

# FinScope Zambia 2009

## Top Line Findings



**FINSCOPE**



**AFRICAN HEIGHTS**



**FINMARK TRUST**

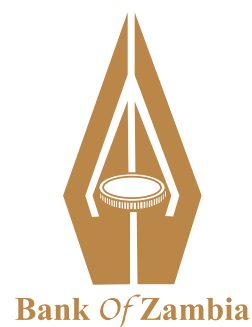
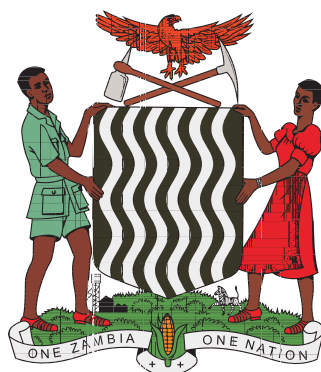
Making financial markets work for the poor



**Republic of Zambia**

**CENTRAL STATISTICAL OFFICE**

**M & N  
ASSOCIATES  
LIMITED**



# FinScope Zambia 2009

## Top Line Findings

## Final Report

**June 2010**

Report prepared by FinMark Trust and African Heights for the Government of the Republic of Zambia  
Financial Sector Development Plan (FSDP) Secretariat

Study funded by the Private Sector Development Reform Programme (PSDRP)



## FOREWORD

FinScope continues to be an integral part of the Government of the Republic of Zambia's (GRZ's) Financial Sector Development Plan (FSDP). The FSDP, which has since been extended under a second phase, to run from 2010 to 2012, continues to be the Government's comprehensive strategy for strengthening and broadening the Zambian financial sector. In complimenting various other national initiatives, it is also aimed at improving the business environment for private sector growth in the country by reducing the impediment of limited and costly access to finance. It targets to achieve this objective through three strategic pillars, namely, enhancing market infrastructure; increasing competition; and increasing access to finance.

In implementing the second phase of the FSDP, the Government of the Republic of Zambia has reiterated its commitment to have a dynamic and inclusive financial sector that supports all aspects of the economy.

The FinScope survey was first conducted in Zambia in 2005 with financial support from some cooperating partners as a component of FSDP Phase I. FinScope surveys are aimed at guiding policymakers, financial service providers and supporting agencies in their efforts to promote better access to financial services by all Zambians.

The FinScope Zambia 2009 survey forms an important part of FSDP Phase II. The objective of this follow-up survey is to assess how the landscape of financial access has changed since 2005 and measure the extent to which various developments within the financial sector have impacted on levels of inclusion throughout the country.

As coordinators of the FSDP, the Bank of Zambia wishes to acknowledge the support of the Private Sector Development Reform Programme (PSDRP) in funding FinScope 2009 and would like to thank FinMark Trust and their local partners in undertaking this study, notably, the Central Statistical Office (CSO), M&N Associates, African Heights, 3C Consulting and representatives from the respective FSDP working groups.

This report documents some of the key findings of FinScope 2009. All information contained in this report is taken from FinScope, unless otherwise stated. An electronic copy of this report, together with a summary brochure, the survey questionnaire, and the full dataset is available on the flash disk that accompanies this report.

As with FinScope 2005, it is hoped that by making this data available, policymakers, regulators and other institutional players will be encouraged to strive to build a conducive environment for the development and growth of an inclusive financial sector. It is also expected that financial service providers will be motivated to identify new product opportunities and explore ways of improving service delivery to the Zambian population as a whole.

Dr Caleb M Fundanga  
Governor  
Bank of Zambia





## CONTENTS

<b>Acronyms and abbreviations</b>	<b>1</b>
<b>Definitions</b>	<b>2</b>
<b>Executive summary</b>	<b>3</b>
<b>Structure of the report</b>	<b>7</b>
<b>1 Survey background and methodology</b>	<b>8</b>
1.1 Introduction	8
1.1.1 Background to FinScope in Zambia	8
1.1.2 The FinScope survey tool	8
1.1.3 The FinScope Zambia 2005 survey	9
1.1.4 A follow-up FinScope survey	9
1.2 Survey methodology	10
1.2.1 Implementation structure	10
1.2.2 Implementation stages	11
<b>2 Context</b>	<b>15</b>
2.1 Demographic and landscape overview	15
2.1.1 Adult population at a glance	15
2.1.2 Understanding people's lives	17
2.2 Income-generating activities	24
<b>3 Financial inclusion in Zambia</b>	<b>28</b>
3.1 What is financial inclusion?	28
3.2 Overall picture of financial inclusion	29
3.2.1 Formal versus informal inclusion, rural versus urban	29
3.2.2 Financial inclusion by income source	31
3.2.3 Usage overlaps	32
3.2.4 Financial access strand	33
3.2.5 Landscape of access	37
3.3 Financial inclusion by product category	40
3.3.1 Banking	40
3.3.2 Savings	43
3.3.3 Credit	47
3.3.4 Comparing savers and borrowers	51
3.3.5 Insurance	53
3.3.6 Remittances	56
3.4 Barriers to financial inclusion	57
3.4.1 Definitions of access and usage barriers	57
3.4.2 Barriers to formal inclusion	58
<b>4 Financial inclusion: 2009 versus 2005</b>	<b>62</b>
<b>5 Conclusion and recommendations</b>	<b>69</b>
5.1 Conclusions	69
5.2 Recommendations	69
<b>6 Bibliography</b>	<b>72</b>
<b>Annex I: FinScope Zambia 2009 Sample Design and Sample Selection</b>	<b>73</b>
<b>Annex II: FinScope Zambia 2009 Data Validation Process</b>	<b>78</b>



## LIST OF FIGURES

Figure 1	Survey implementation stages	11
Figure 2	Sample distribution map of selected EAs	12
Figure 3	Gender distribution: percentage of adults	15
Figure 4	Rural-urban split of the adult population	15
Figure 5	Geographical distribution of the Zambian adult population by province	16
Figure 6	Age distribution of the Zambian adult population	16
Figure 7	Education profile of Zambian adults	16
Figure 8	Access to drinking water: percentage of Zambian adults	17
Figure 9	Access to sanitation facilities: percentage of Zambian adults	18
Figure 10	Energy sources used for cooking: percentage of Zambian adults	18
Figure 11	Poverty indicators: percentage of Zambian adults	19
Figure 12	Household asset ownership: percentage of Zambian adults	19
Figure 13	Dwelling ownership: percentage of Zambian adults	20
Figure 14	Access to a telephone: percentage of Zambian adults	20
Figure 15	Cellphone ownership: percentage of Zambian adults	21
Figure 16	Access to facilities: percentage of rural adults	21
Figure 17	Access to facilities: percentage of urban adults	22
Figure 18	Nearest financial institution: percentage of Zambian adults	22
Figure 19	Access to documentation: percentage of Zambian adults	23
Figure 20	Main income-generating activities: percentage of Zambian adults	24
Figure 21	Percentage of Zambian adults that are involved in farming	25
Figure 22	Income distribution of Zambian adults by personal monthly income	26
Figure 23	Method of receiving income: percentage of Zambian adults	26
Figure 24	Cash transaction preferences	27
Figure 25	Components of financial inclusion	28
Figure 26	Formal versus informal financial product usage among Zambian adults	29
Figure 27	Percentage of Zambian adults using financial services: urban	30
Figure 28	Percentage of Zambian adults using financial services: rural	30
Figure 29	Usage of financial services among adults who run their own business	31
Figure 30	Usage of financial services among adults who are involved in farming	31
Figure 31	Overlap of usage of banking, formal other and informal financial services: total adult population	32
Figure 32	Overlap of usage: urban versus rural	32
Figure 33	Overlap of usage: self-employed versus farmers	33
Figure 34	Financial Access Strand for Zambian adults	34
Figure 35	Financial access strands for the various FinScope survey countries	34
Figure 36	Breakdown of the Zambian access strand: rural versus urban	35
Figure 37	Breakdown of the Zambian access strand: male versus female	35
Figure 38	Breakdown of the Zambian access strand: different income-generating activities	36
Figure 39	Financial access landscape for Zambia	37
Figure 40	Financial access landscape: rural versus urban	37
Figure 41	Financial access landscape: male versus female	38





## LIST OF FIGURES CONTINUED

Figure 42	Financial access landscape for various income-generating activities	38
Figure 43	Formal financial access landscape for farmers and self-employed individuals	39
Figure 44	Financial access landscape for the various components of the access strand	40
Figure 45	Breakdown of the banked population by income-generating activities	41
Figure 46	Landscape of access for the banked population	41
Figure 47	Time required to reach the nearest bank	42
Figure 48	Savings mechanisms	43
Figure 49	Zambian savings strand	44
Figure 50	Perceptions of savings among Zambian adults	45
Figure 51	Understanding of savings: percentage of adults indicating various definitions	45
Figure 52	Reasons for saving: percentage of savers	46
Figure 53	Perceived barriers to saving: percentage of Zambian adults who do not save	46
Figure 54	Sources of borrowing	47
Figure 55	Reasons for borrowing	47
Figure 56	Credit strand for Zambian adults	48
Figure 57	Credit strand: rural versus urban	49
Figure 58	Credit strand: gender comparison	49
Figure 59	Perceptions of borrowing: Zambian adults	50
Figure 60	Perceived barriers to credit	50
Figure 61	Overlap between savers and borrowers	51
Figure 62	Financial access landscape for claimed savers	51
Figure 63	Financial access landscape for claimed borrowers	52
Figure 64	Financial access landscape: claimed savers and borrowers	52
Figure 65	Insurance usage: percentage of adults	53
Figure 66	Insurance usage by various income-generating activities	54
Figure 67	Actual risk experience over the past 12 months	54
Figure 68	Coping mechanisms: most costly event	55
Figure 69	Reasons for insurance usage	55
Figure 70	Reasons for not having insurance	56
Figure 71	Breakdown of formal versus informal usage among remittance senders	57
Figure 72	Barriers to banking in Zambia: reasons for the unbanked not to have bank accounts	59
Figure 73	Attitudes and perceptions of banks: unbanked adults	59
Figure 74	Attitudes and perceptions about MFIs: formally unserved population	60
Figure 75	Provincial distribution of financial sector infrastructure	61
Figure 76	Financial access strand for 2005 and 2009	62
Figure 77	Financial access landscape for 2005 and 2009	63
Figure 78	Formal landscape of access: 2005 and 2009	64
Figure 79	Usage of financial products: 2005 and 2009	64
Figure 80	Number of product types among the banked population: 2005 versus 2009	65
Figure 81	Product usage within the formal other category	67
Figure 82	Financial access landscape: informal products	67
Figure 83	Livelihoods segmentation analysis framework	70



## LIST OF TABLES

Table 1	Organisations contracted to assist in implementing the survey	10
Table 2	Provincial distribution of completed interviews	13
Table 3	Distribution of banked population by province	40
Table 4	Number of POS, ATMs and branches since 2005	62
Table 5	Banked product usage by banked population (%)	66



## ACRONYMS AND ABBREVIATIONS

ASCA	Accumulating Savings and Credit Association
ATM	Automated Teller Machine
Barclays	Barclays Bank Zambia Limited
CSO	Central Statistical Office
DFID	Department for International Development (UK)
EA	Enumeration Area
EPSEM	Equal Probability Selection Method
FAL	Financial Access Landscape
FAS	Financial Access Strand
FSAP	Financial Sector Assessment Programme
FSDP	Financial Sector Development Plan
GRZ	Government of the Republic of Zambia
IMF	International Monetary Fund
K	Kwacha (Zambian currency)
KYC	Know Your Customer
LCMS	Living Conditions Monitoring Survey
LFS	Labour Force Survey
MFI	Microfinance Institution
M-Pesa	A cellphone banking facility in Kenya
NRC	National Registration Card
ODA	Overseas Development Assistance
POS	Point of Sale terminal
PSDRP	Private Sector Development Reform Programme
PSU	Primary Sampling Unit
ROSCA	Rotating Savings and Credit Association
SACCO	Savings and Credit Cooperative
Sida	Swedish International Development Agency
Zanaco	Zambia National Commercial Bank Plc





## DEFINITIONS

TERM	DEFINITION
Access strand	A measurement of financial inclusion across the formal-informal institutional provider continuum.
Additive	Financial services that target existing customers.
Banked	Individuals using one or more traditional financial product supplied by banks.
Credit	Obtaining funds from a third party with the promise of repayments of principal and, in most cases, with interest and arrangement charges in exchange for the money.
Demand-side barriers	Characteristics inherent to individuals that prevent them from accessing financial services, such as perceived insufficient income, low levels of financial literacy and lack of trust in financial institutions.
Formal other	Individuals using one or more financial product supplied by formal financial institutions which are not banks (e.g. MFIs, insurance companies, formal remittance service providers).
Formally included	Individuals using formal financial products supplied by institutions governed by a legal precedent of any type. This is not exclusive usage, as these individuals may also be using informal products.
Financial access landscape	A measurement of usage of both formal and informal products across the four main product groups: transactions, savings, credit and insurance.
Financially served	Individuals using one or more formal and/or informal financial product.
Financially excluded	Individuals who are not using any formal or informal financial product.
Financial inclusion	Giving people access to appropriate financial products and services, such as savings, transaction banking, credit and insurance, whether formal or informal.
Informal products	Financial services provided by individuals and associations that are not regulated by government, such savings clubs (chilimbos) and private informal moneylenders (kaloba).
Informally served	Individuals who are not using any formal financial products but who are using one or more financial products supplied from an informal source, such as a savings club or informal moneylender.
Insurance	Payment of a premium for risk of an event happening, where payout is made if or when the event occurs.
Remittances	The sending and receiving of money between people in one place to people in another, using formal or informal means.
Savings	Safeguarding and accumulating wealth for future use.
Supply-side barriers	Factors inherent to financial service providers that prevent individuals from using their services, such as location of access points and the cost of using these services.
Transactional	Financial services that use cash or other means (such as cheques, credit cards, debit cards or other electronic means) to send or receive payments.
Transformational	Financial services that target those people that are not currently financially served.



## EXECUTIVE SUMMARY

### Background

The Government of the Republic of Zambia (GRZ) has been committed to reforming the country's financial sector for several years. Financial access is now a priority pillar of reform within Phase II of the Financial Sector Development Plan (FSDP), alongside interrelated pillars that are aimed at stimulating competition and promoting ongoing improvements to market infrastructure.

The FinScope surveys are part of the GRZ's commitment to expanding financial inclusion in the country. At the same time, FinScope has provided private service providers with valuable market information that they can, and have, used to improve service delivery and pursue greater outreach.

The FinScope survey tool has been developed by FinMark Trust as a nationally representative survey of consumer perceptions about financial services and issues. The survey is conducted among adults, defined as all individuals aged 16 and above. To date, it has been rolled out in 14 African countries.

FinScope provides insights into how people source their income and manage their financial lives. By so doing, FinScope assists in establishing credible benchmarks and indicators of financial inclusion, while at the same time providing insights into market obstacles to growth and innovation, and highlighting opportunities for policy reform and innovation in product development and delivery.

A FinScope survey was first completed in Zambia in late 2005. It showed a picture of low overall financial inclusion:

- Only 14.6% of adults were banked in 2005.
- A further 7.8% were served by non-bank financial institutions. This brought the formally served market (banks and non-banks) to 22.4% of adults.
- A further 11.3% only used informal financial services.
- This totalled up to 33.7% of Zambians who are financially included in some way, leaving two thirds (66.3%) of all Zambian adults financially excluded.

In 2008, FinMark Trust was commissioned by the Bank of Zambia to conduct a second FinScope survey (FinScope Zambia 2009), which was funded by the GRZ's Private Sector Development Reform Programme (PSDRP). The objectives of this follow-up survey are to provide further insights into Zambia's financial sector and assess how the landscape of financial access has changed over time. These insights will enable the GRZ to measure its performance in improving access since 2005 and to ascertain the extent to which developments within the financial sector, including the recent global financial crisis, have impacted on financial inclusion. The findings will also assist in informing other industry support processes and product innovation strategies, and thereby contribute meaningfully towards the ultimate long-term goal of effective financial access for all Zambians.

This report provides an overview of the top line findings of the FinScope Zambia 2009 survey.

### Summary of top line findings

In 2009, there were 6 387 885 adults in Zambia. Overall financial inclusion increased by 3.6%, from 33.7% of adults in 2005 to 37.3% in 2009. The level of financial inclusion is now 42% in urban areas and 34.4% in rural areas.

This is a significant, if not large, overall shift, and is largely explained by an increase in the number of people using formal other and informal financial services:

- 13.9% of all adults are now banked. Statistically, this figure has remained relatively static from 2005.



- Non-bank formal financial product usage now accounts for a further 9.3% of adults. This is 1.5 percentage points more than the 7.8% in 2005 – a statistically significant increase. The formally served market now represents 23.2% of adults.
- The biggest increase lies in the informal market which now serves 14.1% of the adult population, compared to the 11.3% recorded in 2005.
- 62.7% of Zambian adults remain financially excluded, compared to 66.3% in 2005.

Financial services usage can be broken down into four categories of financial services: transactional banking, savings, credit and insurance:

- **Transactional banking:** 26.3% of all urban adults compared to only 9.6% of rural adults currently use transactional services. Usage is almost equally spread between formal and informal transaction services: 15.9% of adults use informal transaction services and 15.5% formal.
- **Savings:** 22.4% of urban and 13.9% of rural adults save in some form or another. The bulk of the savings market is served informally: 17.1% of Zambian adults save informally, compared to just 9.9% who save through formal channels.
- **Credit:** This is the only financial service for which usage is higher in rural than in urban areas. 13.7% of urban adults and 20.5% of rural adults have some form of credit. This may be partly explained by the fact that rural inhabitants turn to informal forms of borrowing more than their urban counterparts. In total, 17.9% of adults borrow informally, compared to just 8% that do so from a formal institution.
- **Insurance:** Usage among urban adults is 5.4%, compared to 3% in rural areas. Informal insurance is very limited.

Underlying the financial inclusion picture is a largely rural (62% of all adults live in rural areas), relatively young population with generally low education levels. A large proportion of Zambian adults, especially in rural areas, live in poverty and do not even have access to basic amenities such as safe drinking water and sanitation. 90% of rural adults rely on firewood or charcoal as cooking fuel, which implies that time needs to be spent sourcing this energy requirement – time that could otherwise have been used productively. Though people own basic assets such as agricultural hand tools and furniture, these assets are not normally linked to wealth and cannot be used to leverage finance. Claimed home ownership is high, but very few people have title deeds for the land on which they live. Overall, three out of five Zambian adults still do not own a cellphone. This figure is reversed for urban areas, where 60% do own a cell phone (versus less than 30% in rural areas).

More than a third of Zambians earn their livelihoods in agriculture. This figure rises to more than 50% in rural areas. Most adults, be they rural or urban, earn their income on an irregular, inconsistent basis. Only 14% of urban inhabitants earn a salary or wage from a company or business, reducing to less than 3% for rural adults. In rural areas, financial activity is driven by farming activities, whereas in urban areas self-employment (running a business) and money received from a household member feature more prominently. Overall, farming income and self-employment are the two biggest income earners.

Against this backdrop, the still low levels of financial inclusion are not altogether surprising. A number of barriers to financial inclusion still need to be overcome before it can be expected that the majority of the adult population will become financially included:

- Lack of income is perceived to be the most significant barrier to expand inclusion through banking, followed by the affordability of bank products and services.
- Although access to documentation needed to open a bank account is not perceived to be a significant barrier to banking, only 2.6% of the unbanked have the necessary documentation should banks stringently enforce Know Your Customer (KYC) requirements. This could pose a significant barrier to formal inclusion through banking.
- Among the unbanked and formally unserved, usage barriers such as trust and knowledge about products as well as how and where to open accounts with formal financial institutions appear to be significant demand-side barriers to inclusion.



- Attitudinal barriers are also significant in inhibiting uptake, with two-thirds (66%) of unbanked adults claiming that they can easily live their lives without bank accounts and 43% trusting their own knowledge of money matters rather than the advice of others.
- The fact that more than 40% of rural inhabitants can access a financial institution in less than an hour implies that physical access does not seem to be such an absolute barrier<sup>1</sup>. In urban areas, physical access ceases to be any barrier to financial access. Only one in 10 of the unbanked identified physical access as a significant barrier to banking.

Nevertheless, a larger increase in financial inclusion would have been expected since 2005 given the increased policy emphasis on financial inclusion on the one hand and the substantial increase in financial sector infrastructure (as measured by the number of branches, ATMs and point of sale (POS) devices) and the proliferation of bank products on offer since 2005 on the other hand. Particularly surprising is the fact that the proportion of the adult population that is banked remained the same since 2005.

The FinScope Zambia 2009 data helps to illustrate that, rather than expanding access to the previously unbanked population, these new bank products and services on offer are improving service delivery to an existing customer base. In other words, they are having an additive as opposed to a transformational effect, with the cross-sell ratio of banks increasing from an average of two products per person in 2005 to three products per person in 2009.

This, rather than an expansion in the absolute number of people that are banked, can be regarded as the largest benefit reaped from the expansion drive in the banking industry since 2005. While this development is positive in some respects, it is not contributing to an increased breadth of access (more people served) as would have been hoped.

Furthermore, whereas the use of savings and insurance products has declined since 2005, the uptake of transactional products has increased slightly and the uptake of credit has increased significantly. These findings are not conclusive, but they do suggest that the recent global financial crisis has had a significant impact at the grassroots level in Zambia, with many people, by necessity, having to stop saving and take up credit to meet their needs. Had an additional FinScope survey been undertaken before the financial crisis took root, a greater uptake in all these products groups, and a higher increase in levels of financial inclusion, may well have been measured.

The result of these product shifts is that the formal and the informal sectors are now playing an equally significant role in serving Zambia's adult population. Whereas usage of formal products among the financially served population was greater in 2005 than that of informal products, the usage of both formal and informal in 2009 is almost the same.

## Recommendations

Levels of financial inclusion in Zambia remain relatively low and point to the need to build further momentum around the financial access priority of all stakeholders. Implementing the following recommendations could assist in building such momentum:

**Packaging and disseminating findings to various stakeholder groups:** The planned public launches represent the first step in what needs to be a targeted and long-term communication campaign.

**Further segmentation analysis to enhance understanding of the needs of target groups:** Further segmentation of the data based on livelihoods characteristics will improve understanding of the circumstances, and therefore the real needs of the population who are currently not formally served. In turn, this will facilitate the development of strategies to more effectively address these needs.

<sup>1</sup> It should be remembered that FinScope is a demand-side survey measuring perceptions. Financial services are therefore not perceived to be that much less physically accessible than other services.



**Follow-up supply-side research to fill gaps in understanding:** Given the evolution of the financial sector since the last supply side study was conducted, coupled with the impact of the recent global financial crisis, a follow-up study would assist in updating strategies to improve financial inclusion from a supply perspective. Such a study should also consider the role of non-traditional market players, appreciation of the nature of the informal sector, and a review of current and anticipated regulatory barriers to access.

**Prompt implementation and ongoing refinement of FSDP's financial access strategy:** The existing strategy needs to be implemented promptly to increase the likelihood of positive impact on the landscape of access in forthcoming years, and should place strong emphasis on the promotion of pro-poor and pro-rural products. In terms of process, the strategy should include mechanisms that enable regular progress monitoring and ongoing refinement to accommodate changes within the financial sector.

**Promote financial literacy:** Continuing low levels of financial literacy point to the need for a coordinated effort to improve the situation in Zambia. The Bank of Zambia is committed to developing a national strategy for Zambia which is a positive step. Soliciting support to implement this strategy will be a crucial component of its success.

**Regular monitoring:** Implementing bi-annual follow-up surveys will be important to effectively gauge the impact on ongoing reforms, as well as assessing other factors at play within the financial sector.



## STRUCTURE OF THE REPORT

**Section 1** outlines the background to FinScope in Zambia, the rationale for conducting a follow-up survey and the methodology applied.

**Section 2** provides an overview of the adult Zambian population, in terms of their key demographics and their livelihoods.

**Section 3** considers the financial inclusion landscape in Zambia by types of institutions as well as by types of products.

**In Section 4** highlights the key differences between the FinScope 2005 and 2009 findings.

**Section 5** concludes on some key insights gained from FinScope Zambia 2009 and makes recommendations to facilitate application and action based on the findings.





# 1 SURVEY BACKGROUND AND METHODOLOGY

## 1.1 Introduction

### 1.1.1 Background to FinScope in Zambia

The GRZ has been committed to reforming the country's financial sector for several years. The FSDP was first designed in 2004, following research which identified fundamental weaknesses in the sector and raised concerns over low levels of financial intermediation<sup>2</sup>. The FSDP, which is managed by the Bank of Zambia and is now in its second phase, is being implemented to overcome these weaknesses through a prioritised reform action plan that focuses on strengthening the financial sector infrastructure, stimulating competition and building financial inclusion in order to support sustainable and diversified economic growth.

For this financial sector reform process to be effective, the GRZ identified the need to strengthen understanding of the financial market's dynamics, both from supply and demand perspectives. Such information was deemed critical in guiding policymakers and financial service providers alike in their efforts to promote better access for all Zambians to appropriate financial services.

To support the enhancement of this market knowledge, FinMark Trust was first contracted in 2004 by the UK's Department for International Development (DFID) and the Swedish International Cooperation Development Agency (Sida) to provide technical expertise to the FSDP. FinMark Trust is a not-for-profit organisation established in 2002 with funding from the DFID. Its purpose is to 'make financial markets work for the poor' which it achieves by conducting research to identify systemic constraints that prevent financial markets in Africa from reaching out to poor populations and by advocating for change on the basis of research findings<sup>3</sup>. FinMark Trust's support to FSDP Phase I included the implementation and dissemination of the first FinScope survey (FinScope Zambia 2005)<sup>4</sup>, as well as a review of the inclusiveness of Zambia's financial system that identified key issues impacting on financial access from a supply perspective<sup>5</sup>. A subsequent FinScope survey was completed in 2009 and forms the basis of this report.

### 1.1.2 The FinScope survey tool

The FinScope survey tool was developed by FinMark Trust as a nationally representative survey of consumer perceptions about financial services and issues. FinScope provides insights into how people source their income and manage their financial lives. It looks at the use of, and demand for, financial services as well as attitudes, vulnerability, coping behaviour and consumption patterns. By exploring the use of informal as well as formal financial products, FinScope helps to build a valuable picture of the role that the formal and informal sectors play in a country's financial market.

A representative sample of the adult population, rich and poor, rural and urban, is used to create a continuum of the market in order to lend perspective to various market segments. By so doing, FinScope assists in establishing credible benchmarks and indicators of financial inclusion, while at the same providing insights into market obstacles to growth and innovation, and highlighting opportunities for policy reform and innovation in product development and delivery.

FinScope findings can therefore be of value both to policymakers who wish to develop policy aimed at improving the functioning of financial markets, to private service providers who are able to design product strategies around the segmentation and trends highlighted by the data, and to donors and non-governmental agencies who wish to support increased financial inclusion to specific regions or population groups.

<sup>2</sup> IMF/World Bank's Financial Sector Assessment Programme 2003.

<sup>3</sup> For more information about FinMark Trust's work, refer to [www.finmarktrust.org.za](http://www.finmarktrust.org.za).

<sup>4</sup> More information about FinScope Zambia 2005 is available at [www.finscopeafrica.com](http://www.finscopeafrica.com).

<sup>5</sup> See OPM and PMTC (2007) *Supply-Side Study of the Inclusiveness of Zambia's Financial Systems*.



To date, FinScope surveys have been completed in 14 African countries, including Zambia, South Africa, Namibia, Botswana, Kenya, Tanzania, Uganda, Nigeria, Rwanda, Malawi and Mozambique. In addition pilot surveys have been conducted in Swaziland and Lesotho and new or repeat surveys are underway in Nigeria, Ghana and Uganda. Mauritius, Lesotho, Zimbabwe, Morocco, Sudan and Burundi have expressed interest to conduct FinScope surveys as well. This Pan-African implementation of FinScope facilitates valuable cross-country comparison, benchmarking and ongoing performance monitoring.

### **1.1.3 The FinScope Zambia 2005 survey**

A FinScope survey was first completed in Zambia in 2005 using a nationally representative sample of 4,000 respondents aged 16 and above, being the age at which Zambians are legally eligible to open a bank account. The sample was based on the Census sampling framework and the questionnaire was developed in close collaboration with the FSDP Financial Access Working Group as well as other FSDP Working Groups and financial sector stakeholders. The survey findings were officially launched in Lusaka in November 2006 and in Ndola in February 2007, and have been disseminated through various publications and workshops since that time<sup>6</sup>.

The FinScope Zambia 2005 findings showed that levels of financial inclusion of Zambians were very low at the time the survey was implemented, with only one in seven adults having a formal bank product and only a third being served by one or more formal or informal financial products. The proportion of Zambia's unserved adult population was significantly higher than in other African countries where FinScope data was available.

These findings, together with the supply side research, have helped to quantify issues around financial product access, usage and behaviour that were not previously understood. This has facilitated the building of a common language of financial inclusion among local financial market players.

Greater understanding of the dynamics of intermediation within Zambia's financial markets has assisted in pushing access to the top of government's financial policy agenda. Financial access is now a priority pillar of reform within Phase II of the FSDP, alongside interrelated pillars that are aimed at stimulating competition and promoting ongoing improvements to market infrastructure. At the same time, FinScope has provided private service providers with valuable market information that they could, and have, used to improve service delivery and pursue greater outreach.

### **1.1.4 A follow-up FinScope survey**

In 2008, FinMark Trust Zambia was commissioned by the Bank of Zambia to conduct a second FinScope survey (FinScope Zambia 2009), which was funded by the GRZ's Private Sector Development Reform Programme (PSDRP). The objectives of this follow-up survey are to provide further insights into Zambia's financial sector and assess how the landscape of financial access has changed over time. These insights will enable government to measure its performance in improving access since 2005 and to ascertain the extent to which developments within the financial sector, including the recent global financial crisis, have impacted on financial inclusion.

This report provides an overview of the top line findings of the FinScope Zambia 2009 survey. It is hoped that the wealth of information that this updated survey provides will serve to guide the Bank of Zambia in the effective implementation of FSDP Phase II, to inform other industry support processes and product innovation strategies, and thereby to contribute meaningfully towards the ultimate long-term goal of effective financial access for all Zambians.

<sup>6</sup> Publications, presentations and other materials on FinScope Zambia 2005 are available at [www.finscopeafrica.com](http://www.finscopeafrica.com).



## 1.2 Survey methodology

### 1.2.1 Implementation structure

FinMark Trust Zambia was contracted by the Bank of Zambia to manage the implementation of FinScope Zambia 2009 and has reported regularly to the FSDP Secretariat on progress. The FinMark Trust project management team included a core group of FinMark Trust staff and consultants who were responsible for the oversight and day-to-day implementation of the survey and producing deliverables in accordance with the project milestones agreed in consultation with the FSDP Secretariat.

In accordance with its contract, and with the objective of building local capacity in executing FinScope in Zambia, FinMark Trust contracted local research organisations to undertake specific tasks throughout the implementation of the survey as outlined in Table 1. These organisations were selected on a competitive basis by an evaluation team that included two representatives from the FSDP working groups, as well as the FinMark Trust project management team. Contracts were awarded to the selected organisations by FinMark Trust following a no-objection from the FSDP Secretariat.

**Table 1. Organisations contracted to assist in implementing the survey**

Organisation	Tasks undertaken
M & N Associates	Focus group discussions to inform questionnaire design
Central Statistical Office, in partnership with M & N Associates	Questionnaire design, sample design, fieldwork preparation, fieldwork, data inputting, database cleaning, weighting and validation
African Heights	Data analysis

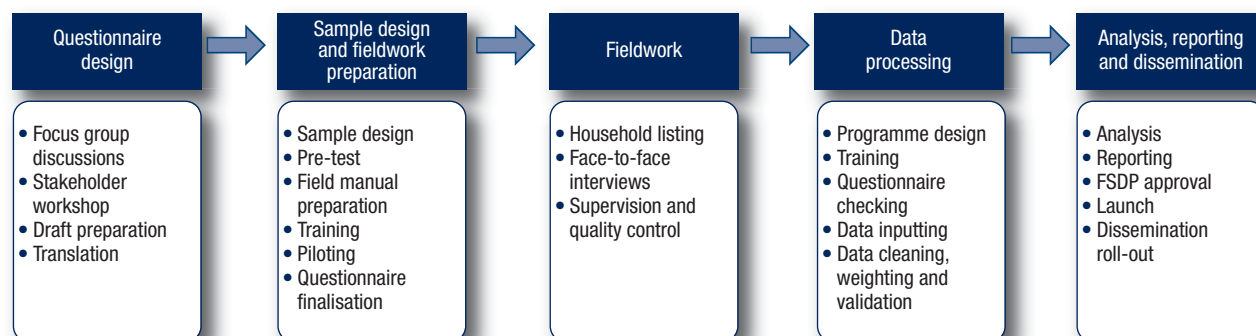
Following approval of the survey findings by the FSDP Implementation Committee and FSDP Steering Committee, FinScope Zambia 2009 is being officially launched in Lusaka and Ndola in the latter half of 2010. FinMark Trust will further assist the FSDP Secretariat in the design and roll out of a dissemination strategy that will maximise the distribution and application of the data. To facilitate this process, the FinScope Zambia 2009 dataset and all published materials will be made available to any individual or organisation with a legitimate interest in them. Such parties might include commercial service providers, government departments, industry associations, academic or commercial research organisations, whether from Zambia or elsewhere.



### 1.2.2 Implementation stages

FinScope Zambia 2009 was initiated in December 2008 and implemented in a number of phases as summarised in Figure 1.

**Figure 1. Survey implementation stages**



### Questionnaire design

The questionnaire design phase included 14 focus group discussions<sup>7</sup> and the facilitation of a stakeholder workshop in August 2009, which was attended by a broad cross-section of stakeholders within the financial sector.

These activities assisted in adapting the FinScope Zambia 2005 questionnaire to include notable developments that had taken place in Zambia's financial sector and economy as a whole since the first survey was conducted, while at the same time allowing for comparisons with the 2005 data.

The revised questionnaire was translated into Zambia's seven vernacular languages and included questions on the following topics:

- Household information and demographics
- Farming and fishing
- Income and expenditure
- Access to infrastructure
- Financial literacy and awareness
- Attitudes and perceptions towards finance
- Savings
- Borrowing
- Product penetration and banking
- Insurance
- Informal finance
- Remittances
- Psychographics

### Sample design

The sampling frame for the survey was developed by the Central Statistical Office (CSO) based on an area-based sampling methodology that used the population census as the main frame and which ensured that each citizen 16 years and above had an equal probability of being sampled. The sample is therefore representative of the population of adults aged 16 and above within 12 reporting domains, these being national, regional (i.e. urban and rural) and all nine provinces.

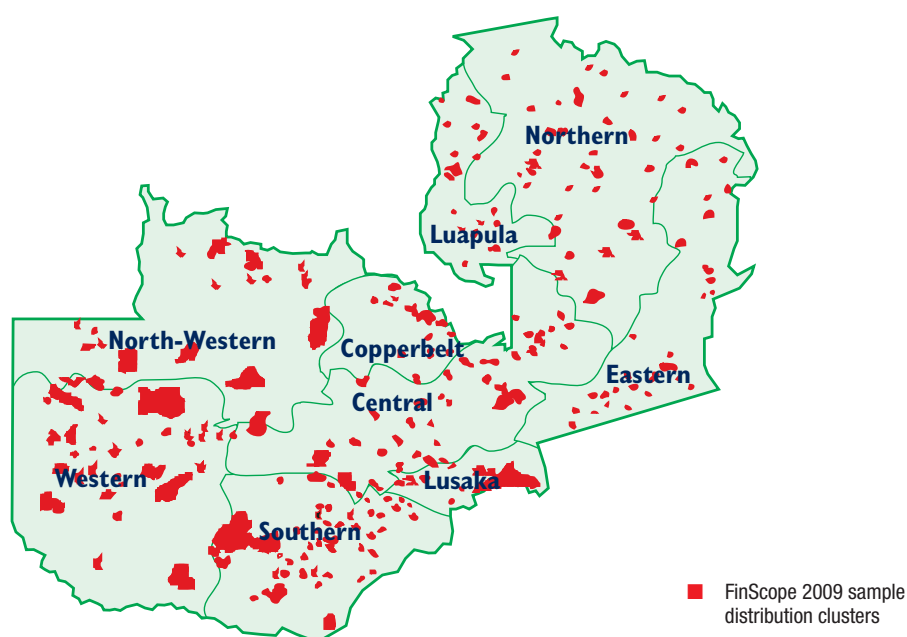
<sup>7</sup> A summary of the focus group discussion report is available on request.



The Enumeration Area (EA) was used as the Primary Sampling Unit (PSU), with a total of 400 EAs being selected systematically from each stratum (province, urban/rural) with probability proportional to size. Ten households within each sampled EA were randomly selected and one eligible individual within each household was selected for interview using a Kish grid. This provided a sample of 4,000 adults aged 16 and above which allows statistically reliable estimates for national, regional and provincial desegregation. Further details of the sampling methodology are provided in Annex 1.

A map showing the sample distribution is provided in Figure 2.

**Figure 2. Sample distribution map of selected EAs**



## Fieldwork preparation

Preparation for the fieldwork included a questionnaire pre-test, the training of CSO field staff and the piloting, finalisation and reproduction of the questionnaire.

To test the length, flow and translation of the questionnaire, a pre-test was conducted based on purposive household selection in eight residential areas in Lusaka. Forty interviews were conducted by the CSO/M&N technical working group, which comprised five interviews for each language, including English. The questionnaire was revised taking into account the results of this pre-test and in preparation for the fieldwork training.

A 10-day training programme was conducted in October 2009 and was attended by 80 interviewers, 13 supervisors, two data programmers, two data entry supervisors, 10 data entry officers and five office editors. Specific topics covered during the training included:

- Background to FinScope and objectives of FinScope Zambia 2009;
- Survey methodology;
- Questionnaire content;
- Listing, sampling and reporting procedures to be followed, and;
- Quality control procedures.

Mock interviews were conducted during training to test interviewer technique and understanding.



All fieldwork procedures, protocols and methodologies were documented in a comprehensive fieldwork manual which was provided to participants during training.

The training also included a field practical (pilot) in four areas, two within a rural (Chongwe) district and two within an urban (Lusaka) district. This exercise focused primarily on enabling the interviewers and supervisors to gain experience in administering the listing forms and questionnaire to ensure maximum efficiency during the main fieldwork.

Following the completion of the fieldwork, the questionnaire and translations were finalised, taking into account minor issues that were highlighted during the pilot. The final questionnaires and listing forms were reproduced in sufficient quantities for the fieldwork.

## Fieldwork

Fieldwork took place between October and December 2009 and was carried out by 13 teams. Each team consisted of one supervisor, six or seven interviewers and a driver.

The fieldwork was carried out in two phases. The first phase involved listing all the households in the selected EAs which was done to update the 2000 Census data and ensure accuracy of the data weighting and validation process. During the listing, each household was given a serial number to enable the random sampling of 10 households from the EA for the purpose of data collection. The second phase involved the random selection of one respondent aged 16 years and above from each of the 10 households using the Kish grid. Data collection was carried out through face-to-face interviews with the selected respondents. Two call backs were allowed for each selected respondent in addition to the initial contact. In cases where selected respondents were not available or refused to be interviewed, a substitution procedure was followed.

A total of 4 000 interviews were successfully completed, as shown in Table 2.

**Table 2. Provincial distribution of completed interviews**

Province	Number of EAs	Number of Interviews
Central	42	420
Copperbelt	54	540
Eastern	48	480
Luapula	40	400
Lusaka	50	500
Northern	50	500
North-Western	34	340
Southern	46	460
Western	36	360
<b>Total</b>	<b>400</b>	<b>4 000</b>

## Quality control

To ensure efficient and successful data collection, the following quality control measures were put in place:

- All completed questionnaires were submitted to the team supervisors to check for consistency and completeness of all entries. In cases of wrong entries, the enumerator involved was sent back to the respondent to clarify entries. All questionnaires were endorsed by the supervisor once all checks had been done and corrections made. Only once this had been done did the team move to the next EA.
- Approximately four spot checks in each EA were carried out by the supervisor in order to ensure that the interviews were being conducted thoroughly within the sampled households.
- Three field visits were undertaken, two by the CSO technical team and one by FinMark Trust to ensure that interviews were being completed correctly and that other fieldwork procedures were being followed.





- Completed questionnaires were re-checked for completeness by the CSO data processing team prior to inputting.
- CSO provincial heads were given the responsibility of ensuring that all the logistics for the field operations were in place.

## Data processing

Prior to data capture, a data entry programme was developed, tested and refined using the Census and Survey Processing (CSPPro) software package. This process was carried out in close consultation with FinMark Trust to ensure that the survey indicator values could be calculated. Nine data operators and two data supervisors were trained to familiarise them with the data entry programme and also to facilitate their understanding of the questionnaire.

The completed questionnaires were checked before being captured. Data inputting was carried out from November to December 2009, after which the data was cleaned, weighted, validated and converted into Statistical Package for the Social Sciences (SPSS) software.

Following the submission of preliminary findings to the FSDP Secretariat by FinMark Trust, a second validation procedure was performed in January using additional population projections and other survey data. This resulted in slight adjustments to the weighting. Further information on the cleaning, weighting and validation process is available in Annex 2.

## Data analysis, reporting and dissemination

Analysis of the data has been performed by FinMark Trust in collaboration with African Heights. This report contains an overview of the analysis of the top line findings undertaken to date. These findings were presented to the Bank of Zambia management team in April 2010 and comments from this meeting were incorporated into this report. The findings and report were subsequently presented to, and approved by, the FSDP Implementation Committee and FSDP Steering Committee in June 2010.



## 2 CONTEXT

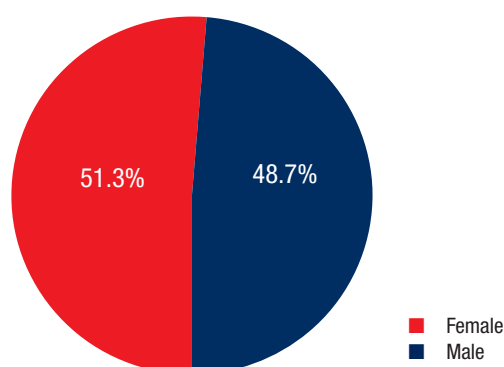
In order to understand the financial inclusion landscape, it is important to first understand who the target market is for financial products and services in Zambia. What is the demographic composition of the population? How do Zambians make a living, where do they live and what are their circumstances? These and other questions are core to understanding people's perceptions and usage of financial services.

### 2.1 Demographic and landscape overview

#### 2.1.1 Adult population at a glance

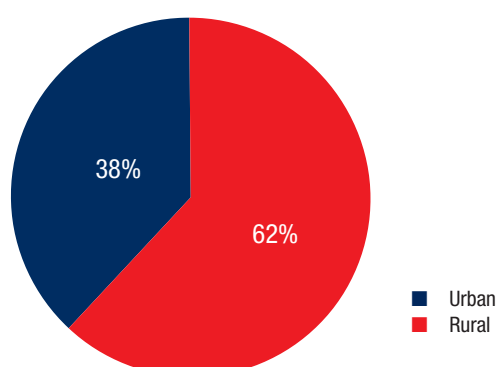
In 2009, there were 6 387 885<sup>8</sup> people aged 16 and above in Zambia. In contrast to many African countries where the population is often skewed towards females, the gender distribution in Zambia is fairly even, as shown in Figure 3.

Figure 3. Gender distribution: percentage of adults



As Figure 4 illustrates, just fewer than two out of every three adult Zambians live in rural areas:

Figure 4. Rural-urban split of the adult population



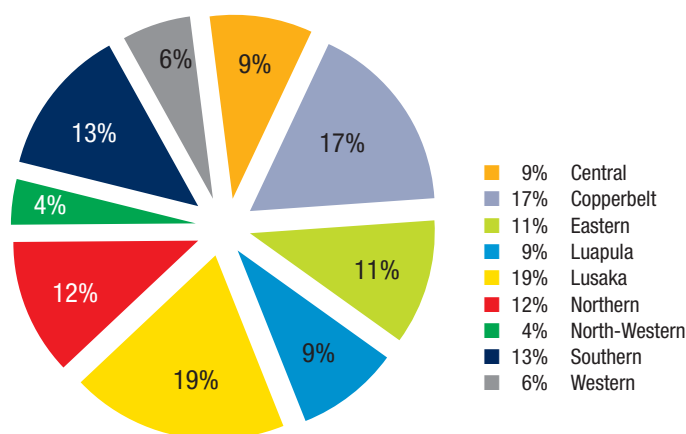
The rural nature of the population should be taken into account when considering the overall financial access picture and developing strategies to expand inclusion, as the realities of rural life are an important driving force of uptake.

<sup>8</sup> All data quoted in this report, unless otherwise stated, draws directly from FinScope Zambia 2009.



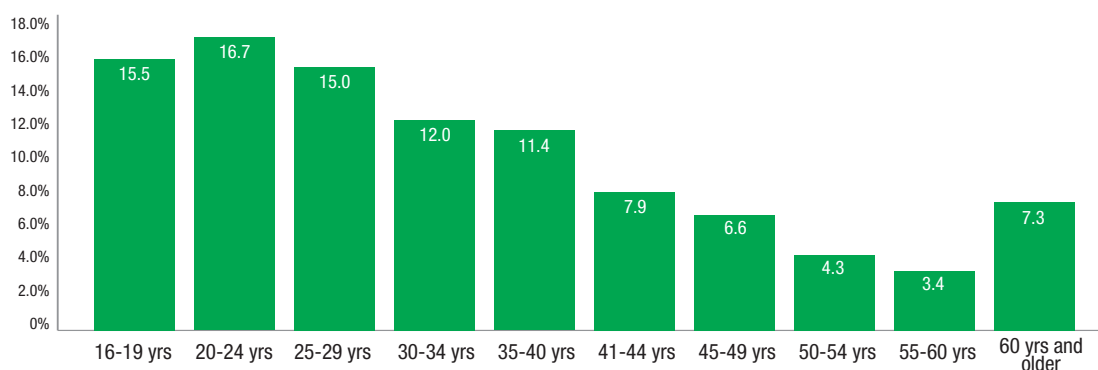
The adult population is fairly evenly spread, geographically. Lusaka and the Copperbelt are the most populated provinces, followed by Southern and Northern provinces, while Western and North Western provinces record the lowest adult population at 6% and 4% respectively (see Figure 5).

**Figure 5. Geographical distribution of the Zambian adult population by province**



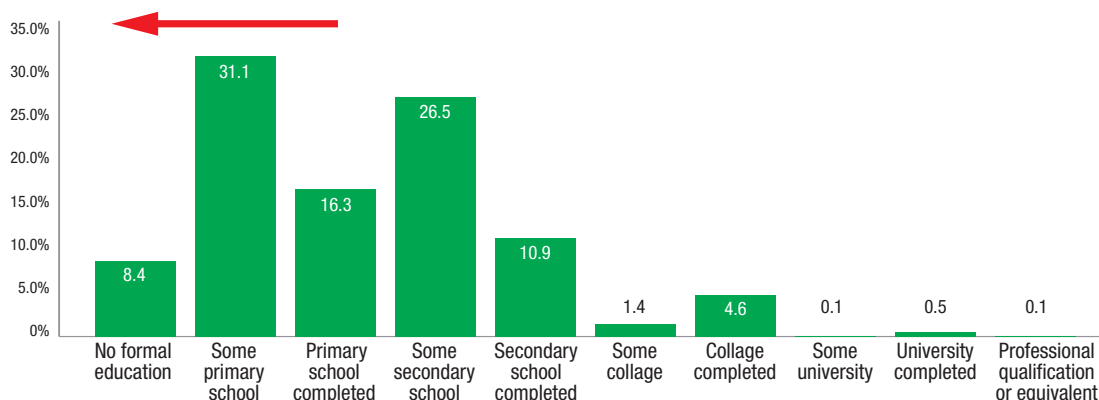
Zambia has a relatively young population. Almost half (47%) of the adult population are under the age of 30 (see Figure 6).

**Figure 6. Age distribution of the Zambian adult population**



The overall education profile of the adult Zambian population is low. More than half the population (56%) have only a primary school education or less. Almost 40% have not completed their primary education. Eight percent have no formal education whatsoever (see Figure 7).

**Figure 7. Education profile of Zambian adults**





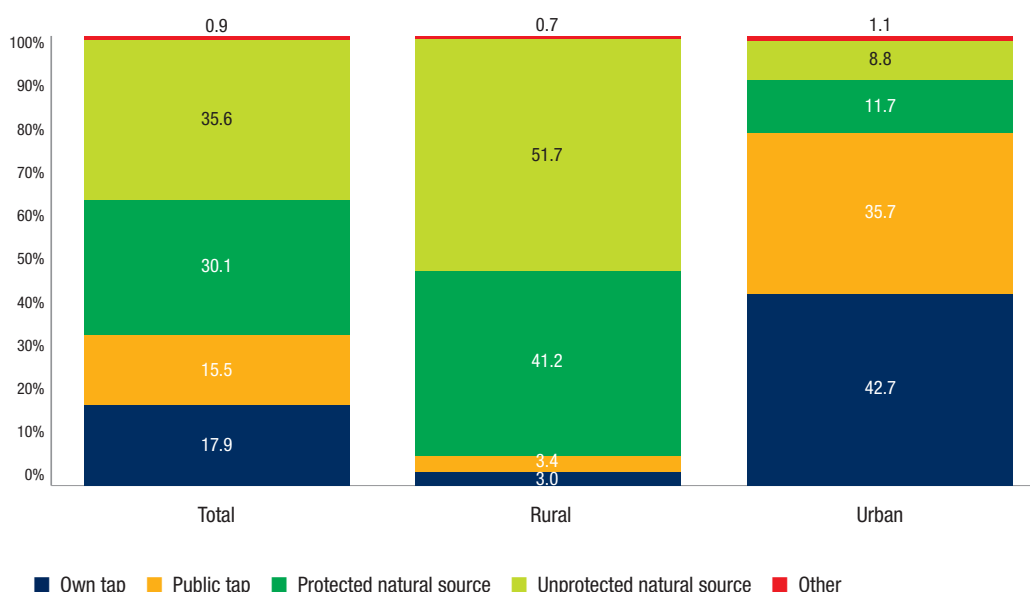
These low education levels are significant as, in general, there is a direct correlation between education levels and financial behaviour and literacy. In attempting to address issues of financial inclusion, it is therefore important to understand that the largest part of the population is not very educated.

### 2.1.2 Understanding people's lives

In addition to assessing the demographic landscape, it is also important to have a good understanding of what the realities and challenges are that people face in their daily lives – in terms of access to amenities, access to infrastructure<sup>9</sup> and income and wealth profiles. All of these aspects are likely to affect how people interact with financial services. People struggling to survive on a daily basis, who do not have access to basic amenities, or who live in an entirely cash-based economy are unlikely to prioritise usage of financial services within their limited means.

The survey findings show that a large proportion of Zambian adults do not have access to basic amenities. Those who live in rural areas are worse off in terms of all key poverty indicators than their urban counterparts. This is evident from a review of access to drinking water, sanitation and energy sources for cooking, as illustrated in Figures 8, 9 and 10.

Figure 8. Access to drinking water: percentage of Zambian adults

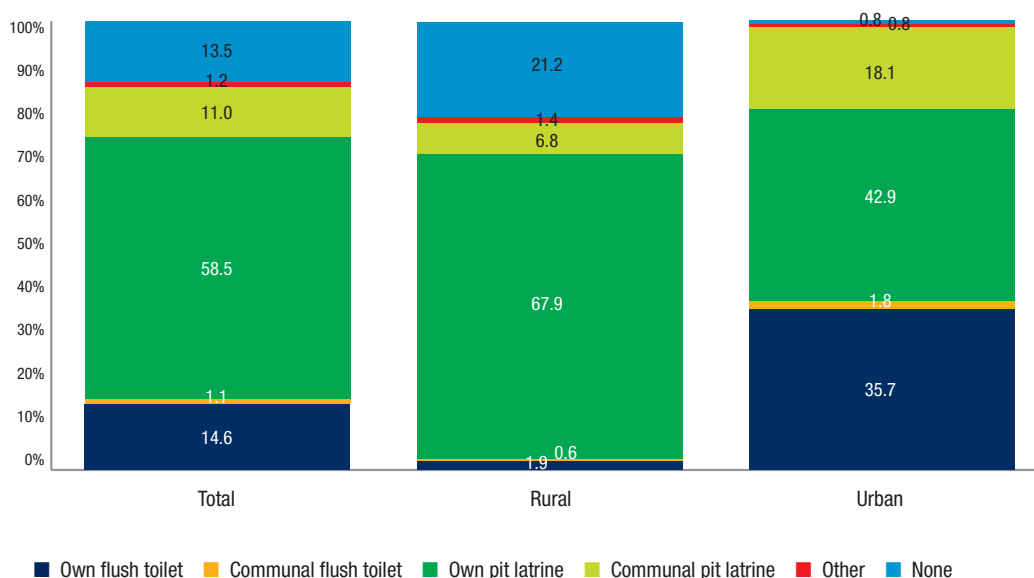


Two in every five adults do not have access to a safe source of drinking water. This is significantly worse in rural areas, where more than half the population do not have access to a safe water source. In total, fewer than 20% (one in five) adults have access to their own tap, a figure that reduces to only 3% in the rural areas. The fact that so many people cannot take access to water on a daily basis for granted – and often need to spend precious productive time fetching water – is an indicator of severe poverty and should not be forgotten when considering the financial access issue. Many people need to make do with only the basics. This is confirmed by the fact that more than 13% of adults (21% in rural areas) do not have access to a toilet facility, with only 16% having access to a flush toilet (see Figure 9).

<sup>9</sup> For example, the issue of geographical access to financial services needs to be regarded in the context of other infrastructure serving the rural areas. If, for example, there are no schools in an area, it will hardly be surprising if there are no banks.

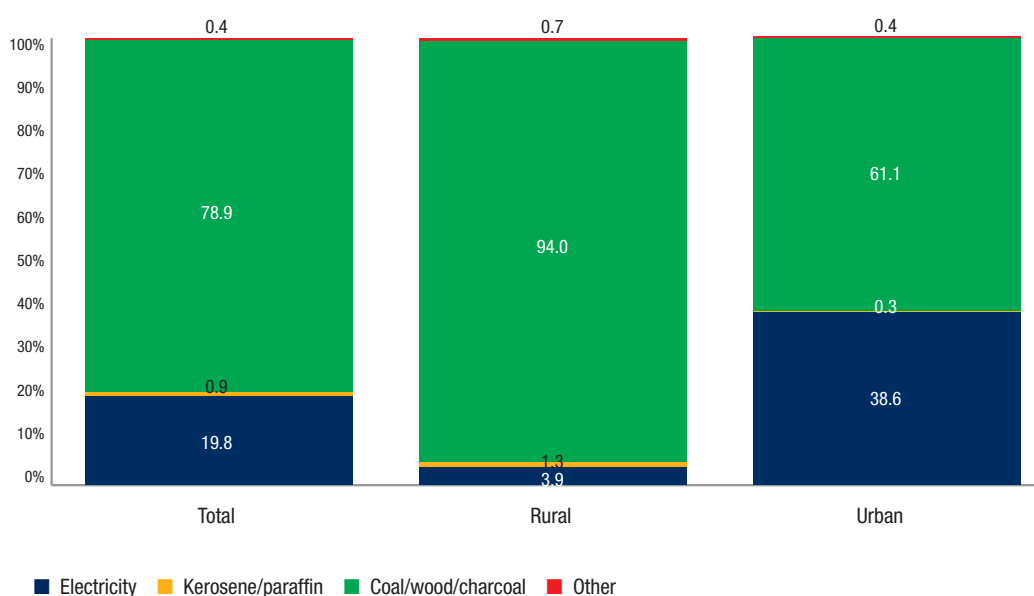


Figure 9. Access to sanitation facilities: percentage of Zambian adults



Furthermore, as Figure 10 indicates, only one in every five adults uses electricity to cook. More than 90% of those living in rural areas have to rely on wood or charcoal as cooking fuel. This implies that time needs to be spent gathering firewood – time that could otherwise have been used productively.

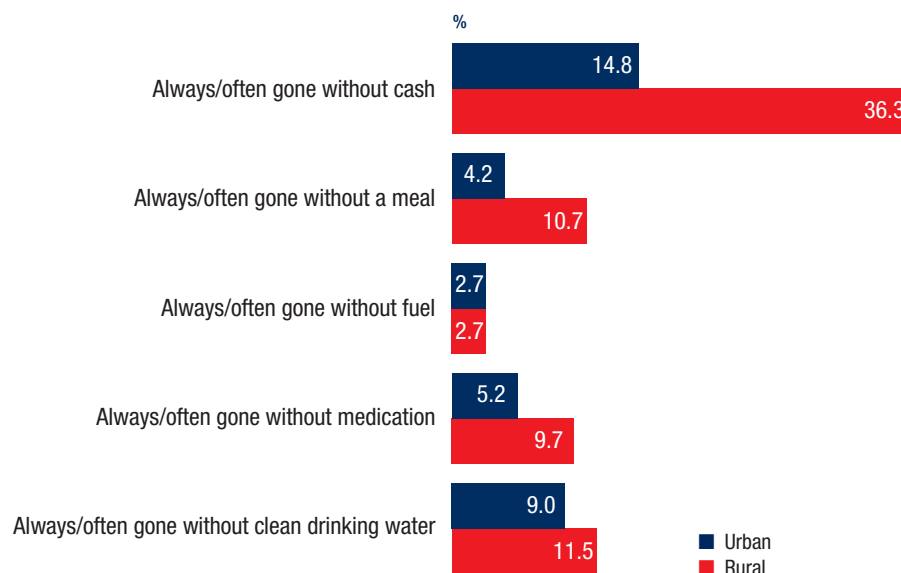
Figure 10. Energy sources used for cooking: percentage of Zambian adults





The picture of pervasive poverty that these access to amenity indicators sketch is confirmed when considering more direct measures of poverty, as detailed in Figure 11.

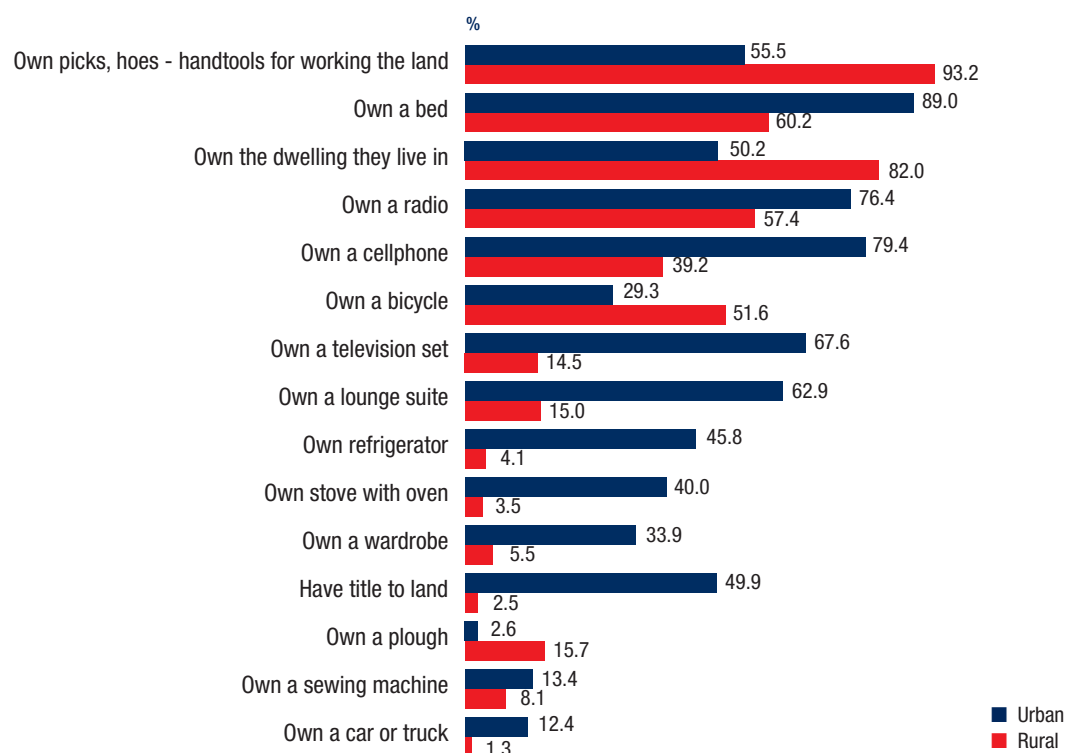
**Figure 11. Poverty indicators: percentage of Zambian adults**



Almost two out of every five rural adults and 15% of urban adults say they often or always go without cash. This is a problem in a cash-based society – even more so in urban than in rural areas. Even more disconcerting is the fact that, in rural areas, about one in 10 of adults regularly has to skip a meal or go without clean water or medication when they need it.

Though people own basic assets such as agricultural hand tools and furniture, these assets are not normally linked to wealth. Neither can they be used to leverage finance (see Figure 12).

**Figure 12. Household asset ownership: percentage of Zambian adults**

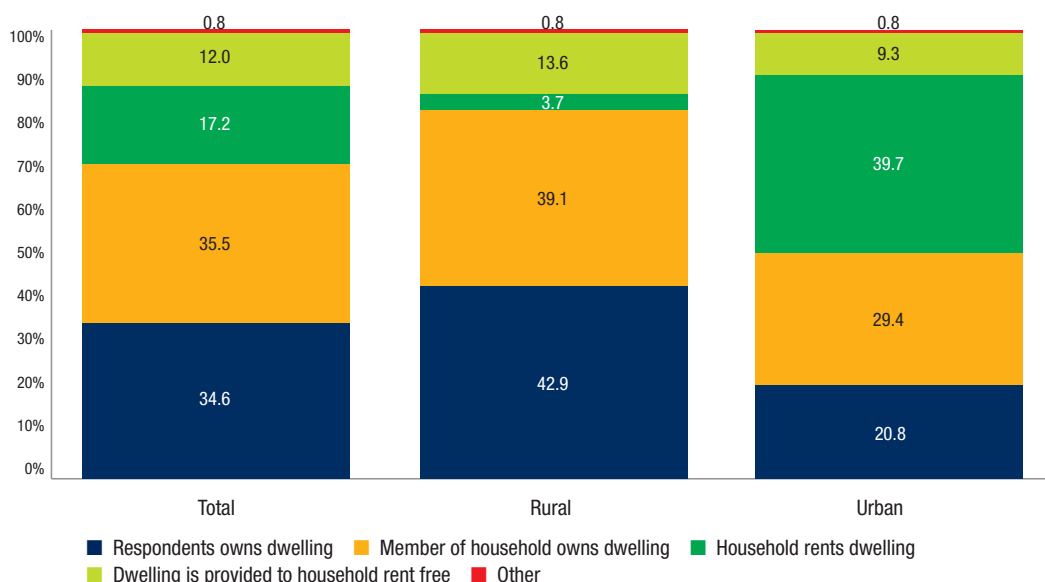






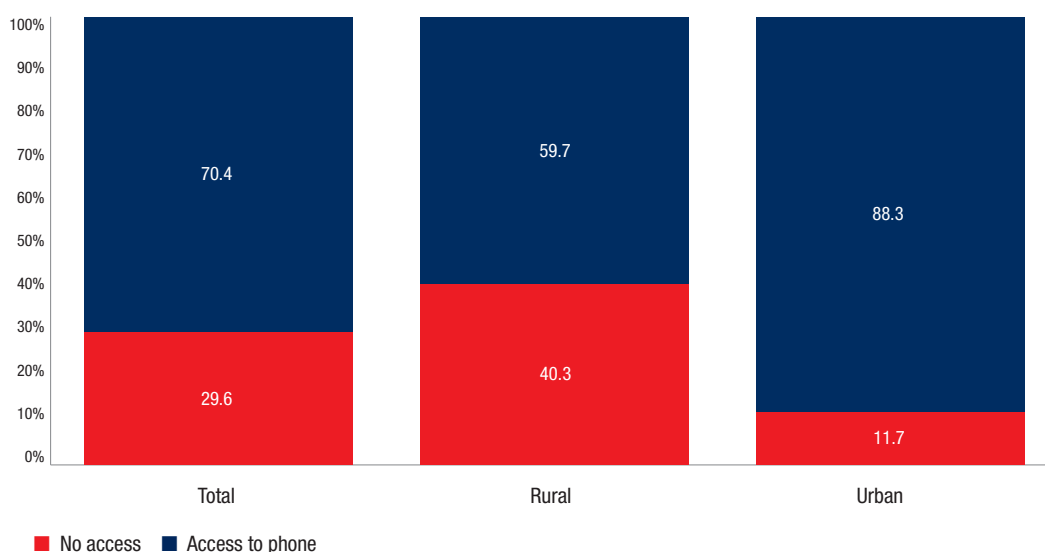
Claimed home ownership is high (see Figure 13). More than 70% of all adults and more than 80% of rural adults indicated that they or a member of their household own the dwelling that they live in<sup>10</sup>. Yet the data also illustrate that most people (87%) do not have title deeds to the land, implying that it is difficult to use the house as collateral for accessing finance. Efforts to formalise land ownership through the issuance of title deeds may further the cause of financial inclusion.

**Figure 13. Dwelling ownership: percentage of Zambian adults**



It is also useful to consider access to financial services in the context of access to other infrastructure and services. FinScope shows that overall access to communication facilities is high, with more than 70% of the total adult population having access to a cell phone, landline or public phone. The difference between rural and urban access, however, remains stark: 40% of rural inhabitants do not have any access to a telephone, as compared to only about 12% in urban areas (see Figure 14).

**Figure 14. Access to a telephone: percentage of Zambian adults**

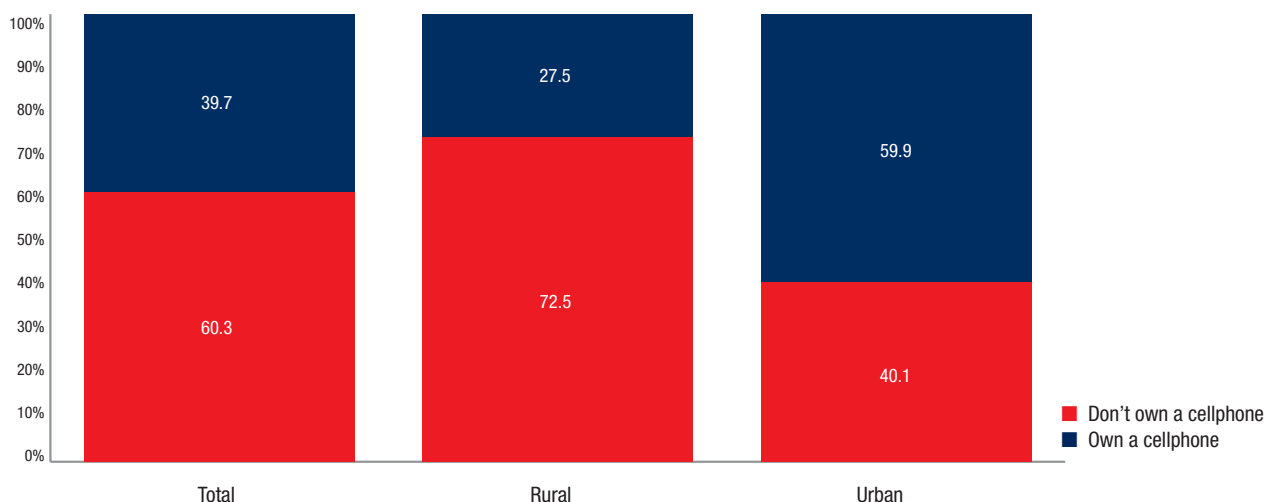


Phone ownership is perhaps a more appropriate indicator than access to a phone, should one be interested in the scope for leveraging off connectivity for financial service purposes.

<sup>10</sup> As can be expected, a significantly larger proportion of urban adults rent than those in rural areas.



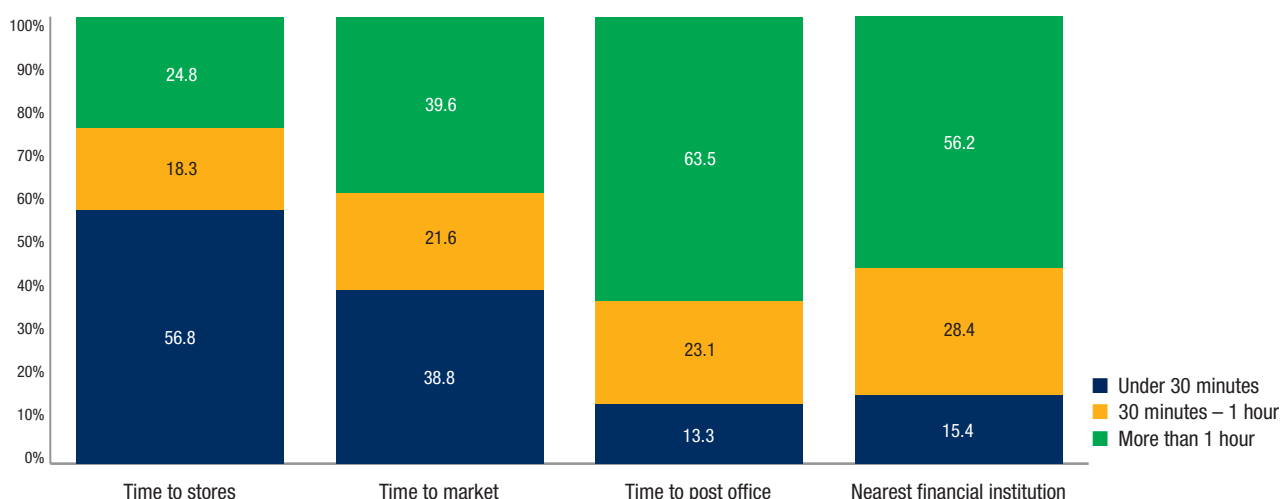
**Figure 15. Cellphone ownership: percentage of Zambian adults**



Overall, three out of five Zambian adults still do not own a cellphone (see Figure 15). This figure is reversed for urban areas, where 60% do own a cell phone. In rural areas, less than 30% have their own cell phone. These figures seem to suggest that, though cell phone banking does present a valuable opportunity, it may not have the same transformational impact that could be assumed when considering success stories elsewhere, such as the M-Pesa money transfer product in Kenya.

The travel time needed to reach the nearest store, market, post office or financial institution casts further light on the effect of access to infrastructure. While more than half of rural adults are within 30 minutes from the nearest store and only four out of 10 need to travel more than one hour to reach the closest market, more than six out of 10 need to travel more than an hour to reach the nearest post office and 56% need to travel more than an hour to reach the nearest financial institution (see Figure 16).

**Figure 16. Access to facilities: percentage of rural adults**



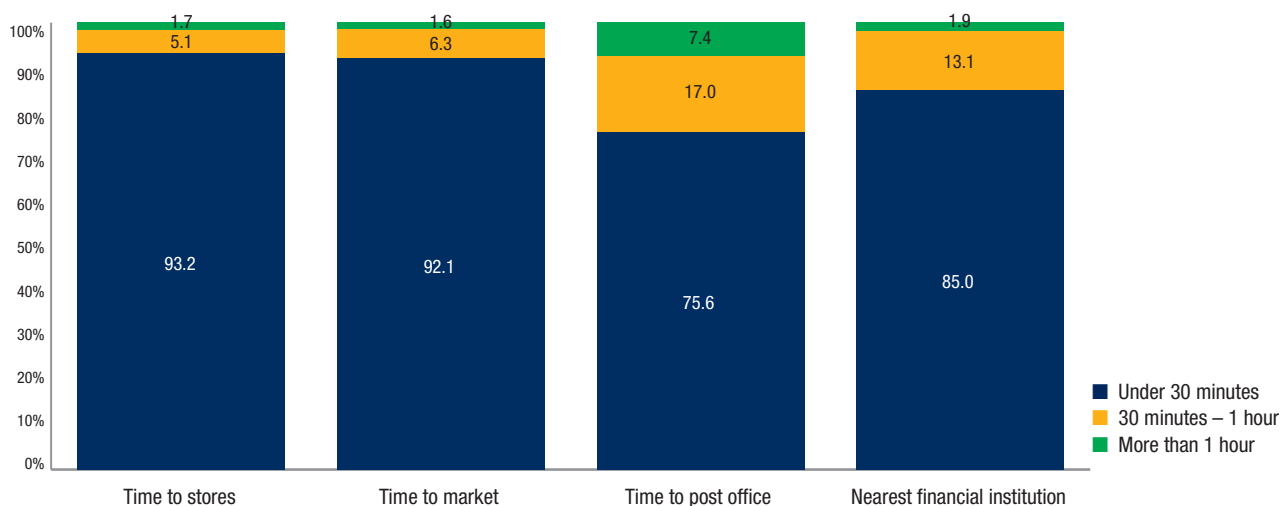
This indicates that financial infrastructure lags behind commercial infrastructure (stores and markets) in rural areas. It may be worth looking at these outlets as potential distribution channels for financial services, that is, to leverage existing infrastructure in rural areas. However, as the financial sector footprint has now surpassed that of the post office and the fact that more than 40% of rural inhabitants can indeed access a financial institution in less than an hour implies that physical access does not seem to be such an absolute barrier<sup>11</sup>.

<sup>11</sup> It should be remembered that FinScope is a demand-side survey measuring perceptions. Financial services are therefore not perceived to be that much less physically accessible than other services.



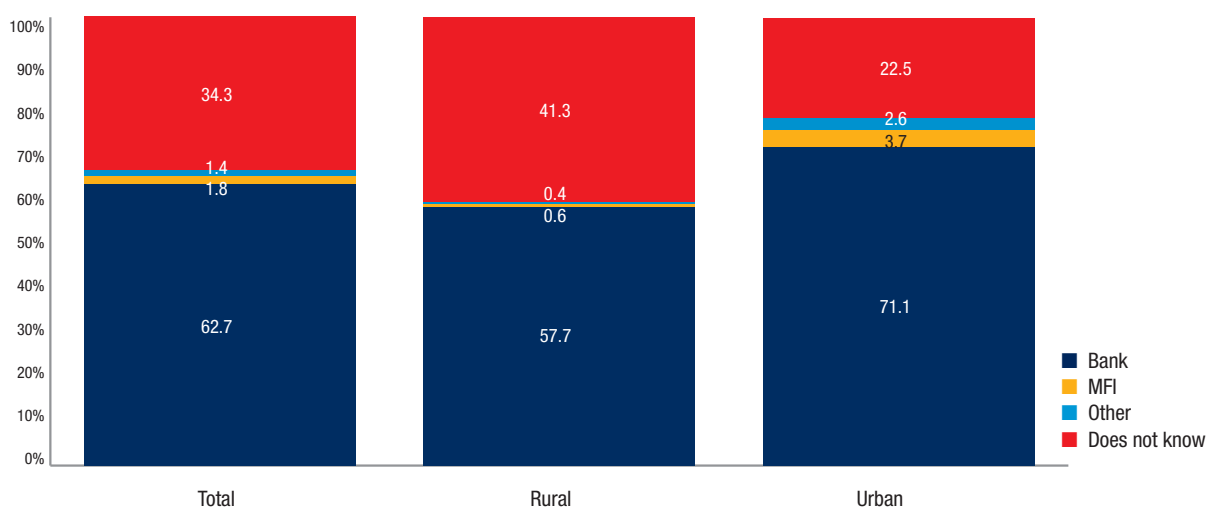
In urban areas, physical accessibility ceases to be any barrier to financial access whatsoever, as shown in Figure 17.

**Figure 17. Access to facilities: percentage of urban adults**



When asked what their nearest financial institution was, three out of five adults indicated it to be a bank, and appeared to have very little knowledge of other financial institutions (see Figure 18).

**Figure 18. Nearest financial institution: percentage of Zambian adults**

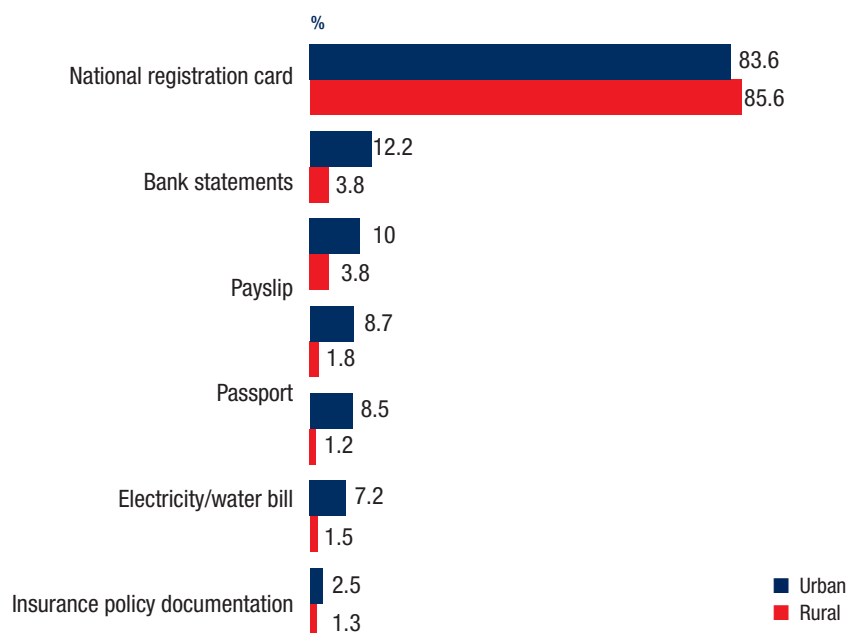


This supports the conclusion that physical or geographical access to a bank is not really perceived as an absolute barrier to access (see Section 3.4 for a discussion of financial inclusion barriers). A second point to be drawn from Figure 18, is an apparent lack of knowledge, which points to a need for consumer education – 34% of adults do not know which financial institution is closest to them.

Another relevant aspect affecting financial access is documentation. Due to the Know Your Customer (KYC) requirements imposed by anti-money laundering legislation, documentation is a prerequisite to establishing relationships with formal financial services providers. Figure 19 details possession of documentation in Zambia.



Figure 19. Possession of documentation: percentage of Zambian adults



More than 80% of adult Zambians have a national registration card (NRC). Interestingly, the penetration is even higher in rural areas than in urban centres. As would be expected from the employment profile of Zambians, only 10% of urban inhabitants and less than 4% of rural adults have a payslip. Zambia is underserved by formal utilities: only 1.5% of rural adults and 7.2% of urban adults receive an electricity or water bill.

Usually, basic KYC requires an identity document (an NRC in Zambia) to be shown, as well as proof of residential address. In many jurisdictions, a utility bill addressed to the individual at the stated residential address is required as proof of address. These requirements may exclude those who do not have an accepted identity document or formal utility services from accessing the formal financial sector.

In Zambia, documentation is unlikely to pose an absolute access barrier. The NRC is pervasive among rural and urban adults alike. Furthermore, the *Zambian Anti-Money Laundering Directives*<sup>12</sup> accept a range of documents as address verification, including a reference from a professional, the customer's employer, a known customer of the financial institution or a customary (village) authority. People can also use a utility bill, a credit reference agency service or an address validation service. Zambia is therefore relatively flexible with address verification and it is unlikely that many Zambians will be excluded from using financial services on this basis.

However, prompted by risk aversion or group policy from their international headquarters, financial institutions are often overly strict in applying address and identification requirements. This may imply that, even where regulation does not serve as an absolute barrier, many individuals will still be regarded ineligible by financial service providers.

Some financial institutions may also require prospective customers to provide a payslip or proof of income as eligibility requirement for certain financial services. This will exclude the bulk of the adult population who do not receive payslips.

<sup>12</sup> In Zambia, the Prohibition and Prevention of Money Laundering Act was enacted in 2001. It is supplemented by the Anti-Money Laundering Directives of 2004, which provide details of what KYC should entail. Under Section 6 of the Directives, financial institutions must verify the identity of customers by using a national registration card, driver's licence or passport. Section 7 requires address verification. In contrast with some other jurisdictions, however, there is considerable flexibility in how this is done and several forms of verification may be used. In this way, the Bank of Zambia has pre-empted the possible exclusion of people living in informal settlements or rural areas from financial services.

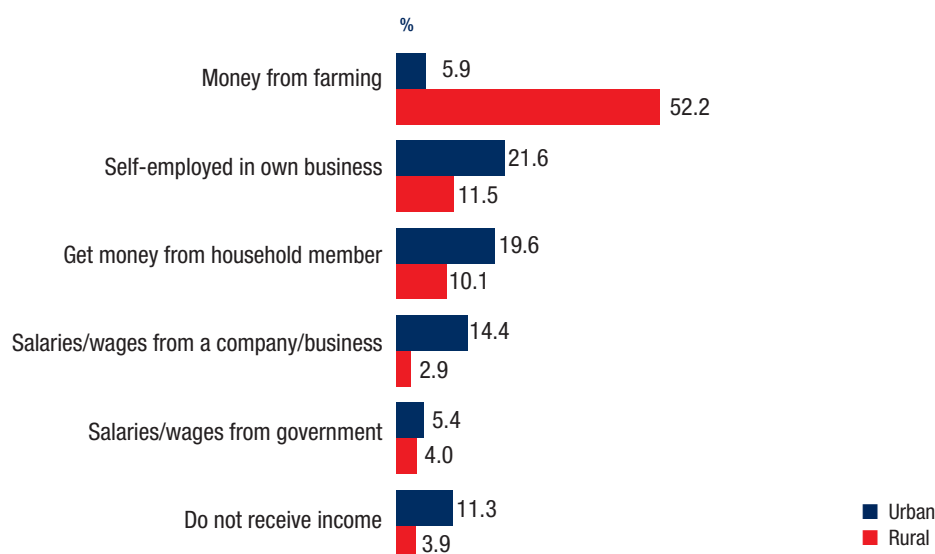


## 2.2 Income-generating activities

In addition to appreciating the general demographics of the Zambian adult population and how they live their lives, as outlined in Section 2.1, it is also important to understand how people generate their income and what the income distribution is. Without knowing the income realities of Zambians, it will be difficult to understand their financial service usage choices and constraints as income is one of the primary determinants of affordability and, hence, of financial inclusion. Understanding the source, regularity and consistency of the earned income can also inform the optimal way that financial services should be structured to unlock usage.

Figure 20 shows the main income-earning activities in Zambia.

**Figure 20. Main income-generating activities: percentage of Zambian adults**



Most adults, rural and urban, earn their income on an irregular, inconsistent basis. Only 14.4% of urban inhabitants earn a salary or wage from a company or business, reducing to less than 3% for rural adults. In rural areas, financial activity is driven by farming activities, whereas in urban areas self-employment (running own business) and money received from a household member feature more prominently. Overall, farming income and self-employment are the two biggest income earners.

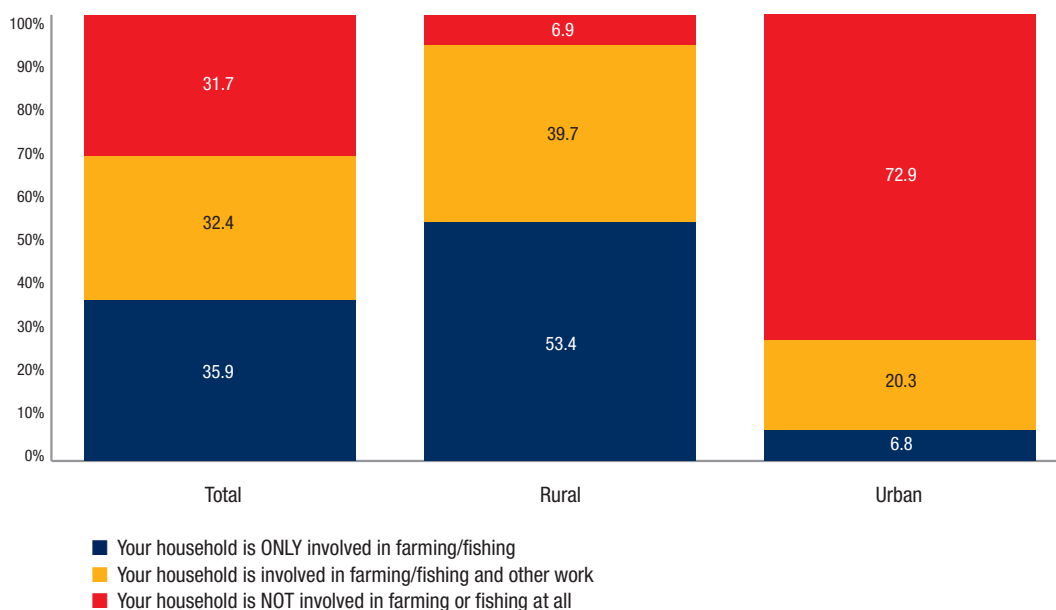
This could imply that a significant proportion of adults could be ineligible to open an account, should proof of regular income be required by the bank.

On the positive side, only one in five (19.6%) of urban adults and one in ten (10.1%) of rural adults rely on someone else for their livelihood. This is low in comparison with other countries for which FinScope data is available. For example, FinScope Mozambique (2009) indicates the dependency rate among adults to be almost 50%. This suggests that Zambians choose to be entrepreneurs rather than to rely on others. Furthermore, the percentage of people that state that they do not receive any income (11.3% urban; 3.9% rural) is lower than in most other countries in the region where FinScope surveys have been conducted.

Given that more than half of rural adults, who in turn represent the majority of the adult population, rely on farming to generate an income, it is worth considering agricultural activities in more detail. Figure 21 indicates the percentage of rural, urban and total adults, who indicated that their household (i) is involved solely in agriculture or fishing, (ii) farms or fishes in addition to other work, or (iii) is not involved in agriculture/fishing at all.



**Figure 21: Percentage of Zambian adults that are involved in farming**



Almost 70% of all households (rising to more than 90% in rural areas) are involved in agriculture or fishing in some way. Agriculture is the sole livelihood for 36% of households, and the rest farm for consumption or to supplement other income purposes. This figure becomes significantly larger when just considering rural adults. Agriculture is the sole economic activity for one out of every two households in rural areas.

The farming picture is extremely relevant when considering financial inclusion, as agriculture is a partial or full income earning activity for more than two thirds of Zambian adults. When asked whether they generate a cash surplus from farming, 23% of those involved in agriculture indicated that they sell most of their farm outputs, 59% consume most of their farm outputs and sell only a small proportion, and 18% are purely subsistence farmers.

Agricultural finance, specifically, as well as access to financial services such as transactional services, savings, credit and insurance for the farming community may therefore be transformational in terms of expanding financial inclusion. Very few farmers claim to have supplier credit: less than 1% or around only 34 000 adults in total. Other types of lending for agricultural inputs are even lower (less than 1% in total). Therefore the agricultural sector is still very much underserved in terms of credit. The same holds for other financial services: only 1.5% of those who are involved only in farming have insurance (compared to 5.3% of those who are not involved in farming at all). Only 5% of those for whom agriculture is the sole income-generating activity are currently banked (compared to 23% of those who are not involved in agriculture at all). Therefore farming as main income source tends to imply lower financial inclusion.

Income from agriculture is generally low, suggesting that affordability may be a constraint:

- 32% of those involved in farming earn below K400 000<sup>13</sup> personal income a month on average
- 9% earn between K400 000 and K800 000 a month
- Only 11% state that they earn above K800,000 per month

Furthermore, 91% of those earning an income from agriculture do so only occasionally or seasonally and may therefore find monthly financial services charges or contributions challenging.

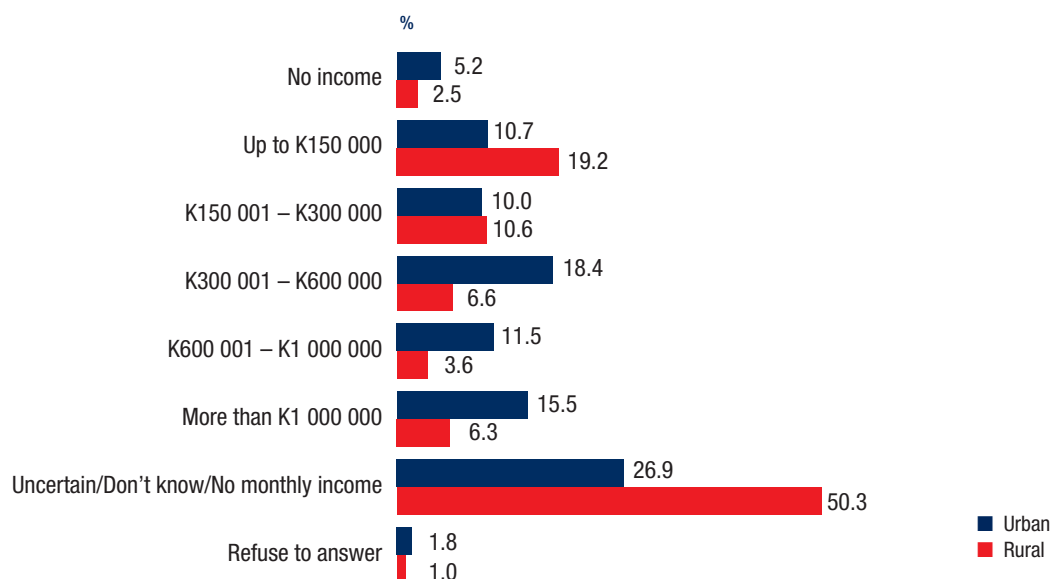
Moving on from income-generating activities, it is also important to consider the actual income levels of Zambians, as this will determine affordability of financial services (as will be discussed in Section 3.4, affordability is one of the potential barriers to financial inclusion). The following diagram indicates the distribution of Zambian adults by monthly personal income:

<sup>13</sup> US\$1 = K5 145 (June 2010)





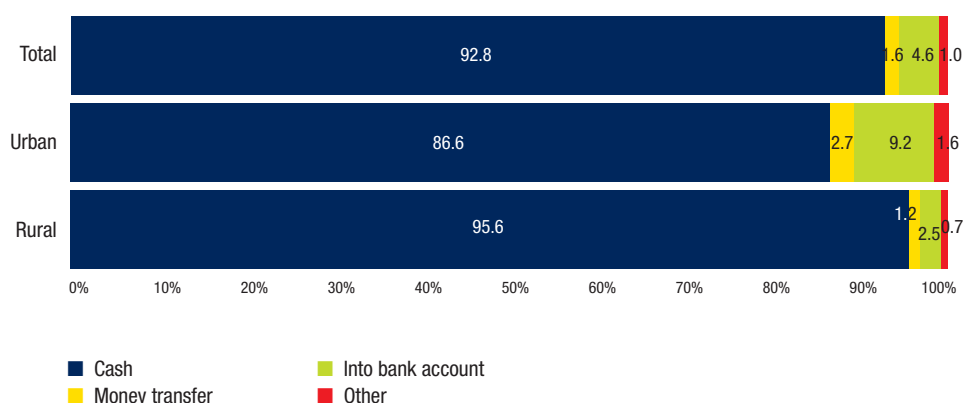
**Figure 22. Income distribution of Zambian adults by personal monthly income**



A small proportion of Zambian adults indicate that they do not have any income. However, 50% of rural and 27% of urban adults do not have a regular monthly income and in total almost 80% of adults earn below K400 000 a month (if including those who do not indicate a monthly income). This is in line with the picture sketched by the income-generating activities outlined in the discussion above: the fact that most rural inhabitants are involved in agriculture and that the single biggest income-generating activity in urban areas is self-employment implies that incomes are likely to be low, irregular and inconsistent for most Zambian adults. This all points to a lack of certainty and predictability about income – an important factor to understand when considering financial inclusion.

Lastly, people tend to receive their income and transact in cash, implying that a general mind shift will be needed before electronic transacting will become pervasive. When asked how they receive their income, 96% of rural adults and 93% of all Zambian adults indicated that they do so in cash and, as Figure 23 indicates, even the urban areas remain largely cash-based:

**Figure 23. Method of receiving income: percentage of Zambian adults**

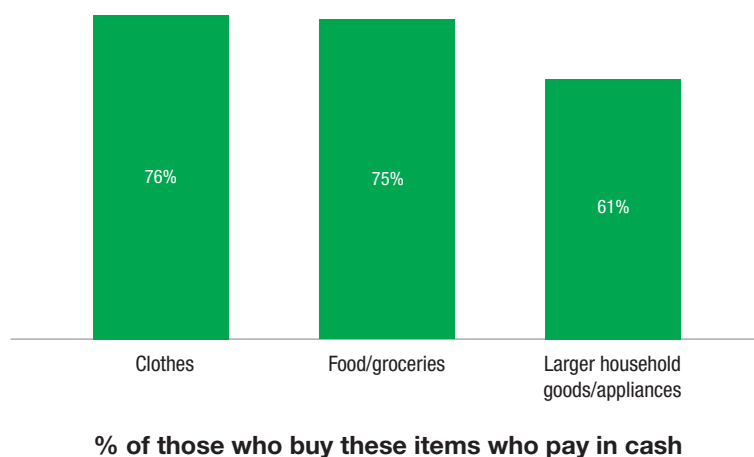


Only 5% of the population receive their incomes into a bank account, compared to 14% who receive a regular salary/wages from a company, government or others. This suggests that there is still an untapped potential for salary earners to become banked and for government and companies to pay salaries directly into a bank account.



The transaction profile of Zambian adults similarly point to cash dominance. Of those who indicated that they buy clothes, groceries and/or larger household goods, the majority in each case indicated that they do so in cash (see Figure 24).

**Figure 24. Cash transaction preferences**



The overall landscape emerging from Section 2 is one where there are likely to be many financial inclusion challenges in Zambia: the population is largely rural and relatively poor, with a substantial proportion not even having access to basic amenities such as sanitation or safe drinking water in their homes. Incomes are generally low and erratic, explained by the fact that most people either earn their livelihood in small-scale agriculture, or are micro entrepreneurs of which the business income may be unpredictable. Zambia still largely operates in a cash-based economy and even those adults who do have formal or regular jobs tend to receive their income and transact mostly in cash.



### 3 FINANCIAL INCLUSION IN ZAMBIA

This section considers the landscape of financial inclusion in Zambia as it emerges from the FinScope 2009 findings, bearing in mind the profile of the adult population as sketched in the preceding section. Section 3.1 defines financial inclusion. Section 3.2 employs the financial access strand and financial access landscape tools to indicate the overall state of financial inclusion. Section 3.3 investigates the usage of different types of financial services. Section 3.4 considers the barriers to financial inclusion in Zambia in an attempt to explain the overall high level of financial exclusion.

#### 3.1 What is financial inclusion?

The concept “financial inclusion” is core to the FinScope methodology. Financial inclusion considers that part of the adult population that uses any kind of financial service, formal or informal. The term used for this part of the population, is “financially served” or “financially included”.

The FinScope methodology uses this concept to segment the adult population. All those who are not part of the financially included population are regarded as “financially excluded”, i.e. those individuals who use no financial products whatsoever (formal or informal) to manage their financial lives. Therefore the total adult population can be divided into two groups: the financially included and the financially excluded.

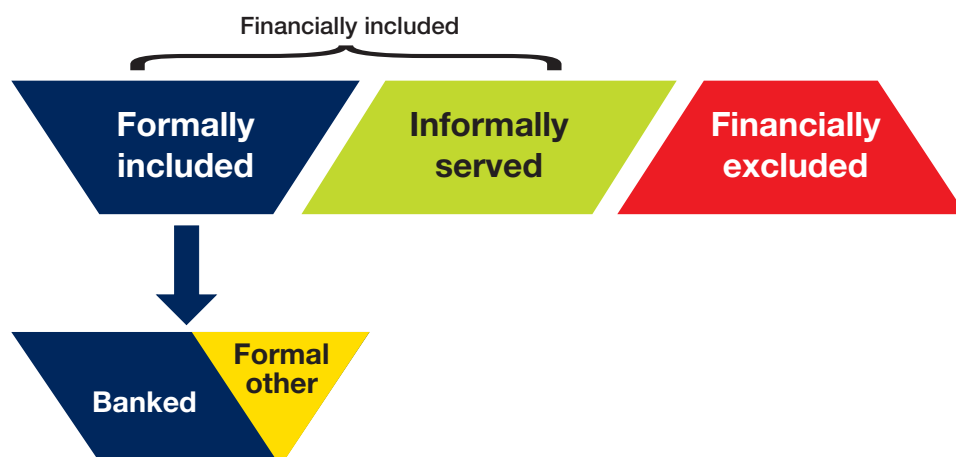
Within the financially included category, people can either be “formally included”, i.e. use the financial services offered by formal financial institutions, or “informally served”, i.e. use only informal financial services. Formal financial services are defined as any financial products supplied by institutions governed by a legal precedent of any type, and informal services are the converse. Examples of informal financial services include saving with an employer, membership of a savings group (chilimba) or borrowing from an informal moneylender (kaloba).

Formal usage is not exclusive usage, as these individuals may also be using informal products. However, the informally served is defined as those using only informal services, i.e. not using any formal services.

The formally included population, in turn, can be segmented into the “banked” population and the “formal other” population. The banked population is defined as individuals using traditional financial products supplied by commercial banks. “Formal other” is defined as individuals using financial products supplied by formal financial institutions which are not commercial banks such as microfinance institutions (MFIs).

These concepts are graphically depicted in Figure 25.

Figure 25. Components of financial inclusion





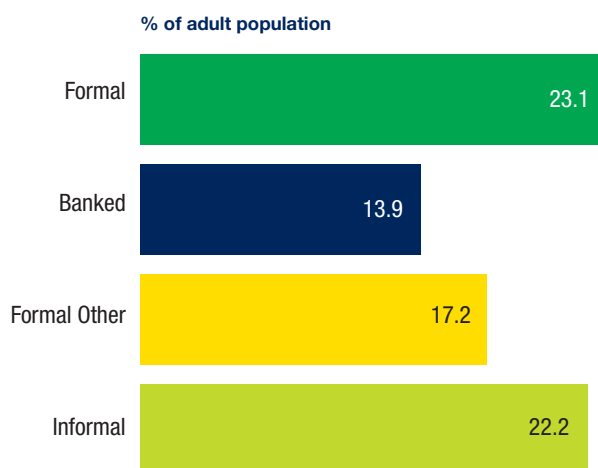
There are different lenses through which financial inclusion can be viewed: usage of formal versus informal financial services can be compared for the adult population as a whole, between urban and rural areas, or in terms of how people earn their income. An access strand (to be defined in Section 3.2) can be drawn up for the whole adult population or for various sub-categories. Financial inclusion can also be considered for different product categories through the financial access landscape tool (see Section 3.2 for an explanation) and by conducting an analysis for each individual product category. Together, these different angles build a coherent picture of financial inclusion in Zambia. Each of these is considered in the following section.

## 3.2 Overall picture of financial inclusion

### 3.2.1 Formal versus informal inclusion, rural versus urban

A total of 63% of Zambian adults do not use any form of financial product to manage their financial lives, be it formal or informal. In total, 23% use formal financial services and 22% use informal financial services, as indicated in Figure 26.

Figure 26. Formal versus informal financial product usage among Zambian adults



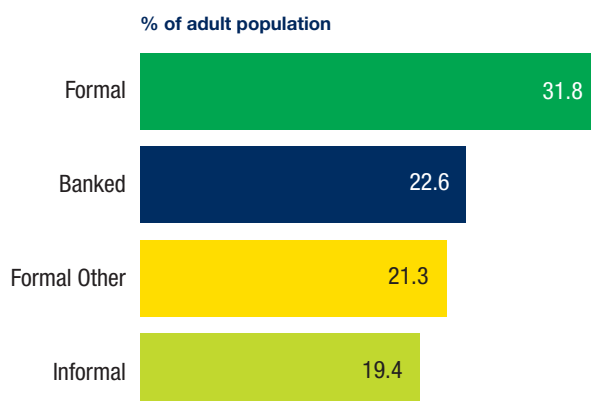
Formal and informal financial products and services are therefore playing an equally important role in the lives of Zambians. Within the formal sector, non-bank financial institutions play an even larger role than banks: 14% of Zambian adults have a bank account, but 17% use products from non-bank financial institutions.

It is important to note in reading Figure 26 that there will be overlaps between formal and informal financial product usage. That is: some people who have a formal financial product will also have an informal one; formal and informal usage as depicted in the figure cannot simply be added up to reach total inclusion. The same holds for banking and non-bank financial services: many of those who use non-bank financial services are likely to also have a bank account. These differences will become apparent when inclusion is unpacked further.

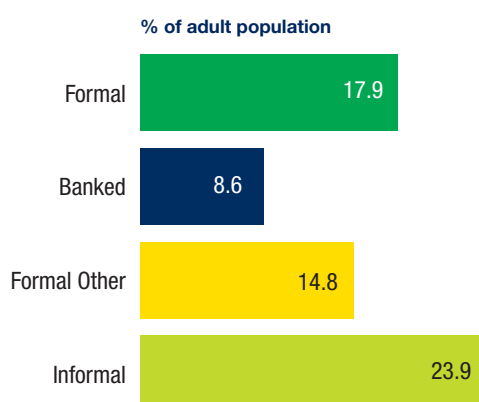


Figures 27 and 28 show a comparative analysis of rural and urban usage figures.

**Figure 27. Percentage of Zambian adults using financial services: urban**



**Figure 28. Percentage of Zambian adults using financial services: rural**



As expected, formal financial services usage is higher in urban than in rural areas: 32% of urban adults use formal financial products, versus 18% in rural areas. The converse holds for informal financial services: such services serve 19% of urban adults and 24% of rural adults.

The differences are, however, not as stark as would intuitively have been expected. This indicates that physical or geographical accessibility does not seem to be an absolute barrier preventing financial inclusion in rural areas. This is confirmed by the fact that almost 20% of urban adults still use informal financial services, even though physical accessibility does not pose any challenge to accessing the formal sector in urban areas. The issue of accessibility is explored further when considering the barriers to financial inclusion in Section 3.4.

Within formal services, banks and non-bank financial institutions have more or less equal penetration in urban areas, but in rural areas other formal services outstrip banking services.

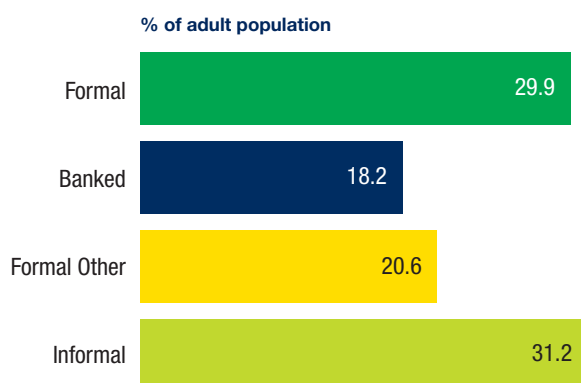
Overall, in urban areas the formal sector is more important in servicing the needs of the population than the informal sector, but people are equally likely to use a bank product or another formal product. In rural areas, the informal sector still plays the most important role. When rural adults use formal services, they prefer non-bank financial services (even though the proximity analysis in Section 2.1 shows that banks tend to be the nearest financial service in rural areas). Keeping in mind that the majority of Zambians live in rural areas, this is an important phenomenon and begs the question: what needs are served by other financial institutions that are not being met by banks? If “formal other” mainly means MFIs, it would seem that MFIs are serving the rural population better than banks, even though their geographical footprint may be smaller.



### 3.2.2 Financial inclusion by income source

Figure 29 and Figure 30 analyse the use of financial services among the two main income-generating activity groups, namely own business and agriculture. This gives further insight into how people in these groups tend to manage their finances.

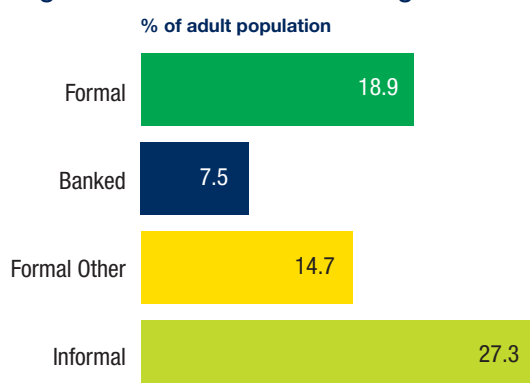
**Figure 29. Usage of financial services among adults who run their own business**



More of those who run their own business are financially served than in the adult population as a whole. This holds for both formal and informal usage, which play a more or less equally important role. Within formal services, likewise, banking and other formal play a more or less equal role. As the “own business” category is one of the main drivers of urban employment, it is significant that informal financial services are still so prevalent – despite the widespread availability of formal services in urban areas. This points to other barriers to the formal sector than just accessibility, which could include affordability and eligibility, but is likely to also entail more subtle barriers in terms of perceptions, trust and consumer education. This will be explored further in Section 3.4.

Figure 30 considers usage among those who are involved in farming.

**Figure 30. Usage of financial services among adults who are involved in farming**



If own business activities are a driver of the urban sector, then agriculture is an even bigger driver in rural areas. Informal financial services play a larger role than formal services among those involved in agriculture and serve almost one in every three farmers (only about one in every five use formal services). Irrespective of the fact that banks are perceived to be nearer for adults living in rural areas than other financial institutions, other formal financial services reach almost double the number of farming adults than banks, who can count only 7.5% of farming adults as their customers.

The relatively higher usage of informal services in both groups (farming and own business) indicates an untapped opportunity for the formal sector. In pursuing these markets, a thorough understanding is, however, needed of what drives the preference for informal services. This can be explored further through additional segmentation of the data. Financial institutions also need to conduct a close inspection of the extent to which their own services are tailored to the needs of these target markets. The homework specifically for banks will be even greater, given the preference for non-bank financial institutions over banks.



### 3.2.3 Usage overlaps

It is useful to consider the extent of overlap in usage of different financial services among Zambian adults. Overall, a significant proportion of the adult population uses a combination of financial services (see Figure 31).

**Figure 31. Overlap of usage of banking, formal other and informal financial services: total adult population**

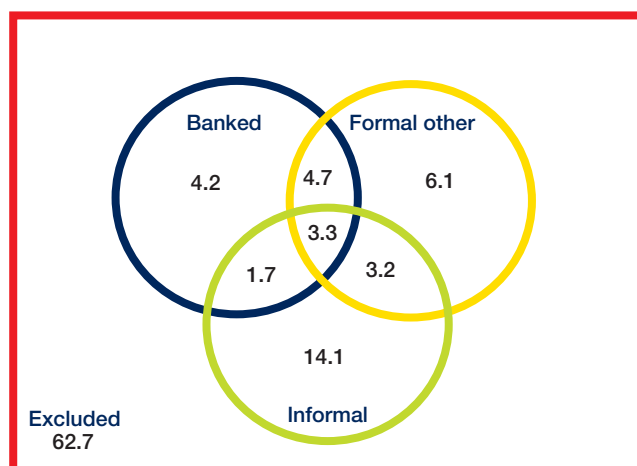


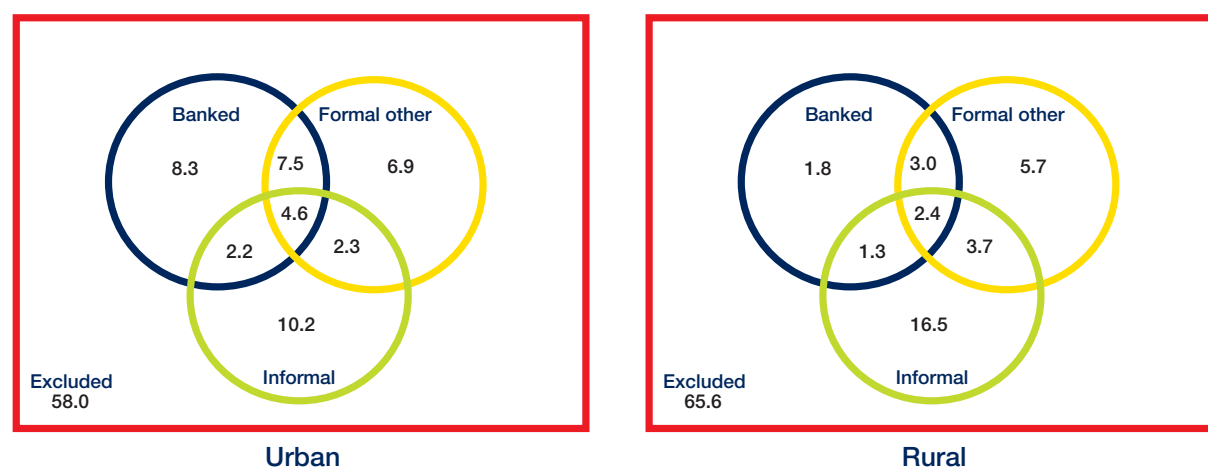
Figure 31 shows that:

- 4.2% of adults are only banked;
- 4.7% are banked *and* use other formal financial services;
- 3.3% are banked *and* use other formal services as *well* as informal services; and
- 1.7% are banked *and* use informal services.

In total, 70% of those that are banked also use another type of financial product. The graph can be read in the same way for the formal other and informal categories, respectively. The majority of those who use other formal services also have another type of financial service, whereas most of those with informal financial services use informal services exclusively (only 40% use other products). This confirms the emerging picture of the importance of the informal sector.

These overlaps can also be compared between urban and rural inhabitants, as well as between those generating an income through their own businessess or through agriculture.

**Figure 32: Overlap of usage: urban versus rural**







There is an institutional overlap in usage in both urban and rural areas (see Figure 32). The reliance on formal other only is similar in rural and urban areas. More rural inhabitants tend to rely on informal services only (16.5%) than their urban counterparts, though at 10.2% the figure is still significant in urban areas, pointing to an opportunity for formalisation. Of equal significance is the usage of banking services: 8.3% of urban adults use only banking, compared to just 1.8% in rural areas. There is therefore much room for growth in the banking sector, particularly in rural areas but also in urban areas.

A similar picture emerges when considering the overlaps among those that run their own businesses and who are engaged in farming, respectively. This is relevant as these two activities are the most important sources of income for the adult population as a whole.

Figure 33. Overlap of usage: self-employed versus farmers

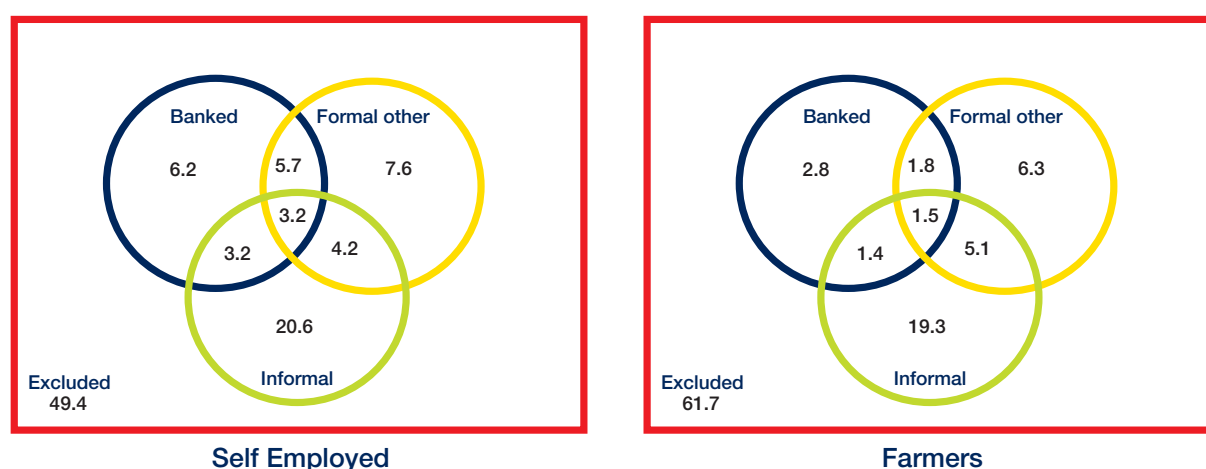


Figure 33 shows that there is no big difference between the two categories in terms of their reliance on other formal or informal financial services, but that more of the self-employed tend to be banked only than those involved in farming. This confirms the findings that the farming sector is still underserved by banks, despite agriculture being the biggest source of income for Zambians. The reasons that the formal financial sector is not serving the agricultural population may hold the key to a large part of the financial exclusion story in Zambia and can be explored through further segmentation analysis.

### 3.2.4 Financial access strand

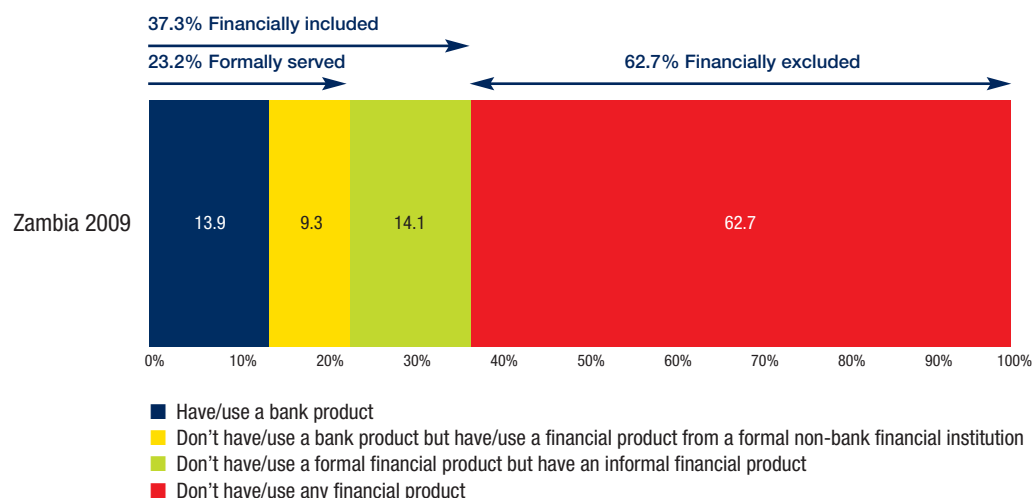
Another tool to consider financial inclusion, which removes some of the overlaps highlighted in the previous analysis, is the financial access strand (FAS). The FAS is based on the definition of financial inclusion and the corresponding segmentation of the adult population as set out in Section 3.1. To recap, all adults in a country will fall into one of the following categories:

- **Banked** – Individuals using commercial bank products. This is not exclusive usage – these individuals could also be using financial products from other formal financial institutions or informal products.
- **Formal other** – Individuals using financial products from formal financial institutions which are not commercial banks such as microfinance institutions or insurance companies. This excludes bank usage, but is not exclusive in terms of informal usage: these individuals could also be using informal products.
- **Informal** – Individuals using informal financial products only. This category is defined as exclusive informal usage and does not count those within the banked or formal other categories that also use informal services.
- **Excluded** – Individuals using no financial products to manage their financial lives – neither formal nor informal.



Figure 34 plots financial services usage in Zambia according to these categories.

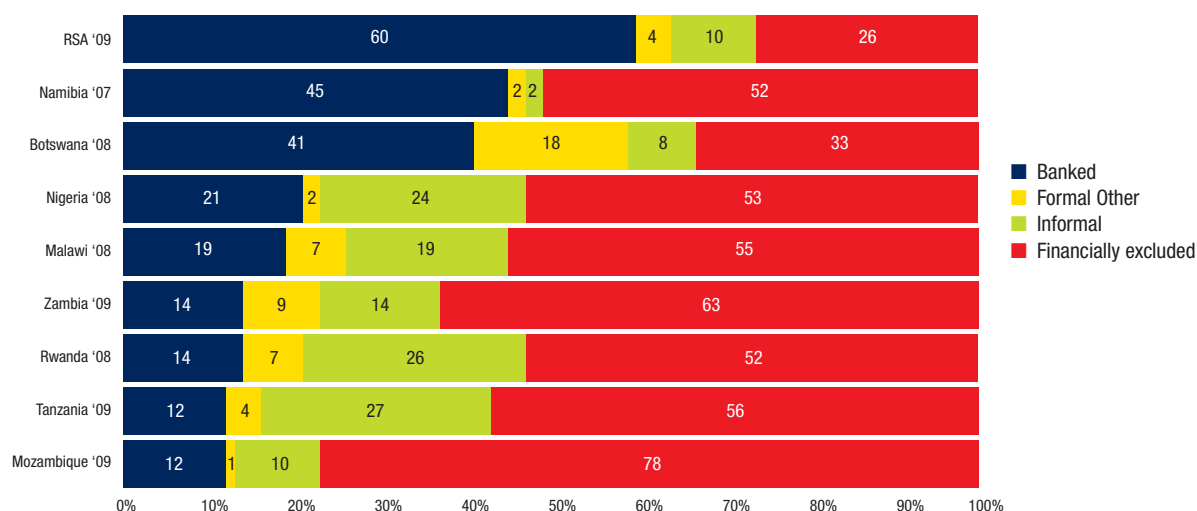
**Figure 34. Financial access strand for Zambian adults**



A total of 23.2% of Zambians are formally included: 13.9% have a bank account and 9.3% have other formal financial products, though they do not have a bank account. A further 14.1% of the population is informally served, i.e. use only informal financial products. This brings the total financially included population to 37.3%, leaving 62.7% of adults financially excluded.

The FinScope FAS tool can be used to compare financial inclusion levels across countries, or between different population segments within a country. Figure 35 compares Zambia's access strand to those of other countries in which FinScope surveys have recently been conducted, followed by a look at the access strands for different segments within Zambia.

**Figure 35. Financial access strands for the various FinScope survey countries**



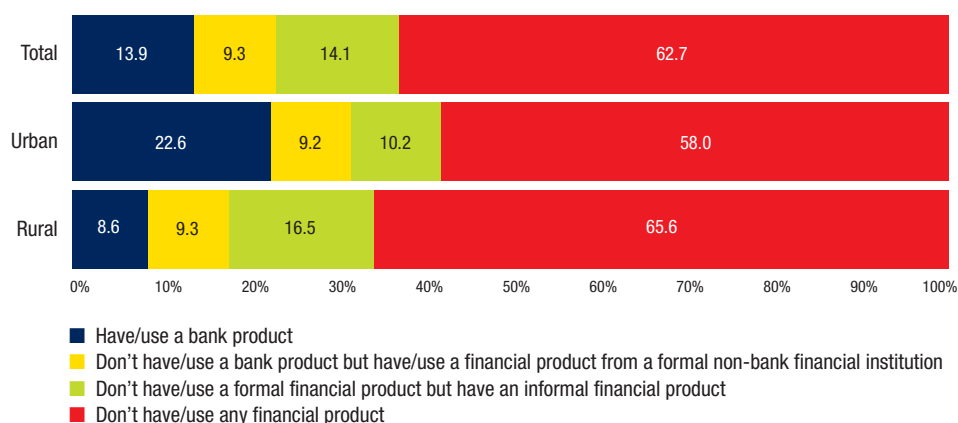
With the exception of Mozambique, Zambia is the country with the highest level of financial exclusion. Though the reach of the banking sector is relatively low in Zambia, the size of the formally served sector ranks Zambia around the middle of the sample, should South Africa be removed. Likewise, the size of the informal sector is fairly average compared to the rest of the sample. It is noteworthy that the formal other segment in Zambia is second only to Botswana. This confirms the important role played by non-bank financial institutions in Zambia, as highlighted in various instances in the preceding analysis.



Caution, however, is needed when comparing results across countries as the FinScope surveys differ somewhat between countries. Each country also has a unique financial sector and general economic context that has to be taken into account when making any comparative analysis.

Figures 36, 37 and 38 consider the access strands for Zambia for the rural and urban sectors, by gender, and according to income-generating activities.

**Figure 36. Breakdown of the Zambian access strand: rural versus urban**

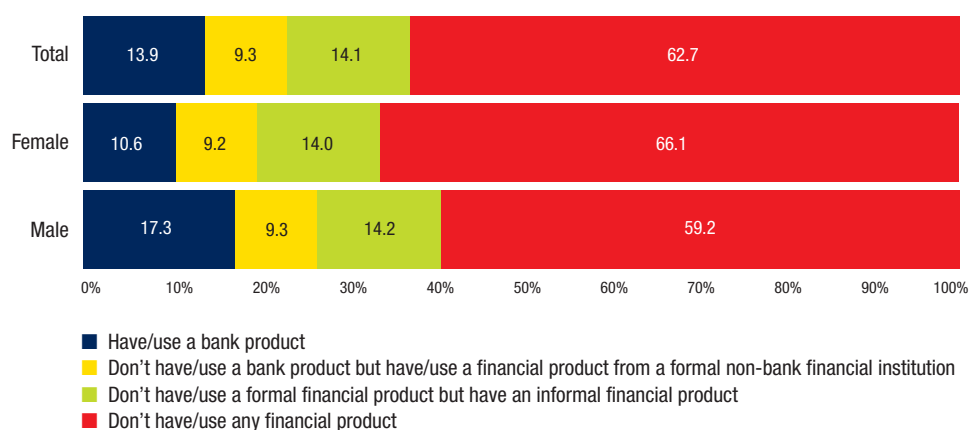


The most significant difference between the rural and urban access strands lies in the banking sector where, as previously established, banking penetration is more than twice as high among urban adults compared to rural adults. Formal other services play an equally important role in rural and urban sectors, an encouraging sign for the potential of the formal sector to reach the rural areas, where the bulk of the population lives. It is likely that own-business owners are pushing up the use of formal other in urban areas and farmers in rural areas.

As expected, the percentage of those who use only informal services is higher in rural than in urban areas. The informal sector is an important driving force of financial inclusion in rural areas. In striving to promote rural inclusion, policymakers and financial institutions alike should look to the informal sector to better understand what services it offers, and in what way, that give it a competitive edge over formal banking and other services.

A gender analysis shows that the banked market is skewed towards males, without any significant difference in the other FAS elements (see Figure 37).

**Figure 37. Breakdown of the Zambian access strand: male versus female**

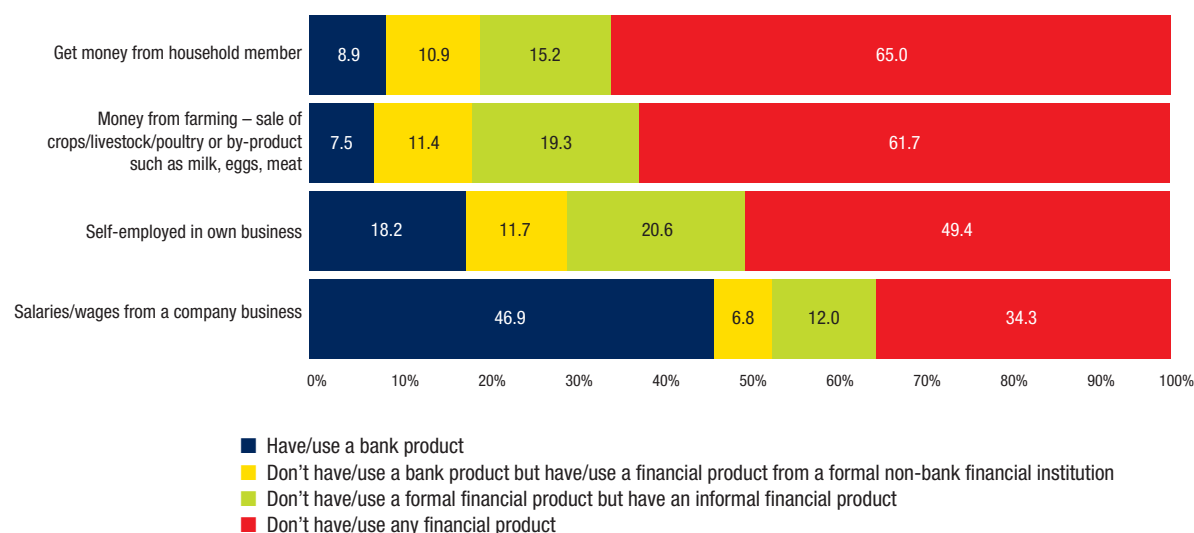




Banks therefore have a bigger role to play in serving female financial needs and marketing specifically to unserved females. At the same time, the male population is still far from saturated.

The differences become more pronounced when comparing access across different income-generating activities (see Figure 38).

**Figure 38. Breakdown of the Zambian access strand: different income-generating activities**



Predictably, those who rely on a household member for their livelihood tend to use fewer financial services than the rest of the population. However, even with this group usage of formal other services is on par with other groups, once again underlining the importance of this category. The exception is those who are employed, i.e. earn a salary or wages from a company. Among them, formal other is markedly lower than among the other groups, as they rely mostly on banks for their financial service needs. This is consistent with the fact that this group earns a stable, reliable income and may suggest that irregular income will remain a challenge to formal financial inclusion – unless financial products are reinvented to also suit the needs of people without a predictable and stable income stream.

Formal financial services usage is very low for the farming sector, confirming the earlier analysis that the agricultural sector remains a largely untapped market. Informal financial services reach about 20% of farmers, but overall exclusion in the agricultural sector remains high.

Banking becomes more significant for the self-employed than for those who earn money from farming or are dependent on family members. This may be because a bank account serves as a transactional tool for self-employed business people.

As noted, banking penetration is significantly skewed towards the employed population: almost one out of every two formally employed Zambians have a bank account. Two observations are relevant: though already the best served group, there is still much room for growth for banks and other formal financial institutions among the employed. Thirty-four percent remain excluded and a further 12% use only informal financial services. This would seem to be a “low hanging fruit market” for formal financial institutions to pursue. At the same time, this market is not very big in absolute numbers compared to the other income-generating activities and cannot be targeted in isolation.

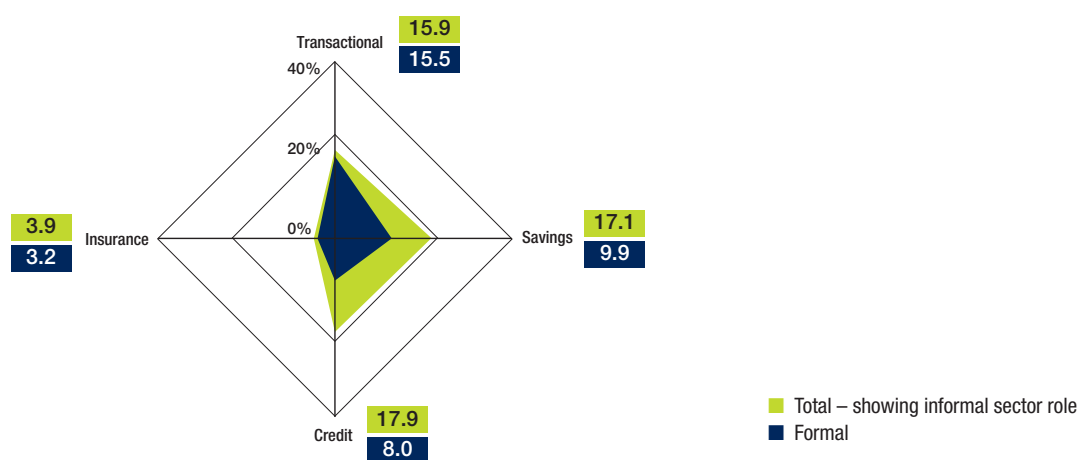


### 3.2.5 Landscape of access

The financial access landscape (FAL) is another FinScope tool. This compares usage between the four main types of financial products: transaction banking, savings, credit and insurance. It complements the institutional analysis of access provided by the financial access strand. Again, it is possible to segment usage into formal versus informal, rural versus urban, and male versus female, as well as by income-generating activities.

The FAL is plotted on a diamond chart. Each of the four quadrants indicates usage of one of the four financial product categories. The horizontal and vertical axes indicate percentage of adults using each product (see Figure 39).

Figure 39. Financial access landscape for Zambia

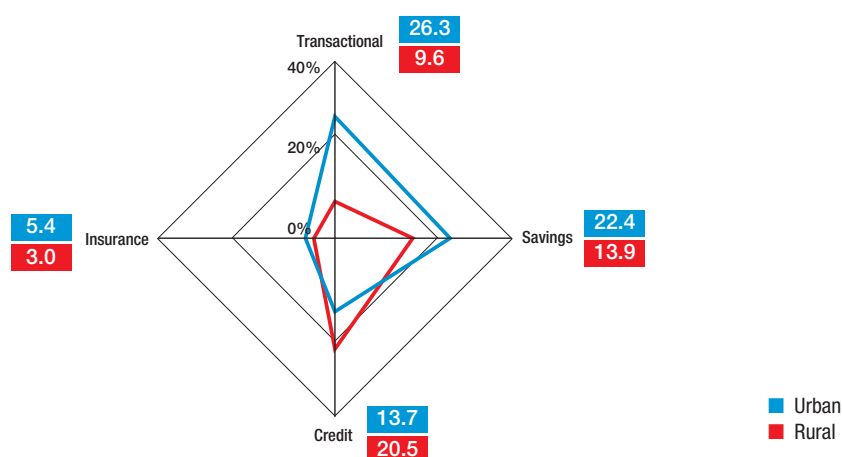


The axes give an indication of the extent of usage: savings and credit are more or less equal and slightly outperform transactional banking, with insurance lagging significantly behind.

Only slightly more people use informal transactional banking services than formal, but most savings are informal, as is most credit. This is in line with the intuitive expectation that transaction services would tend to be through formal channels, but that more people will save at home or through other informal means, and borrow from informal moneylenders or other mechanisms. The informal sector significantly pushes out the boundaries of financial inclusion for savings and credit.

Figure 40 considers the rural and urban financial access landscape.

Figure 40. Financial access landscape: rural versus urban





Usage of financial services is lower in rural than in urban areas for all financial products apart from credit. Rural people tend to save less and borrow more than their urban counterparts. Transactional banking enjoys most take-up in urban areas, at 26%, followed by savings, 22%, and then credit, 14%. Insurance usage, at 5.4%, is again well below the others.

Though usage is generally skewed towards males, Figure 41 indicates that the shape of the diamond is relatively similar for males and females. This is surprising, as in the other FinScope survey countries, savings tends to be skewed towards females and the rest towards males.

**Figure 41. Financial access landscape: male versus female**

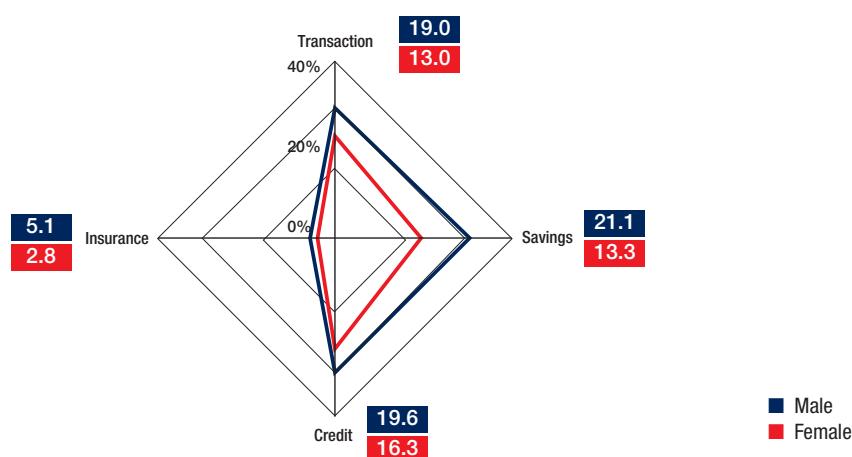
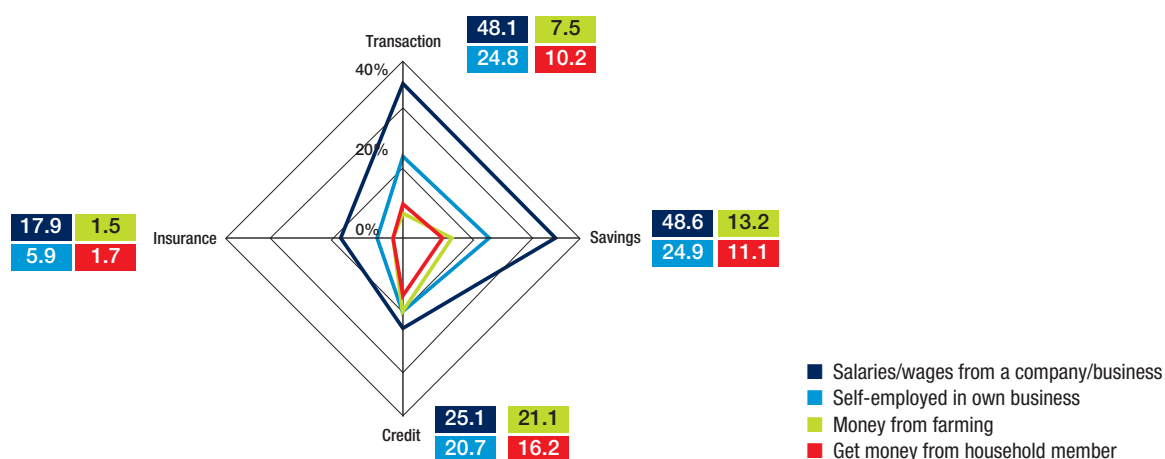


Figure 42 shows usage of various financial products across income-generating activities.

**Figure 42. Financial access landscape for various income-generating activities**



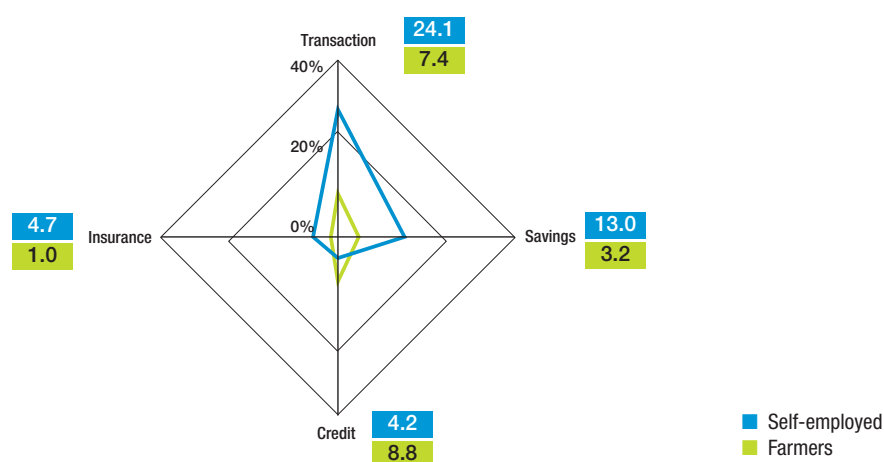
The product review confirms the institutional analysis in indicating lower usage among those who rely on a household member or on farming than for the other two categories. It is, however, interesting to note that the difference is less pronounced for those who rely on household members and virtually falls away for farmers for *credit* usage.



This is in line with the high usage of credit in rural versus urban areas. Indeed, with 21% of farmers, 20.7% of the self-employed population, and 16.2% of those relying on family members using credit compared to 25% of the employed, credit seems to be the one financial service where usage does not tend to be much higher among the more well-to-do than among the poor. For the other financial services, usage among the employed (i.e. those with a reliable source of income) significantly outstrips that of people with more inconsistent income sources.

So far the analysis of the financial access landscape has considered total usage (formal and informal). It is also interesting to focus on formal financial product usage only in the farming and self-employed sector to gauge where the particular opportunities and challenges may lie (see Figure 43).

**Figure 43. Formal financial access landscape for farmers and self-employed individuals**



The self-employed market tends to rely on transaction services and savings more than on credit and insurance. As business owners, both credit and insurance may have a significant welfare-enhancing effect for them. This indicates a largely untapped market among the self-employed for credit and insurance providers to explore. The opportunities also extend to savings and transactional banking, both of which remain low in absolute terms.

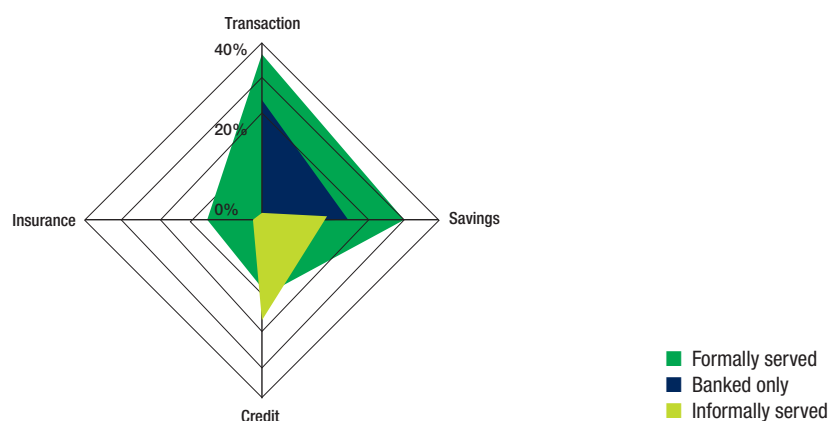
The opportunity is even more pronounced for the farming sector, which has very low formal financial product usage: farmers use some transaction products and some credit but very little savings or insurance. This is the single biggest group and, as the analysis in Section 2.2 indicates, many farmers do generate a cash surplus from which they could potentially pay for financial services.





In Figure 44, the FAL tool measures usage of various financial products between the institutional components of the access strand. The dark blue area indicates product usage among those only using banked products, green indicates the total formally served market and yellow indicates the informally served:

**Figure 44. Financial access landscape for the various components of the access strand**



Among the banked population savings and transaction products dominate, with virtually no credit or insurance. When the total formally served market is considered, the financial access landscape significantly expands in all quadrants. The informally served market is concentrated on credit and, to a lesser extent, savings. Therefore the “formal other” market pushes out the frontier of inclusion on all fronts, whereas the informally served pushes out the boundary of credit inclusion.

### 3.3 Financial inclusion by product category

Building on the overall financial access landscape established in Section 3.2, this sub-section conducts a product-by-product analysis of financial usage, preferences and behaviour. The banked population is first considered in more detail, before unpacking the savings, credit and insurance markets.

#### 3.3.1 Banking

The survey data indicate that 13.9% of the adult population currently uses banking services. This will cover transactional banking, savings accounts or other savings products, as well as bank credit.

Two provinces, Lusaka and the Copperbelt, account for 60.4% of total banking customers while the rest of the provinces, which account for 67.6% of the population, serve only 39.6% of the banked population. This indicates a significant skew in banking towards the Lusaka and the Copperbelt provinces (see Table 3).

**Table 3. Distribution of banked population by province**

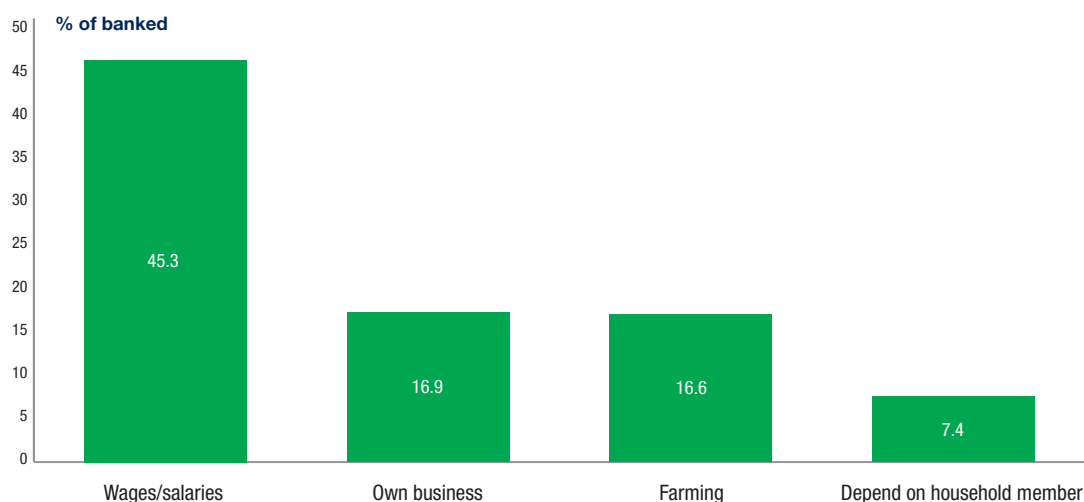
Provinces	% of population	% of banked population
Lusaka	14.8	39.2
Copperbelt	17.6	21.2
Southern	11.7	12.9
Northern	12.0	6.7
Central	11.3	5.9
Eastern	12.6	5.5
Northwestern	5.5	3.5
Western	7.3	2.7
Luapula	7.3	2.4

Source: Bank of Zambia and FinScope 2009 survey



To better understand the low and mainly urban penetration of banking it is important to investigate: (i) the profile of the banked population and the perception and understanding that people have of banks; as well as their perceptions of (ii) the supply-side infrastructure.

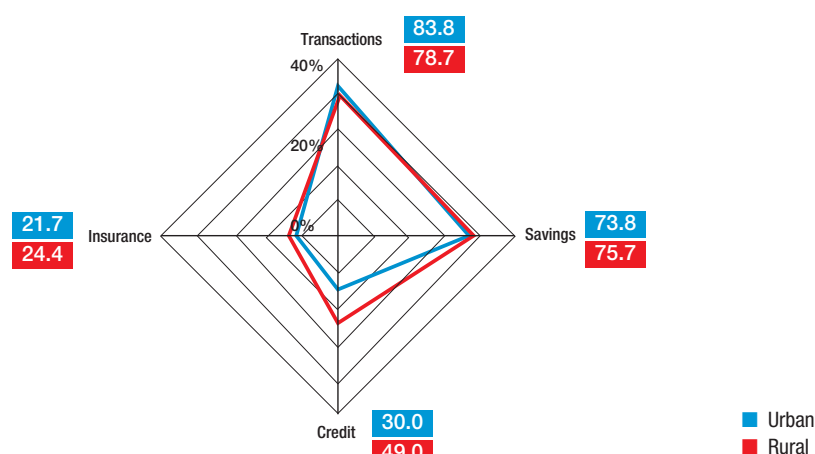
**Figure 45. Breakdown of the banked population by income-generating activities**



Almost half of banking customers are employed. As this segment represents just 11% of the total adult population, this shows a significant skew towards banking for those who earn a salary or wages from government or a business: 90% of the salaried sector already has a bank account. The farming and self-employed sectors are still relatively underrepresented in the banking market (see Figure 45).

In terms of drivers of bank account usage, the aspects of **safety of money**, **depositing of salaries** (which could be expected as almost half of the banked population earn salaries and/or wages) and **earning interest on savings** seem to be the most significant – 77% of banked individuals mentioned safety of money as an advantage of having a bank account, 40% mentioned the depositing of salaries, and 31% interest on savings; less mentioned were the transactional benefits of bank accounts. If the landscape of access of these individuals is considered, however, it is interesting to note that the products used, although skewed towards savings products, are also significantly skewed towards transactional products, which seems to contradict the expressed needs.

**Figure 46. Landscape of access for the banked population**





The landscape of access for the banked population shows that financial product usage for banked individuals from urban and rural areas are more or less the same for transactional, savings and insurance products, but not for credit – banked individuals from rural areas being significantly more likely to use credit/loan products than their urban counterparts (see Figure 46).

Most banked individuals have transactional and savings products. It is important to note that these two functionalities could be combined in a single bank account, and that savings do not refer to dedicated or long-term savings products alone. Credit usage is markedly lower than savings and transactions, and insurance even more so. Nevertheless, insurance usage (used by just 3.9% of the total adult population) is significantly skewed towards the banked population – 23% of whom have insurance products.

In terms of perceptions, banked individuals' perceptions of banks are mostly favourable and include perceptions such as:

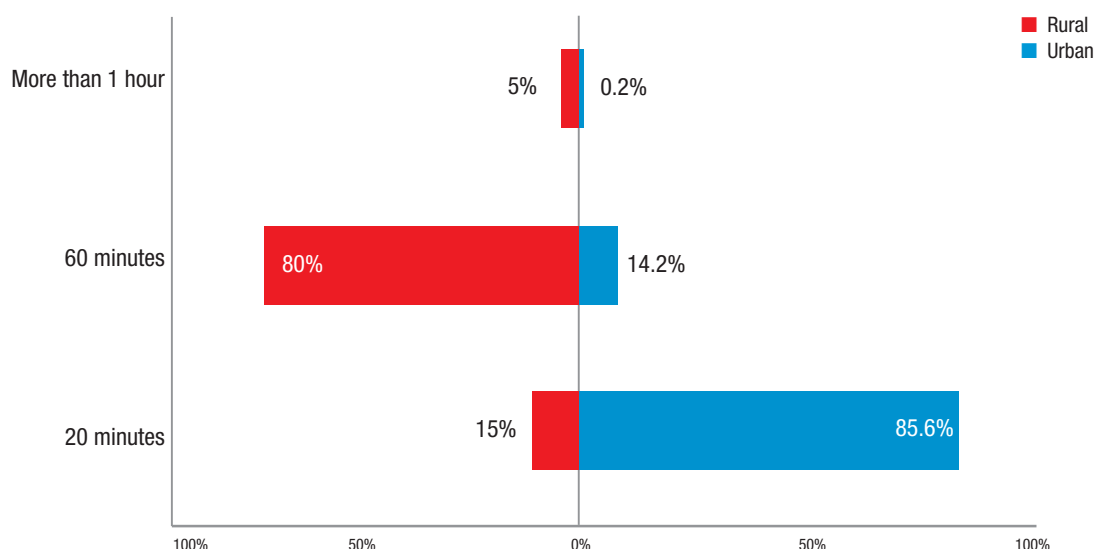
- Banks allowing them quick access to cash (perception of 85% of banked individuals)
- Banks being trustworthy (75%)
- Banks having appropriate products and services (64%)

Only 15% of banked individuals feel that banks services are expensive and that loan/credit interest rates are too high.

When asked how long they have to travel to reach the nearest bank, it becomes evident that urban banked adults are indeed nearer to banking infrastructure than those in rural areas. Eight-six percent of urban adults are within 30 minutes of a bank, compared to just 15% of rural adults. Instead, 80% of rural inhabitants have to travel up to an hour to reach a bank. Significantly, however, only 5% of rural adults have to travel more than an hour (see Figure 47). It could therefore be argued that accessibility is not an absolute barrier. It may be more inconvenient and expensive for rural adults to reach a bank, but it is not impossible for them to do so. This confirms the usage picture emerging from the previous analysis.

However, the fact that banking services are more accessible in urban than rural areas underlines the need for alternative or branchless banking solutions in rural areas. The access strand analysis in Section 3.2 indicates that rural banked inclusion still lags substantially behind the urban banked component.

**Figure 47. Time required to reach the nearest bank**





### 3.3.2 Savings

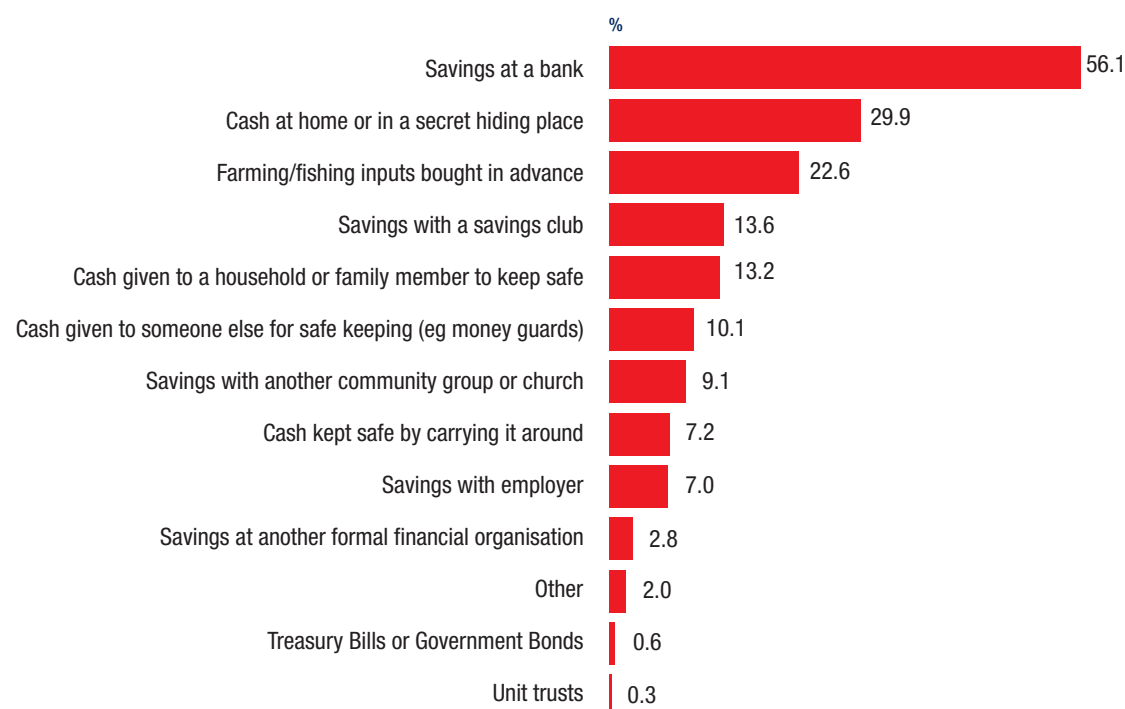
In total, 46% of adults claim to save in some way. There are no significant demographic skews within the saving population: around 61% of claimed savers are rural (39% urban) and 52% are male (48% female). This is roughly in line with the overall population distribution between male and female, urban and rural.

Generally, Zambians do recognise the function of savings as a form of insurance against risks, and 59% of those who claim to save state that one should save even if times are hard. However, in reality, only 17% of the adult population actually uses savings products (formal or informal). A large proportion of those who claim to save do not have savings products but put money aside and keep it at home or give it to a family member for safe keeping.

Of those who have savings products, 39% claim to save monthly, but nearly half can only save very irregularly – three or four times a year (30%), once a year (14%), and less than once a year (3.5%). Seventy-seven percent indicate that the amounts saved are not fixed, but depend on how much they have available. There is therefore very little disciplined savings and it can be expected that unforeseen expenses regularly eat into accumulated savings, if not wipe them out altogether.

Apart from getting more people to save, there are also untapped opportunities within the savings market for formal financial institutions. When those who claim to save were asked how they save, a number of savings mechanisms were revealed (see Figure 48).

**Figure 48. Savings mechanisms**



Most savers save in a bank account. This is largely an urban phenomenon: 71% of urban savers save in a bank account, versus 41.5% of rural savers. Next to saving in a bank account, the most popular savings mechanism is to save at home or to save implicitly by buying farming inputs in advance. Furthermore, almost 14% of savers save through a savings club (chilimba), 13% give the money to somebody else for safekeeping, and 9% with another community group or with their church. The fact that saving in a bank account is the single biggest savings mechanism is encouraging relative to the other FinScope survey countries.



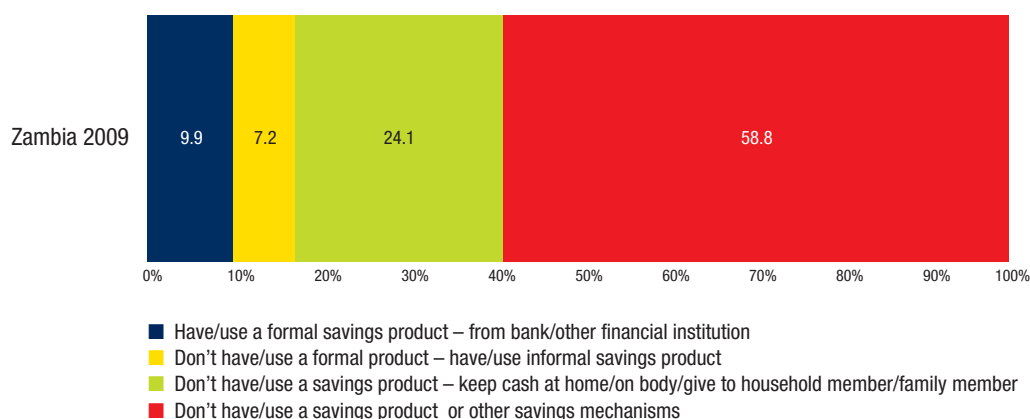
Yet there are still large opportunities for banks to further mobilise savings. Two out of every five savers do not save in a bank account but rely on less secure mechanisms. There is also an opportunity for expansion of savings in non-bank “formal other” institutions such as MFIs once they are fully operational in accepting deposits<sup>14</sup>.

Savings behaviour and opportunities for growth can best be illustrated using the **savings strand**. The savings strand segments the adult population based on their usage of savings products/mechanisms:

- **Have/use formal savings products** – individuals who save by means of financial products from a formal financial institution (these individuals may also be saving by other means such as using informal products or saving by keeping cash at home)
- **Have/use informal products** - individuals who save by means of informal products (these individuals could save by other means as well for example saving by keeping cash at home, but they do not have any savings products from commercial banks or other formal financial institutions)
- **Don't have/use savings products but keep cash at home or giving cash to family member to keep**
- **Don't have any savings products/mechanisms**

Figure 49 shows the savings strand for Zambia.

**Figure 49. Zambian savings strand**



Only 10% have a formal savings product and a further 7% have informal savings products, bringing total use of savings products to 17% of adults. A further 24% save at home or by giving money to a family member, but a full 59% of Zambian adults do not save in any way. That means that six out of every 10 Zambians live from day to day without any accumulation of wealth or risk mitigation through savings. Nine out of 10 do not save in the formal sector. This is a large market to unlock. To do so would require financial service providers and policymakers to get to the heart of the population's understanding of, and attitudes towards savings, as well as their income realities.

Further insight can be gained by considering the saving strand for different population groups:

- **Urban versus rural:** Urban adults are more likely to save formally (16%) than rural adults (6%). This is cancelled out by 28% of rural adults saving at home/through a family member, compared to just 24% or urban adults. Only slightly more rural adults save through informal mechanisms than urban adults. Overall, the rural and urban savings strands are more or less equal, indicating that both areas should be targeted to increase savings usage.

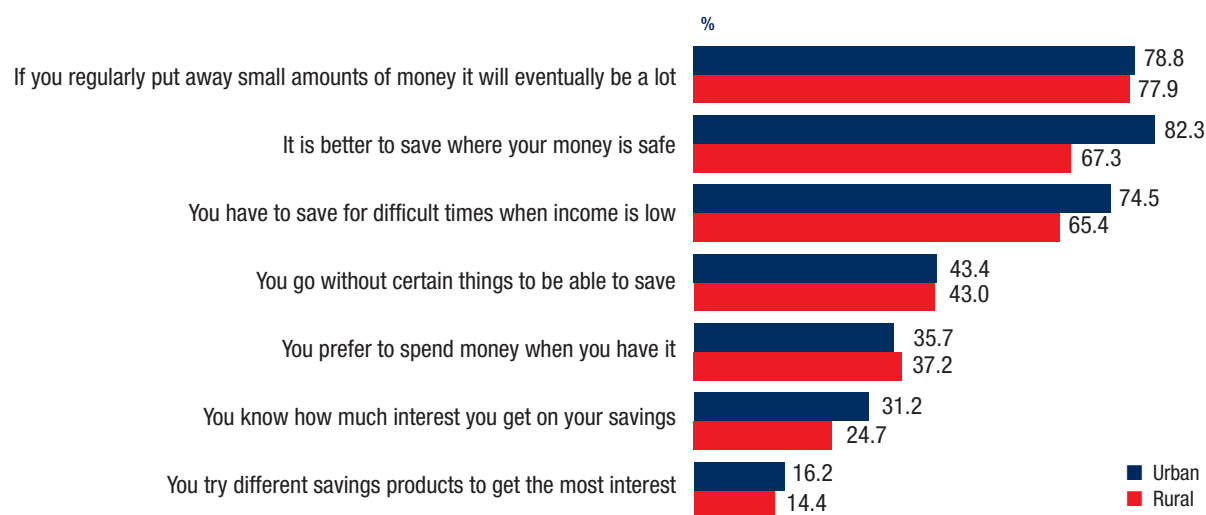
<sup>14</sup> Under the Bank of Zambia's Banking and Financial Services (Microfinance) Regulations, 2006, microfinance institutions meeting certain requirements are allowed to register as deposit-taking microfinance institutions. This is the first time that MFIs are allowed to take deposits in Zambia. Indications are that MFIs are still positioning themselves for the taking of deposits.



- **Gender:** Fewer females save than males. Whereas 54% of males do not save, the figure rises to 63% for females. The most pronounced difference lies in formal savings mechanisms, where females tally only 6.7%, versus just more than 13% for males. There is therefore scope for financial institutions to target females specifically in their savings promotion campaigns. At the same time, the untapped opportunity among males remains large and they cannot be ignored.

**Why do people not save more?** The survey responses reveal a generally positive perception of savings (see Figure 50).

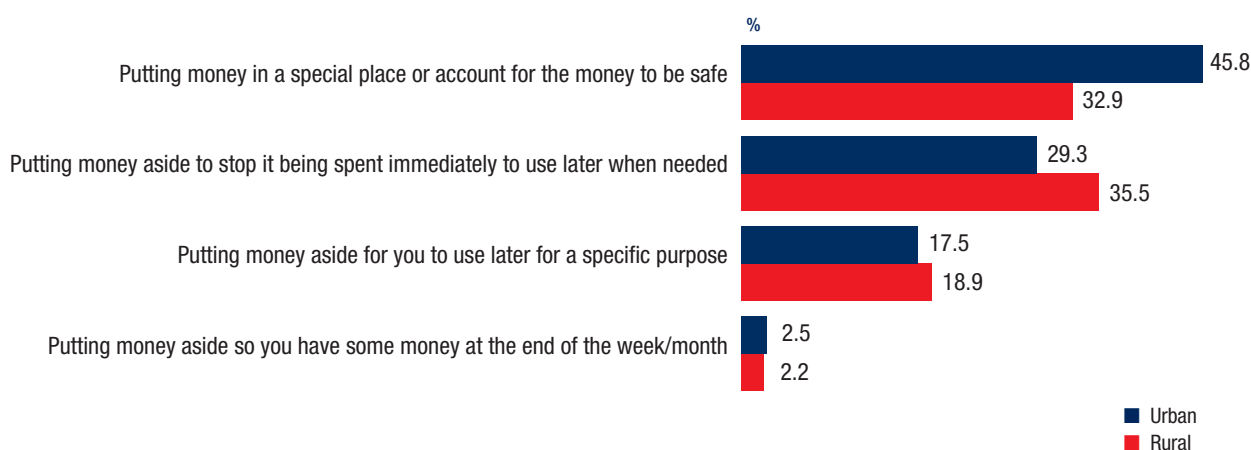
**Figure 50. Perceptions of savings among Zambian adults**



Rural and urban adults alike understand that savings is a good thing, that they should put money away. They also think that it's better to save in a safe place. Supply-side issues such as interest rates rank low. Based on these perceptions alone, one would expect savings in general and savings in a bank in particular to be high.

Yet this is not reflected in reality. This can be ascribed to a lack of understanding of the purpose of saving on the one hand, as well as a number of barriers to saving on the other hand. Most adults do not understand savings as an accumulation of wealth, but simply regard it as the practice of putting money aside for later, i.e. of delaying present consumption in favour of future consumption, or as a way of keeping money safe. Figure 51 shows the responses when asked what savings is.

**Figure 51. Understanding of savings: percentage of adults indicating various definitions**

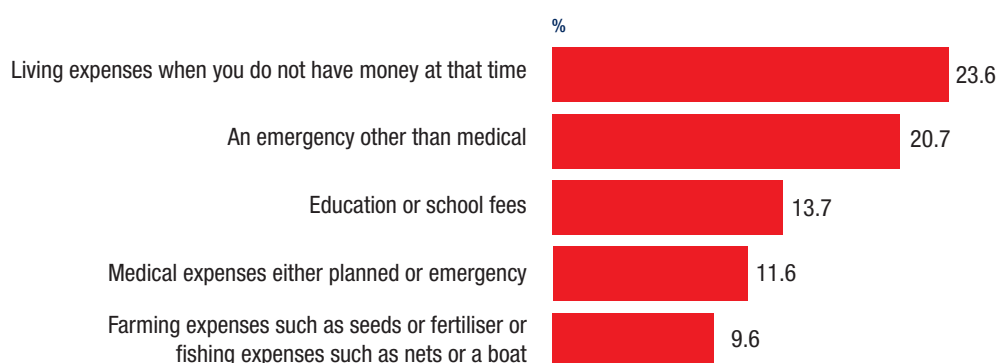




Only one in five adults have a long-term view of savings (putting money aside to use later for a specific purpose). The understanding of savings is therefore still inadequate in rural and urban areas alike, calling for consumer education.

This is confirmed by responses to the question as to why people save (see Figure 52).

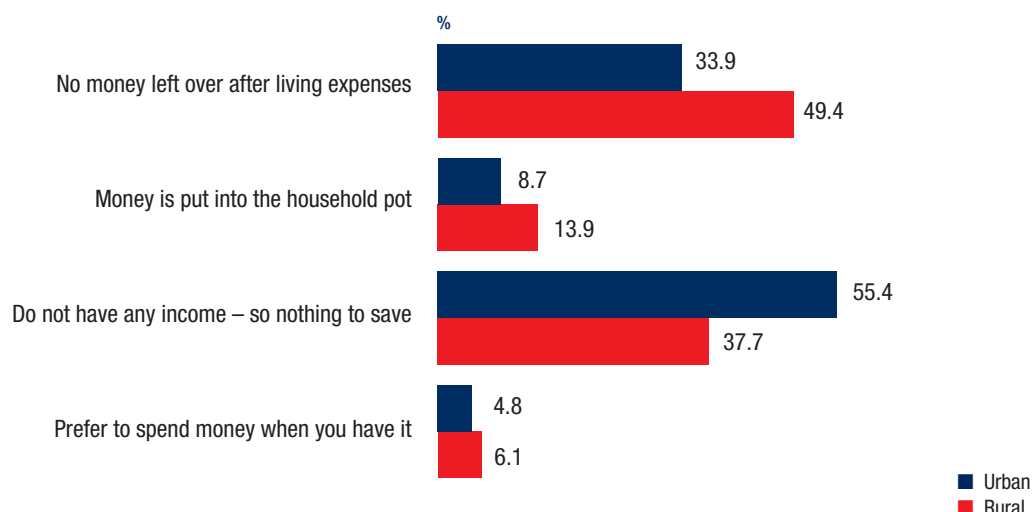
**Figure 52. Reasons for saving: percentage of savers**



The biggest drivers of savings are living and day-to-day expenses such as medical expenses and farming expenses, as well as for emergencies. People do not have a long-term savings orientation. The biggest difference in reasons for saving between rural and urban is, understandably, in the farming expenses category, where 22% of rural savers resort compared to just 5% of urban savers. Rural savers are also more likely to save for living and medical expenses and less likely to save for other purposes than urban savers.

The barriers to saving likewise relate to day-to-day living expenses and emergencies. Those who are not saving say they cannot save because they do not have enough money left over after covering their living expenses. It is living conditions, rather than no desire to save, that prevents savings. That is, exactly those things that people want to save for prevent them from saving. In fact, the largest barriers to saving all lie on the demand-side rather than the supply-side (see Figure 53).

**Figure 53. Perceived barriers to saving: percentage of Zambian adults who do not save**







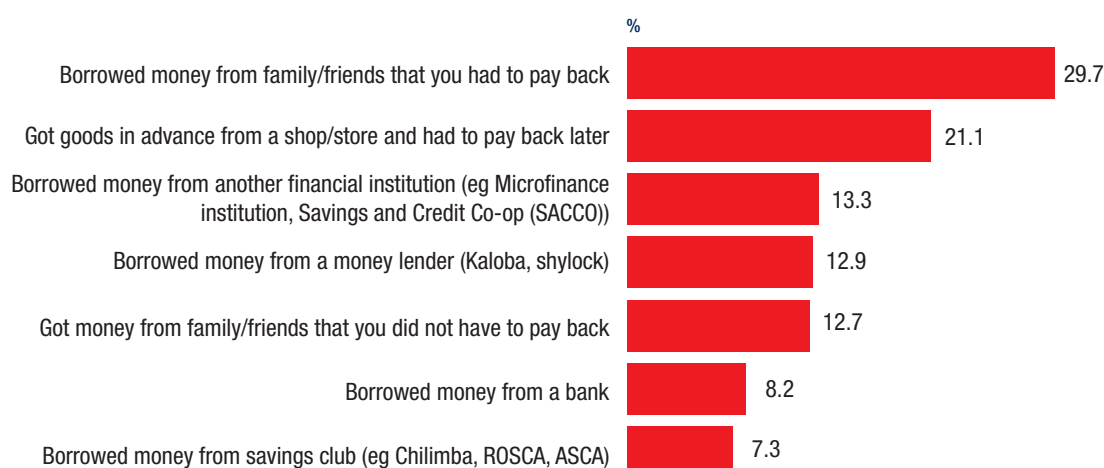
### 3.3.3 Credit

Only 24% of Zambian adults admit to having borrowed money in the 12 months before the survey was conducted. A total of 76% claim not to have any credit. Significantly more Zambians therefore claim to save than to borrow money. It is important to note, however, that demand-side survey data tend to under-represent credit, as people do not like to admit being indebted or needing to borrow money.

There is no urban-rural skew within the credit population. Sixty-eight percent of borrowers are rural (in line with the national proportion). However, 68% of borrowers are male, indicating that males tend to be slightly more likely to borrow than females.

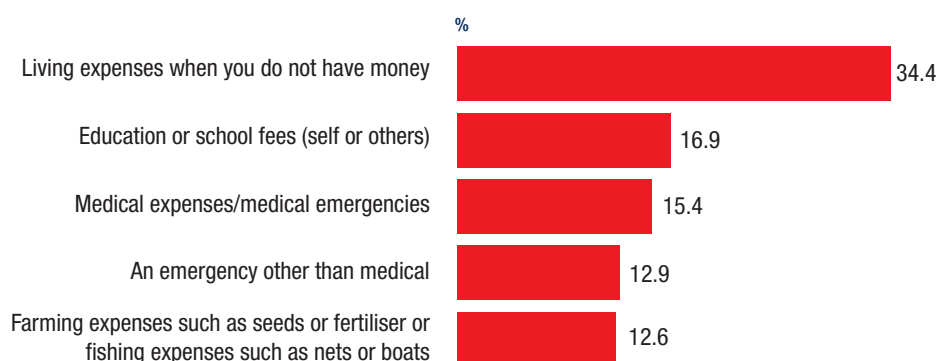
Those who claim to borrow do so largely from family and friends or through informal arrangements with shopkeepers for goods in advance. Among borrowing institutions, non-bank financial institutions such as MFIs and SACCOs (Savings and Credit Cooperatives) enjoy most popularity, followed by informal moneylenders. Only 8% of borrowers borrow from a bank (see Figure 54).

**Figure 54. Sources of borrowing**



The fact that MFI borrowing is higher than bank borrowing is significant. It confirms the emerging storyline that non-bank financial institutions seem to serve needs more or better than banks. The borrowing sources indicated in Figure 54 correspond to the reasons for borrowing quoted by survey respondents in Figure 55.

**Figure 55. Reasons for borrowing**





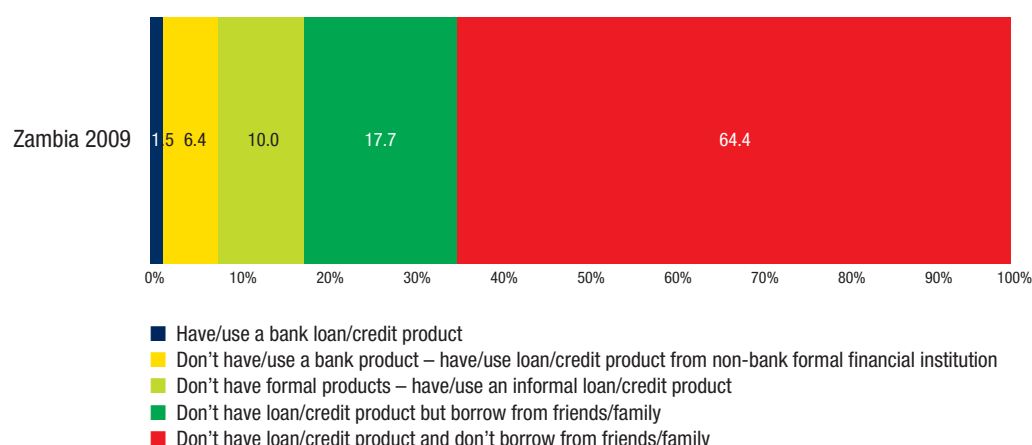
One out of every three borrowers do so for consumption purposes, to cover living expenses when their income is insufficient. The next most frequent motivations for borrowing are school fees and medical expenses, followed by other emergencies and farming expenses<sup>15</sup>. All of these represent lump sum expenses that cannot be covered out of low-income earners' average monthly income or often meager savings. Borrowing is therefore in the first instance an income smoothing strategy rather than a productive investment strategy. People tend to borrow relatively small amounts, to which they need access quickly. It is thus not surprising that they turn to family and friends rather than go to the bank.

As with savings, the credit strand is a tool for better understanding credit usage. The credit strand segments the adult population based on their usage of credit products/mechanisms, into the following five categories:

- **Have/use commercial bank credit/loan products** – individuals who accessed a loan from a commercial bank (these individuals may use other loan products as well, for example loans from other formal financial institutions, informal credit products or borrowing from family and friends)
- **Have/use credit/loan products from other formal financial institutions** – individuals who accessed a loan from other formal financial institutions such as microfinance institutions (these individuals may use other loan products as well, for example informal credit products or borrowing from family and friends, but not products from commercial banks)
- **Have/use informal credit products** – individuals who use informal credit products (these individuals could also be borrowing from family and friends, but make no use of any products from any formal institutions)
- **Have/use no credit products but borrow from family/friends** – individuals who borrow money only from family and/or friends
- **Don't have/use credit products and do not borrow from family and friends**

Figure 56 shows the credit strand for Zambia.

**Figure 56. Credit strand for Zambian adults**



Only 1.5% of Zambians access credit via a bank. A further 6.4% borrow from other formal entities such as MFIs, bringing total formal borrowing to 8%. This is still very low. An additional 10% access an informal loan product, for example from a moneylender, and most borrowers (17.7% of all adults) turn to family or friends for loans. Sixty-four percent of the adult population do not use any formal or informal credit. This is a large untapped market and the very low formal credit inclusion may help explain the generally low formal

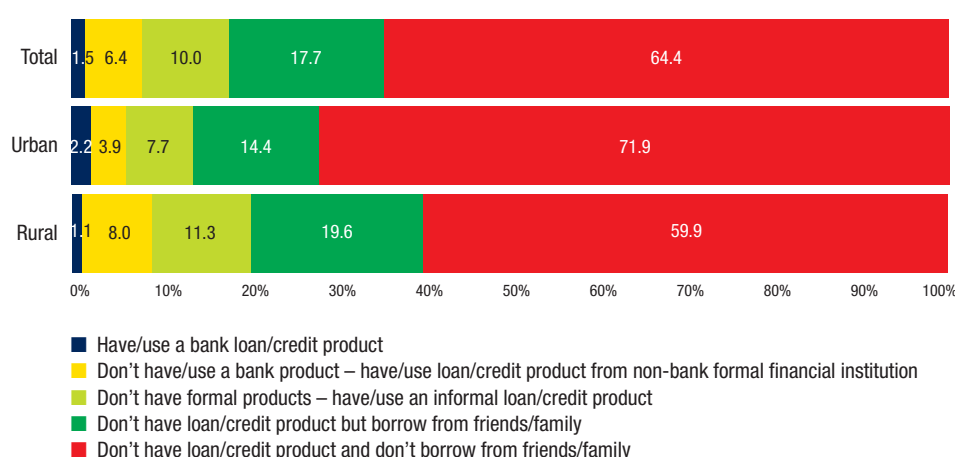
<sup>15</sup> The reasons for borrowing are more or less aligned between urban and rural areas, with the exception of borrowing for farming expenses, which is a reason for 16.5% of rural adults versus just 3.8% of urban adults. Slightly more rural adults also tend to borrow for medical expenses or emergencies. In all the other strategies, urban adults slightly outstrip rural ones.



financial inclusion. It should, however, be remembered that people are likely to under-claim borrowing and that the figures may therefore not be a true reflection of borrowing in the population. The opposite is likely to hold for savings: people are likely to claim to save more than they actually do.

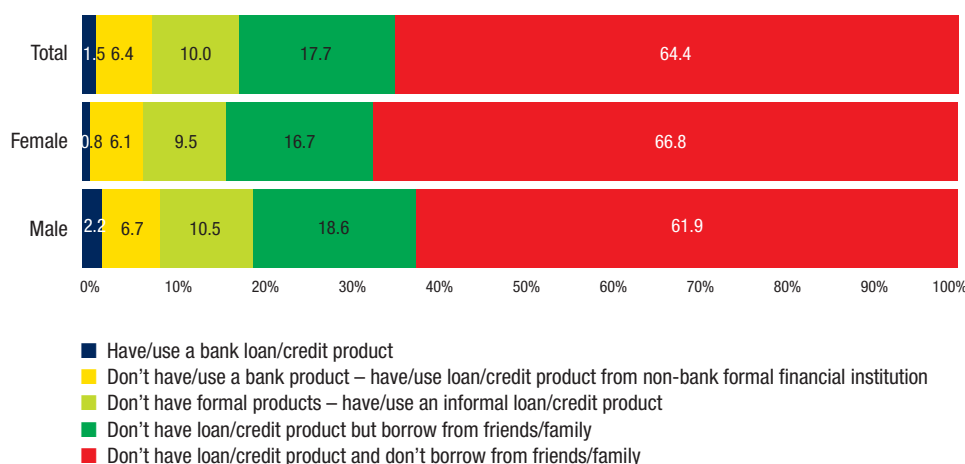
As expected from the financial access landscape analysis in Section 3.2, the credit strand for rural Zambians shows a higher level of inclusion than for urban Zambians – 71% of urban Zambians do not use any credit whatsoever. More rural inhabitants borrow from friends and family, as well as from other informal sources and non-bank formal sources than urban dwellers. The percentage of urban adults that borrow from a bank is however double that of rural (see Figure 57).

**Figure 57. Credit strand: rural versus urban**



Slightly fewer females borrow than males. In total, 67% of female adults are excluded from credit, compared to 62% of males. The largest difference lies in bank credit: only 0.8% of females have bank credit, while 2.2% of males access credit through a bank (see Figure 58).

**Figure 58. Credit strand: gender comparison**





**Why is credit usage so low?** The reasons for borrowing quoted in Figure 55 indicate a real need for credit, if not for productive purposes then at least for consumption purposes. Yet the adult population in general also realise the dangers of a debt trap (see Figure 59).

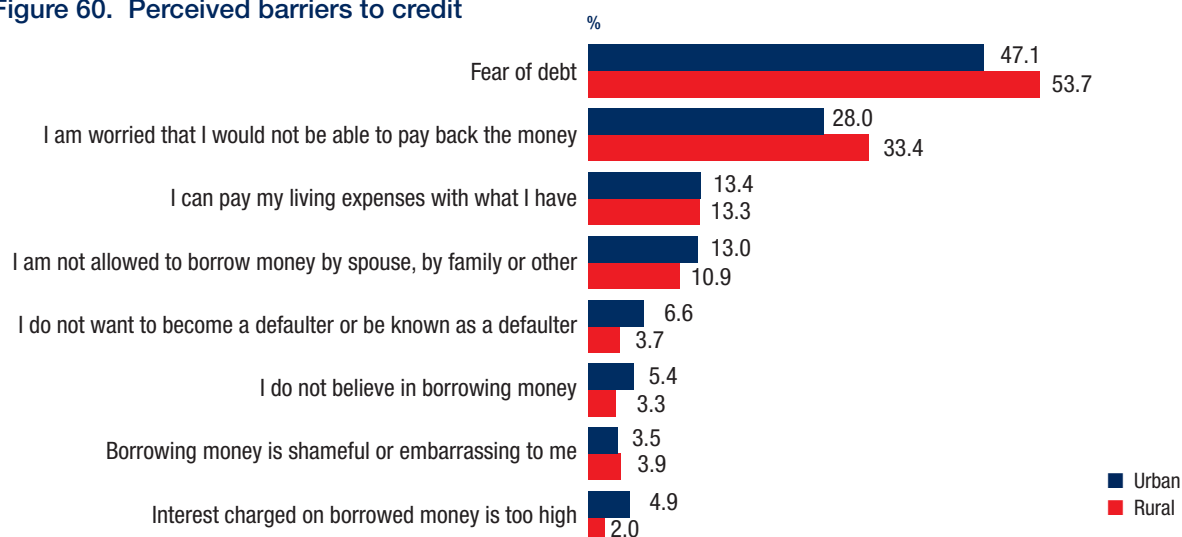
**Figure 59. Perceptions of borrowing: Zambian adults**



The reasons for borrowing quoted in Figure 55 indicate a real need for credit, if not for productive purposes then at least for consumption purposes. Yet the adult population in general also realises the dangers of a debt trap (see Figure 59).

When asked what the barriers to borrowing are, the survey respondents revealed a number of reasons about Zambian adults' perceptions of credit barriers (see Figure 60).

**Figure 60. Perceived barriers to credit**



Fear of being indebted ranks most highly, even more so in the minds of rural than urban adults. People are also discouraged from borrowing because they are worried that they would not be able to repay the loan.

Two data points are particularly relevant: only 13% of both urban and rural adults believe that they do not need to borrow, i.e. can make do with what they earn. This means that there would be a need for credit among almost 90% of adults (as opposed to just 35% served in some way). Secondly, the barriers almost all relate to demand-side factors. The only supply-side barrier noted is that interest charges are too high and this holds true for only 5% of urban and 2% of rural adults. Clearly, it is not on the availability or cost of credit so much as on consumer education to change perceptions of credit that the financial services industry needs to focus. That said, the fact that people are afraid of not being able to repay loans may be an indicator

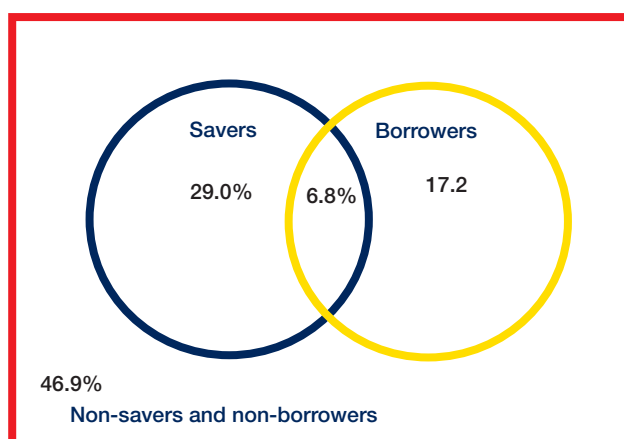


that many are simply too poor to borrow formally. People's tendency to rather avoid debt for consumption purposes is also prudent and a reckless borrowing culture should not necessarily be encouraged.

### 3.3.4 Comparing savers and borrowers

It is interesting to note the overlaps and comparisons between savers and borrowers in the population. There is only a 7% overlap between saving and borrowing, that is: only 7% of the adult population are both savers and borrowers. The rest engage in only one of these activities (29% of adults save, but do not borrow and 17% borrow but do not save). Forty-seven percent of adults do not save or borrow at all (see Figure 61).

**Figure 61. Overlap between savers and borrowers**



As before, the caveat is that these figures represent *claimed* behaviour and are therefore not necessarily an indication of actual usage of savings or borrowing instruments.

Analysing more closely those who claim to save but not to borrow makes it possible to check claimed behaviour against actual usage of different product categories. This is done by using the financial access landscape (see Figure 62).

**Figure 62. Financial access landscape for claimed savers**

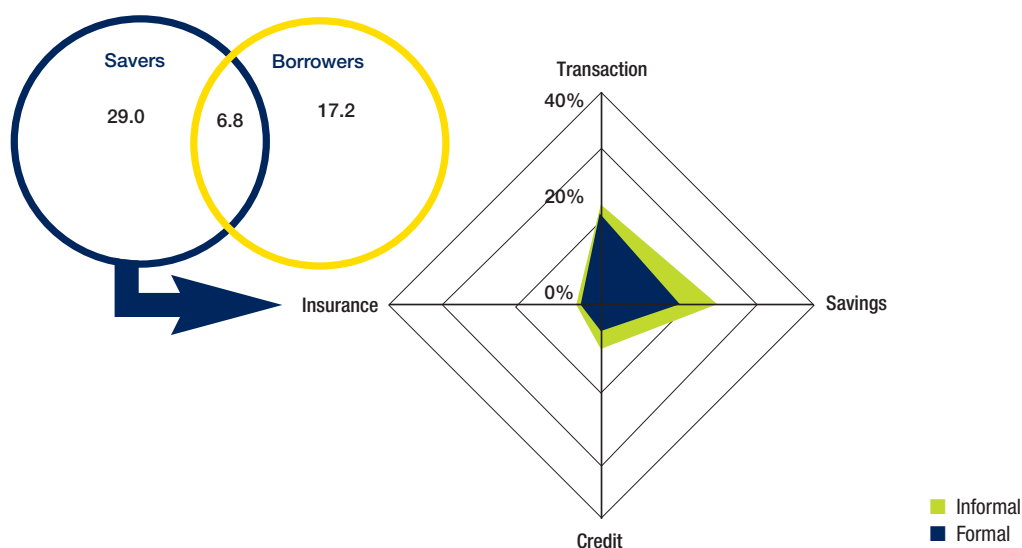
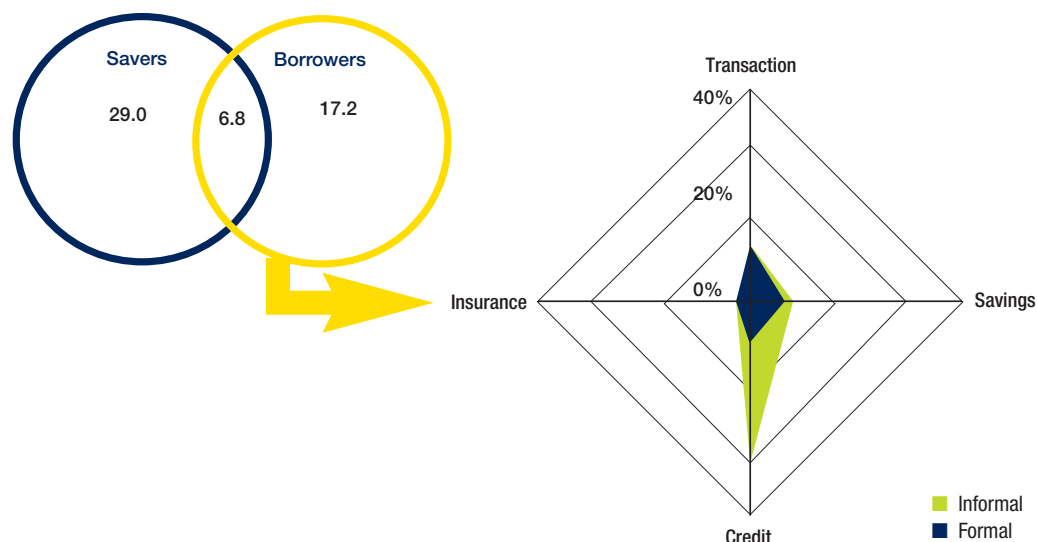


Figure 62 indicates that some of those who say that they save but do not borrow *do indeed have credit products*. This illustrates the under-claiming of credit in survey data. It also illustrates that, though a significant proportion of claimed savers save formally, many turn to informal mechanisms. The same holds for credit products. With transaction products, formal usage dominates.



Considering only those who claim to borrow but not to save, a proportion does in fact have savings products although product usage is indeed skewed towards credit (see Figure 63).

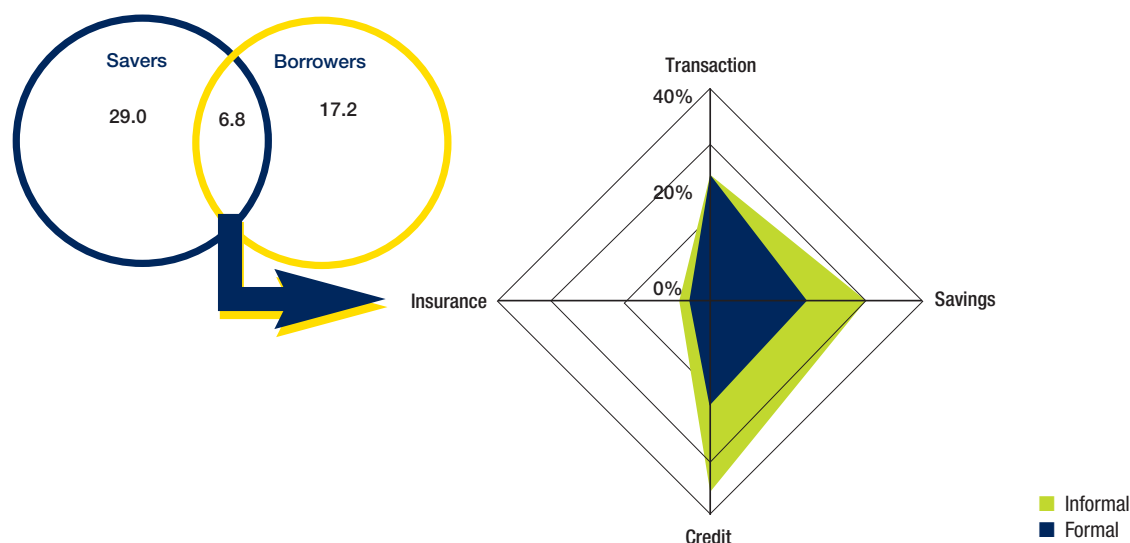
**Figure 63. Financial access landscape for claimed borrowers**



The borrowers' landscape of access shows a large skew towards informal usage, i.e. more borrowers tend to borrow informally than from formal institutions. The savings indicated on the graph may be represented by those borrowers who borrow from the formal MFI sector, as they are often compelled to put money into a savings product as a prerequisite to being granted a loan. It is also interesting to note that some do have a transaction product.

Figure 64 considers the financial access landscape of those who claim to both save and borrow (7% of Zambian adults).

**Figure 64. Financial access landscape: claimed savers and borrowers**





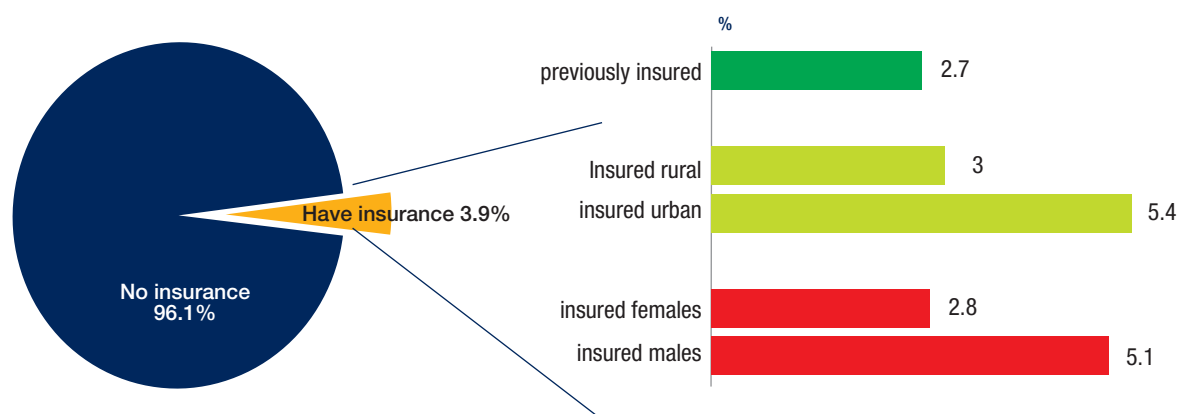
As expected, both credit and savings product usage is quite high within this subset of the adult population, but credit more so than savings. Therefore more of those who say that they save and borrow actually are more likely to have credit products than savings products. Informal usage is higher for credit than for savings products. More than 30% of the sample also has a transaction product and there is some usage of insurance. The spectrum of products is broader, overall, than for those who only save or only borrow.

Those who are both savers and borrowers are those with greater access to formal financial products across the board. Yet, even for this sub-group, the informal sector is still important and pushes out the boundaries of inclusion, particularly for credit.

### 3.3.5 Insurance

Only 3.9% of the adult population in Zambia has any form of insurance (see Figure 65).

Figure 65. Insurance usage: percentage of adults



In addition to the 3.9% of adults that are insured, a further 2.7% indicate that they previously had insurance, but do not currently have it. Insurance usage is skewed towards males (5.1% of males have insurance, as opposed to just 2.8% of females) and towards urban areas, where 5.4% of adults have insurance. Just 3% of rural inhabitants have insurance.

Insurance in Zambia is broken down into long-term insurance (which covers mainly life insurance) as well as general insurance (which relates mostly to assets). At 2.9% usage, long-term insurance is more popular than general insurance (1.6% of adults). However, this is largely due to the inclusion of employer pensions and NAPSA (National Pension Scheme Authority) in the long-term category. If these are removed to show only risk-related insurance, total insurance usage drops to just 2.7% of adults and long-term insurance drops to 1.4% of adults. Just 1.1% of adults have any form of life insurance (life, funeral or credit life insurance) and a very low 0.3% has some form of health insurance or cover.

Insurance is skewed significantly towards those who are formally employed/earn a regular, predictable income; yet even they remain underserved and there is room for growth across the board (see Figure 66).

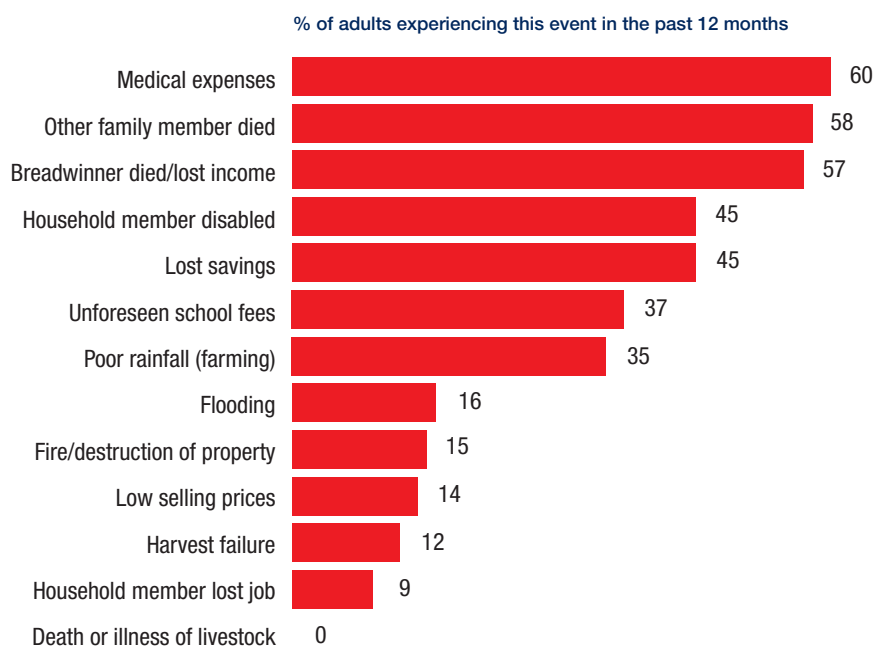



**Figure 66. Insurance usage by various income-generating activities**


If those who earn a salary or wages from government and from a business are regarded as the formally employed market, penetration is substantially higher in this market than in the rest of the economy, but remains low. The untapped opportunity is perhaps best understood by considering the absolute figures: 180 886 adults who earn wages from government do not yet have insurance and 310 833 who earn a salary or wages from a business are uninsured.

With those outside of formal employment, the opportunities are even larger: there are 773 768 self-employed adults without insurance. In total, 1 918 596 adults who earn their living from farming do not have insurance. Another opportunity is apparent when considering only the banked population. Of all those that are banked, only 23% currently have insurance.

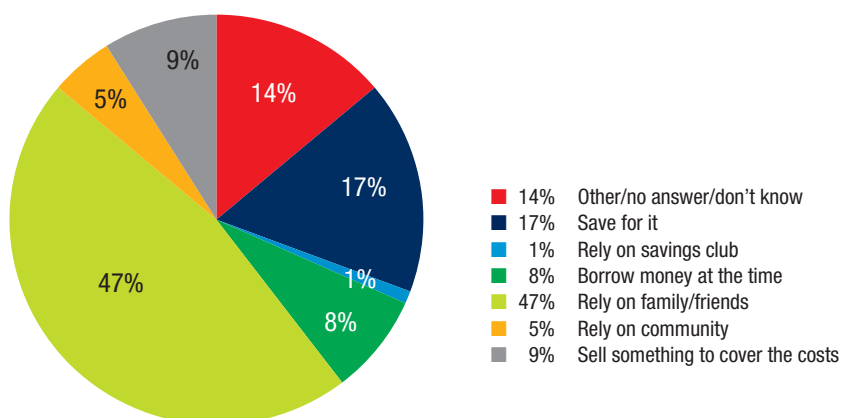
The low overall insurance usage does not mean that Zambians do not face insurable risks. When asked what the most costly event is that could happen to them, 19% of adults indicated illness or a medical emergency and 23% indicated having to pay for a funeral. Both of these relate to insurable risk events. The majority of Zambians also experienced an insurable risk event during the 12 months prior to the survey (see Figure 67).

**Figure 67. Actual risk experience over the past 12 months**




People, however, do not spontaneously think of insurance as a way of coping with risk. When asked what they would do, should the most costly event happen to them, most Zambian adults indicated that they will rely on family and friends for financial support. Insurance was not given any significant mention (see Figure 68).

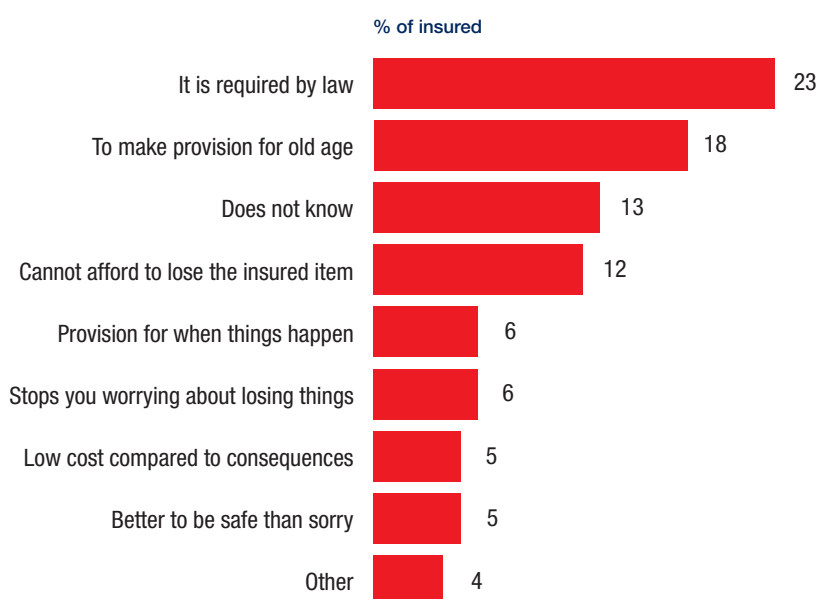
**Figure 68. Coping mechanisms: most costly event**



**Why is insurance usage so low?** There seems to be a generally positive perception of insurance. One in every three adults believe that insurance protects you when you have a problem and only 11% believe that it is for rich people only. Twenty-three percent see it as a way of saving on a long-term basis. Trust in insurance companies is also high. Only 6% of adults believe that insurers do not pay when you submit a claim and only 8% think it's a complicated process to apply for insurance<sup>16</sup>.

What, then, drives actual insurance behaviour? Those who have insurance bought it because they have to (compulsory third party vehicle insurance), followed by provision for old age (see Figure 69).

**Figure 69. Reasons for insurance usage**



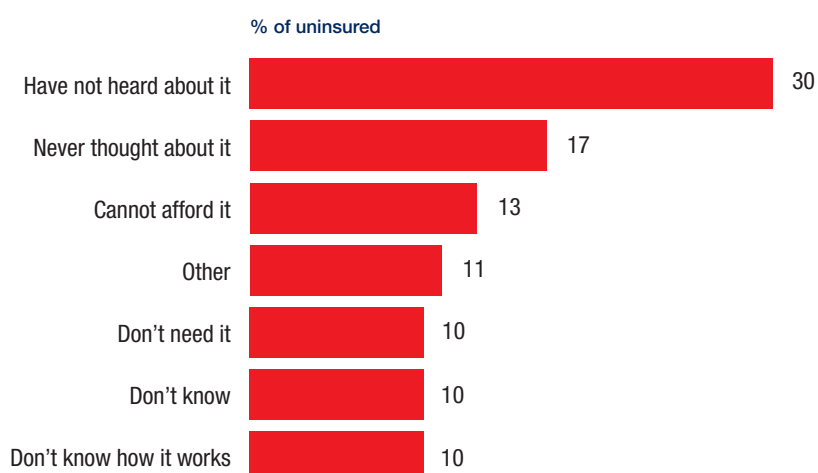
<sup>16</sup> Note, however, that in response to all of these questions, more than 50% of adults answered that they do not know. This points to very low insurance awareness, to which we'll return below.



There is some awareness of insurance as a means to prevent losses related to assets, but these factors were mentioned less frequently.

Asked why they *did not* have insurance cover, it emerges that a lack of consumer awareness lies at the heart of the low usage figures (see Figure 70).

**Figure 70. Reasons for not having insurance**



Less than 15% of the uninsured find insurance unaffordable and only 10% say they don't need it. For the rest, the fact that they do not have insurance largely relates to a lack of knowledge or understanding. For example: 30% have never heard of insurance and 17% say that buying insurance has never occurred to them, even though they have heard of it. Indeed, when asked elsewhere in the survey whether they have heard of and understand various financial terms, it was revealed that only 28% of Zambian adults have heard of and understand the term "insurance". A further 24% have heard of it but do not understand it. Seventy-four percent of Zambian adults have never heard of the word "premium".

It is therefore to a large extent demand-side or usage barriers, rather than supply-side or access barriers that prevent greater insurance usage. The barriers to financial inclusion are discussed in more detail in Section 3.4.

### 3.3.6 Remittances

In terms of remittances, 10.9% of Zambian adults indicated that they sent money to someone during the 12 months prior to the FinScope 2009 survey, while 13.9% indicated that they received money from someone during the same period.

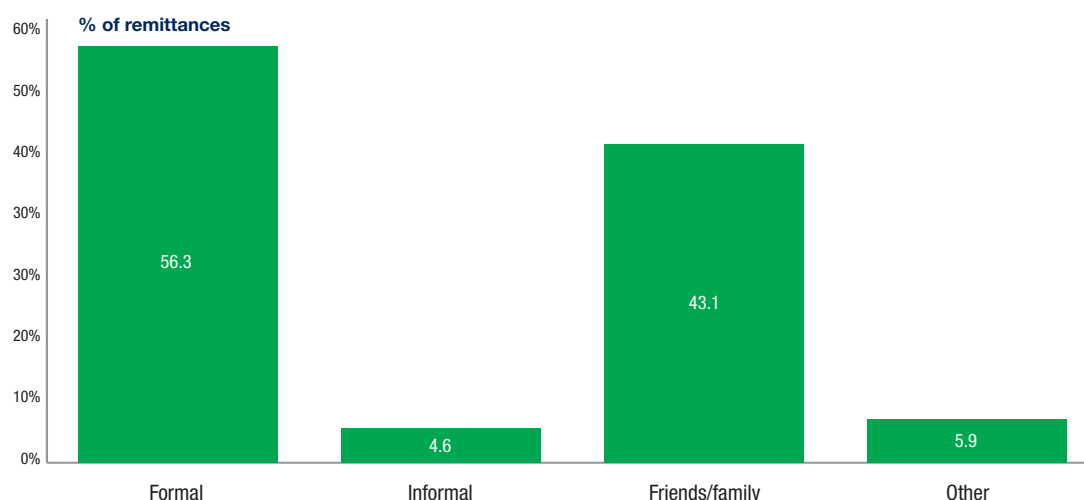
Of those who sent money to others, 52% reside in rural areas and 48% reside in urban areas. Individuals from rural areas who send money are more likely to send money to individuals in other rural villages (55%) than to individuals in urban areas (50%). Individuals who send money from urban areas are more likely to send money to individuals in other urban areas (57%) than to individuals in rural villages (44%). Most remittances are not done regularly – 37% of those who send money to others do so on a seasonal basis while 35% do so once a year.

A larger proportion of adults rely on informal channels<sup>17</sup> to remit and receive money, as shown in Figure 71.

<sup>17</sup> From the survey, the formal channels are identified as banks, post office, Western Union, Moneygram, Swiftcash and cellphones, while informal channels included using bus- and taxi drivers for remittance purposes.



Figure 71. Breakdown of formal versus informal usage among remittance senders



### 3.4 Barriers to financial inclusion

The analysis so far has shown that financial inclusion is generally low in Zambia: only 23% of adults are formally included (14% banked; 9% formal other) and 22% of adults use informal financial services, reducing to 14% if counting those who *only* use informal services and do not overlap with the formally served market.

In total, 63% of adults do not use any form of financial services whatsoever. This represents almost two out of every three adults. What is keeping them from using financial services? What drives financial exclusion? The general and product analyses have already alluded to various factors, including income, profiles and perceptions that may help explain the low level of financial inclusion. The terminology most often used to describe and understand the drivers of financial inclusion or exclusion is that of *access barriers* and *usage barriers*.

#### 3.4.1 Definitions of access and usage barriers

Access to financial services can be defined as the ability of an individual to obtain and, on a sustainable basis, use financial services that are affordable and appropriate to their financial needs. A number of factors may explicitly exclude people from using a particular service (referred to as **access barriers**) or may discourage users from using a particular service even if they are not explicitly excluded (referred to as **usage barriers**).

The FinMark Trust access methodology (Porteous, 2005) initially identified four dimensions or drivers which define access to a specific product with an additional driver (regulation) added in later:

- **Physical access:** Also referred to interchangeably as proximity or geographical access. This considers how far a person must travel to access the service concerned and is usually defined in terms of the time required and/or the cost of travel.
- **Affordability:** The concept of affordability is quite complex to evaluate and differs for different types of financial products. The basic premise is that people are likely to be excluded from a particular financial service if the cost of using the service exceeds a critical threshold relative to their monthly income or the value of the transaction. The assessment of affordability also needs to consider the value derived from and functionality offered by the product. Importantly, *perceived value* and *perceived cost* in the minds of the target audience may often be an even greater driver than actual cost or value. Furthermore, as with physical proximity, the nature and frequency of interaction required for a specific product needs to be considered when assessing affordability. For example:
  - ❖ For bank accounts (deposit and transaction accounts) interaction is expected to be frequent and often regular monthly charges apply, which means that affordability is appropriately considered relative to the monthly (periodic) income of the user.



- ❖ For money transfer products, transfer activity may be less frequent and irregular. In such cases affordability may need to be considered relative to the transaction value but with some reference to the income of the user.
- ❖ For insurance products, premiums will be paid regularly, which suggests that affordability will be considered relative to some measure of periodic income (depending on the frequency). In addition, affordability needs to be related to the benefit paid as this directly determines the premiums and is often set by choice of the user.
- **Appropriate features:** The features of the service should be appropriate to the user and be able to meet the user's particular needs for the financial service.
- **Eligibility requirements:** Sometimes, financial service providers impose eligibility requirements. Contractual terms imposed by financial service providers may inappropriately exclude specific categories of users from utilising the service. For example, some deposit accounts may require minimum levels of income or formal employment, which is not relevant for the service offered but used by the financial institution to exclude less profitable clients.
- **Regulation:** : Regulation may inadvertently affect access to financial services. This may happen because regulation may exclude specific groups of people (e.g. through the statutory KYC requirements under anti-money laundering legislation) and may increase the cost of serving particular communities. Sometimes access is affected by the absence of basic regulatory infrastructure necessary to provide a facilitating business environment.

**Usage barriers** or determinants are factors that may discourage individuals from taking up formal financial services even if there are no absolute barriers. Usage decisions involve the exercise of judgment by individuals on the value of the product and its ability to meet their needs based on their experience and knowledge. This judgment is exercised within a complex set of considerations, constraints and priorities.

Usage drivers may include:

- The perceived value proposition of the formal product
- The relative cost (e.g. compared to informal alternatives)
- The hassle factor (e.g. of filling out forms)
- Perceptions of formal products and institutions (e.g. the fear of officialdom and the belief that financial institutions are for the rich)

Financial literacy and the level of awareness and understanding of financial services among the population will be a key driver of the above usage drivers.

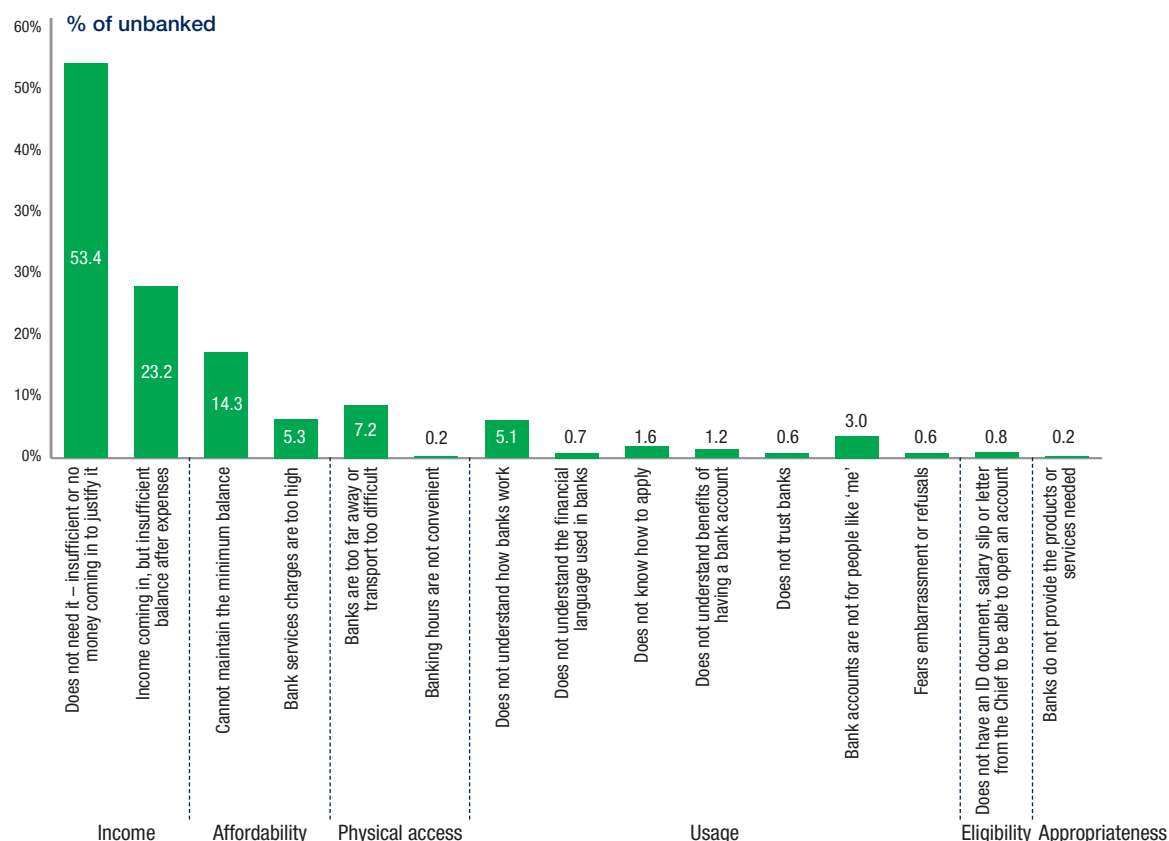
### 3.4.2 Barriers to formal inclusion

In identifying the barriers to formal inclusion, this section looks first at barriers to banking. Figure 72 summarises the findings on perceived barriers to banking, illustrating **lack of income** to be perceived as the most significant barrier to expanding inclusion through banking. This is followed by affordability of bank products and services. As well as being consistent with the FinScope findings in 2005, these findings support the conclusion that the recent global financial crisis has further impacted on the potential of formally serving those currently financially excluded.

Although access to documentation needed to open a bank account is not perceived as a significant barrier to banking, it is important to re-iterate that only 3% of the unbanked have documentation that would be required should commercial banks stringently enforce KYC requirements (i.e. proof of identity as well as proof of residential address). This could potentially pose a significant barrier to expanding formal inclusion through banking. The FinScope 2009 survey findings further show that 45% of unbanked adults do not know what documentation they would need to open a bank account.

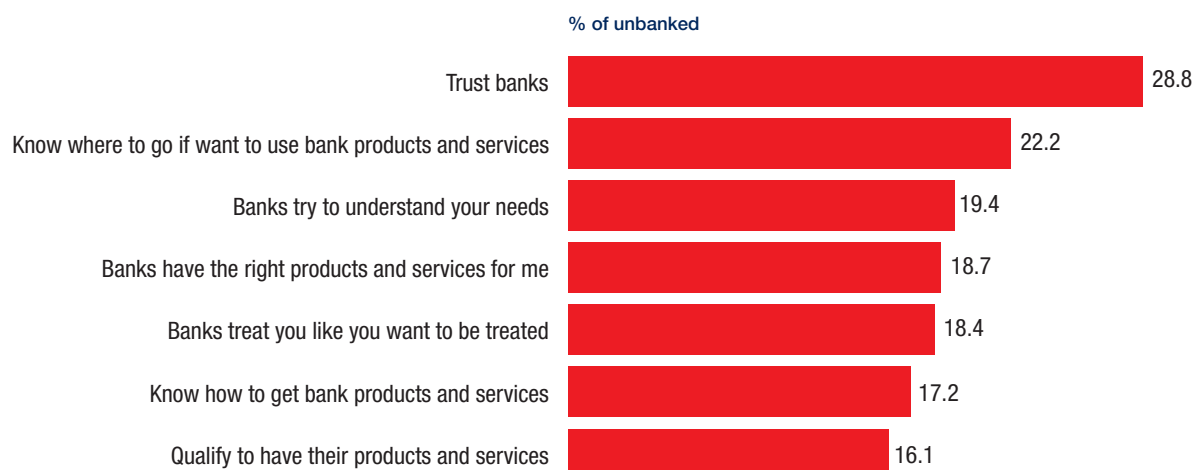


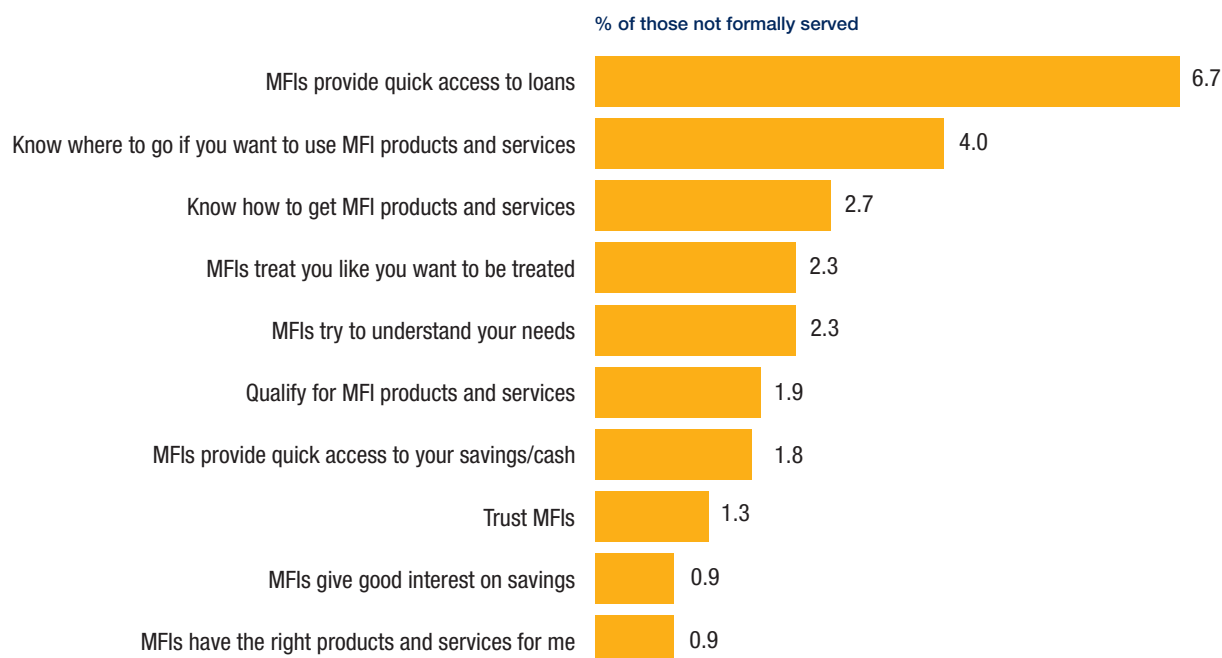
**Figure 72. Barriers to banking in Zambia: reasons for the unbanked not to have bank accounts**



Findings summarised in Figure 73 and Figure 74 further indicate that usage barriers to formal financial inclusion such as perceptions about, and attitudes toward, formal financial institutions are more significant than suggested when looking only at perceived barriers to banking. Amongst the unbanked and formally unserved, issues such as trust and knowledge about products and services as well as how and where to open accounts with formal financial institutions seem to be significant demand-side barriers to inclusion.

**Figure 73. Attitudes and perceptions of banks: unbanked adults**




**Figure 74. Attitudes and perceptions about MFIs: formally unserved population**


In addition to the findings summarised in Figures 73 and 74, 66% of unbanked adults are of the opinion that they can easily live their lives without bank accounts, and 43% trust their own experience/knowledge rather than the advice of others when it comes to money matters – 45% are more likely to turn to household members when in need of financial advice, 38% to family and friends, and only 7% are likely to go to a financial institution for advice.

Further evidence from the FinScope findings that usage barriers are significant in limiting the potential of increasing formal financial inclusion is the finding that 30% of Zambian adults who are not insured have never heard of insurance, 17% have never thought about it, 10% don't know how it works and 10% are of the perception that they don't need it.

Physical access is perceived as a less significant barrier (less than one in 10 of the unbanked identify this as a significant barrier to banking). This conforms to the developments seen in the sector during the last four years but not by as much as would be expected. Banks have so far not expanded their services significantly among the Zambian population (See Figure 75). There are several reasons for this. Seventeen commercial banks are operating in the sector, but the level of concentration is high and this high concentration can stifle product development and competition, although this could be changing with the arrival of new entrant banks especially since 2008.

Several common financial sector-wide challenges have been identified. These include the dearth of skilled human resource, the inadequate legal infrastructure, different accounting and auditing standards, lack of financial safety nets and a poor credit culture. These combined factors explain to a certain extent the lack of progress in the banking sector (Bank of Zambia, 2004).

A key positive reform step has been to enable MFIs to take deposits from their clients. This may result in the growth of formal savings products available to the population. One obstacle for MFI expansion is the low population density of Zambia, especially in rural areas. Long distances increase costs and reduce the community bond that is part of many MFIs' operating philosophy. According to FinScope data only 2% of the adult population see a microfinance institution as their nearest financial institution.

The predominant lending methodology of MFIs is also a barrier to expansion. Most use salary-loans, i.e. the prospective client has to be in formal employment to be eligible for a loan. This limits expansion to the growth of the formally employed sector, which currently employs only 11.1% of the population according to FinScope data.





Figure 75. Provincial distribution of financial sector infrastructure

Key:

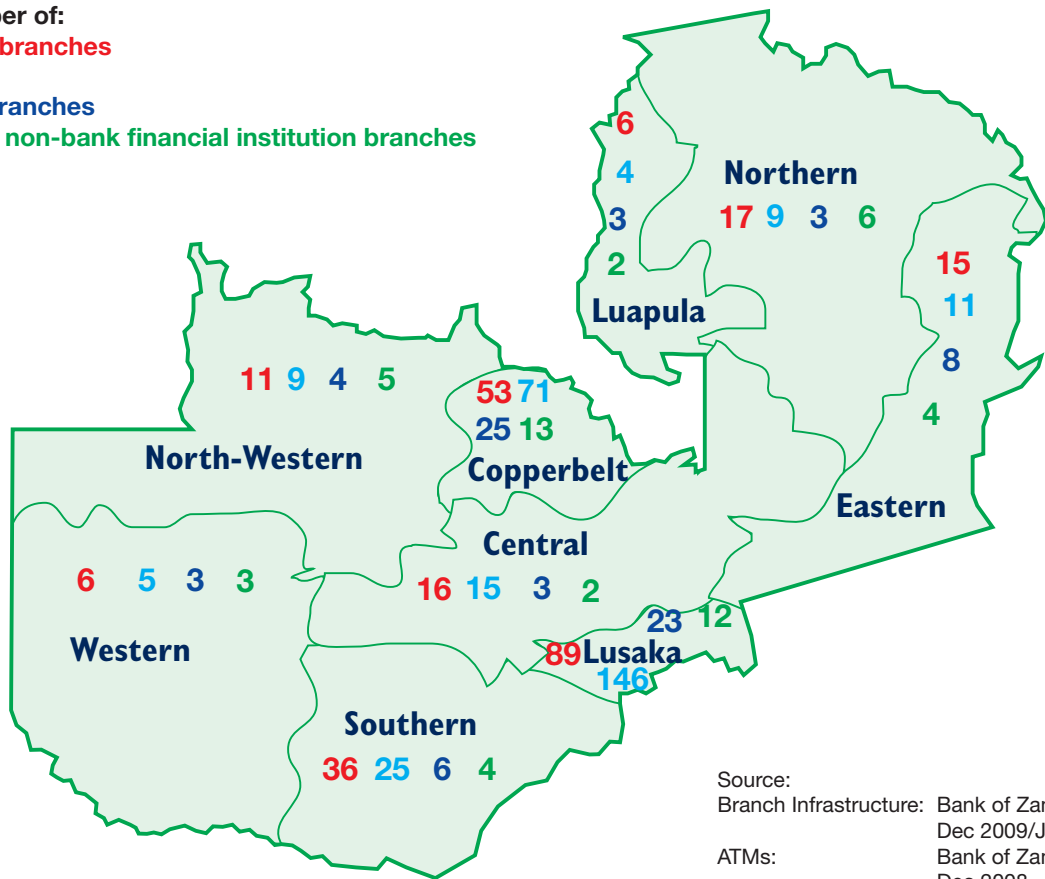
Number of:

Bank branches

ATMs

MFI branches

Other non-bank financial institution branches



Source:  
Branch Infrastructure: Bank of Zambia,  
Dec 2009/Jan 2010  
ATMs: Bank of Zambia  
Dec 2008



## 4 FINANCIAL INCLUSION: 2009 VERSUS 2005

This section compares the financial inclusion landscape in Zambia in 2009 with that of 2005 on the basis of which Section 5 concludes and makes recommendations for reducing financial exclusion.

Greater understanding of the dynamics of intermediation within Zambia's financial markets has assisted in pushing access to the top of government's financial policy agenda. Financial access is now a priority pillar of reform within Phase II of the FSDP, which was first launched in 2004, alongside interrelated pillars aimed at stimulating competition and promoting ongoing improvements to market infrastructure. At the same time, FinScope has provided private service providers with valuable market information that they can, and have, used to improve service delivery and pursue greater outreach.

Since the last FinScope survey was conducted in 2005, there have been notable efforts to promote financial inclusion. Following the launch of the 2005 findings, the GRZ has introduced a financial access indicator within the country's Performance Assessment Framework, a framework to measure the country's performance annually by both government and cooperating partners. Furthermore, supply-side data indicates that the banking sector infrastructure has expanded over the past five years. While there were only 342 POS devices in the country in 2005, there were 850 in 2009. The number of ATMs has increased almost five-fold and the number of branches increased by 33% (see Table 4).

**Table 4. Number of POS, ATMs and branches since 2005**

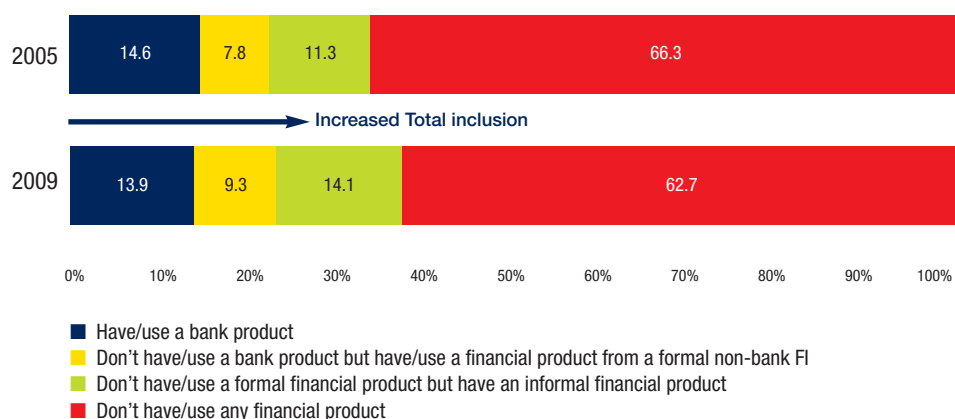
	2005	2006	2007	2008	2009
POS	342	405	420	726	850
ATMs	83	133	186	295	400
Branches	176	183	190	222	234

Source: Bank of Zambia

The question is: what difference have these efforts made? Has the policy emphasis and supply-side expansion drive helped to push out the financial access frontier in Zambia and if so, to what extent? Have other factors played a role in shaping the landscape of access? If so, what are they? The answers to these questions are crucial, as they will inform policy decisions and public and private sector strategies going forward.

When comparing financial inclusion in 2009 with that of 2005, the results are disappointing at first glance (see Figure 76).

**Figure 76. Financial access strand for 2005 and 2009**



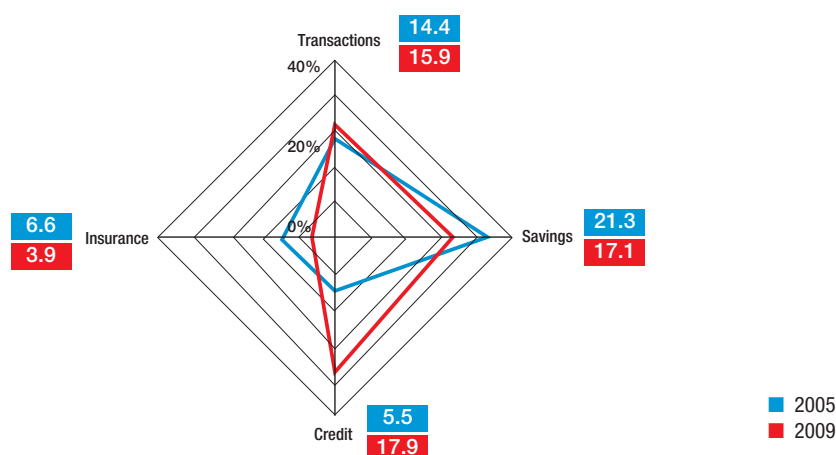


Overall, there has been a 3% increase in financial inclusion with 62.7% of Zambian adults now financially excluded, compared to 66.3% in 2005. This shift is statistically significant, but smaller than would have been expected. The increase has been driven by the formal other and informal segments, rather than by the banking sector:

- The slight decrease in the banked population indicated on the access strands is not statistically significant, implying that the banked population has remained stagnant.
- About 1.5% more adults now use other formal financial services. This is a statistically significant increase and confirms the observations in the rest of the report regarding the important role played by the non-bank financial sector.
- The biggest increase lies in the informal market. Its share of the adult population has increased from 11.3% to 14.1%.

The financial access landscape tool can be used to compare the types of products that people are using between the two survey years (see Figure 77).

**Figure 77. Financial access landscape for 2005 and 2009**



Usage of transactional products has stayed more or less the same, but there has been a decrease in savings and insurance and a significant increase in credit. It indicates a shift in the landscape of access away from savings, but towards credit.

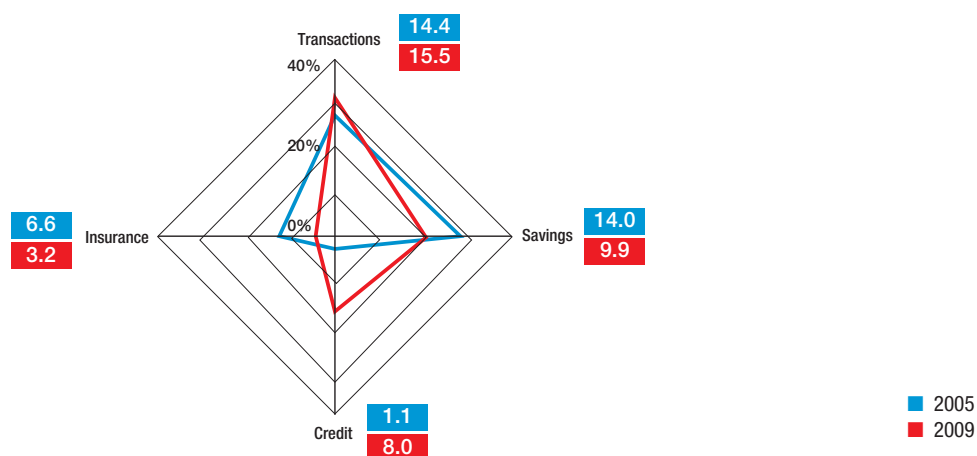
This suggests that the global recession of 2008/9 has had an impact on financial inclusion in Zambia: when under economic pressure, people cut back on savings and insurance (which have to come out of surplus income) and turn to credit to help tide them over.

In his paper, Ndulo (2010) has argued that the impact of the recent global financial crisis was transmitted to Zambia through trade, private capital flows, remittances and overseas development assistance. This may have had an adverse affect on Zambians across the board by impacting on employment and income levels, leading to reduced savings and increased borrowing. There were also spillover effects on the financial sector, especially for institutions that are subsidiaries of international groups. Banks, for example, became less motivated to spend money on large expansion drives and more cautious in their lending practices.



This argument is confirmed when considering the formal landscape of access (see Figure 78).

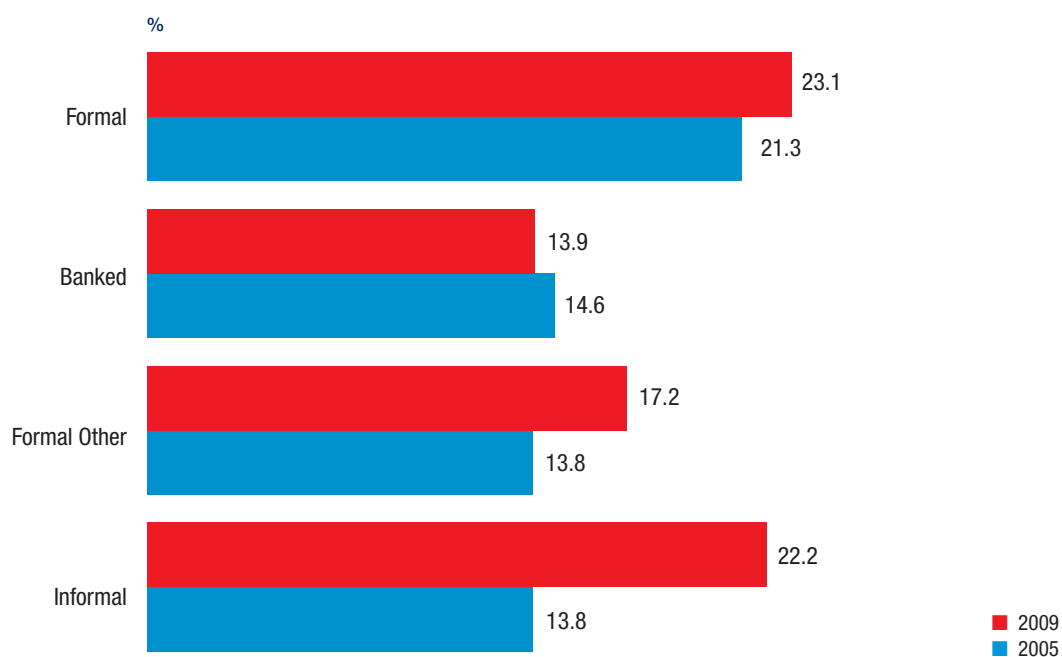
**Figure 78. Formal landscape of access: 2005 and 2009**



Slightly more individuals that only use formal products tended to use transactional banking products in 2009 than in 2005, but substantially more used credit. On the other hand, usage of savings and insurance decreased significantly.

Apart from the access strand and the financial access landscape, the two survey years can also be compared by considering overall use of financial services (i.e. not removing any duplication between categories) (see Figure 79).

**Figure 79. Usage of financial products: 2005 and 2009**





As already indicated in the access strand analysis, the 2009 results show that:

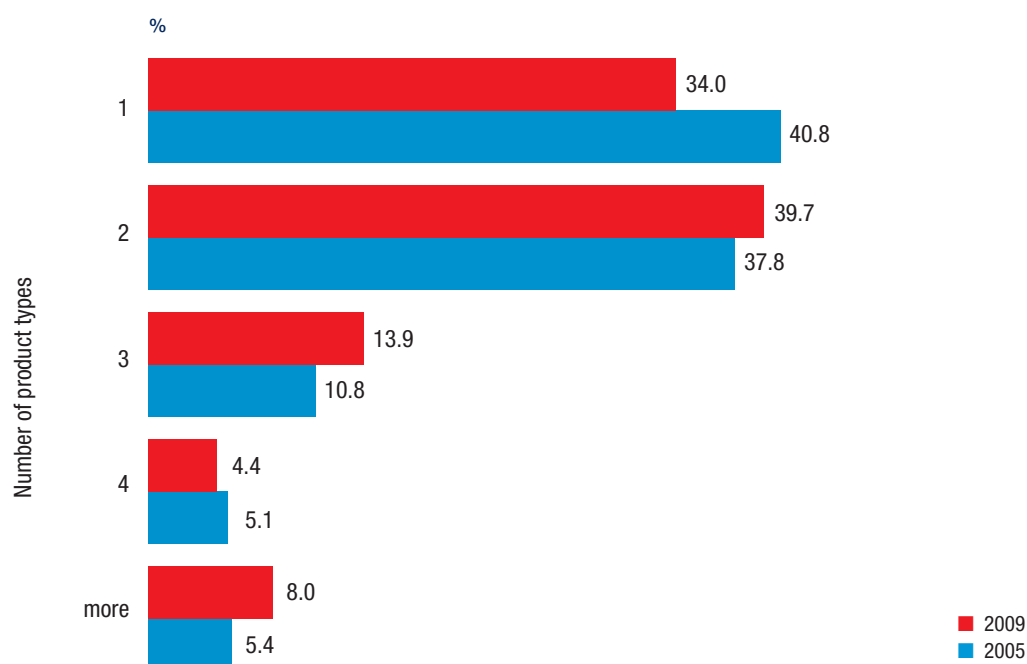
- 63% of adults do not use any financial products at all to manage their financial lives.
- 14% of adults are banked (86% unbanked) and 17% use products from non-bank financial service providers who provide services that banks cannot or do not provide. In total, 23% of the adult population is formally served, i.e. use any form of formal financial product. Formal other therefore seems to be a bigger driver of formal inclusion than banking.
- A total of 22% use informal products (as the access strand indicated, 14% use informal services exclusively, the rest also has some form of formal product). The formal and informal sectors therefore play an equally significant role in terms of financial inclusion.

The comparison with 2005 in Figure 79 indicates that there has been a slight increase in formal access, driven by formal other. It would be important to understand why banking stayed the same while formal other increased. The most significant swing between 2005 and 2009 was witnessed in the informal sector. The formal and informal sectors are now playing a more or less equal role in serving the financial services needs of the adult population, compared to 2005, when the formal sector played a more important role than the informal sector.

These three trends – banked, formal other and informal – are unpacked below.

To understand why the proportion of adults who are banked stayed more or less the same, the number of products used by the banked population in 2005 versus in 2009 is considered (see Figure 80).

**Figure 80. Number of product types among the banked population: 2005 versus 2009**



Those who are banked in 2009 use more product types than those who were banked in 2005. In 2005 each banked adult on average had two banking products. This has now increased to three products. The proportion of banked individuals with only one product type decreased significantly from 40.8% in 2005 to 34% in 2009.



Table 5 compares specific product usage between the two survey years.

**Table 5. Banked product usage by banked population (%)**

Product	2005	2009
Savings Account	92.5	91.4
ATM/Cash Point Card	50.9	63.2
Current/Cheque Account	15.9	12.4
Debit Card/Connect Card	12.4	10.0
Fixed Deposit Account	6.9	8.4
Visa Electron Account	3.6	16.5
24 Hours Call Account	3.2	5.9
Credit Card	2.3	6.6
Bank Overdraft	2.2	5.9
Standing Order	1.7	5.3
High Interest Savings Account	1.5	5.2
Celpay	0.5	8.0
Bank Account outside of Zambia	0.3	4.9
US Dollar/Foreign Currency Account	0.2	4.5
Unit Trust Account	0.0	4.8

Comparing bank product usage between 2005 and 2009, there is a highly significant increase in transactional products (ATM/Cashpoint cards and Visa Electron accounts).

The conclusion is that there appears to have been an increase in the range of products used, specifically transactional products. This, rather than an expansion in the absolute number of people that are banked, can be regarded as the largest benefit reaped from the expansion drive in the banking industry since 2005. The depth of access in the banking sector has therefore increased (more products per served person, cross-selling to existing bank customers) rather than the breadth of access (more people served).

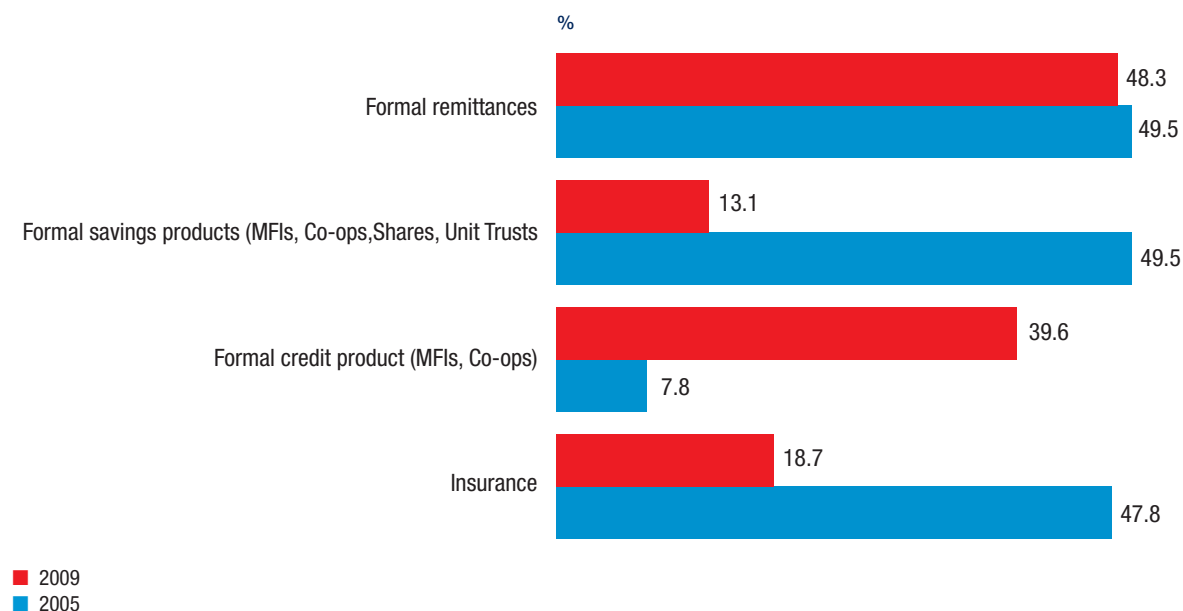
This is confirmed when considering changes in usage between specific banking institutions. Since 2005, there has been a significant increase in uptake of products from Zanaco and Barclays Bank Zambia, particularly with their lower-cost products. It would therefore appear that existing banking customers are switching to these lower-cost transaction banking products.

A last possible explanation for the fact that the banking market has remained static refers back to the financial access landscape comparison. The market has seen a shift out of formal savings into credit, particularly informal credit, in line with the global recession. This means that, due to economic reasons, the product preference of individuals shifted away from those provided by banks.



The next question to consider is why there has been such a significant increase in the role of the “formal other” sector. Figure 81 shows the breakdown of the formal other market in terms of types of financial services comparing 2005 and 2009.

**Figure 81. Product usage within the formal other category**

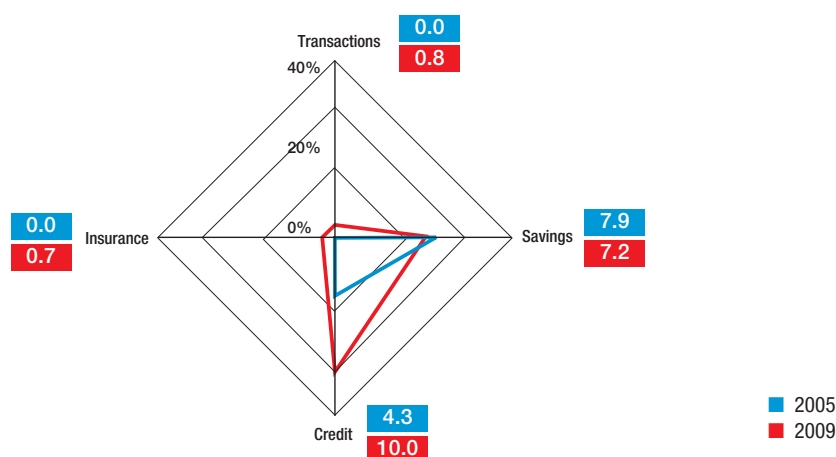


In an attempt to explain the growth in the non-bank financial institutions sphere, product usage is analysed within this category. Findings summarised by Figure 81 indicate that a significant decrease in the use of formal savings and insurance products and a significant growth in the use of formal credit products.

The MFI usage profile has also changed – adults who use MFIs are most likely to claim to use Microfin Africa Zambia Ltd, Bayport and Blue Financial Services; in 2005 it was Cetzam Opportunity Microfinance Ltd, Bayport and Pride Zambia Ltd.

Figure 82 looks at the increase in the informally served market by comparing the financial access landscape for the informally included market in 2009 to that of 2005.

**Figure 82. Financial access landscape: informal products**







The financial access landscape for informal users confirms the earlier finding that there was a substantial increase in informal credit usage between 2005 and 2009. This is the only product recording any significant change between the two survey years. The increased role of the informal sector compared with the formal sector is therefore driven virtually exclusively by the rise in informal credit. As noted, this could possibly be ascribed to the global financial crisis, the tightening in formal lending practices the crisis subsequently triggered, and the overall spillover effect on the Zambian economy resulting from the global recession, which caused fewer people to save and more to borrow.



## 5 CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusions

FinScope Zambia 2009 provides a snapshot of how adult Zambians currently source their income and manage their financial lives. As well as providing insights into attitudes, demand and consumption patterns, the findings provide a valuable picture of the role that both the formal and informal sectors play in the country's financial market.

The FinScope Zambia 2009 findings show that overall levels of financial inclusion have increased since 2005, albeit by a small margin. More than 37% of adult Zambians are now financially served as compared to less than 34% in 2005. Forty-two percent of urban adults are financially served compared to 34.4% of rural adults. This increase is largely driven by growth in the up-take of both formal other products and informal products. The growth in formal other products has mainly been driven by greater use of formal money transfer mechanisms and, to a lesser extent, the uptake of microcredit. Growth in the use of informal products has been primarily driven by an increase in the uptake of informal credit, both in urban and rural areas.

At the same time, in spite of an increase in the number of licensed commercial banks and the proliferation of bank products on offer, the proportion of Zambia's adult population that are banked has remained the same since 2005. The FinScope Zambia 2009 data illustrates that, rather than expanding access to the previously unbanked population, these new financial products and services on offer are improving service delivery to an existing customer base. In other words, they are having an additive as opposed to a transformational effect, with the cross-sell ratio of the banking industry having increased from an average of two products per person in 2005 to three products per person in 2009.

Further analysis using the financial access landscape lens has helped to illustrate the shifts in usage of specific product groups. Whereas the use of insurance and savings products has declined since 2005, the uptake of transactional products has increased slightly and the uptake of credit, particularly informal credit, has increased significantly. Though by no means conclusive, these findings suggest that the recent global financial crisis has had a significant impact on the Zambian population, who by necessity has had to draw on savings and take up credit to meet their day-to-day needs. Had an additional FinScope survey been undertaken immediately before the financial crisis took root, a greater uptake in all these products groups, and a higher increase in levels of financial inclusion, may well have been measured.

The net result of these shifts in product usage is that both the formal and the informal sectors are now playing an equally significant role in serving Zambia's adult population, both in rural and urban areas. Whereas usage of formal products among the financially served population was greater in 2005 than that of informal products, the usage of both formal and informal products in 2009 is almost the same. If the role of the informal sector in expanding access was discounted, then Zambia's level of financial inclusion would reduce from 37% to 23%.

### 5.2 Recommendations

While levels of financial inclusion have increased since 2005, they still remain relatively low, particularly compared to other African countries for which FinScope data is available. The FinScope 2009 findings therefore emphasise the need to build further momentum around the financial access priority of government, donors and private service providers, in order for positive and significant growth in access to be realised in forthcoming years. Further, the survey shows that enhancing financial inclusion is not just a question of increasing supply, but of understanding the nature of demand and developing products and services that more effectively meet that demand.

The following recommendations are considered to be relevant for all stakeholders and reflect the need for the survey data to be scrutinised in more detail and considered alongside other research on the financial sector.



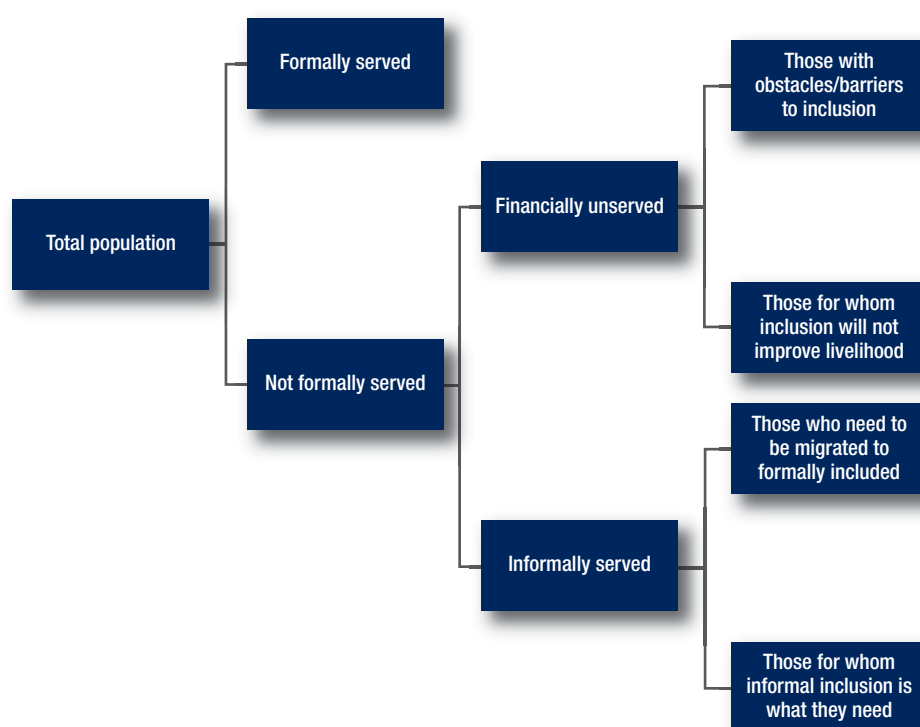
### ***Packaging and dissemination of findings to various stakeholder groups***

The planned public launches of the survey findings represent the first step in what needs to be a targeted and longer-term communication campaign. The results are important for policymakers, donors and private service providers alike and need to be packaged to serve the interests of these different groups and disseminated and debated at all levels. Such a campaign will help to increase understanding of the implications highlighted by the survey and maximise application of the data, whether for the purposes of articulating a national access policy, designing a new financial product, or developing an industry support programme. FinMark Trust is committed to assist the FSDP Secretariat and others in the design and roll-out of such a campaign.

### ***Segmentation analysis to enhance understanding of the needs of target groups within the population***

The top line findings in this report provide a valuable overview of consumption patterns and levels of financial inclusion in Zambia. However, further analysis of the data is required to better understand the circumstances, and therefore the real needs, of the large proportion of the population who are not currently formally served. This can be achieved through livelihoods segmentation, an analysis tool which separates those who are informally served from those that are not financially served at all, and further breaks down these segments into sub-groups of people as illustrated in Figure 83. By analysing the circumstances and behaviour of these sub-groups, the analysis helps to identify the real needs of people within these groups, and thereby facilitates the development of strategies to more effectively address these needs.

**Figure 83. Livelihoods segmentation analysis framework**



This analysis can also be applied to those who are already formally served, to assess the extent to which formal products are meeting their needs as well as to identify the livelihood characteristics that differentiate those that are formally served from those that are not.



### ***Follow-up supply side research to fill gaps in understanding***

A supply-side study on the inclusiveness of Zambia's financial sector was undertaken in 2007 and updated in summary form in 2008<sup>18</sup>. This study provided a useful overview of the largely institutional issues impacting on the supply of financial services at the time. Given the visible evolution of Zambia's financial sector since then, and coupled with the recent impact of the global financial crisis, a follow-up study would be useful in helping to update strategies to increase inclusion from a supply perspective.

This research should include consideration of emerging non-traditional financial sector players, such as cellphone and transaction service providers, as well as the traditional banking and non-bank financial institutions. Ideally, the study should also provide further insights into what can be learnt from, as well as how to accommodate, the supply of informal financial services in strategies to promote financial inclusion, given that the informal sector plays such an important role in extending the boundaries of access. From a regulatory perspective, the research should also check the extent to which the current legislative framework supports the promotion of financial access, as well as highlighting necessary changes to accommodate the emerging non-traditional players and products.

### ***Prompt implementation and ongoing refinement of the FSDP's financial access strategy as defined under Phase II***

The GRZ has defined a strategy to increase financial access within Phase II of the FSDP, which is a positive step. The key is to implement the strategy promptly to increase the likelihood that the desired outcome of financial inclusion will be realised in forthcoming years. It will also be important to build in mechanisms that enable progress to be assessed regularly, the implications of FinScope and other research to be considered and, if necessary, the strategy to be refined based on this research and other evolving factors within the financial environment.

The strategy should place strong emphasis on the promotion of pro-poor as well as pro-rural financial products as the realities of the low-income and, particularly, rural populations will be an important long-term driver of uptake. Such products would include cellphone banking and microinsurance, as well as low-cost transaction and savings products.

Making a difference to the access landscape will require the support and action of all stakeholders. As such, the dialogue structures both within the FSDP, as well as through other means, should enable the participation of all relevant stakeholders and regular debate on common-ground issues. Inclusive dialogue will facilitate the leveraging and coordination of support from other related institutions and programmes with a common objective, such as the GRZ's Rural Finance Programme.

### ***Promote financial literacy***

In general there is a direct correlation between financial literacy and financial behaviour and product uptake. The continuing low levels of financial literacy in Zambia, as highlighted by FinScope, point to the need for a coordinated effort to improve the financial literacy levels in Zambia. The Bank of Zambia's intention to develop a financial literacy strategy for Zambia is a positive step in the right direction. Soliciting support from government, donors and the private sector to implement the strategy will be crucial for its success and should therefore constitute an important factor in the forthcoming strategy development process.

### ***Regular monitoring***

FinScope provides a diagnostic demand-side overview of Zambia's financial sector at a particular point in time. It will be important to continue to implement follow-up surveys to effectively gauge the impact of ongoing reform processes, as well as assess other factors at play within the financial sector. It is suggested that these follow-up surveys be implemented bi-annually: any less and there is a risk that the nuances of the evolving environment are not measured; any more and the exercise becomes prohibitively expensive.

<sup>18</sup> OPM and PMTC (2007) Supply-Side Study of the Inclusiveness of Zambia's Financial Systems.



## 6 BIBLIOGRAPHY

Bank of Zambia. (2004). *Financial Sector Development Plan for Zambia Executive Summary 2004-2009*.

Brochure, C. *Africa Fixed Income Guide*. Africa Development Bank.

Fundanga, C.M. (November 2009). The Medium to Long-Term Strategy To Develop the Financial Sector in Zambia. *UK Zambia Investment Forum on Infrastructure Development*. London.

Kish, L. (1995). *Methods for Design Effects*.

Ministry of Community Development and Social Services. (May 2008). *The Social Transfer Scheme*. Lusaka.

Ndulo, M. (January 2010). *Global Financial Crisis Discussion Series: Zambia Phase 2*. Overseas Development Institute.

OPM and PMTC (2007) *Supply-Side Study of the Inclusiveness of Zambia's Financial Systems*.

Porteous, D. (2005) *The Access Frontier as an Approach and Tool in Making Markets Work for the Poor*. Available at [www.finmark.org.za](http://www.finmark.org.za).

Sherraden, M.S. *Can the Poor Save? Saving and Asset Building in Individual Development Accounts*.

The Economist. (September 26th-October 2nd 2009). *The Power of Mobile Money*. A special report on telecoms in emerging markets.

United Nations (2005). *Household sample surveys in developing and transition countries*. P108.



## ANNEX I: FINSCOPE ZAMBIA 2009 SAMPLE DESIGN AND SAMPLE SELECTION<sup>19</sup>

### Sample Size

The sample size sought is one that will ensure that the study results can be relied upon to make generalisations. For this survey the choice of the sample size will be guided by the number of domains for which separate estimates are required, precision, variability of characteristics in the population, the size of the population, the method of sampling and the levels of non-response. Cost, time and operational constraints will also be factors for consideration.

### Domains

A total of 11 reporting domains will be considered; 9 provinces, rural, urban and as well as at national level.

### Precision

Precision or reliability is a measure of closeness of sample estimates to the results you could get from a census, i.e., 100% enumeration. The level of precision is usually specified in terms of the coefficient of variation (cv). A coefficient of variation less than 0.1 is good, but cv less 0.2 is tolerable (Kish, 1995). For our purpose we settle for a cv = 0.05 in order to allow reliable estimates for all important subclasses the survey will cover.

### Method of sampling

The stratified three stage cluster sampling method will be used. The first stage will involve selection of enumeration areas, selection of households in the second stage and selection of Individuals (respondents) in the third stage. The survey objectives and the available sampling frame have been the main determinants for the method.

The formulas to calculate sample size are based on simple random sampling. Since the proposed design is complex, it is necessary to inflate the sample size determined with a multiplication factor called the design effect to avoid high variances in the estimates. This estimate is usually obtained from previous similar surveys but where it is not available a default value of 1.5 could be used.

### Assumed response rate

It is extremely rare that a 100 percent response is achieved in surveys. Therefore if the effect of non-response is ignored, the number of units in the sample will be smaller than expected and consequently lower the precision of the produced estimates. This situation can be avoided by taking a larger initial sample size based on an expected response rate. For the proposed survey a 90% response is assumed.

The sample size is then obtained by using estimated proportions, whose variance, under the assumption of simple random sampling, is given as:

$$s^2 = p(1-p),$$

where p is an estimate of the proportion of the population that has the characteristic of interest or the probability of success. The safest estimate of p=0.5 is taken because this is the case when maximum variability occurs. Generally the greater the variability among units in the population, the larger will be the sample size needed to achieve specific levels of precision. It is proposed that p= 0.6 be used for this study. From the last survey it was found out that about 66 percent of the adult population was not financially served.

<sup>19</sup> Extract from Central Statistical Office in partnership with M & N Associates (2009) FinScope Zambia 2009 Field Report.



Therefore the simple random sample size is computed as follows:

Calculating initial simple random sample as

$$n_{srs} = \frac{s^2}{[cv(p)p]^2} = \frac{p(1-p)}{[cv(p)p]^2}$$

$$n_{srs} = \frac{0.5(1-0.6)}{(0.05 \times 0.6)^2} = 267$$

where  $cv(p)$  is the coefficient of variation for the proportion.

Table 1 summarises the simple random sample estimates for varying levels of the  $cv$  and  $p$ .

**Table 1. Simple random sample sizes for varying levels of coefficients of variation and proportion**

Guesstimate of $p$	variance	Sample sizes at different levels of coefficient of variation			
		CV=0.025	CV=0.05	CV=0.1	CV=0.2
0.1	0.09	14 400	3 600	900	225
0.2	0.16	6 400	1 600	400	100
0.3	0.21	3 733	933	233	58
0.4	0.24	2 400	600	450	38
0.5	0.25	1 600	400	100	25
0.6	0.24	1 067	267	67	17
0.7	0.21	686	171	43	11
0.8	0.16	400	100	25	6
0.9	0.09	178	44	11	3

Adjust the initial simple random sample with the design effect and the expected response rate.

$$n = \frac{n_{srs} \times deff}{r} = n = \frac{267 \times 1.5}{0.90} = 45$$

where  $n$  = the overall sample size of 445 households.

$n_{srs}$  = the initial simple random sample size  
 $r$  = the expected response rate  
 $deff$  = the design effect

For the proposed study therefore a sample of about 445 households to get estimates at single domain level will be required. However, the major reporting domains for which separate estimates will be required are the nine provinces separately and the same sample size can provide reliable estimates for rural, urban and at national domains separately. Therefore the final sample size should be multiplied by 9 to get the overall sample size. The overall sample size is approximately 4 000.





## Sample allocation

The overall sample will be allocated to the provinces and to rural and urban strata in proportion to the population size according to 2000 census. Adjustments will be made to the proportional allocation in order to allow the smaller provinces fair representation in the sample.

### Sampling Frame

The sampling frame for the selection of households sample will be constructed within the selected Enumeration Areas. A three stage stratified cluster sampling design will be used for the survey.

1. *This means the primary sampling units will be selected from the census frame in the first stage.*
2. *The households will be selected from the selected Enumeration Areas in the second stage.*
3. *One adult (respondent 16 year +) will be selected for interviews in the selected household in third stage.*

The structure of the census frame to be used to select the primary sampling units, which are enumeration areas is as described below:

Administratively, Zambia is divided into nine provinces. Each province is in turn subdivided into districts. For statistical purposes each district is subdivided into Census Supervisory Areas (CSAs) and these are in turn subdivided into Enumeration Areas (EAs). During the 1998-2000 mapping exercise in preparation for the 2000 census of population and housing, CSAs were grouped in wards, wards in constituencies, constituencies in districts and districts in provinces. In total, Zambia has 72 districts, 150 constituencies, 1 289 wards, about 4 400 CSAs and 16 800 EAs. The listing of EAs has information on number of households and the population. The number of households will be used as a measure of size for selecting primary sampling units (PSUs).

### Stratification

In the current census frame, the EAs (i.e. the clusters) are grouped by CSA within a ward, by ward within a constituency, by constituency within a district and by district within province. The EAs are also grouped into urban and rural categories. The desired stratification for this survey is Provinces, rural and urban grouping of EAs.

### Selection of Primary Sampling Units (PSUs)

The procedure for selecting PSUs (i.e., EAs) in each stratum will involve:

- (i) Calculating the sampling interval,  $I$ , for each stratum

$$I_h = \frac{\sum_{i=1}^{N_h} M_{hi}}{a_h}$$

Where  $M_{hi}$  is the number of households in EA (or cluster)  $i$  and stratum  $h$ ,

$\sum_{i=1}^{N_h} M_{hi}$  is the size of the stratum (total number of households in the stratum according to the 2000 census) and  $a$  is the number of clusters (EAs) to be selected in the stratum.

- (ii) Calculating the cumulated size of each EA.
- (iii) Calculating the sampling numbers.

$$R, R+I, R+2I \dots R + (a-1)I,$$

Where  $R$  is a random number between 1 and  $I$

- (iv) Comparing each sampling number with the cumulated sizes of the EAs.



The first EA (or cluster) whose cumulated size is equal to or greater than the random number generated in (iii) is selected. The next EA to be selected is the one with cumulated size equal to or greater than  $R+1$ . Each of the rest of the EAs will be selected using the same procedure, making sure to add 1 at each subsequent selection.

Four hundred (400) EAs or PSUs will be selected based on the objective of sampling ten households per EA for the purpose of identifying survey respondents. Substitution of EAs will only be allowed under practical constraints such as flooding, civil disturbance, etc., All these situations would have to be verified and confirmed by the field coordinator before any substitution is made. Only the Sampling Statistician is allowed to select the replacement EA.

### ***Selection of households***

A frame of households will be determined by listing all the households in all the selected EAs. Upon completion of household listing, the household lists will be given new household numbers, which are sampling serial numbers assigned to each household in the cluster. The sampling numbers will be assigned sequentially within each EA starting from 1. The total number of households in the EA will be equal to the last serial number assigned. Ten (10) households will be selected from every listed EA. Every effort will be made to obtain interviews from selected individuals in the selected households. However, substitution of households will be allowed where there is no eligible respondent in the household, non-availability of eligible respondent during the fieldwork period or any other justifiable reason, verified and confirmed by the field coordinator.

The following steps will be used to select the households:

1. Calculate the sampling interval for each EA

$$I = \frac{B}{b}$$

where B is the number of households listed in the selected EA and b is the number of households to be selected in the selected EA.

2. Generate a random number (R) between 1 and the Interval B; the first selection will hence be R.
3. Add the interval to the random number to get the next selection.
4. Add the interval repeatedly until you get your desired sample size.

### ***Selection of Individual***

A Kish selection Grid will be provided to the interviewer for selecting one adult in the selected household.

At the household level, a list of all members of the households will be compiled; the ages and other demographic characteristics will be obtained. The interviewer will assign a serial number to each adult; first the males are assigned serial numbers in order of decreasing age then the females in the same order. Depending on the number of adults listed in the household, the selection grid will guide the interviewer which adult to select in the household based on the serial number assigned. There will be clear instructions on how to use the selection grid.



## Estimation Procedure

### Weights

Due to the non-proportional allocation of the sample to the different strata, sampling weights will be required to ensure actual representation of the sample at national level. The sampling probabilities at first-stage selection of EAs and probabilities of selecting the households and individuals will be used to calculate the weights. These weights will therefore allow boosting of the survey results back to household and individual level. The weights of the sample are equal to the inverse of the probability of their selection.

The probability of selecting cluster  $i$  will be calculated as:

$$\frac{a_h M_{hi}}{\sum_{i=1}^{N_h} M_{hi}}$$

The weight or boosting factor is, thus, given as:

$$w_{hi} = \frac{1}{P_{hi}}$$

where:  $P_{hi}$  is the first stage sampling probability of (EA),  $a_h$  is the number of EAs selected in stratum  $h$ ,  $M_{hi}$  is the size (households according to the Census frame) of the  $i^{\text{th}}$  EA in stratum  $h$ , and  $\sum M_{hi}$  is the total size of stratum  $h$ .

The selection probability of the household will be calculated as:

$$P_h = \frac{n_h}{N_h}$$

where  $n_h$  = the number of households selected from stratum  $h$ ,  $N_h$  = the total number of households in stratum  $h$ .

Let  $y_{hij}$  be an observation on variable  $Y$  for the  $j^{\text{th}}$  household in the  $i^{\text{th}}$  EA of the  $h^{\text{th}}$  stratum. Then the estimated total for the  $h$ -th stratum is:

$$y_h = \sum_{i=1}^{a_h} \sum_{j=1}^{n_h} w_{hi} y_{hij}$$

where,  $y_h$  is the estimated total for the  $h$ -th stratum,  $w_{hi}$  is the weight for the  $j^{\text{th}}$  household in the  $i$ -th EA of the  $h$ -th stratum,  $I = 1-a_h$  is the number of selected clusters in the stratum,  $j = 1-n_h$  is the number of sample households in the stratum. The national estimate is given by:

$$y = \sum_{h=1}^H y_h$$

where,  $y$  is the national estimate,  $h = 1, \dots, H$  is the total number of strata. For this survey,  $H = 18$  (the rural/urban and the 9 provinces).



## ANNEX II: FINScope ZAMBIA 2009 DATA VALIDATION PROCESS<sup>20</sup>

### Post Stratification Adjustment

In the validation process, the total population was used to first compare between the FinScope data and the CSO projected population for Zambia 2009. The CSO Census 2000 Population Projections Report has projected population at national, rural/urban, province and district level. The FinScope Zambia 2009 survey collected data on the household size. The weighted sum of the household size variable is supposed to give a good and accurate estimate of the current population in a particular domain. The survey was designed to produce estimates for province, rural/urban and national level. The expression to get the Population value is given below:

$$\hat{Y} = \sum_h \sum_i \sum_j w_{hi} * y_{hij}$$

Where  $\hat{Y}$  is = The Estimator of the Population  $Y$  using sample data

$w_{hi}$  = weight of the sample households in the  $i$ -th SEA of Domain  $h$  (Rural/Urban within Province)

$y_{hij}$  = household size ( $y$ ) of the  $j$ -th sample household with the  $i$ -th SEA of Domain  $h$  (Rural/Urban within Province)

The results of the above expression are given in Table 1 below.

**Table 1: Estimated total population distribution using unadjusted FinScope weights and CSO projections by province and residence, Zambia, 2009**

Province	Rural			Urban			Total		
	Unadjusted Estimated Total Population	CSO Projected Total Population	Percent Difference	Unadjusted Estimated Total Population	CSO Projected Total Population	Percent Difference	Unadjusted Estimated Total Population	CSO Projected Total Population	Percent Difference
Central	805 636	1 031 933	21.9	268 506	303 412	11.5	1 074 143	1 335 345	19.6
Copperbelt	378 197	400 919	5.7	1 349 513	1 605 369	15.9	1 727 710	2 006 288	13.9
Eastern	1 352 038	1 595 426	15.3	141 491	148 803	4.9	1 493 529	1 744 229	14.4
Luapula	923 181	873 570	-5.7	136 664	153 488	11.0	1 059 845	1 027 058	-3.2
Lusaka	275 560	331 844	17.0	1 380 402	1 382 726	0.2	1 655 961	1 714 570	3.4
Northern	1 341 658	1 464 312	8.4	243 128	218 941	-11.0	1 584 786	1 683 253	5.8
North Western	569 728	678 862	16.1	84 289	100 425	16.1	654 017	779 287	16.1
Southern	1 189 978	1 268 500	6.2	290 780	318 696	8.8	1 480 758	1 587 196	6.7
Western	831 511	854 664	2.7	105 420	101 833	-3.5	936 932	956 497	2.0
<b>Total</b>	<b>7 667 488</b>	<b>8 500 030</b>	<b>9.8</b>	<b>4 000 197</b>	<b>4 333 693</b>	<b>7.7</b>	<b>11 667 681</b>	<b>12 833 723</b>	<b>9.1</b>

It is very clear that overall, the estimated total population using unadjusted FinScope weights in Table 1 is an under estimate since the frame used for sampling was generated in 2000 and also there were some listing problems due to the fact that some boundaries used in the 2000 census may no longer exist, i.e., the features used as boundaries in 2000 may have changed or have disappeared all together. These frame problems can only be solved after the completion of the on going Census 2010 Mapping exercise.

<sup>20</sup> Extract from Central Statistical Office in partnership with M & N Associates (2009) FinScope Zambia 2009 Field Report.



The sample was a three stage stratified cluster design. The frame and listing problems mentioned above would lead to the true probability of selection not being known, that is, the design ceases to be an Equal Probability Selection Method (EPSEM). EPSEM samples are **probability samples** where each observation in the population has the same known probability of being included in the sample. EPSEM samples have certain desirable properties; for example, the simple formulas for computing means, standard deviations, and so on can be applied to estimate the respective parameters in the population. The design is made non-epsem in two ways;

1. *At the first stage of selection, i.e., the selection of the PSUs, in this case the EAs due to the use of an old census frame.*
2. *The second stage which is the selection of households within EAs due to listing problems, i.e., under listing and over listing from boundary problems.*

In order to make the design epsem it is necessary to adjust the weights to compensate for the above problems (see 'Household Sample Surveys in Developing and Transition Countries' by United Nations, 2005 page 108). The solution for now is the adjustment of the weights to reflect the 2009 population. This is done by post stratification adjustment of the weights or population weighting. This procedure is done for all national household based surveys conducted by the CSO and indeed a standard practice in other statistical institutions internationally. The procedure is given below.

$$k = \frac{Y_{proj}}{\hat{Y}}$$

where  $k$  = adjustment factor

$Y_{proj}$  = Projected 2009 Population of the domain (rural/urban within province) from the Census 2000 Projections Report

$W'_{hi} = W_{hi} * k$  where  $W'_{hi}$  = adjusted final household weight (or adjusted second stage weight ).

The results of this adjustment are given in Table 2 below:

**Table 2: Estimated total population distribution using adjusted FinScope weights corrected for frame defects by province and residence, Zambia, 2009**

Province	Rural	Urban	Total
Central	1 031 933	303 412	1 335 345
Copperbelt	400 919	1 605 369	2 006 288
Eastern	1 595 426	148 803	1 744 229
Luapula	873 570	153 488	1 027 058
Lusaka	331 844	1 382 726	1 714 570
Northern	1 464 312	218 941	1 683 253
North Western	678 862	100 425	779 287
Southern	1 268 500	318 696	1 587 196
Western	854 664	101 833	956 497
<b>Total</b>	<b>8 500 030</b>	<b>4 333 693</b>	<b>12 833 723</b>



Please note that the total population of the FinScope data calculated using adjusted weights is exactly the same as the CSO projected population (compare with Table 1). The survey estimated totals in these domains are going to change by the approximately percentage differences shown in Table 1. The survey proportion and ratio estimators such as percent in employment, percentage those 16 years and above who have bank accounts and so on will not change whether we use adjusted or unadjusted weights within the domains of analysis (province, province-rural, province-urban, rural/urban and national) because the adjustment factor is common to both the denominator and the numerator of the ratio or proportion mathematical expression (see Tables 5a and 5b).

The third stage weight or the weight for an individual 16 years and above that responded in the survey is also adjusted by the same factor;

$$W'_{hi} = W_{hi} * k$$

where  $W_{hij}$  = the weight for an *i-th* individual 16 years and above in the *i-th* SEA of the *j-th* sample household

Then all other estimates can confidently be assumed to reflect the 2009 situation in terms of the population, since the weights have been adjusted to compensate for the frame and listing problems.

### Population of those aged 16 years and above using unadjusted and adjusted weights by province and residence, 2009

Table 3 below shows the distribution of the population for those aged 16 years and above. The percentage differences are very similar if not the same with those shown in table 1 for the total population. The national population for those aged 16 years and above was under estimated by 9.2 percent and the total population by 9.1 percent.

**Table 3: Population of those aged 16 years and above using unadjusted and adjusted weights by province and residence, 2009**

Province	Rural			Urban			Total		
	16yrs + Population using unadjusted weights	16yrs + Population using adjusted weights	Percentage Difference	16yrs + Population using unadjusted weights	16yrs + Population using adjusted weights	Percentage Difference	16yrs + Population using unadjusted weights	16yrs + Population using adjusted weights	Percentage Difference
Central	433 968	555 220	21.8	161 054	181 991	11.5	595 021	737 211	19.3
Copperbelt	198 759	210 701	5.7	786 779	935 946	15.9	985 539	1 146 647	14.1
Eastern	644 119	760 070	15.3	74 377	78 220	4.9	718 496	838 291	14.3
Luapula	429 756	406 662	-5.7	69 181	77 698	11.0	498 938	484 359	-3.0
Lusaka	137 928	166 101	17.0	793 289	794 624	0.2	931 217	960 725	3.1
Northern	632 001	689 778	8.4	120 379	108 403	-11.0	752 380	798 182	5.7
North Western	260 944	310 929	16.1	43 135	51 393	16.1	304 079	362 321	16.1
Southern	564 403	601 645	6.2	151 576	166 128	8.8	715 979	767 774	6.7
Western	422 547	434 312	2.7	52 690	50 897	-3.5	475 236	485 209	2.1
<b>Total</b>	<b>3 724 425</b>	<b>4 135 418</b>	<b>9.9</b>	<b>2 252 460</b>	<b>2 445 300</b>	<b>7.9</b>	<b>5 976 885</b>	<b>6 580 718</b>	<b>9.2</b>



## Population (16 years +) distribution by age using adjusted and unadjusted weights

The table below shows the distribution of the adult population (16 years and above). The variance in total population is similar to that of the national picture, that is, an average difference of about 9 percent.

**Table 4: Population (16 years +) distribution by age group and residence using adjusted and unadjusted FinScope weights, Zambia, 2009**

Age Group	Rural			Urban			Total		
	16yrs + Population using unadjusted weights	16yrs + Population using adjusted weights	Percentage Difference	16yrs + Population using unadjusted weights	16yrs + Population using adjusted weights	Percentage Difference	16yrs + Population using unadjusted weights	16yrs + Population using adjusted weights	Percentage Difference
16 to 19	662 030	733 528	10.8	434 379	473 922	9.1	1 096 409	1 207 450	10.1
20 to 24	630 813	702 023	11.3	398 997	431 184	8.1	1 029 809	1 133 207	10.0
25 to 29	531 348	591 502	11.3	370 389	402 906	8.8	901 737	994 408	10.3
30 to 34	414 237	460 143	11.1	249 191	269 498	8.1	663 428	729 641	10.0
35 to 39	346 039	382 614	10.6	219 781	237 355	8.0	565 820	619 968	9.6
40 to 44	250 480	278 190	11.1	147 859	160 015	8.2	398 338	438 205	10.0
45 to 49	238 808	264 569	10.8	123 432	134 905	9.3	362 240	399 474	10.3
50 to 54	162 773	179 534	10.3	90 091	98 811	9.7	252 865	278 344	10.1
55 to 59	133 705	146 849	9.8	65 226	70 577	8.2	198 931	217 427	9.3
60 to 64	109 268	121 212	10.9	59 997	65 588	9.3	169 265	186 800	10.4
65 plus	244 924	275 254	12.4	93 119	100 540	8.0	338 043	375 794	11.2
<b>Total</b>	<b>3 724 425</b>	<b>4 135 418</b>	<b>11.0</b>	<b>2 252 460</b>	<b>2 445 300</b>	<b>8.6</b>	<b>5 976 885</b>	<b>6 580 718</b>	<b>10.1</b>





## Total population distribution by age

The CSO Census 2000 Population Projections Report does not have data by age group for 2009 so direct comparison could not be done. The results compare very well with the age percentage contribution to the provincial population in other household based surveys like the Living Conditions Monitoring Survey (LCMS) 2006 (CSO, unpublished), Labour Force Survey (LFS) 2008 (CSO, unpublished), Labour Force Survey 2005 Report (CSO) and Census of Population and Housing 2000 Report. Table 5a and Table 5b show the distribution of the population by province and age in terms of numbers and percentages, respectively.

**Table 5a: Estimated total population distribution using FinScope adjusted weights by age group and province, Zambia, 2009**

Age Group	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North Western	Southern	Western	Zambia
0-4	180 261	263 076	311 266	187 271	214 809	312 452	136 687	255 741	135 593	1 997 154
5-9	195 358	258 038	308 377	185 027	239 032	283 953	139 609	265 052	145 573	2 020 020
10-14	173 230	257 506	240 819	146 297	239 097	234 168	120 540	245 873	145 763	1 803 292
15-19	187 161	311 075	180 024	114 595	222 518	192 891	84 181	191 625	136 029	1 620 097
20-24	124 472	187 098	152 319	65 507	182 472	129 701	57 420	139 652	98 761	1 137 402
25-29	108 449	182 247	130 476	71 573	157 786	111 154	52 992	121 823	61 591	998 089
30-34	83 360	113 930	88 522	58 267	117 554	81 164	43 575	97 576	48 394	732 342
35-39	59 882	98 775	83 430	55 011	97 673	76 032	40 320	78 088	33 053	622 263
40-44	44 209	69 981	59 092	37 468	67 110	52 486	30 417	53 661	25 403	439 827
45-49	38 920	69 703	52 634	31 102	54 155	46 078	27 838	41 011	39 512	400 953
50-54	30 154	54 297	35 379	24 346	30 536	45 063	11 555	25 447	22 598	279 375
55-59	25 158	37 755	19 813	18 290	23 707	35 413	14 194	24 844	19 057	218 231
60-64	22 887	40 572	23 097	12 373	22 527	27 473	8 656	15 601	14 307	187 491
65+	55 815	54 302	59 782	25 212	47 442	61 739	15 657	34 907	22 329	377 185
<b>Zambia</b>	<b>1 329 316</b>	<b>1 998 353</b>	<b>1 745 030</b>	<b>1 032 338</b>	<b>1 716 416</b>	<b>1 689 767</b>	<b>783 639</b>	<b>1 590 902</b>	<b>947 963</b>	<b>12 833 723</b>

**Table 5b: Estimated percentage total population distribution using FinScope adjusted weights by age group and province, Zambia, 2009**

Age Group	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North Western	Southern	Western	Zambia
0-4	13.56	13.16	17.84	18.14	12.51	18.49	17.44	16.08	14.30	15.56
5-9	14.70	12.91	17.67	17.92	13.93	16.80	17.82	16.66	15.36	15.74
10-14	13.03	12.89	13.80	14.17	13.93	13.86	15.38	15.45	15.38	14.05
15-19	14.08	15.57	10.32	11.10	12.96	11.42	10.74	12.05	14.35	12.62
20-24	9.36	9.36	8.73	6.35	10.63	7.68	7.33	8.78	10.42	8.86
25-29	8.16	9.12	7.48	6.93	9.19	6.58	6.76	7.66	6.50	7.78
30-34	6.27	5.70	5.07	5.64	6.85	4.80	5.56	6.13	5.11	5.71
35-39	4.50	4.94	4.78	5.33	5.69	4.50	5.15	4.91	3.49	4.85
40-44	3.33	3.50	3.39	3.63	3.91	3.11	3.88	3.37	2.68	3.43
45-49	2.93	3.49	3.02	3.01	3.16	2.73	3.55	2.58	4.17	3.12
50-54	2.27	2.72	2.03	2.36	1.78	2.67	1.47	1.60	2.38	2.18
55-59	1.89	1.89	1.14	1.77	1.38	2.10	1.81	1.56	2.01	1.70
60-64	1.72	2.03	1.32	1.20	1.31	1.63	1.10	.98	1.51	1.46
65+	4.20	2.72	3.43	2.44	2.76	3.65	2.00	2.19	2.36	2.94
<b>Zambia</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>



## Highest level of Education Completed

The highest level of education completed was also compared with the other survey data sets and it also compares very well. The way this variable was collected was different from the other surveys hence the comparison had to be made using the actual live data in this case the LCMS 2006 and LFS 2005.

**Table 6a: Percentage distribution using FinScope adjusted weights of the 16 years and population by highest level of education completed and province, 2009**

Education Level Completed	Central	Copper-belt	Eastern	Luapula	Lusaka	Northern	North western	Southern	Western	Zambia	Population of 16 yrs + using Adjusted Weights
No formal education	8.51	3.19	19.97	4.61	4.38	8.25	13.29	7.87	9.99	8.39	552 568
Some Primary school	31.64	18.32	44.31	45.71	17.09	42.70	34.16	27.16	36.03	31.03	2 043 897
Primary school completed	19.53	11.86	14.67	16.94	14.72	17.40	9.48	23.45	19.45	16.31	1 074 412
Some secondary school	24.54	36.78	14.63	22.79	33.39	23.80	29.91	22.46	23.09	26.49	1 744 707
Secondary school completed	7.28	20.05	2.52	5.98	20.06	5.09	6.99	11.06	7.69	10.92	719 094
Some college	1.45	1.37	.52	.49	4.23	.09	1.66	1.50	.32	1.43	94 204
College completed	6.21	7.50	2.08	3.01	4.78	2.41	2.23	6.41	3.44	4.62	304 255
Some University	.08	.16	.06	.09	.40	.00	.53	.00	.00	.14	9 163
University completed	.47	.25	1.15	.00	.73	.26	1.43	.03	.00	.46	30 492
Professional qualification or equivalent	.00	.23	.09	.38	.22	.00	.00	.00	.00	.11	7 276
Post Graduate/ Doctorate	.00	.06	.00	.00	.00	.00	.00	.00	.00	.01	651
<b>Zambia</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>6 580 718</b>



**Table 6b: Percentage distribution using FinScope unadjusted weights of the 16 years and population by highest level of education completed and province, 2009**

Education Level Completed	Central	Copper-belt	Eastern	Luapula	Lusaka	Northern	North western	Southern	Western	Zambia	Population of 16 yrs + using Adjusted Weights
No formal education	8.34	3.28	19.82	4.73	4.34	8.2	13.29	7.9	9.95	8.24	493 066
Some Primary school	31.28	18.65	44.13	45.9	16.88	42.11	34.16	27.28	35.95	31.02	1 855 826
Primary school completed	19.14	11.86	14.66	17.15	14.49	17.43	9.48	23.48	19.39	16.33	976 994
Some secondary school	24.71	36.69	14.82	22.58	33.65	24.11	29.91	22.39	23.14	26.56	1 588 725
Secondary school completed	7.63	19.83	2.59	5.72	20.09	5.17	6.99	10.96	7.78	10.95	654 891
Some college	1.56	1.35	0.55	0.5	4.33	0.08	1.66	1.49	0.33	1.47	88 083
College completed	6.4	7.43	2.12	2.94	4.85	2.58	2.23	6.4	3.45	4.61	275 932
Some University	0.08	0.15	0.06	0.08	0.42	0	0.53	0	0	0.14	8 425
University completed	0.52	0.25	1.14	0	0.75	0.31	1.43	0.03	0	0.46	27 601
Professional qualification or equivalent	0	0.22	0.09	0.39	0.2	0	0	0	0	0.11	6 730
Post Graduate/ Doctorate	0	0.06	0	0	0	0	0	0	0	0.01	614
<b>Zambia</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>5 976 885</b>



## Employment Status

The method for collection of employment status for the FinScope 2009 Survey was very different from that of the Labour Force Surveys and the Living Conditions Monitoring Surveys. Therefore, the numbers do not compare very well, e.g., the variables unemployment, employee and self employed in the Labour Force Surveys and the Living Conditions Monitoring Surveys are obtained indirectly through a series of questions and are then coded at analysis stage after data cleaning. The disadvantage of a one question and single response only in employment status, as used in the FinScope 2009 Survey, is that there are no other questions to further probe employment status. Furthermore, the LFS defines working age population of 15 years and above as opposed to the FinScope survey which is 16 years and above. The unemployment rate in the data is estimated at 26 percent while in the LFS 2005 it is 15 percent. This difference is expected as the FinScope is a perception survey.

**Table 7: Employment status using FinScope adjusted weights of 16 years and population by Province, Zambia, 2009**

Employment Status	Central	Copper-belt	Eastern	Luapula	Lusaka	Northern	North Western	Southern	Western	Zambia	16 yrs + Population
An employer	.32	.08	.00	.00	.00	.00	.20	.47	.00	.12	7 897
An employee	13.45	14.83	6.98	4.90	19.15	4.67	8.75	11.60	6.56	11.07	728 485
self-employed	31.47	24.56	45.61	72.50	25.23	59.33	65.97	57.37	43.38	43.22	2 844 186
unpaid family worker	8.20	2.46	32.63	7.67	4.62	25.19	4.39	13.37	14.50	12.60	829 170
unemployed	40.28	54.42	7.34	9.42	41.65	7.89	17.32	16.60	4.17	26.04	1 713 619
Others	6.27	3.65	7.44	5.50	9.34	2.91	3.37	.59	31.38	6.96	458 018
<b>Zambia</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>6 580 718</b>