Mozambique, Zimbabwe, and Zambia is a reductionist exercise, but it is useful for the way in which it focuses attentions on the policy levers that can enable the development of transformational financial services.

Bearing in mind the implications of the Openness and Certainty framework, we use Section 4 to examine the findings from stakeholder interviews in Malawi, Mozambique, Zimbabwe and Zambia. Where the Openness and Certainty framework identified *broad-based*, *environmental* factors, the thematic analysis that follows will advance discussion of *locally identified*, *contextual* factors that bear on retail payment services.

#### 4 Emergent Themes

In this section, we take a broad view of the themes that emerge from our research in Malawi, Mozambique, Zimbabwe and Zambia. Where the foregoing discussion of Openness and Certainty provided an *a priori* analytic framework that could be applied to any country, this section draws from the experiences of each country to construct a list of themes common to Malawi, Mozambique, Zimbabwe, and Zambia. By providing these themes, we summarize the state of play across the four countries. We do this to form a bridge between the general policy actions suggested by the analysis of Openness and Certainty and a set of discrete, regionally calibrated priorities for the region in Section 6.

From this view, three thematic clusters emerge:

- 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 centers 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 behavioral aspects of payment services usage and addresses how consumers prioritize and rank the services available to them.

Generally, focus group discussions revolved around the availability, ease of access, affordability, and reliability of payment services.

Each theme comprises a number of framing questions that we use in the discussion below to explore the theme:

Theme	Framing Questions
	Holistic NPS strategy
	2. Coordination strategy with regulatory bodies
Government	3. Position on the use of stored value and e-money
Policy	4. Participation in the NPS
Measures	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
Access	10. Flexible account opening
Barriers	11. Agent network development
	12. Market for third-party providers
	13. Cost of expanding distribution network
	14. Primary factors in payment instrument selection
	15. Perceptions of formal financial institutions
Consumer	16. Attitudes toward electronic payments
Perspectives	17. Importance of payment channels
	18. Use and nature of informal tools
	19. Consumer interest in new services

#### 4.1 Government Policy

# 1 GOVERNMENT POLICY: HOLISTIC NPS STRATEGY IS THERE A STRATEGY THAT GUIDES REGULATORY PRIORITIES?

The work on crafting NPS development strategies in Malawi, Mozambique, Zimbabwe, and Zambia is at once encouraging and incomplete. NPS development goals are not clearly identified in Zimbabwe, but Malawi, Mozambique and Zambia offer different approaches to setting and realizing NPS development goals. Broadly construed, these approaches can be understood by their area of focus: retail payment systems and large-value payment systems.

Retail payment system development can be integrated into financial inclusion objectives. Malawi's efforts in NPS development strategy-setting have primarily revolved around efforts to deepen financial inclusion. To that end, it has articulated an NPS development strategy that integrates with the country's financial inclusion strategy. Through the efforts of the central bank and a multi-stakeholder national payments council, Malawi has promoted the adoption of electronic payments infrastructure. The regulator's efforts to establish a national switch through the investment of participant banks has the potential to reduce transaction costs to consumers and, ultimately, spread the reach of financial services.

Large-value payment system development is an essential input to retail payment system development. Where recent efforts in Malawi have focused on the establishment of a retail payments infrastructure, much of the NPS strategy in Mozambique has concerned the development of large-value payment systems. The central bank has sought—with considerable success—to modernize the country's RTGS and facilitate interbank transfers. The NPS strategy is less clear on discrete steps for developing the retail payments system, but cheque-clearing and integration into a regional RTGS within SADC will reduce the costs of retail payment services in the medium term.

Strategies for "next generation" policy issues are not yet clear. Despite generally brisk progress on extant NPS strategies, there is little clarity on discrete strategies regarding agency rules for banks and nonbank payment service providers, stored value accounts and e-money, and interconnection and its attendant pricing issues. Malawi, Mozambique and Zimbabwe are actively seeking solutions for ongoing issues, the challenges of which are leaving little opportunity to coalesce around a vision or scenario of the next generation of financial access opportunities and obstacles.

Zambia stands out in the group for having a formal development policy integrating both retail and large value payment systems. The translation of such goals in formal documents articulated and implemented through working groups comprised of government and industry representatives creates a high level of clarity and certainty with regard to the planned steps, even though not all the details of each measure have been unveiled or agreed upon among the involved parties. This set up creates a good environment for identification and discussion of next generation policy issues.

#### GOVERNMENT POLICY: COORDINATION STRATEGY WITH OTHER REGULATORY BODIES

#### DOES NPS DEVELOPMENT IMPACT OTHER AREAS OF REGULATION?

There is considerable scope for policy rationalization through closer regulatory coordination in Malawi, Mozambique and Zimbabwe. While informal coordination appears to be relatively common, institutionalized channels for policy coordination are few. Malawi's E-Banking Task Force is a good example of internal coordination among the Banking and Payments departments at the Reserve Bank of Malawi, as referenced below. The Bank of Mozambique has also created its own E-Banking Working



Group. All four countries would benefit from more coordination such as this, within the central banks as well as across institutions (e.g. with the respective ministries of finance.). Zambia is ahead for having put in place a more formal coordination mechanism stemming from its Financial Sector Development Plan and related working groups.

**G2P** payments are an avenue for intra-governmental coordination. As the largest-scale payer and payee in a country, the government is well-positioned to effect NPS reforms (quite apart for its rule-making powers) through the force of example. G2P payments have the potential to spur this sort of intra-governmental coordination, but the experience in Malawi, Mozambique, Zimbabwe, and Zambia suggests that it is underutilized. Zambia is starting the process to shift its national cash transfer program to electronic payments, but there is room for other initiatives, such improving electronic salary payments for government employees.

Payment system development strategies offer a channel for central bank and finance ministry coordination. Here, Malawi serves an example of how meaningful dialogue and coordination can be put into practice. The Ministry of Finance and Reserve Bank of Malawi have jointly articulated strategies for NPS development and financial inclusion. These policies were affected through bodies such as the National Payment Council and the E-Banking Task Force and highlight the utility of formalized coordinating bodies. No such formal coordination or joint initiatives have been pursued in Mozambique or Zimbabwe, but are found in Zambia, as previously noted.

GOVERNMENT POLICY: 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?

Stored value instruments permit the conversion of currency into electronic value that can be recognized and traded by banks, nonbanks, and individuals alike. As such, stored value instruments form the backbone of many innovative retail payment platforms; the most prominent of these platforms is emoney. There are two issues that emerge from a consideration of e-money policy action in Malawi, Mozambique, Zimbabwe and Zambia:

- 1) A lack of regulatory clarity
- 2) Missing infrastructure that would support e-money offerings

**Extant rules lack clarity.** Neither Malawi nor Zimbabwe has clear rules on e-money issuance in the form of laws or regulations, and it is reasonable to assume that this policy vacuum inhibits market development through uncertainty. In Zambia, although there are no specific e-money rules, the Bank of Zambia has been authorizing nonbanks to issue e-money, under the existing money transmission regulations.

It is possible that this lack of regulatory certainty will influence the four countries differently:

- The Reserve Bank of Malawi has established an e-banking taskforce, and, while its guidelines are
  nonbinding, it has recommended that would-be mobile payment service providers partner with
  commercial banks to launch their service offerings. This guidance, coupled with Malawi's
  common law background, suggests that nonbanks can offer e-money instruments in partnership
  with commercial banks.
- In the absence of clear rules, the Reserve Bank of Zimbabwe's case-by-case approach to authorizing e-money offerings may introduce a *de facto* standard of nonbank-commercial bank partnerships to issue e-money. The hybrid common law and civil law legal tradition in Zimbabwean commercial law does not endorse applications from nonbanks that do not partner with commercial banks.
- The Bank of Zambia has adopted the policy of consistently approving new market players that meet minimum requirements of the money transmission regulations. This has allowed the market to take initial steps towards development, and has given room for innovation by nonbanks. The regulator is now working on setting minimum operational and prudential rules for e-money issuers, in close coordination with the industry.

While Mozambique is furthest along in its development of e-money rules, those rules remain incomplete and the pace of development is slow. As noted in Section 3, Mozambique has passed legislation defining e-money but that legislation delegated to future legislation the task of articulating the scope of nonbank institutions that would be permitted to offer e-money instruments. At the time of writing, no such legislation has been passed. The Bank of Mozambique has identified the next steps in the regulatory process, articulated by the recently created E-Banking Working Group.

Environmental factors that support e-money instruments are underdeveloped. Most examples of successful e-money-based payment services have been implemented in contexts where a single provider has dominated the market (e.g., M-Pesa in Kenya on the back of mobile operator Safaricom's dominant market share). Whether such market dominance is a necessary condition of implementation is unclear, but it does suggest that certain characteristics of such uneven markets favour transformational e-money deployments. Those characteristics include standardized infrastructure and transaction ease between users of the service. In practice, these characteristics suggest that the number and success of e-money service offerings will depend not only on the clarity of e-money rules but also on the thoroughness of interconnection between various services.

4 GOVERNMENT POLICY: PARTICIPATION IN THE NPS
WHO IS ELIGIBLE TO PARTICIPATE IN THE NPS, AND WHAT IS THE SCOPE OF THEIR PARTICIPATION?

Participation in the formal channels of national payment systems in Malawi, Mozambique, Zimbabwe and Zambia is largely restricted to banks through a combination of *de jure* and *de facto* policy.



Nonbank participation in the NPS is largely proscribed by formal rules. In Malawi, only financial institutions—defined as banks and MFIs—are permitted to participate in the national payment system. Here, a national payment systems law, if passed, could open participation in the regulated NPS by officially distinguishing between payment services on the one hand and traditional, full-service banking services on the other. Nonbanks must partner with banks in Zimbabwe to offer payment services, as the Reserve Bank's NPS department has oversight authority that extends only to financial institutions, which are defined as banks.

Informal practice excludes nonbanks, even where there are no formal rules restricting their participation in the regulated NPS. Although Mozambique's payment systems law addresses nonbank payment service providers and empowers their supervision by the central bank, only banks, Interbancos, and Carteria Móvel are formal participants in the payment system, highlighting an institutional focus on a small percentage of the market who are sufficiently affluent to merit investment in electronic payments as additive services. In Zambia, nonbanks have formed the Payment and Money Transfer Association, and there are plans by Bank of Zambia to allow nonbanks to participate in the national payment system, including the upcoming national bank switch. This goal is also articulated in the country's Financial Sector Development Plan.

GOVERNMENT POLICY: EXCHANGE CONTROL RULES

UNDER WHAT CONDITIONS DOES FOREIGN CURRENCY ENTER OR EXIT THE MARKET, AND HOW

DOES THIS INFLUENCE THE AVAILABILITY OF SERVICES?

There are few formal barriers to the entry of foreign exchange in Malawi, Mozambique, Zimbabwe and Zambia. For example, incoming foreign currency is welcomed as it fuels domestic purchasing power for remittance receivers. As such, regulators explicitly noted that they had no interest in creating barriers for remittance oriented foreign exchange transactions. However, current business practice makes it expensive and inconvenient for most to conduct such transactions.

Banks apply tight rationing rules to retail-level foreign exchange transactions. Foreign currency (be it dollars or Rand) is accepted more broadly by international partners as a settlement medium than the local currencies in Malawi, Mozambique and Zambia. Accordingly, banks tend to conserve foreign currency to support and service their large customers who may need it to purchase capital equipment and materials from abroad or use it as collateral in their own cross-border operations. Consequently, foreign currency for use by retail-level customers is tightly rationed.

The mobility of money transfer operator-mediated foreign currency within Malawi and Mozambique is constrained by current business practice. To preserve market share, money transfer operators will not make cross-platform transfers. For example, if money is wired from the US to Malawi via Western Union, the local Western Union branch in Lilongwe will not transfer those funds to the Moneygram



branch in Balaka, due to contractual exclusivity agreements with the respective local bank partner. Thus, the end recipient of funds will have to travel to the specific operator outlet to collect those funds. When foreign currency enters the market, it is therefore "sticky" with regard to point of entry. The lack of mobility of funds constrains the introduction of foreign currency at the retail level. In Zambia the issue of foreign exchange rationing has not been specifically noted as a barrier, although pricing practices create undue costs for small remitters and recipients, particularly when money is sent from South Africa.

Rationing of foreign exchange in Zimbabwe is very limited. Since the government of Zimbabwe abandoned the Zimbabwean dollar in favor of foreign currencies such as the US dollar and South African Rand, there have not been discernible controls on either the volumes or amounts on foreign exchange transactions in the country, nor are there formal reporting rules on foreign exchange transactions. In interviews, banks reported that their primary concern regarding foreign exchange was simply meeting their customers' demand for cash reserves; no informal barriers were mentioned by respondents.

GOVERNMENT POLICY: LEVEL PLAYING FIELD FOR MNOS AND BANKS IS THE MARKET OPEN TO ALL PLAYERS, REGARDLESS OF NATURE, SIZE, SCALE AND COMPLEXITY?

Existing rules on market participation often mean that competition across different types of market

actors is uneven. For example, the uneven application of agency rules across banks and nonbanks tends to favor nonbanks, but, as they are developed, e-money rules may end up favoring banks. It is unclear whether or how such uneven regimes may ultimately favour certain actors or business models.

MNOs are advantaged by extant agency rules. At present, banks in Malawi and Mozambique are prohibited from using agents for account opening and service while MNOs and other nonbanks are not. The Reserve Bank of Malawi has developed draft agent banking guidelines, but the rules for bank agents would place them at a disadvantage vis-à-vis MNO agents. Although banks are not clearly prohibited from using agents, the absence of a specific regulation may work as a deterrent. The Bank of Zambia is drafting agent banking guidelines, but it is not clear whether it will level the playing field between banks and nonbanks. There are no formal rules restricting the use of agents in Zimbabwe, and any service that intends to use agents as a part of its business model must seek a letter of permission from the National Payment System Department of the Reserve Bank of Zimbabwe. These letters are issued on a case-bycase basis.

But rules on e-money and stored value may end up advantaging banks. There is little official guidance on e-money and stored value accounts in Malawi, Mozambique, Zambia and Zimbabwe. Neither Malawi nor Zimbabwe prohibit nonbanks from issuing e-money, but, given that NPS participation in these countries is restricted to banks, it is likely that any forthcoming rules on stored value and e-money are likely to favor models that are either bank-led or nonbank-bank partnerships. Independent nonbank issuance of e-money or stored value accounts is unlikely. Mozambique has yet to specify the rules on



whether nonbanks will be permitted to issue e-money or stored value accounts, which would be applicable to nonbanks like Carteira Movel. Zambia stands out for sending clearer signs of the regulator's desire to allow e-money issuing by nonbanks in equal foot to banks, both by setting common minimum standards in an upcoming e-money regulation and by allowing participation of nonbanks in the payment system infrastructure.

7 GOVERNMENT POLICY: PROMOTION OF INTERCONNECTION
HOW INVOLVED IS THE REGULATOR IN PROMOTING INTERCONNECTION AMONG FINANCIAL

INSTITUTIONS?

Interconnection appears to be a priority of central banks and (prospective) market actors in Malawi, Mozambique, Zambia and Zimbabwe.

Central banks are grappling with technical and tactical questions of how to effect interconnection in their areas of remit. Central banks in all four countries are keen to promote interconnection as a means of greater payment system efficiency, financial inclusion and consumer welfare, but they differ slightly in their tactics for implementing an interconnected system.<sup>28</sup> In Malawi and Zimbabwe regulators have deployed their "soft power" to promote interconnection, rather than via a regulatory mandate. The Bank of Mozambique's and Bank of Zambia's push to promote a national switch have relied on more active forms of advocacy<sup>29</sup>. In Mozambique, banks have offered some resistance, seeking to protect the sunk costs of payments infrastructure development. In Zambia, a consultative approach has resulted in a higher level of acceptance in the overall future model, although agreement on the amount to be invested by each participant, including nonbanks, is still a pending topic.

In Malawi, Zambia and Zimbabwe, market actors desire interconnected platforms for their service offerings. In these countries, banks appear keen to establish a clear vision of interconnected services for at least two reasons. First, their decisions on payments infrastructure investment will benefit from a clear understanding of the interconnected future of retail payments. Second, they view interconnection as an opportunity for sharing the costs of reaching underserved markets.

Mozambican banks may resist push for interconnection Interbancos, the main switch in Mozambique, was initially intended by its founding members to be a universal switch for the country. With the departure of Standard from the switch and concomitant investment by Standard and other banks in their own payments infrastructure, it may be the case that Mozambican banks will view their

<sup>28</sup> Additionally, central banks in all four countries are interested promoting interconnection as a lever to effect greater payment system efficiency.

system efficiency.

<sup>29</sup> For example, the BM has encouraged banks to sign memoranda that commit them to participating in SIMO as part of their efforts to move a reluctant financial service industry closer towards interconnection of electronic services. The Bank of Zambia has also gathered formal agreement by banks to invest in the future national switch.



proprietary payment networks as a source of competitive advantage and resist an interconnection mandate that would dilute this advantage.

#### 4.2 Access Barriers

8 Access Barriers: Competition

WHAT ROLE DOES COMPETITION PLAY IN DRIVING INNOVATION, PRODUCT DESIGN AND PRICING?

Mozambique does not have a framework to address competition in the financial service market, exemplified by the limited innovations and complacency of financial institutions. However, Malawi and Zimbabwe appears to have fairly robust competition in their respective retail payments markets. Competition in Zambia is being driven by electronic retail payments.

Customer segmentation by banks affords competitive opportunities in Malawi. There is a clear division of the customer market for financial services in Malawi. On the one hand, the largest banks compete for the business of the relatively small, affluent population of Malawians. Additive services at competitive prices are the major outcomes from such competition. On the other hand, smaller banks are pursuing the largely untapped market for poorer Malawians. Here, innovation is concentrated on delivery channel and product types to reduce the costs of sustained provision of services.

The aftermath of financial instability has resulted in a competitive landscape in Zimbabwe. Zimbabwe is a special case apropos of competition. Due to high market exit by customers during the period of hyperinflation, banks compete to regain the trust of customers through the offering of new services such as mobile banking. In focus group discussions, consumers expressed high sensitivity to fees charged by banks and nonbanks alike for payment services. Consideration of this feedback in light of the recent proliferation of new payment products suggests that pricing may form the next area for competition.

The introduction of mobile financial services has the potential to sharpen competition. While the dominant status of Airtel in Malawi could pose threats to banks' ability to experiment with pricing, it is also possible that partnerships with the MNO could facilitate transfers across service providers, thereby promoting product feature competition. Competition between MNOs Econet and Telecel in Zimbabwe stands to heighten competition in pricing and product offerings. Zambia is characterized by a relatively large number of nonbank players (including MNOs) offering mobile phone and POS-based payments, which might increase competition in a more diversified product offering, and drive prices down. Future partnerships between these nonbanks and banks could potentially drive competition, by banks, for lower income segments that are today largely ignored by the bank sector.

9

ACCESS BARRIERS: BUSINESS RULES AND THE INCENTIVES FOR INTERCONNECTION

## How prepared is the market to organize and agree to an interconnected retail payment system across all channels?

There is a desire among regulators to promote interconnection through national switches, but the extent of participant buy-in is mixed.

Historically, banks in all four countries have focused nearly all of their efforts on serving small, high-income populations. Although not all banks in all countries are party to this trend, there is nonetheless a trend to move down-market by reaching out to middle- and low-income customers. Because these customers have been underserved in the past, there is little in the way of infrastructure and product lines in place to serve lower-income customers. Consequently, banks have a collective incentive to share the burdens of initial and fixed costs associated with increased outreach. Interconnection paradigms offer an opportunity to share these costs of expansion to new segments.

The banking sectors in Zambia, Malawi and Zimbabwe are generally supportive of the establishment of a national switch. MalSwitch, ZimSwitch and the future national switch to be implemented under the leadership of Bank of Zambia are supported by the banking sectors of Malawi, Zimbabwe and Zambia respectively as platforms for smoothing interconnection in the ATM and POS channels. In Zambia, however, it is not yet clear how the interests of nonbanks will be incorporated into the future national switch model.

Mozambique is the exception to this trend. There is lack of support for SIMO among the large banks that would be its primary users due, in part, to extant payment infrastructure initiatives that these banks have undertaken through Interbancos and proprietary platforms.

Mobile payments remain a wildcard for interconnection. To date, there are no rules concerning interconnection among mobile payment services. Given the dominant position of Airtel in Malawi, it is probable that interconnection regulation will meet with some resistance there unless it works to the advantage of Airtel's payment services strategy. In Zimbabwe, Telecel's and Zimswitch's mobile payment offering has helped banks develop non-exclusive models for mobile payments. It remains to be seen how Telecel's open model will compete with Econet's exclusive network. In Mozambique, Carteira Móvel (a licensed e-money issuer, and subsidiary of mCel) offers a mobile wallet, MKesh, and Carteira Móvel will be permitted to access Mozambique's RTGS. Vodacom is currently in negotiations with the Bank of Mozambique to offer M-Pesa; pending authorization, it, too, may settle through the RTGS. In Zambia, the coordination mechanisms set up by the Bank of Zambia for the development of the mobile payments industry will provide the right platform to create rules for interconnection to overcome the existing reluctance of mobile money providers to interconnect among themselves and with banks.

#### ARE THERE BARRIERS TO OPENING LOW-VALUE ACCOUNTS?

There are substantial barriers to opening low-risk accounts in Malawi, Mozambique, and Zimbabwe, and to a certain extent in Zambia, due to a combined lack of regulatory openness and certainty, and a tendency of banks to be overly conservative in setting account opening requirements. (For a fuller discussion, see Section 3.)

Tiered KYC rules are unsupported. The market for payment services is limited by identity and other documentation requirements for low-risk accounts. By reducing the documentation and verification requirements for a class of low risk accounts, regulators could grow the market for payments services by a) decreasing the cost to providers of supplying such accounts and b) increasing the population of eligible accountholders. As discussed in Section 3.4, Malawi, Zimbabwe and Zambia do not explicitly permit such a graduated KYC scheme, and, while Mozambique permits tiered KYC requirements, the general dearth of identity documentation in the country blunts the salutary effects of the country's position on KYC.

Focus group respondents in Mozambique, Malawi, Zimbabwe, and Zambia reported that documents and other requirements needed to open accounts are barriers to financial inclusion. In Mozambique, government identification and proof of address were mentioned as hindrances to accessing formal retail payment systems. In Zimbabwe, Zambia, and Malawi, some focus group participants reported that minimum account balances and monthly fees associated with opening a new account were prohibitively expensive. Banks interested in the down-market segments in Zambia and Malawi seem to be doing the best regionally at offering simplified, low-cost accounts. Few Mozambican banks seem to offer similar accounts, and in Zimbabwe customers that we spoke with are more interested in non-bank payment products.

ACCESS BARRIERS: AGENT NETWORK DEVELOPMENT

IS THERE A FRAMEWORK TO SUPPORT DEPLOYMENT OF A BROAD NETWORK OF CASH MERCHANTS

AND AGENTS?

There appears to be little strategic focus on the extension of banks' services to new customers through the use of agents. Presently, banks in Malawi and Mozambique are prohibited from using agents for account opening and service. The law is less clear in Zimbabwe and Zambia, for there are no specific rules regarding agency and the provision of financial services. Instead, the Reserve Bank of Zimbabwe applies a case-by-case analysis of the operational and prudential management of services that use agents. In Zambia, a couple of banks have established agency relationships with nonbanks such as the post office, and have encountered no obstacle from the Bank of Zambia. In Mozambique, the high costs of developing an agent network are exacerbated by vast distances and poor infrastructures. These



factors, combined with (mis)perceived lack of demand may also help explain the slow development of the agent network in Mozambique.

Generally, MNOs are permitted to use agents for payment services, but the ability of non-MNO nonbanks is unclear. MNOs are permitted to utilize agent networks for account opening and service in Malawi and Mozambique. As with banks' use of agents, the situation in Zimbabwe is less clear, as the central bank considers service offerings that use agents on a case-by-case basis. In Zambia there is no such disparity as non-MNO nonbanks rely on a clearer framework created to govern the money transmission business.

Across Malawi, Mozambique, Zambia and Zimbabwe, focus group respondents mentioned demand for services that are closer to home to save on transport costs and wait times. Agents would serve this need, and there is demand for branchless payment options. In Mozambique, focus group respondents were confused about whether mCel agents were operating yet, and how they worked. In Malawi, respondents were largely satisfied with the Fast Cash money transfer service operated by Malawi Post, and similar services would likely be welcome. Similarly, in Zambia the ZamPost transfer services, Swift Cash, is a popular way to send money to rural areas. However, liquidity concerns in the rural post offices and long travel times are likely to still be a concern for agents in Malawi and Zambia. Simplified accounts with a mobile link that allows for intra-bank transfers and bill payments are well loved among respondents in Zambia. In Zimbabwe, customers mentioned interest in mobile and stored value cards that could operate through an agent network, and respondents suggested that agents for this purpose are in higher demand than agents offering only extensions of traditional bank services.

ACCESS BARRIERS: MARKET FOR THIRD-PARTY PROVIDERS

ARE THIRD-PARTY PROVIDERS EMPOWERED TO CAPITALIZE ON MARKET OPPORTUNITIES?

Existing rules favouring banks over MNOs and other nonbanks that may wish to offer payment services are poised to limit the market opportunities available to third parties.

Licensing requirements and restrictions on the offering of stored-value accounts by non-banks may erect barriers to market entry in the future. By restricting licenses to banks and the companies that partner with them, it is possible that extant rules may prevent second-generation payments services from developing, as banks, after having invested in first-generation partnerships, may have little incentive to modify existing business models for payments to encourage the entry of new service providers. This applies to Malawi, Mozambique, and Zimbabwe, all of whom are facing a circumstance where traditional deposit accounts offered by banks do not offer the right balance and affordability and access that may be better suited to simple stored value accounts, such as those seen in Kenya. In particular, third party providers in Malawi and Zimbabwe have demonstrated an interest in pursuing the use of stored value accounts to add value to their existing customer base while attracting new users. However, in each of these cases the regulatory position is unclear regarding the use of stored value



accounts, thus reducing the comfort of non-banks (as well as their partner financial institutions) to invest sufficiently in the necessary products needed to increase access to a population of new clients.

The coordination mechanisms put in place by the Bank of Zambia for the implementation of measures impacting the national payment systems have the potential to overcome market barriers imposed (or potentially imposed in the future) by participants such as large banks and MNOs, on smaller players, for accessing and using existing infrastructure. The Bank of Zambia's leadership is posed to play an important role in opening doors (and keeping them open) for third parties to capitalize on opportunities.

13 Access Barriers: Cost of expanding the distribution network

IS THERE A PERCEIVED RETURN ON INVESTMENT FOR EXPANDING DISTRIBUTION CHANNELS?

Poor country-level infrastructure presents strong headwinds to private sector investment in expansion of distribution channels.

In Malawi, Mozambique, Zambia and Zimbabwe basic, general purpose infrastructure such as roads and the electrical grid present the greatest obstacles to expansion of extant distribution channels. While interconnection standards may defray some of the costs to individual entities of expanding these channels, those costs remain substantial so long as general infrastructure is poor. Consequently, the perceived return on investment is depressed in each country.

#### 4.3 Consumer Perspectives<sup>30</sup>

14 CONSUMER PERSPECTIVES: FACTORS IN PAYMENT INSTRUMENT SELECTION

DO CUSTOMERS PRIORITIZE CONVENIENCE, RELIABILITY, OR AFFORDABILITY?

Generally, price is the least salient factor for customers in Malawi and Mozambique, as they consider various payment instruments. Urban respondents in Zimbabwe are more concerned with high bank charges. Payment instrument reliability and ease of access rank as the most important factors to consumers in payment method selection. By reliability we mean the instrument serving its intended purpose, such as remittances arriving to their destination, and ATM networks being online. In Zambia, bad experiences with electronic systems that are frequently offline and are perceived as unreliable is an important deterrent from adopting "cash-lite" products. Many participants in focus groups in the research countries pay high transaction costs, including financial costs, time spent, and loss or theft,

<sup>&</sup>lt;sup>30</sup> The consumer perspective information in this report is based on 12 focus groups and 11 individual interviews in Mozambique, 6 focus group discussions in Zimbabwe, 6 focus group discussions in Malawi, and 6 focus groups and 6 individual interviews in Zambia. In total we spoke to over 200 people in the four countries. Please see the country reports for more detailed descriptions of the findings and locations in all countries.



when making or receiving payments. In all countries included in this research, people articulated a demand for more available and accessible payment options.<sup>31</sup>

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**CONSUMER PERSPECTIVES: PERCEPTION OF FORMAL FINANCIAL INSTITUTIONS** 

#### DO CONSUMERS TRUST THE BANKS AND MNOS?

Most consumers we surveyed in Malawi, Mozambique, and Zambia reported that they trust banks to be sound stewards of their assets; in Zimbabwe, the memory of accounts being "wiped out" at the advent of dollarization depresses trust in banks. However, there is a perception that banks are not transparent with their fees and charges, and that the banks are greedy in charging whatever they can without disclosing this to the customer. Although lack of trust is not the primary obstacle to inclusive payment systems from the consumer perspective, financial institutions in all four countries are often seen as remote, limited to the rich, and unable to resolve clients' problems. Many respondents in Malawi and Mozambique felt they were too poor to use formal financial services.

CONSUMER PERSPECTIVES: ATTITUDES TOWARD ELECTRONIC PAYMENTS

WHAT ARE CONSUMERS' IMPRESSIONS AND PREFERENCES AROUND ELECTRONIC PAYMENT

METHODS?

Consumers in Malawi, Mozambique Zimbabwe, and Zambia generally reported interest in using electronic payments, but there was considerable concern regarding the availability of electronic payments infrastructure. Contrary to the perception of some working on the supply side, respondents did not display lack of enthusiasm or understanding of electronic payment options, and many of the challenges will be in designing appropriate, accessible products that can serve the needs of low-income populations. Zambia is an exception, with low-income consumers reporting using and liking the simplified, mobile-linked accounts called Xapit (Zanaco) and Tonse (Barclays) that allow for bill pay and transfers from the mobile-phone.

17 CONSUMER PERSPECTIVES: IMPORTANCE OF PAYMENT CHANNELS
WHAT ARE CURRENT BEHAVIOURS AND REQUESTS FROM CONSUMERS IN REMITTANCE, G2P, AND
B2P PAYMENTS?

The country reports examine how the consumer engages with payment services and whether the current environment adequately meets the demand for services along four dimensions: **Availability** – existence of payment services within a reasonable distance. This could also include the existence of agents, mobile banking products, or other services; **Accessibility**-extent of transaction costs, travelling and wait times, requirements for account opening, and inclusiveness of informal instruments; **Affordability**- in money terms, including transaction costs; and **Reliability**- Frequency with which services fail to deliver their supposed purpose, including delays and financial losses.



Across the research countries, cash remains the foremost payment mechanism. In Zimbabwe, use of cheques and debit cards is growing for large value purchases, often in urban settings, while in the more rural areas people reported bartering for low value items in order to avoid having to make change, with dollar-value coins absent from the payment universe. In all four countries people working for large companies and the governments receive their payments through bank accounts. Indeed, this is a main avenue for financial inclusion. However, the lion's share of payments in all four countries is made with cash. While international remittances are often received through Western Union, MoneyGram, or a similar service in this region, especially in Zambia and Zimbabwe, it is more common for domestic remittances to be sent in cash through informal channels such as family and friends or bus drivers, or through the post office, especially in Malawi and Zambia.

18 Consumer Perspectives: Use and nature of informal tools
WHICH INFORMAL INSTRUMENTS ARE MEETING THE FINANCIAL NEEDS OF THE POOR?

Relationship based tools feature largely in the retail payments landscape in Malawi, Mozambique, Zimbabwe, and Zambia. Focus group participants in all four countries use an extensive range of informal financial tools - such as savings groups, deposit collectors, borrowing from family and friends, and savings in the house - to manage their money. When informal loans are available, families and friends often offer low- or no- interest loans. But participants, especially in communities with economies based around agriculture, mentioned that in hard times it is possible for no one to have extra money to offer as a loan.

Most of these informal financial instruments in the region are built around cash. Informal money transfer systems such as minibuses and delivery via family and friends are widely used for both domestic and international transfers, but the costs of using these services can exceed 20% of the amount sent, not to mention the wait times, theft, and inconvenience experienced by users. Only in Zimbabwe were some of the people we met using formal money transfer companies. Receivers reportedly liked the reliability and quickness of receiving money this way. Between Malawi and South Africa, various hawala networks operate to provide more accessible informal transfer options, and Malawians spoke highly of these services (see the Malawi country report for more information). Low-income individuals make informal tools work for them because they don't have other options. But, according to consumers, most informal payment mechanisms are lacking in at least one dimension among availability, accessibility, affordability, and reliability.

19 CONSUMER PERSPECTIVES: CONSUMER INTEREST IN NEW SERVICES
WHICH SERVICES DID CLIENTS SAY THEY WOULD LIKE TO USE?

Across Malawi, Mozambique, Zimbabwe, and Zambia respondents appear to be interested in instruments that resolve the challenge of proximity— reducing travel times, transport costs, and wait

times. These might include broader services offered through the postal system (all countries), mobile van banking (Malawi), stored value cards (Zimbabwe), and agent banking and mobile payment products (all). In Zambia we encountered the common practice of parents frequently sending money to students who are away at public boarding schools. The students often don't have accounts, so cash is sent with bus drivers or other means. Respondents were interested in a product to fill this common need. There is enthusiasm for mobile payment products in all four countries, with products on offer in the market in Malawi, Zimbabwe, and Zambia, and in the pipeline for Mozambique. However, customers mention the unreliable cellular network and erratic power supply in these countries as a threat to dependable mobile and other electronic payments.

#### 4.4 Summary

The themes discussed above frame the conditions associated with enabling transformational payment services in each of the markets in question. Each country faces a unique set of circumstances that will likely require a bespoke solution to achieving greater access and usage of electronic retail payment services. This is not to say that they do not share many similar challenges or that lessons in one jurisdiction cannot apply to another. On the contrary, from a regional perspective, successes in Malawi, Mozambique, Zambia or Zimbabwe will likely demonstrate lessons that can be applied to their respective neighbours. For example, all four markets are showing growing interest by market players in broadening the market through the use of mobile technology. Likewise, growing awareness of the increased efficiencies brought by greater interconnection of electronic services is creating more active dialogue among stakeholders. However, these opportunities also highlight associated challenges, such as developing new distribution networks using agents, brokering rules around competition and the use of shared infrastructure and, of course, developing a regulatory framework that can ensure that the safety and stability of the market is prioritized.

In that context, shared success has the potential to translate into greater harmonization for cross-border payments, which is a specific objective of the Southern African Development Community (SADC) of which Malawi, Mozambique, Zambia and Zimbabwe are members. The following section looks specifically at the implications of the current payments environment on the efficacy of cross border payments.

#### 5 Implications for Regional Payment System Harmonization

Cross border payments are a critical component of the retail payment service environment in Malawi, Mozambique, Zambia and Zimbabwe. All of these countries receive a sufficient enough volume of international remittances (particularly from South Africa) that any payment system development strategy should strive to further enable the flow of funds across borders over formal channels. The enabling conditions for cross border payments vary among the different markets, but are generally underpinned by a policy strategy that demonstrates an intent to support emergent business models and development of infrastructure. The research underpinning this report has revealed significant momentum across both of these fronts.

Of particular note is the modernization of payment system infrastructure to facilitate greater use of electronic payment mechanisms, as evidenced by the incorporation of mobile payment platforms into Malswitch in Malawi and Zimswitch in Zimbabwe. Additionally, all four countries are actively seeking solutions to overcome the challenges posed by their respective legacy of NPS rules and regulations that do not adequately address electronic retail payments. In many markets, including those researched, this is often accomplished by reactively introducing regulatory guidance to allow *specific* new business models to provide retail payment solutions, without due consideration given to a broader context of payment system modernization. As a result, there remains some work to be done to develop a *holistic* legal framework in each country to enable affordable, accessible and reliable cross border retail payments.

#### 5.1 First Mile vs Last Mile Obstacles

For the purposes of this discussion we can frame our assessment of the cross-border payments in the context of obstacles at the first-mile (where transfers are initiated) and last-mile (where funds are received). We can start by looking at the last-mile issues since Malawi, Mozambique, Zambia and Zimbabwe are net receivers of cross-border payments.

Across the four countries the clear obstacle to receiving domestic or international payments is the limited infrastructure for cash distribution outside urban centers. All of the countries in question with the exception of Zambia require traditional money transfer operators (such as Western Union and MoneyGram) to operate out of regulated outlets such as bank branches or post offices. These outlets are limited in their national distribution across (on average fewer than four per 100,000 people) and even then mainly confined to urban centers. Lack of an extensive cash distribution network, including in Zambia, creates a circumstance that decreases convenience and increases the cost of the service to the majority of receiving customers. More specifically, customers from outside urban centers are forced to travel into the city to receive funds, often forgoing the opportunity to earn a day's wage and incurring the cost of travel to an often highly congested service outlet (e.g. bank branch or post office). This high transaction cost to customers makes the proposition for informal payment services more attractive, as informal channels (such as buses, taxis or relatives) often find their way to a location that is more accessible and at times more affordable than the formal alternative.

This finding is corroborated by a study commissioned by the World Bank<sup>32</sup> to assess the regulatory obstacles to cross border payments in Malawi, Mozambique and Zambia. The study found that two main obstacles to efficient cross border payments within formal channels are (i) lack of interconnection between money transfer operators (MTO) and (ii) limited infrastructure for cash distribution. The study also notes that onerous customer identification requirements in Malawi and Mozambique inhibit access to a significant proportion of the population who may not have means of formal identification (passport, driver's license, etc).

<sup>&</sup>lt;sup>32</sup> DRAFT REPORT- Regulatory Issues Related to Facilitating Cross Border Payment Through Mobile and Branchless Channels, Authors: Oxford Policy Management, Commissioned by the World Bank, October 2011



The World Bank research takes note of the emerging trend for mobile phone based payments in each of the countries studied, highlighting that the technology shows potential but cannot by itself avoid the obstacles to cross-border payments noted previously. The research notes that second generation issues to enabling cross border payments include a proportionate legal framework that levels the playing field for banks and non-banks and maximizes transparency.

This report and the World Bank research both highlight the challenges facing the *last mile* of payments within the countries in question<sup>33</sup>. It is worth noting here that a key presumption of last mile issues in the previously described circumstance is that the fund transfer is initiated at *a formal* financial institution at the first mile of the transaction. However the reality is the diaspora of remittance senders often find it difficult to gain access to formal financial services (often due to immigration status) and therefore are forced to use informal channels to send funds to their respective countries of origin. This finding is corroborated by a report commissioned by FinMark Trust<sup>34</sup> which found immigrants in South Africa who wish to send money to their home country often did not have formal employment or any form of formal identification, both of which may be required to open an account in South Africa to send money electronically. There are also large numbers of migrant workers who, though they have a passport, do not have a valid work permit. Under current South African legislation, foreigners without legality of stay are not allowed to access the formal financial system. In addition to this, outlets to send payments are often limited in areas where many migrant workers reside<sup>35</sup>. Formal cross-border money transfers from South Africa are also notoriously expensive<sup>36</sup>. Informal channels therefore dominate mainly because of the absence of convenient, affordable and accessible alternatives.

The net result of the research conducted around cross border payments is that there are clear barriers at both the first and last mile of the transaction corridor. Modernization of NPS infrastructure for electronic payments will likely help improve efficiency of payments, but only if interconnection standards are equal between countries and a level playing field pervades the region to allow a variety of institutions to participate in the system and maximize product innovations. It is clear that the mobile phone channel is the fastest developing product in each country, but this technology is still reliant on an accompanying infrastructure that can support cash in and out services (both urban and rural), which at the moment is absent.

The Cross Border Money Transfer Experience, FinMark Trust, April 2011

<sup>&</sup>lt;sup>33</sup> In the case of Zambia, a detailed analysis of the last mile challenges is found in Sarah Langhan (2011). <u>Understanding the last mile in cross-border money transfers from South Africa to Zambia</u>. <u>ExactConsult, prepared for FinMark Trust</u>.

Money transfer operators Western Union and MoneyGram are limited to the infrastructure of the banks with which they partner and there are no non-bank money transfer operators. Furthermore, many bank branches are not authorised to do foreign exchange transactions (needed for SWIFT transfers). This is a particular barrier for remittances senders in rural areas, but even in urban areas customers cannot easily know which branches to approach and may waste time going to the wrong branch first.

<sup>&</sup>lt;sup>36</sup> According to the annual World Bank publication "Remittances Prices Worldwide: making markets more transparent" (available at: <a href="http://remittanceprices.worldbank.org/">http://remittanceprices.worldbank.org/</a>), South Africa to Mozambique and South Africa to Zambia are two of the five most expensive remittance corridors in the world.

#### 6 Regional Priorities

This section highlights a selection of policy priorities that can frame a road map for better integration of payments in regional context across Malawi, Mozambique, Zambia and Zimbabwe. These priorities are arranged in the order of greatest potential impact in the short to medium term, according to findings of the authors of the respective country reports. However, the authors of this series of reports also encourage full engagement with the policy makers within each country to discuss the findings and agree the most appropriate arrangement of these priorities based on factors such as timing, funding and capacity.

#### 6.1 Market and Regulatory Priorities

- 1. Continue to promote interconnection of retail payment mechanisms. Malawi, Mozambique, Zambia and Zimbabwe are all actively addressing the issue of low levels of interconnection of their respective payment systems because it is a central pillar in improving the level of access and usage of new payment products in a highly competitive financial services market. Customers will likely see more competitive pricing and better service as financial institutions differentiate themselves not on the extent of their network alone, but also on the quality of their service. Greater interconnection not only will facilitate more efficient domestic payments but will also pave the way for cross border payments to more effectively transact through to the last mile of service distribution.
- 2. Develop robust and complete rules for use of agent networks. As each country experiments with new payment innovations such as mobile phone and/or POS based services, agent networks will remain the key issue in extending cash in/cash out services beyond traditional channels such as branches and ATM's. However, at present there is little evidence that any of the countries in question have developed a sufficiently robust agent network framework that levels the playing field amongst different types of institutions, protects customer interests, and safely introduces new technologies into the NPS.
- 3. Lower barriers to entry with tiered KYC framework. Issues such as affordability and reliability are insignificant if customers are unable to open an account and access needed payment services. Across Malawi, Mozambique, Zambia and Zimbabwe, lowering the requirements to open a basic transaction account may be the most efficient solution to removing the access obstacle for customers. Further support should be given to formalize efforts to develop a risk based KYC framework that works in tandem with the AML/CFT rules and lowers the barriers for account opening.
- 4. Update legal framework for payment services to address emergence of new electronic payment instruments. There are a multitude of critical issues that face the incorporation of new electronic payment instruments into the existing NPS, which should be formally enshrined in laws and regulations to provide the necessary certainty to the market. Moreover, the legal framework should be sufficiently open as to encourage new entrants into the market, not only



to serve the domestic stakeholder but also those across the SADC network via more efficient *formal* cross-border payment activity.

5. Develop a holistic payment system strategy to reduce the cost of last mile payment transactions. A clear national policy on payment system modernization will be critical to effectively incorporate the many facets of development across the regulatory and market environments. Consulting all the relevant public and private stakeholders in the production of a payment system development strategy will provide clarity where existing obstacles exist and thus identify policy priorities to overcome them. This is particularly critical as public sector institutions struggle with capacity concerns and thus must seek the most efficient and effective use of their powers to both develop and protect the national payment system.

#### 6.2 Consumer Priorities

- 6. Strengthen consumer protection at national and regional levels. SADC and other bodies could work closely with Malawi, Mozambique, Zambia and Zimbabwe to ensure that new regulation accompanying innovative payment systems include sufficient disclosure requirements and legal protection for consumers, especially low-income individuals. In Mozambique, Malawi and Zambia especially, these efforts should include provisions for conveying terms of financial agreements to the illiterate.
- 7. Define and support financial capability. To fully support consumers to take control of their financial lives and access a broader range of more affordable and reliable payment systems, helping people to understand and test new products will be important. But little is known about the best way to do this. SADC, FinMark Trust, and others may be interested in supporting research on the most effective ways to enhance financial capability and empowerment in Southern Africa, allowing these organizations to join the frontier of new and exciting research. Financial capability research can also be a valuable input to the regulatory process, as rules can also embed protections and nudges to incentivize desirable financial behaviour.
- 8. Remain cognizant of the link between general purpose infrastructure and financial services. Donors and national organizations have made impressive strides in offering seed funding for innovative ideas and products in financial services. While these efforts are invaluable, payment platforms that use electronic switches and mobile networks will only be as good as the power supply and network coverage in these countries. Similarly, poor roads and limited electricity networks in rural areas pose fundamental challenges for consumers and providers alike. Perhaps closer dialogue between those supporting infrastructure development and access to finance is in order.

#### 7 Annex: Openness and Certainty Detailed Scoring

In this Annex, we detail the Openness and Certainty scoring applied in Section 3 of this report. To have applicability beyond a single country, any scoring paradigm is a schematic, and therefore incomplete, view of the state of affairs in a given jurisdiction. We share our methodology to detail the logic underpinning our scoring determinations while acknowledging that the measures are not collectively exhaustive of the Openness and Certainty concepts.

**Defining and scoring Openness.** In the context of retail payment system development, we operationalize Openness as a function of licensing requirements, e-money issuance by nonbanks, and proportionality in the Know-Your-Customer rules that apply to account opening and usage. We outline each of these subdimensions in turn:

Licensing requirements. We use licensing requirements as a proxy for Openness, as they are roughly indicative of a regulator's readiness to greet market entry by new firms and permit the development of novel payment instruments.

Nonbank issuance of e-money. As a second proxy for openness, the legality of nonbank issuance of e-money is appropriate because it undergirds future payment instruments. Without nonbanks' ability to issue e-money, any future payment instrument will have to be offered in partnership with a bank. While this outcome is not detrimental to market development *per se*, it offers comparatively limited opportunity to expand rapidly the ranks of accountholders. As an input to inclusive financial instruments, then, e-money issuance is an important component of Openness.

Proportionality in KYC rules. Customer due diligence is an important hedge against money laundering and other criminal activity, but legal regimes that fail to distinguish between low-and high-risk account holders limit the reach of payment instruments among poor customers who are more likely to lack formal identification or make frequent, small transactions. For this reason, many jurisdictions have begun to introduce tiered accounts that attenuate know-your-customer identification requirements for lower-volume accounts. In this Openness subdimension, we assess a country's proportionality in KYC by determining whether there are tiered KYC rules in rough proportion to the AML/CFT risks associated with the accounts and their users.

We score each of the Openness subcomponents separately.

*Licensing Requirements.* Each country begins with a score of 7 for the licensing sub-dimension of Openness. For each specific payment license required, we deduct one point.

*E-money*. The e-money subdimension permits scores of 0, 3, or 6. Lower scores represent less open environments than higher scores. A country receives 6 points if it has formal rules that permit nonbanks to issue e-money, 3 points if there are nonbank e-money offerings in the market absent formal e-money rules or if e-money is permitted in practice, but not through formal rules, and 0 points if e-money rules are neither enacted nor forthcoming.

KYC rules. Possible scores on this metric are 0, 3, and 6. We apply 6 points to those countries like Pakistan that have articulated clear rules on tiered KYC requirements for account opening. Malawi, Mozambique, Zambia and Zimbabwe all score in the middle of this range, as there are either a) rules on the books concerning tiered KYC but are implemented incompletely due to environmental factors, b) few formal rules, or c) no formal rules. These scenarios describe Mozambique, Malawi and Zambia, and Zimbabwe, respectively. Despite the incompleteness of their rules, there is in practice a measure of tiered KYC in each of these countries.

By applying the foregoing methodology, we arrive at the Openness scores published below and, weighting each subdimension equally, adjust them to a four-point scale.

OPENNESS	Malawi	Mozambique	Zimbabwe	Zambia
Licensing	6	0	2	6
E-Money	3	3	3	3
KYC Proportionality	3	3	3	3
Composite	2.53	1.26	1.68	2.53

**Defining and scoring Certainty.** In the context of retail payment system development, we use a methodology promulgated by the World Bank's Payment System Development Group.<sup>37</sup> Consequently, we operationalize Certainty as a function of the

- 1) Breadth of the legal concepts covered by existing law
- 2) Degree to which the central bank's powers of payment system regulation are defined explicitly in law

Breadth of legal concepts covered by existing law. The aim of this subcomponent of Certainty is to provide a schematic view of the laws and regulations that address insolvency and contractual relations between parties to a transaction. These rules form part of a general business environment that protects counterparties and consumers by employing formal procedures and

<sup>&</sup>lt;sup>37</sup> Cirasino, M. & Garcia, J. A., 2008. "Measuring Payment System Development," World Bank Working Paper Series. http://siteresources.worldbank.org/EXTPAYMENTREMMITTANCE/Resources/MeasuringPaySysDevelopment WorkingPaper.pdf



standards of conduct. We use central bankers' responses to the question of whether there are legal provisions that cover the following specific issues:

- a) Clarity of timing of final settlement (especially when there is an insolvency)
- b) Legal recognition of (bilateral and multilateral) netting arrangements
- c) Recognition of electronic processing of payments (e.g., can electronic signatures and documents be used as evidence in a court of law?)
- d) Non-existence of any zero-hour or similar rules
- e) Enforceability of security interests provided under collateral arrangements (and of any relevant repo agreements)
- f) Protection from third-party claims of securities and other collateral pledged in a payment system

The score for this subdimension is based on the particular combination of legal provisions identified by respondents from each country. The following schedule details this scoring:

If all of the above then give an 8

If all of the above, except one then give a 6, as long as answer (a) was included If between 2 and 4 then give a 4, as long as answer (a) was included

If only (a) then give a 2
If (b) and (c) AND (e) of (f) then give a 2

Source of central bank's legal power to oversee payment systems. The second subdimension of Certainty looks to the sources of authority for the central bank's power to oversee payment systems on the assumption that laws making specific reference to payment system regulation empower the central bank to shape the payments market to a greater degree than, say, a law establishing the central bank alone. To that end, we reference countries' responses to the question of the source(s) of their central banks' powers to oversee payment systems. Respondents made non-exclusive selections from the following list:

- a) The central bank has no formal powers to perform payment system oversight
- b) Oversight powers are to be found in the Central Bank Law
- c) Oversight powers are to be found in the payment system law
- d) Oversight powers are to be found in other laws
- e) Empowerment is general, in the context of "ensuring the adequate and safe functioning of payments in the country"
- f) Empowerment is explicit, granting the central bank powers to operate, regulate, and oversee payment systems.

Responses were scored by the following rubric:



If answer (f) then give a 4

If answer (b), (c), (d), OR (e) If yes, then give a 2

If only answer (a) then give a 0

By applying the foregoing methodology, we arrive at the following Certainty scores:

CERTAINTY	Malawi	Mozambique	Zimbabwe	Zambia
Composite	1	3	3	4

