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GORDON INSTITUTE
OF BUSINESS SCIENCE

Optimisation of the use and access to financial services at the Base of the Pyramid in South Africa

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

10 November 2010

Abstract

At the recent South African Banking Associations inaugural summit held on September 2010, it was estimated that the unbanked South Africans have put approximately R12 billion “under their mattresses” (Greyvenstein, 2010). This money would have a huge impact in the banking system if it was banked. It is widely held that whilst this problem is not uniquely South African and as per the latest Finscope survey results, since 2004, when Finscope first began tracking the number of adults not being served, a steady decline has been noted over the years in the number of banked individuals. The 2009 survey shows a further 2% deterioration when compared to 2008 in the financially excluded category. The 2009 Finscope report findings also show for the first time since 2004, a decline in the percentage number of South African adults who are banked from 63% in 2008 to 60% in 2009.

The financial services sector has been identified as playing a crucial role in this transformation through its financing activities. It is therefore in this context that Beck and de la Torre (2006) argued that broad access to financial services is related to economic and social development. The South African government has therefore implemented various initiatives to combat these challenges. These initiatives, some together with the private sector, include the Broad Based Black Economic Empowerment Act, Financial Sector Charter, Dedicated Banks Bill and the launch of the Mzansi initiative.

The Government is aware that broad-based BEE cannot happen unless previously disadvantaged individuals, especially the poor, are able to access financial services – in order to borrow and invest in small businesses, to save and to protect themselves against risks.

The basis of the research is therefore to explore some of the reasons for the low access to financial services in South Africa's Foundation of the Pyramid (LSM 1- 4) and to find possible solutions by building a model that could possibly work based on propositions related to aspects of the literature around employment status and income, access to credit, some type of identifiable address / dwellings, education, use of technology and costs.

The analysis of the proposed model using frequency, descriptive statistics and the results of the chi-square test upheld all but one of the propositions and showed the possibility of this model to work in South Africa.

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements of the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Name: .....

Signature: .....

Date: .....

Acknowledgements

I would like to acknowledge and thank the following people for their contribution:

- My family for their support and understanding, especially my kids Thabang, Tholwana and Thabiso, during the last two years.
- My supervisor, Dr Clive Corder for guidance and assistance. I could not have made it thus far without your patience and understanding.
- The Standard Bank Marketing Insights and Community Banking teams for allowing me access to the Finscope Data.
- Last but not least, the Almighty for keeping me sane during the most challenging period in my life and I'm truly grateful and blessed to have made it thus far.

Keywords

Banked, Unbanked and Foundation of the Pyramid

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1.1 Introduction

The financial services sector plays a critical role in promoting sustainable development through its financial intermediation (Moyo & Rohan, 2006). At the same instance, the inaccessibility of financial services for both individuals and micro-enterprises is a fundamental impediment to progress towards sustainable development, particularly in Africa.

According to Beck and de la Torre (2006) access to financial services has become a major concern for many policy makers in developing countries. While the use of financial services – measured as having deposit accounts – reaches over 90% in most developed countries, in many low and even middle income countries the use of financial services is restricted to a small number of firms and households (Imboden, 2005).

Whilst markets provide a myriad of opportunities to those who are able to gain access and participate successfully in them, numerous barriers that can be linked to their lack of inclusiveness have resulted in their failure. Incomplete markets (such as for credit and insurance), imperfect information, public goods and externalities are present in all countries, but some of them may be more acute in a low income environment (Mendoza & Thelen, 2008).

Various studies have shown that broad access to well functioning and efficient financial services can empower individuals economically and socially allowing them

to better integrate into the country's economy and actively contribute to its growth (Beck & de la Torre, 2006; Imboden, 2003; Moyo & Rohan, 2006). It is further argued that better financing environments are associated with higher economic growth, at least in part, because more efficient financial sectors facilitate better allocation of capital across investments opportunities (Kerr & Nanda, 2008). Habibullah & Eng (2006) further describe the role of the financial sector as the engine for growth by acting as the provider of funds for productive investments which could therefore lead to accelerating economic growth.

1.2 South African Financial Services

South Africa has a dual economy, with a sophisticated first world sector overlaid on what can be characterised as a developing economy (Arora & Leach, 2005). A key impediment to the growth challenge in South Africa is the relative shortage of high quality human capital, manifested as part of the general unequal distribution of assets (land, financial capital and human capital) in the country (Pillay, 2006), as a result of the previous ruling government's policy of Apartheid.

The BEE Commission Report (BEECom, 2001: 19) encapsulates the history of the financial services in the following paragraph:

> *Market failures and continued racism in established business, particularly the financial sector, are among the major obstacles preventing meaningful transformation. Financial institutions have been*

> *geared to serve the needs of the minority white section of the population, resulting in a biased allocation of resources to the disadvantage of the black majority, particularly, women. The industry has therefore failed to provide banking services to the vast majority of South Africans….currently between 60% to 80% of the country's economically active population remains unbanked. (p.23)*

Various Government initiatives, some together with the private sector, have been implemented since the 1994 democratic elections, like the Broad Based Black Economic Empowerment Act, Financial Sector Charter, Dedicated Banks Bill and the launch of the Mzansi initiative. However, according to the latest Finscope (Finscope, 2009), only 60% of the adult population in South Africa is currently banked (previous year 63%). See figure 1.

1.3 Current Environment and challenges

South Africa is Africa's most advanced, productive and diversified economy, with an estimated population of 49 million and the median personal monthly income averaging R827 (average monthly income in 2008 was R825) (FinScope, 2009). However, per capita income remains very low for just over 70% of the population. Therefore, although South Africa's per capita income almost makes it an upper middle income country, most South African's households are poor or vulnerable to

becoming poor. The Financial Development Report, 2009, ranks South Africa at 32, higher than some of the better developed economies in the world (World Economic Forum, 2009).

This anomaly is caused by the distribution of income and wealth, which is amongst the most unequal in the world. The poorest 20% of the country's households make up 27% population yet only receive 3% of its income. The richest 20% of households make up 3% of the population but obtain more than 65% of national income (Arora & Leach, 2005).

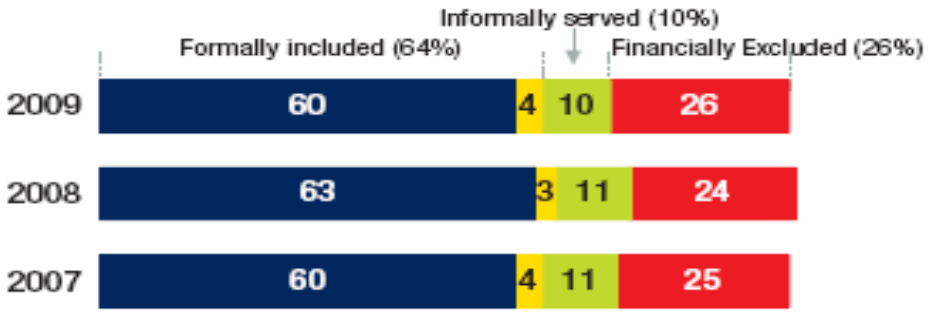


Figure 1: Source: Finscope, 2009.

Finscope 2009 survey (Finscope, 2009) estimates that 64% of South African adults are using some type of formal financial product (blue represents banked and yellow formally served), whilst 10% of adults rely on informal products (such as stokvels or clubs, informal money lenders, such as mashonisas and burial societies) to manage their lives (see Figure 1). The survey further shows that 26% of adults are not being financially served (that is they are managing their lives without the use of financial products, albeit formal or informal). The financially excluded are more likely to be

younger than 30, and personally earn less than R500 per month. The informally served tend to be females earning between R500 – R900 a month, living in tribal land and will have burial societies as their financial access point (see figure 3). The concerning factor is that since 2004, when Finscope began tracking the number of adults not being served, a steady decline has been noted over the years. The 2009 survey shows 2% deterioration when compared to 2008 in the financially excluded category. The 2009 Finscope report findings also show for the first time since 2004, a decline in the percentage number of South African adults who are banked from 63% in 2008 to 60% in 2009 (see Figure 2).

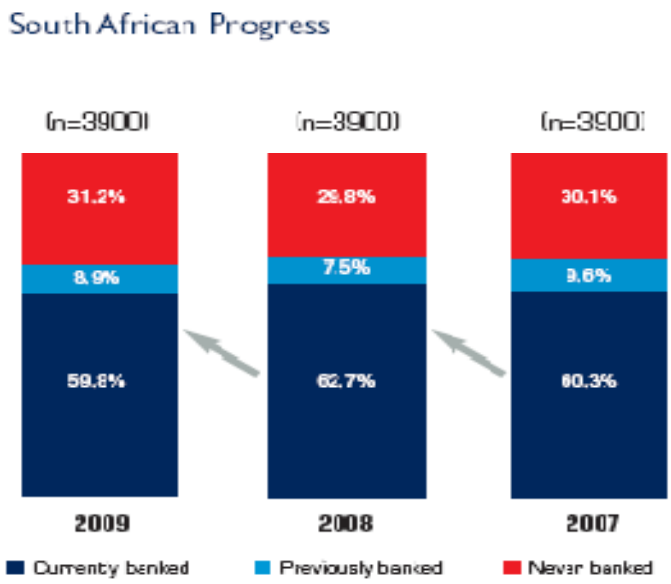


Figure 2: Source: Finscope, 2009.

The number of previously banked individuals (individuals 16 years and older who have been previously banked but who have since dropped out of the banking

system) has increased by 22% since 2008. The drop in banking penetration could be particularly observed amongst the most vulnerable groups of South African adults (such as the lower Living Standard Measure (SAARF, 2008) categories and lower income groups) as well as the new entrants to the 16+ population and young adults under the age of 30. Whilst overall, LSM's 1-4 are likely to be banked; they are more unlikely to have life cover and informal loans.

The basis of this research paper is to explore the underlying factors for the low access and usage of financial services within the South African Base of the Pyramid (LSM's 1-4) as per the Finscope 2009 report. The various alternative financial services models in South Africa and other countries will also be explored especially the ones that could be replicated locally.

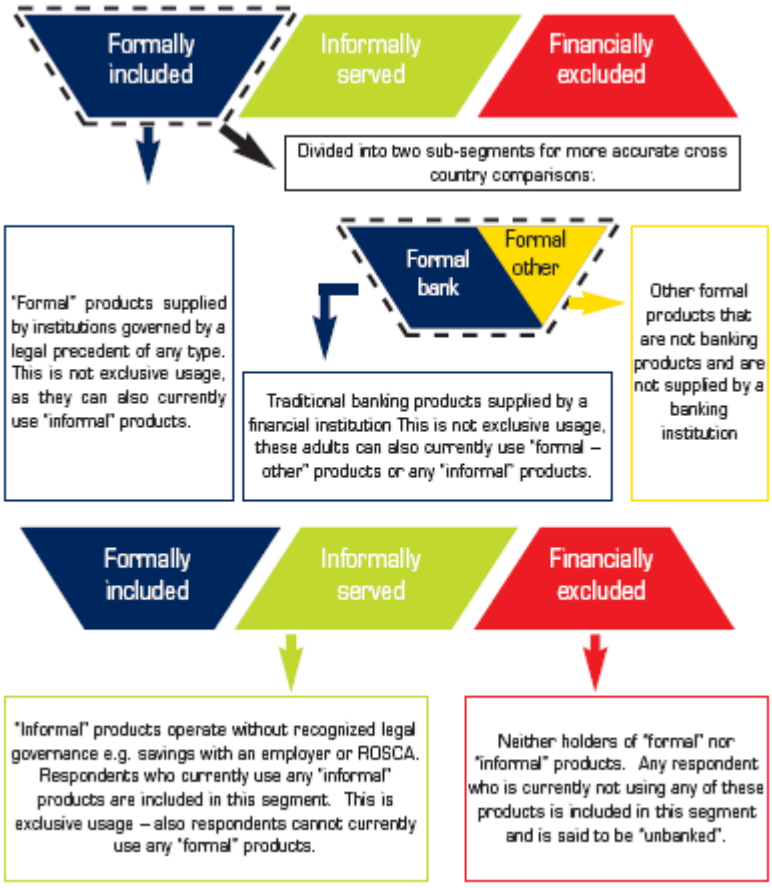


Figure 3: Source: Finscope, 2009.

2. Chapter 2: Theory and Literature Review

2.1 Introduction to Literature Review

The review of the literature starts by defining the Base of the Pyramid in a South African context. The various government initiatives which have been implemented since the first South African democratic elections are then explored. Specific attention will be addressed towards the Financial Services Charter and Mzansi account and their successes or failures in increasing access to financial services to South Africa's BOP. The Financial Action Task Force (FATF) recommendations which led to the establishment of the FIC Act No. 38 of 2001 (FICA) against Anti Money Laundering as well as the recent Regulation of Interception of Communications and Provision of Communication Information Act of No. 70 of 2002 (FICA) will be explored against the backdrop of challenges they bring in the provision of financial services in South Africa. Various literature and impediments to banking the unbanked are discussed in detail in order to give more depth into the challenges faced in this market or sector. In closing, alternative banking models from South Africa and other countries will be further studied.

2.2 The Base of the Pyramid

Until recently the 4,6 billion people excluded worldwide from the market economy and living in poverty have been looked upon as anything but a market according to Sanchez, Ricart and Rodriques (2006), and debates around its viability by various

authors, including Landrum (2007) and Karnani (2006), who question certain assumptions around its size, sustainability of multinational corporations serving this market and marketing strategies proposed (Prahalad, 2005).

In South Africa, the pyramid has been empirically identified in terms of the South African Advertising Research Foundation's (SAARF) Living Standards Measure (LSM) variables into four tiers (Chipp & Corder, 2009). Their study further showed that the "Foundation" can be described as South Africa's BOP. They further state that since more than a third of South Africa's adult population is found at the "Foundation", this group is viable in numbers to constitute a sizeable market with 11 million consumers. The South African Base of the Pyramid can therefore be described as LSM's 1-4 (see Table 1 & Figure 4).

	TOTAL	
The South African Pyramid	'000	%
Population ('000)	31,305	100
The Apex of the Pyramid (Group A - LSM®s 9 &10.)	4,463	14.3
The Buttress of the Pyramid (Group B - LSM®s 7 & 8)	5,105	16.3
The Core of the Pyramid (Group C - LSM®s 5 & 6)	10.534	33.6
The Foundation of the Pyramid (Group F - LSM®s 1-4)	11,194	35.8

Table 1. The South African Pyramid (000s)

Source: SAARF (2009). AMPS® 2008AB / Adapted from Chipp & Corder, 2009.

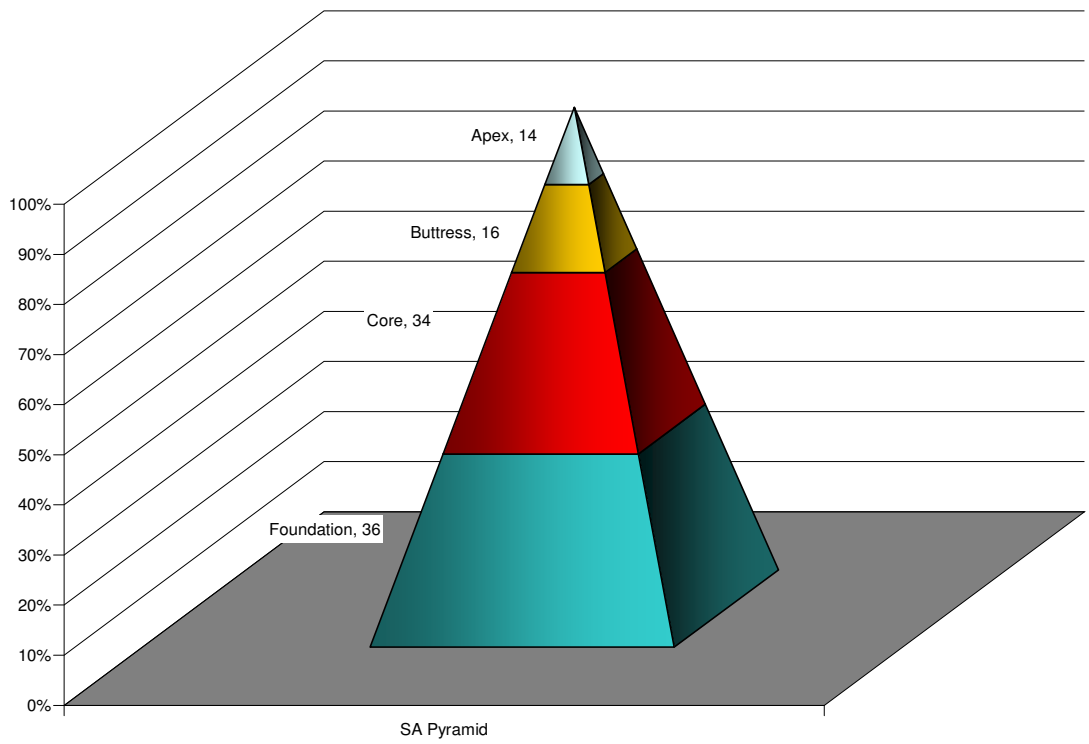


Figure 4. The South African Pyramid
Adapted from Chipp & Corder, 2009.

2.3 Government Initiatives

In an effort to redress the far reaching effects of the Apartheid regime, the Government introduced various legislation and policies to socially and economically transform the landscape of South Africa. The most important of these will be discussed briefly. The financial services sector has been identified as playing a crucial role in this transformation through its financing activities. It is therefore in this context that Beck and de la Torre (2006) argued that broad access to financial services is related to economic and social development. However, access to

financial services, is not synonymous with the use of financial services (Beck, Demirguc-Kunt & Peria, 2005).

2.3.1 Black Economic Empowerment

The Broad-Based Black Economic Empowerment Act, signed in January 2004 (Napier, 2005), provides a legislative framework for BEE. The policy for BEE emerged against a backdrop of increasing frustration with the slow pace of social and economic transformation and the recognition that voluntary initiatives by the private sector were not providing adequate results (Moyo & Rohan, 2006). The act's main aim is to ensure broader participation of the previously disadvantaged people in the economy through the transfer of ownership, management and control of the country's financial and economic resources. The Government is aware that broad-based BEE cannot happen unless previously disadvantaged individuals, especially the poor, are able to access financial services – in order to borrow and invest in small businesses, to save and to protect themselves against risks.

2.3.2 Financial Sector Charter (FSC)

The Financial Sector Charter has developed indicators and targets in order to carry out the mandate given at the NEDLAC Financial Sector Summit which took place in August 2002 as part of its commitment to BEE. The parties to the Charter were the Banking Council of South Africa, Life Offices Association and the Association of Black Securities and Investment Professionals, Government, community

associations and labour representatives. The Charter was developed voluntarily by the sector within the context of the BEE framework.

The parties to the FSC committed themselves to "actively promoting a transformed, vibrant, and globally competitive financial sector that reflects the demographics of South Africa, and contributes to the establishment of an equitable society by effectively providing accessible financial services to black people and by directing investments into targeted sectors of the economy" (FSC, 2002, p.1).

The financial sector acknowledged that access to first order retail financial services is fundamental to BEE and to the development of the economy as a whole. As a result, it was agreed that strategies would be put in place to ensure that the financial sector is more efficient in the delivery of financial services, which enhance the accumulation of savings and direct them to development initiatives. Specific actions were agreed on in relation to ensuring the provision of first order retail financial services which include sustainable and affordable banking services; contractual saving schemes; credit for small and micro enterprises and poor households.

The charter specifically commits itself to increase effective access to first order retail financial services to the greater segment of the population, especially LSM's 1- 5. The charter further undertakes to meet the following targets by 2008:

- 80% of LSM 1-5 have effective access to transaction products and services.

- 80% of LSM 1-5 have effective access to bank savings products and services.
- 1% of LSM 1-5 have effective access to formal collective investment savings products and services, being a first order to basic and secure means of accumulating funds over time.
- 6% of LSM 1-5 have effective access to short term risk insurance products and services.

The signatories and members to the charter further committed themselves to invest 0,2% of post tax operating profits in consumer education.

2.3.3 Mzansi

One of the more visible successes of the FSC was the introduction and growth of the Mzansi account which was introduced as part of the Charter's goal of providing affordable and accessible banking to the previously unbanked population (Moyo & Rohan, 2006). The major South African banks implemented the Mzansi account, including ABSA, FNB, NedBank, PostBank and Standard Bank.

When the initiative was launched in October 2004, 13 million South African's had no bank account, but within the space of 18 months, 3 million people had opened accounts, according to Pickworth (2010). The downside however, is that currently there are 6,9 million Mzansi accounts with an average of 42% of these accounts being dormant between 2004 and 2010, and the trend persists in 2010. The number

of South Africans currently banked further declined from 63% to 60% in 2009 according to the Finscope 2009 survey (see Figure 2).

The current trend of dormancy in the accounts seems to be in line with Moyo and Rohan's (2006) argument that whilst Mzansi has been a good start in provision of access to financial services, it is still a far cry from addressing the real fundamental needs of impoverished blacks. Access to credit for informal and small to medium enterprises where the majority of the players are black is the fundamental issue that requires innovation and action.

Kamhunga (2010), further endorses the view that whilst Mzansi might have been able to attract new customers to banking, it has however not been able to achieve the full financial inclusion goals hoped for, as there is still an estimated 10,2 million people who have never banked in South Africa.

2.3.4 Dedicated Banks Bill

In the Financial Sector Summit held in 2002 (Dedicated Banks Bill, 2004), the constituencies of the National Economic and Development Labour Council (Nedlac) agreed on broad principles on the reform of the South African financial sector. One of the elements of the agreement signed by the principals of the Nedlac constituencies in the said Summit was the need to "Ensure Access to Basic Financial Services".

The object of the Dedicated Banks Bill is to make banking services available in areas and to consumers to whom such services have up to the present not been readily

available (Dedicated Banks Bill, 2004). The aim of the Bill was to create an enabling environment for companies interested in entering the banking system as Savings or and Loans Banks by lowering the entry requirements as currently prescribed in the Banks Act, (94 of 1990). The licensing of interested companies as Savings and Loans Banks and their consequent provision of financial services will assist the banking industry and the nation with improving access to financial services to a broader market (Dedicated Banks Bill, 2004). The adoption of the Bill would allow entry of retail groups and cellular service providers into the banking sector with lower overheads, utilising their brand strength and footprint to change the landscape of access to financial services.

2.4 FICA, FATF AML Standards

According to Bester, de Koker and Hawthorne (2004), South Africa implemented the Financial Action Task Force (FATF) Anti-money Laundering (AML) standards in June 2003 when the Financial Intelligence Centre Act (FICA) came into effect. The Financial Intelligence Centre was established under the FIC Act No. 38 of 2001 (see Figure 5). In October 2001, following the September 11 terror attacks on the US, FATF took a decision to broaden its scope and that of money laundering control framework to combat the funding of terrorism.

In line with international practice on customer identification and verification FICA requires financial institutions to obtain and verify the residential address of a client

before they enter into business relationship or process a transaction for the client. The financial institutions are challenged by this requirement as one third of the South African population live in informal or traditional dwellings without formal addresses whilst half of the population lack some of the documents to verify their residential address. The South African Post Office which maintains a database of formal addresses in the country, have more than 4 million addresses, which include businesses, compared to 9,1 million households. Documentary proof for residential address requested normally is either a utility bill or other accounts containing both the name and physical address of the individual which most low income clients are unable to produce.

FIC Act, No. 38, 2001 - Architecture

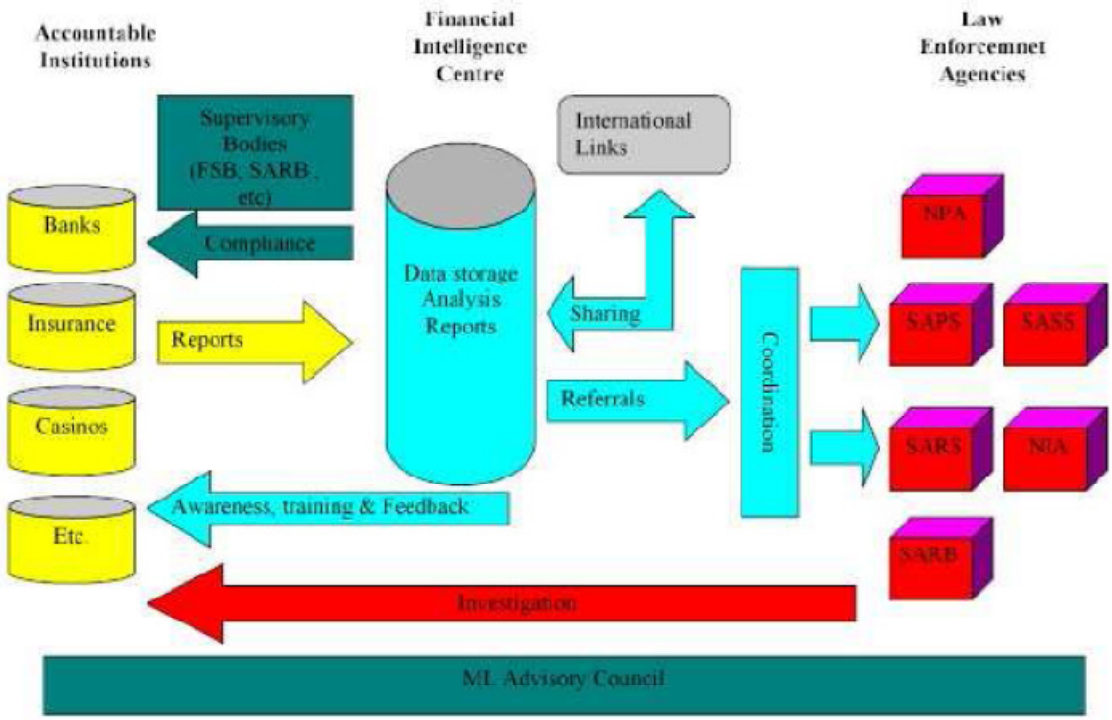


Figure 5: Source: Financial Intelligence Centre Act, 2001.

The results of a study by Bester et al. (2004) show that the manner in which these recommendations are being implemented may put at risk the goal of the Government of increased inclusion of low income earners into the financial sector. This view is further endorsed by Arora and Leach (2005) who state that the procedures and controls often end up as constraints to enabling access to services. In addition these recommendations impose further barriers or costs on the use of these services, increasing transactions costs. The costs are as follows:

- Increased compliance costs for financial institutions.
- Increased direct costs for the clients.

FICA requires all businesses, all persons in charge of businesses and any employee of a business to report suspicious and unusual transactions to the Financial Intelligence Centre (FIC). The main function of FIC is to identify the proceeds of unlawful activities and to combat money laundering activities. Its objective is to make available the collected information to investigating authorities, the intelligence services and the South African Revenue Services to facilitate the administration and enforcement of the laws of the country (FIC Act No. 38 of 2001). FICA further created a range of money laundering control obligations for "accountable institutions". These institutions are mainly banks, insurance companies, money remitters, casinos, attorneys and bureau de change. They are required to identify and verify the identities of their customers, keep relevant records, report specific transactions to the FIC and to generally have the necessary compliance procedures in place.

Financial institutions therefore find themselves in two conflicting government policies which they have to adhere to:

a. Facilitate access to banking for those who are financially and socially vulnerable; and

b. Implement strict money laundering controls.

Exemption 17 of the Financial Centre Act however provides some solution to the challenge faced by financial institutions to verify customers who are unable to provide financial institutions with proof of residential address when opening an account. Exemption 17 however is only applicable to first time customers who do not have an existing relationship with a financial institution and are only opening a savings account, which includes Mzansi and other savings account options.

To adhere to the condition of the exemption the following rules need to be complied with:

- Applicant may not hold more than one savings account.
- Account holders may not transfer, withdraw or pay more than R5 000 a day or R25 000 per month.
- The account balance may not exceed R25 000 at any time. Should this amount be exceeded, the account is locked and account holder will be unable to transact on it. To lift the hold the account holder will need to produce proof of residential address.
- No transfers may be made outside South Africa.

- Exemption 17 can only be applied to South African citizens and residents.

On 1 July 2009, South Africa followed international trends with the enactment of the Regulation of Interception of Communications and Provision of Communication and Related Information Act 70 of 2002 (RICA). The act came into effect on 30 September 2005 but only became effective in 2009. The act governs the interception and monitoring of paper based and electronic communications. The effect of the legislation to cellphone banking is still to be felt as the restrictions are similar to the FIC Act.

2.5 Impediments in banking the unbanked

Imboden (2005) cites the lack of depth in the financial markets as the most basic constraint to financial market integration. These constraints to integration range from unfavourable risk assessment of SME and individuals, micro loan portfolio's and the inability to mobilise public savings by financial institutions serving the poor. Other reasons include macroeconomic stability, provision of physical infrastructure, education and social services. Further reasons for the bankable population not taking up financial services range from socio-economic and gender considerations, lack of confidence and trust in financial organisations, geographic location, their own transport costs for accessing financial services and overall lack of services that correspond to their needs.

Anderson & Billou (2007) cite corruption, poor infrastructure, non-existent distribution channels, illiteracy, lack of robust and enforceable legal frameworks, religious or

racial conflict, and sometimes even war or violent insurgencies as some of the inhibiting factors that can stifle the enthusiasm of companies in serving people living in poverty. Their two year research revealed that whilst the vast majority of corporations have seen these challenges as insurmountable barriers, others have quietly pursued strategies of experimentation in developing unique product and service propositions for some of the world's most needy consumers. They further discovered that some Multi National Corporations that have accepted the challenge of serving the poor have been able to do so profitably.

Many low-income consumers in developing countries survive on daily wages, meaning that cash-flow can be a significant problem and hence they are unable to afford the costs of financial services. Companies need to be able to deliver offerings at a price point that enables consumption by even the poorest consumers (Anderson & Billou, 2007; Anderson & Markides, 2006). Arora & Leach (2005) further refer to affordability as 'price exclusion".

In BOP markets, there is often a need to offer products and services that are adapted to the unique needs of both customers and distributors. Companies might need to respond to specific national or regional cultural or socioeconomic aspects, or to address the unique requirements of local business practices (Anderson & Billou, 2007; Anderson & Markides, 2006; Arora & Leach, 2005).

Distribution channels in BOP markets can be fragmented or non-existent and the task of simply getting products to people can be a major hurdle to overcome. Companies need to explore alternative methods of delivering their products and

services to even the most isolated BOP communities (Anderson & Billou, 2007; Anderson & Markides, 2006; Arora & Singh, 2007).

With many BOP customers largely inaccessible to conventional advertising media, building awareness can be a significant challenge for companies wishing to serve low-income consumers in the developing world. To overcome these constraints companies must explore alternative communications channels (Anderson & Billou, 2007; Anderson & Markides, 2006; Arora & Singh, 2005).

Studies by Mendoza and Thelen (2008) confirm that due to the difficult geography and dispersed locations of rural people, it is often more costly to reach them by both public and private sectors. It is estimated that 74% of the world's poor (living on less than $2 a day) live in rural areas (Chen, Ravallion & Sangraula, 2007). Further rural people tend to have less access to public infrastructure and certain types of social services when compared with urban residents or the urban poor. In turn they may also be excluded from participating in labour and product markets because of their lack of proximity to major domestic markets or transportation hubs for both domestic and export markets.

A further impediment to the poor is that often they have low levels of literacy and may be unfamiliar with certain goods and services, such as new technologies or financial services, which might deter them from using these products. In some cases, a more fundamental appreciation of the usage of these products is non-existent, such as the basic understanding of the importance of taking out insurance, which might need to be carefully developed (UNDP, 2007). The poor might have access to

financial services, but might decide not to use them, either for socio-cultural reasons or because opportunity costs are too high (Beck, Demirguc-Kunt & Peria, 2005).

2.6 Alternative Banking Models

A significant enabler of strategic innovation in recent years has been the emergence of information and communication technologies that have reduced transaction costs and accelerated the exploitation of architectural innovation at industry level (Anderson & Markides, 2006). In order to make markets more inclusive, one of the avenues can be to focus on removing some of the barriers, in an effort to change the environment itself (Mendoza & Thelen, 2008).

Mendoza and Thelen (2008) studied a number of business strategies and innovations that embody different approaches that may help to make markets more inclusive for the poor: production, distribution and marketing strategies, retail and pricing strategies and cross-cutting business strategies. These strategies will be briefly discussed.

2.6.1 Production, Distribution and Marketing Strategies

These strategies leverage on the ways private businesses distribute and market goods and services by using innovations that are simplified, less skill intensive and involve utilising existing community networks in conjunction with high-volume low margin strategies to serve the poor.

Deskilling – This strategy is used to cut down costs and increase productivity by simplifying or standardising procedures once handled by specialists. It is a high volume low margin strategy specifically aimed at reaching the poor. Hence, this particular innovation is useful to help adjust to the low and irregular income streams of the poor. An example of this system is the Aravind Eye Care System in India. It reduced average costs for eye surgeries by using ophthalmic paramedical staff to do all the preparatory and post-operative work on each patient, allowing ophthalmologists to perform an increased number of surgeries per day. A team of paramedics and junior doctors prepare the surgery (they wash the eye, apply the suture, give the injection, etc.). The surgeon conducts the surgery and moves on to the next table. Aravind is today the single largest provider of eye surgeries in the world for poor communities.

Leveraging Soft Networks – This strategy is a lower-cost alternative to the more traditional 'bricks and mortar' strategies typically used in middle-to higher-income markets. The business model has helped to dramatically lower the costs of the final product by specifically addressing the issues relating to low and irregular income. These soft networks appear in two contexts, namely ICT networks and community (or social) networks.

Leveraging ICT's – An example of this strategy is Voxiva, an international for-profit organisation, which used existing telephone lines and internet servers in order to create a shared information platform, called Alerta, in Peru. It allowed Peruvian health officials and practitioners to share up-to-the-minute information on health

issues, enabling them to respond faster to health emergencies and better serve many remote rural communities. Other examples for leveraging ICT networks include recent innovations by Smart Communications and Globe Telecom, the two largest telecommunications companies in the Philippines. Smart Communications introduced an over-the-air payment system for mobile phones which has many advantages compared with traditional payment systems. It allows a retailer to load a customer's airtime electronically and therefore helps minimise physical product-distribution costs. Also, product distribution becomes faster, more efficient and more secure and enables consumers to reload and purchase airtime even in remote rural areas.

Globe Telecom offers a service which allows customers to send and receive money via a mobile phone. The service is called G-Cash and facilitates money remittances, and many other transactions, with just a text message or SMS. Through this innovation, the cost of money transfer decreases substantially and access to transfer services for remittances is extended to geographically remote areas. In addition to enhancing access to money-transfer services, leveraging ICTs can also help enhance access to banking services. Mobile phone banking (or m-banking) is now being offered in a number of countries. WIZZIT in South Africa is one example. An account offered by WIZZIT costs less than the lowest-cost full-service bank accounts offered by the Big 4 (i.e. South Africa's four major banks Absa, First National Bank, Nedbank and Standard Bank) according to Ivatury and Pickens (2006). Even

compared with other m-banking providers in South Africa, WIZZIT offers competitive prices.

Leveraging Community Networks – Marketing strategies built on leveraging community networks may also be considered as examples of leveraging soft networks. These types of innovations could not only help lower the cost of marketing products; they could also tap the comparative advantage on market information that the community members might have. Instead of using mass media advertising, such as TV commercials, South Africa's mobile banking provider WIZZIT markets its services through more than 2,000 'WIZZ Kids', who are typically young individuals from the lower-income population who know the target market well (Ivatury and Pickens, 2006).

An important additional aspect is that it not only serves the poor better, but also offers them employment as well as possible business opportunities. Another example is the GrameenPhone, it provides women entrepreneurs in rural villages in Bangladesh with the opportunity to earn a living by providing retail access to phone services in the villages where they live.

Supply-chain financing – Linking credit delivery to other products and services along the supply chain through trade finance. This strategy could help in addressing constraints related to missing credit markets. In Kenya, Pride Africa (an NGO) implemented DrumNet in 2003, in order to serve as an emerging network of rural farm-business support centres delivering agricultural extension, credit, and marketing services to smallholder farmers. The two main components of DrumNet's

programme are, first, a cashless micro-credit programme that links commercial banks, smallholder farmers, and retail providers of farm inputs, and, second, market services offered through an integrated marketing and payment system with large-scale buyers, farmers, transporters and field agents (World Bank, 2005).

2.6.2 Retail and Pricing Strategies

These strategies are aimed at stretching the poor's purchasing power by adjusting retail and pricing strategies, through joint consumption, flexible payment schemes, and tiered pricing to better fit a large consumer base with individually low and volatile income streams (Mendoza & Thelen, 2008). These strategies are briefly discussed.

Joint consumption: Traditional business strategies tend to focus on reaching single consumers whilst joint consumption aims at reaching the poor by providing goods and services to groups or communities. The 'e-Choupals', is the name of internet kiosks in India which serve both as a social gathering place for exchange of information and an e-commerce hub. One internet-ready computer, housed by one farmer, would then serve an average of 600 farmers in 10 surrounding villages within a radius of about 5km. The costs are then spread between the farmers in the village.

Flexible payments: Due to the poor people's low and variable income streams they are unable to undertake make large or bigger purchases. The absence of access to credit makes the large up-front cost of many goods and services out of their reach. An example of flexible-payment innovations are micro-leasing and pay-as-you-go

solutions. Smart Communications offers affordably priced prepaid cards for mobile phones in the Philippines and Microsoft FlexGo offers a prepaid scheme for obtaining a computer is currently being tested in Brazil.

Tiered pricing: This strategy has proved successful for Aravind Eye Care System, which charges for its services based on ability to pay. The poorest are not required to pay anything. Another example is Bushnet, a limited liability company in Uganda offering ICT-related services, which follows a similar tiered pricing approach. For access to its High Speed Data Network Ten By Ten, Bushnet charges those who can afford it (for example, financial and commercial enterprises) $200 per month, but non-commercial institutions like schools, clinics and local community centres only $50 per month.

2.6.3 Cross-Cutting Business Strategies.

Beyond production, distribution and marketing strategies, as well as retail and pricing strategies, a number of more general and cross-cutting business strategies also seem to work well to improve market exclusivity. These include: contracting innovations, dynamic incentives, partnering, real options strategy and total product solutions. These strategies help manage and minimise risks for businesses serving low-income markets; they help adapt products to the poor consumer's needs, behaviour and context; and they contribute towards improving the financial viability of serving the poor.

2.7 Grameen Bank and Banco Solidario Models

Grammeen Bank (Bangladesh) and BancoSol (Bolivia) are both Microfinance Institutions (MFI) in developing countries. An MFI is an organisation that provides small amounts of credit and potentially other small-scale type financial services to clients who do not have access to the formal banking system (Schicks, 2007). Various studies by advocates of microfinance including Chemin, M (2007) and Auwal, M.A (1996) support the view that it could break the vicious cycle of poverty. It is estimated that the average household income of Grameen Bank members is about 50 per cent higher than that of non-members and that there is a positive effect of microfinance on expenditure per capita, supply of labour, and level of school enrolment for boys and girls (Chemin, 2007).

Theoretically, therefore it has been shown that access to credit for the poor is key to economic development and could lift a country out of poverty. The Grameen Bank and BancoSol models are based on giving loans to the poor people without collateral. The funding models are based on voluntary formation of small groups to provide mutual, morally binding group guarantees in lieu of the collateral required by conventional banks (Schicks, 2007). This mechanism has allowed the Grameen Bank to experience repayment rates of up to 98 per cent (Schicks, 2007).

The Grameen Bank model has been replicated worldwide and has inspired over 7,000 microfinance institutions in Latin America, Africa and Asia serving 25 million

poor clients. Access to credit could increase expenditure of participants by encouraging project start-up and raising labour supply. It could also increase child enrolment in school if the opportunity cost of school decreases due to increased parental wealth.

3. Chapter 3: Research Hypothesis / Questions / Propositions

The South African government together with the private sector has introduced various initiatives which have been extensively discussed in the literature review. Whilst one of the more visible successes of these initiatives, the Mzansi account, has had early success in attracting many unbanked South Africans to be banked it has lately been criticised as many of these accounts are now dormant. It is felt that it has not been able to achieve the full financial inclusion initially hoped for. This view is endorsed by the 2009 Finscope research findings that for the first time since 2004, show a decline of 2% in the number of banked South African adults. This is a concern for the government and the industry at large, as the unbanked is a very important segment of the population. More than a third of the South African population form part of the "Foundation" of the pyramid (Chipp & Corder, 2009), where there is a low level of the use of financial services.

The basis of the research is to explore some of reasons for the low access of financial services in South Africa's Foundation of the Pyramid (LSM's 1-4) and to find possible solutions by building a model that could possibly work in South Africa based on some aspects of the literature.

The research propositions will then test the model to see if there is currently any evidence in South Africa of its sustainability by using the 2009 FinScope survey results.

The proposed model should have the following six attributes in order to enable viable access to financial services:

- Individuals or participants should have some type of employment, be self-employed or should receive some type of income or receive a government grant (Imboden, 2005).
- A banking account should enable the individual access to micro-credit in order to facilitate self-employment or micro enterprises (Chemin, 2007).
- Individuals or participants should have some type of formal address (Anderson & Billou, 2007; FIC Act No. 38 of 2001).
- Individuals or participants should have a basic level of arithmetic and elementary ability to read or write (Anderson & Billou, 2007).
- The service should be available through an ATM network or mobile / cellphone banking service (Mendoza & Thelen, 2008).
- To enable easy money transfer and payment method, transactions costs should be minimal (Anderson & Markides, 2006; Mendoza & Thelen, 2008).

This research sets out to establish the potential for this model at the Bottom of the Pyramid.

Proposition 1:

There is a higher incidence in the number of banked individuals who are employed, self employed or have some type of income (government grants) at the BOP, than among those that are unemployed and have no type of income.

Proposition 2:

There is a higher incidence in the number of banked individuals who have access to credit at the BOP, than among those who do not have credit.

Proposition 3:

There is a higher incidence in the number of banked individuals who have a formal or some type of formal address at the BOP, than among those without a formal or some type of formal address.

Proposition 4:

There is a higher incidence in the number of banked individuals who have completed primary school education at the BOP, than among those without any education.

Proposition 5:

There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.

Proposition 6:

There is a higher incidence in the number of banked individuals where the costs of transacting are lower at the BOP, than where costs are high.

4. Chapter 4: Research Methodology and Design

An objective of the research is to explore and to gain a clearer understanding of some of the reasons for the low access and use of financial services in South Africa's Foundation of the Pyramid (LSM's 1-4). A model based on the literature review is proposed in Chapter 3 in order to assess the potential access and usage of financial services. The research propositions will then test the potential for the model for the BOP by the use of the 2009 Finscope survey results.

4.1 Proposed Research Method

The proposed research method is considered to be a quantitative descriptive method, which is described by Zikmund (2003) as research used to describe the characteristics of a population or a phenomenon. Secondary data (data assembled for another project other than the one currently being undertaken – Zikmund, 2003) from FinMark Trust's FinScope 2009 survey will be used. The FinScope survey is recognised as the most comprehensive survey of financial services in South Africa.

The FinScope survey was established in South Africa in 2002 by the FinMark Trust. The main objective was to provide policy makers and service providers with comprehensive information and insight into the financial needs, preferences and behaviour of South Africans – to enable them to make evidence based decisions in addressing the gaps in the market and work together to make the financial market work for all South Africans (FinScope, 2009). It is an individual based nationally

representative survey of attitudes and perceptions with regard to money and money matters as well as usage of and demand for financial products and services. It provides information on how people source their income and manage their financial lives.

The 2009 FinScope survey targeted 3900 households nationally with face-to-face interviews during the months of July, August and September.

4.2 Proposed Population and Unit of Analysis

Zikmund, (2003) describes the population as a group of entities sharing some characteristics. The proposed population as used by FinScope is all South African residents who are older than 16 years living in households or structures.

4.3 Size and Nature of Sample

Zikmund (2003), describes a sample as a subset of a larger population. A probability sampling method was used. The following sampling methodology was followed: -

- “At the first level of sampling, an area based, nationally representative sample was drawn at Enumerator Area (EA) level with Probability Proportional to Size (PPS).

- Households were randomly selected within each EA, and then individual respondents were randomly selected from individuals 16 years and older in each household.
- 650 EA's were sampled and 6 interviews were conducted in each EA resulting in a total sample of 3900 face-to-face interviews.
- Results were weighted and benchmarked to StatsSA 2009 mid-year population estimates".

As probability sampling method was used, it is possible that any element of the population would be included in the sample. This allowed for the estimation of sampling error and the representativeness of the sample could therefore be tested. The sample was weighted and benchmarked against StatsSA population estimates.

4.4 Data Collection and Interpretation

Fincsope surveys follow a correlation design where each individual is measured on multiple variables during a single interview. Interviewers used a structured questionnaire to collect the data and therefore there is minimal room to deviate from the questionnaire.

4.5 Data Analysis

The data provided by Finscope is of a nominal and ordinal nature, it will allow statistical techniques to be applied to the data including descriptive statistics, correlation, frequency analysis and chi-square analysis (Welman & Kruger, 2001). The specific analysis methods to be used are descriptive statistics, frequency analysis and chi-square analysis.

Only data relating to the propositions of the proposed model in Chapter 3 will be tested in order to establish its potential at the BOP in South Africa.

The entire questionnaire was translated into vernacular languages (isiXhosa, isiZulu, Sesotho, Setswana, Sepedi and Afrikaans).

4.6 Limitations

The distribution of the number of respondents in LSMs 1 – 4 was lower than the other LSMs due to the surveys population of relevance being defined as individuals living in households or structures (see distribution on Table 1). The representativeness of the population is therefore not in line with the population dynamics as it excludes many poor people. There are no specific questions relating to costs of financial services except the ones around reasons for not having a bank account. More respondents in the rural areas as well as informal settlements will assist with by giving better insight into the Foundation of the Pyramid.

5. Chapter 5: Results

5.1 Introduction

The basis of the research is to explore the some of the reasons for the low access to financial services in Southern Africa's Foundation of the pyramid (LSM's 1- 4) and to find possible solutions by building a model that could possibly work based on some aspects of the literature reviewed in Chapter 2. The specific propositions are based on the aspects of the literature around the six key variables: employment status, access to credit, some type of identifiable address / dwellings, education, use of technology and costs.

The sample represents responses from randomly selected individuals in 3900 randomly selected households nationally within Enumerator Areas.

5.2 Demographics

The following tables / figures represent the basic demographic information of the respondents which will aid in understanding and giving a bigger picture view of the group under the context of the specific LSM's being studied (LSM 1- 4).

The respondents were broken down into currently banked and currently unbanked per LSM as well as race (Table 2 and Table 3). The clear skewed distribution of banked / unbanked is visible on both the tables.

Table 2: Currently banked respondents by LSM and Race

Currently Banked: Race											
Currently Banked Individuals by Race	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	LSM 5	LSM 6	LSM 7	LSM 8	LSM 9	LSM 10
Total Respondents	19609384	102338	526629	1026240	2221542	3624708	5572977	2155891	1291893	1355657	1731511
Black	13634953	102338	523429	1000862	2172283	3384911	4544456	1142008	370660	221810	172197
	69.5	100	99.4	97.5	97.8	93.4	81.5	53	28.7	16.4	9.9
Coloured	1886109	0	3201	20401	49258	160330	729749	494383	204904	111030	112854
	9.6	0	0.6	2	2.2	4.4	13.1	22.9	15.9	8.2	6.5
Asian	778845	0	0	4977	0	35448	133808	174969	171874	135269	122500
	4	0	0	0.5	0	1	2.4	8.1	13.3	10	7.1
White	3309477	0	0	0	0	44019	164963	344531	544456	887549	1323959
	16.9	0	0	0	0	1.2	3	16	42.1	65.5	76.5

Table 3: Currently unbanked by LSM and Race

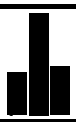
Currently Unbanked: Race											
Currently Unbanked Individuals by Race											
Total Respondents	13167756	294892	1256122	1561544	2616718	3717248	2664860	637014	221061	151341	46957
Black	11471342	294892	1256122	1554723	2541349	3417190	2125978	227494	49165	4430	0
	87.1	100	100	99.6	97.1	91.9	79.8	35.7	22.2	2.9	0
Coloured	1207352	0	0	6821	75299	273883	436535	261492	112519	34520	6283
	9.2	0	0	0.4	2.9	7.4	16.4	41	50.9	22.8	13.4
Asian	187247	0	0	0	70	6729	49562	85795	24780	20311	0
	1.4	0	0	0	0	0.2	1.9	13.5	11.2	13.4	0
White	301814	0	0	0	0	19446	52784	62233	34598	92080	40674
	2.3	0	0	0	0	0.5	2	9.8	15.7	60.8	86.6

Figure 6 clearly shows the breakdown per LSM of all the respondents both banked and unbanked in the country.

Figure 6: Total Respondents by LSM

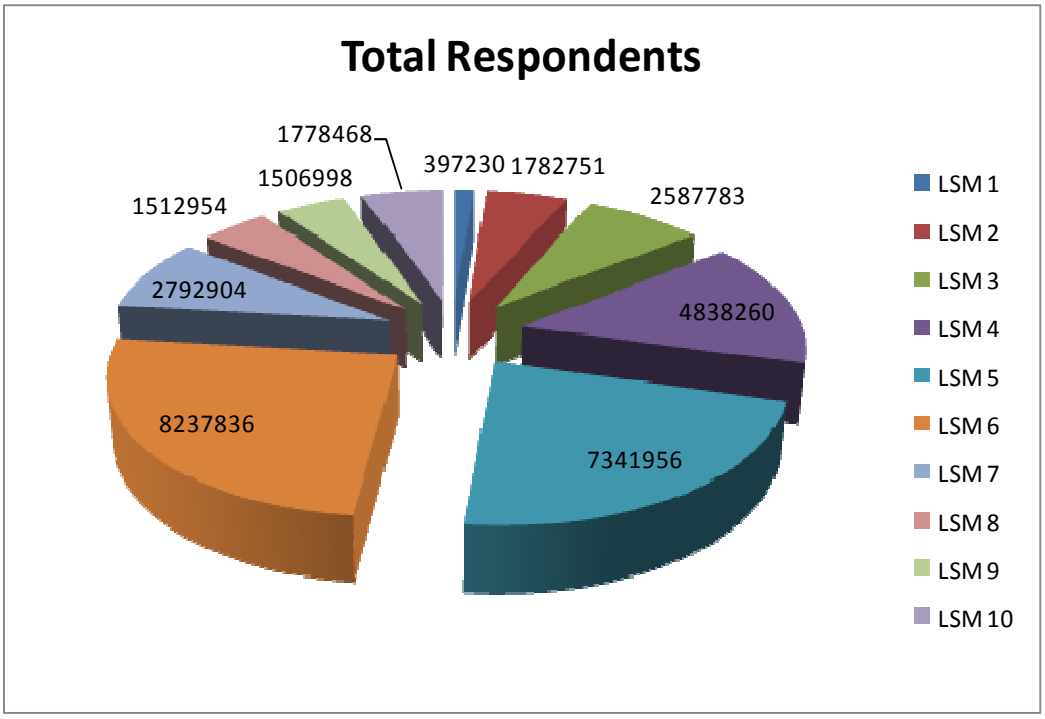


Table 4 indicates the total number of respondents by race and their banking status, by currently banked, previously banked and never banked. The high number making up the previously banked / never banked in the black populations is of concern. In total there were more black respondents than any other race as reflected in Figure 7.

An individual's banking status is derived from the respondents experience with a number of banking products including debit and credit cards, savings accounts,

mzansi account and current / cheque accounts. The banking status is defined as follows:-

Currently Banked: An Individual has a bank account (whether or not if the account is being used).

Previously Banked: An Individual who does not have a bank account presently but used to have one in the past.

Never Banked: An Individual never had a banking account in their life.

Table 4: Total Respondents by Race and Banking Status

Total Market	Total Market	Currently banked	Previously banked	Never banked
	32,777,140	19,609,384	2,925,631	10,242,124
Race				
Black	25,106,296	13,634,953	2,377,274	9,094,069
	76.6	69.5	81.3	88.8
Coloured	3,093,461	1,886,109	393,228	814,124
	9.4	9.6	13.4	7.9
Asian	966,092	778,845	90,806	96,441
	2.9	4	3.1	0.9
White	3,611,291	3,309,477	64,324	237,490
	11	16.9	2.2	2.3

Figure 7: Total Respondents by Race

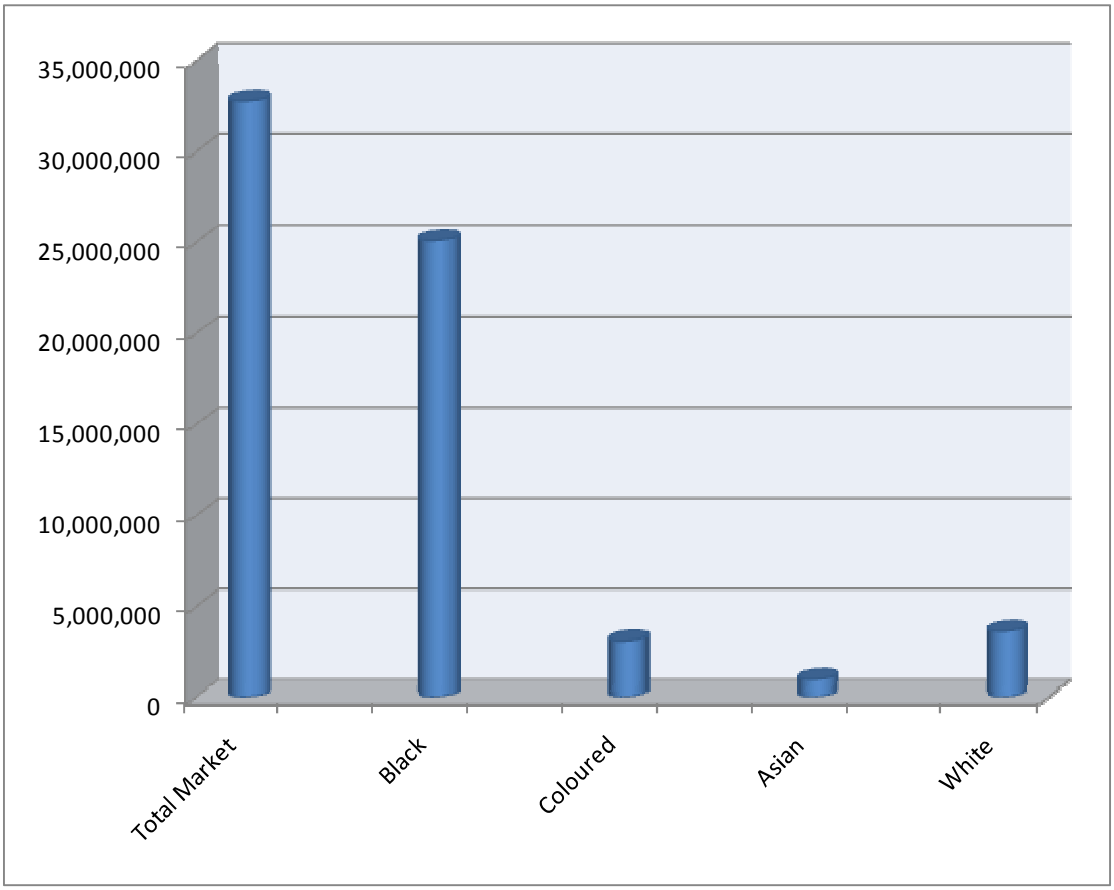
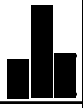


Table 5: Currently banked individuals by usage / status and LSM

Currently Banked: Banking Usage / Status											
Currently Banked Individuals by Banking Usage	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	LSM 5	LSM 6	LSM 7	LSM 8	LSM 9	LSM 10
Total Respondents	32777140	397230	1782751	2587783	4838260	7341956	8237836	2792904	1512954	1506998	1778468
Currently banked	19609384	102338	526629	1026240	2221542	3624708	5572977	2155891	1291893	1355657	1731511
	59.8	25.8	29.5	39.7	45.9	49.4	67.7	77.2	85.4	90	97.4
Previously banked	2925631	26385	198628	297319	559615	918454	579181	222537	90221	27007	6283
	8.9	6.6	11.1	11.5	11.6	12.5	7	8	6	1.8	0.4
Never banked	10242124	268507	1057494	1264225	2057103	2798795	2085678	414477	130839	124334	40674
	31.2	67.6	59.3	48.9	42.5	38.1	25.3	14.8	8.6	8.3	2.3

Tables 5 and 6 shows cross tabulations of currently banked / currently unbanked individuals by their usage status per LSM category. The low usage in LSM's 1-4 is clearly visible in both tables.

Table 6: Currently unbanked individuals by usage / status and LSM

Currently Unbanked: Banking Usage / Status											
Currently Unbanked Individuals by Banking Usage											
Total Respondents	13167756	294892	1256122	1561544	2616718	3717248	2664860	637014	221061	151341	46957
Previously banked	2925631	26385	198628	297319	559615	918454	579181	222537	90221	27007	6283
	22.2	8.9	15.8	19	21.4	24.7	21.7	34.9	40.8	17.8	13.4
Never banked	10242124	268507	1057494	1264225	2057103	2798795	2085678	414477	130839	124334	40674
	77.8	91.1	84.2	81	78.6	75.3	78.3	65.1	59.2	82.2	86.6

5.3 Proposition Test 1 Results

Proposition 1:

There is a higher incidence in the number of banked individuals who are employed, self employed or have some type of income (government grants) at the BOP, than among those that are unemployed and have no type of income.

Tables 7 and 8 shows cross tabulation of the currently banked / unbanked individuals by their employment status or income type.

Table 7: Currently banked - employment status by LSM

Proposition 1: There is a higher incidence in the number of banked individuals who are employed , self employed or have some type of income (goverment grants) at the BOP, than those that are unemployed and have no type of income.						
Currently Banked Individuals by Emplyment Status	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	19609384	102338	526629	1026240	2221542	3876749
Some type of income	14929105	84241	354145	746459	1318693	2503538
	76.2	82.3	67.3	72.7	59.2	281.5
Formal (net)	8916933	17891	138297	231512	596027	983727
	45.5	17.5	26.3	22.6	26.8	93.2
Informal (net)	2979206	33197	138981	471982	395959	1040119
	15.2	32.4	26.4	46	17.8	122.6
Some Type of Income is made up of the following income types: Pension or retired; Work full-time formal/informal sector; work part-time formal/informal sector; housewife or househusband; self-employed formal / informal sector.						

Table 8: Currently unbanked - employment status by LSM

Proposition 1: There is a higher incidence in the number of banked individuals who are employed , self employed or have some type of income (goverment grants) at the BOP, than those that are unemployed and have no type of income.						
Currently Unbanked Individuals by Emplyment Status	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
Some type of income	3654978	63049	510825	481594	724575	1780043
	27.7	21.3	40.6	30.7	27.6	120.2
Formal (net)	612316	3139	32909	65043	136729	237820
	4.7	1.1	2.6	4.2	5.2	13.1
Informal (net)	1223156	28420	207834	216310	332735	785299
	9.3	9.6	16.5	13.9	12.7	52.7
Some Type of Income is made up of the following income types: Pension or retired; Work full-time formal/informal sector; work part-time formal/informal sector; housewife or househusband; self-employed formal / informal sector.						

A Chi-square test was performed on the data as per Table 9 to determine if the frequency distribution differs from the expected distribution. The result of the test clearly supports the proposition.

Table 9: Chi-square results for tables 7 & 8

Currently Banked Individuals by Emplyment Status	Total LSM 1-4 banked	Total LSM 1-4 unbanked	
Total Respondents	3876749	5729276	
Some type of income	2503538	1780043	4283581
Formal (net)	983727	237820	1221547
Informal (net)	1040119	785299	1825418
	4527384	2803162	7330546
Expected range	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**	
Some type of income	2645562.29	1638018.71	
Formal (net)	754433.891	467113.109	
Informal (net)	1127387.82	698030.184	
Chi test p value	0.0000		
Support for the proposition is clear			

Tables 10 and 11 presents currently banked / unbanked individuals by their income status. The two tables have been added to further test proposition 1. The large number of individuals who don't get any money in the unbanked is clearly visible in table 11.

Table 10: Currently banked - income status by LSM

Proposition 1: There is a higher incidence in the number of banked individuals who are employed , self employed or have some type of income (goverment grants) at the BOP, than those that are unemployed and have no type of income.

Currently Banked Individuals by Income Status	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	19609384	102338	526629	1026240	2221542	3876749
Income types	19112218	102337	524044	982246	2137227	3745854
	97.3	100	99.4	95.8	96.1	391.3
Does not get any money	497166	0	2585	43993	84315	130893
	2.5	0	0.5	4.3	3.8	8.6

Income types is made up of the following types of income: Child grant; disability grant; goverment old age pension; UIF; any other type of social grant; inheritance; money from family member / friends; piece work or job; self employed - informal; work for salary from an individual (domestic worker or farm worker); emplyer pension; third party pension return of an investment and other income.

Table 11: Currently unbanked - income status by LSM

Proposition 1: There is a higher incidence in the number of banked individuals who are employed , self employed or have some type of income (goverment grants) at the BOP, than those that are unemployed and have no type of income.

Currently Unbanked Individuals by Income Status	Total Respondents (100%)	LSM1	LSM2	LSM3	LSM4	**Total LSM 1-4**
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
Income types	8404725	202227	986238	971319	1437319	3597103
	63.8	68.5	78.6	62.1	54.9	264.1
Does not get any money	4763031	92665	269885	590224	1179397	2132171
	36.2	31.4	21.5	37.8	45.1	135.8

Income types is made up of the following types of income: Child grant; disability grant; goverment old age pension; UIF; any other type of social grant; inheritance; money from family member / friends; piece work or job; self employed - informal; work for salary from an individual (domestic worker or farm worker); emplyer pension; third party pension return of an investment and other income.

A Chi-square test was performed on the data as per Table 12 to determine if the frequency distribution differs from the expected distribution. The result of the test clearly supports the proposition.

Table 12: Chi-Square results for tables 10 & 11

Currently Banked Individuals by Income Status	Total LSM 1-4 banked	Total LSM 1-4 unbanked	
Total Respondents	3876749	5729276	
Income types	3745854	3597103	7342957
Does not get any money	130893	2132171	2263064
	7753496	11458550	9606021
Expected range	Total LSM 1-4 banked	Total LSM 1-4 unbanked	
Income types	5926864.799	8759052.258	
Does not get any money	1826631.201	2699497.742	
Chi test p value	0.0000		
Proposition is supported			

5.4 Proposition Test 2 Results

Proposition 2:

There is a higher incidence in the number of banked individuals who have access to credit at the BOP, than among those who do not have credit.

Tables 13 and 14 shows cross tabulations of currently banked / unbanked individual and their statements around borrowing.

Table 13: Currently banked – borrowing statements by LSM

Proposition 2: There is a higher incidence in the number of banked individuals who have access to credit at the BOP, than those who do not have access to credit.						
Currently Banked Individuals - Statements about borrowing	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	19609384	102338	526629	1026240	2221542	3876749
I am currently borrowing or I owe money that has to be repaid	6392486	25102	48504	264861	540478	878945
	32.6	24.5	9.2	25.8	24.3	83.8
I am not currently borrowing	12989174	44123	455644	756930	1636960	2893657
	66.2	43.1	86.5	73.8	73.7	277.1
Don't know	227723	33113	22481	4449	44104	104147
	1.2	32.4	4.3	0.4	2	39.1

Table 14: Currently unbanked – borrowing statements by LSM

Proposition 2: There is a higher incidence in the number of banked individuals who have access to credit at the BOP, than those who do not have access to credit.						
Currently Unbanked Individuals - Statements about borrowing	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
I am currently borrowing or I owe money that has to be repaid	1497149	45565	106820	146026	368251	666662
	11.4	15.5	8.5	9.4	14.1	47.5
I am not currently borrowing	11443614	215662	1054628	1415518	2217793	4903601
	86.9	73.1	84	90.6	84.8	332.5
Don't know	226993	33665	94674	0	30675	159014
	1.7	11.4	7.5	0	1.2	20.1

A Chi-square test was performed on the data as per Table 15 to determine if the frequency distribution differs from the expected distribution. The result of the test clearly supports the proposition.

Table15: Chi-Square results for tables 13 & 14

Currently Banked Individuals - Statements about borrowing	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**	Total banked & unbanked
Total Respondents	3876749	5729276	
I am currently borrowing or I owe money that has to be repaid	878945	666662	1545607
I am not currently borrowing	2893657	4903601	7797258
	3772602	5570263	9342865
Expected range	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**	
I am currently borrowing or I owe money that has to be repaid	624108.35	921498.65	
I am not currently borrowing	3148493.65	4648764.35	
Chi test p value	0.0000		
Proposition is supported			

5.5 Proposition Test 3 Results

Proposition 3:

There is a higher incidence in the number of banked individuals who have a formal or some type of formal address at the BOP, than among those without a formal or some type of formal address.

Table 16 presents the unbanked individuals reasons for not having a bank account per LSM. Most of the respondents cited their reasons for not having a bank account as no income, unemployment and not having money to save.

A Chi-square test was performed on the data as per Table 17 to determine if the frequency distribution differs from the expected distribution. The result of the test clearly supports the proposition. In order to test for residential address, all the categories were compared against each other and then average of the rest of the responses in the table against proof of residential address (table 17).

Table 16: Currently unbanked – Reasons for not having a bank account by LSM.

Proposition 3: There is a higher incidence in the number of banked individuals who have formal or some type of formal address at the BOP, than those who do not have a formal address or some type of formal address.

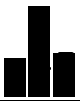
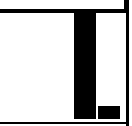
Reasons for not having a Bank account - Unbanked						
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
I don't have a regular income	4762721	72525	445001	536340	852140	1906006
	36.2	24.6	35.4	34.3	32.6	126.9
I don't have a job (unemployed or retrenched or retired)	6924702	46550	557608	803497	1259039	2666694
	52.6	15.8	44.4	51.5	48.1	159.8
I don't have money to save	5221599	96398	562351	585127	1041512	2285388
	39.7	32.7	44.8	37.5	39.8	154.8
I earn too little to make it worthwhile	817171	5964	87761	120870	146037	360632
	6.2	2	7	7.7	5.6	22.3
I don't know how to open an account	254514	0	68865	35925	548	105338
	1.9	0	5.5	2.3	0	7.8
I don't have proof of residential address	115325	10698	38605	1427	1648	52378
	0.9	3.6	3.1	0.1	0.1	6.9
I don't understand how it works	576382	37025	154073	100349	64129	355576
	4.4	12.6	12.3	6.4	2.5	33.8
I use someone else's bank account	149590	0	14010	0	16109	30119
	1.1	0	1.1	0	0.6	1.7
The bank is too far from where I live, work or travel to	355249	68725	54667	72589	37235	233216
	2.7	23.3	4.4	4.6	1.4	33.7
I prefer dealing with cash only	723221	66949	74222	44197	116003	301371
	5.5	22.7	5.9	2.8	4.4	35.8
I don't have an identity document	385829	16046	20091	44965	47463	128565
	2.9	5.4	1.6	2.9	1.8	11.7
I don't qualify to open an account	593141	0	79091	70453	130475	280019
	4.5	0	6.3	4.5	5	15.8
I don't understand technology	390549	7374	105754	12824	71939	197891
	3	2.5	8.4	0.8	2.7	14.4
I don't need a bank account	657376	31946	115563	27657	128978	304144
	5	10.8	9.2	1.8	4.9	26.7
I will consider a bank account in future	1294173	39056	73681	145828	277992	536557
	9.8	13.2	5.9	9.3	10.6	39
I do not feel comfortable in a bank	178409	10554	27861	15831	38301	92547
	1.4	3.6	2.2	1	1.5	8.3
I don't believe in it	292938	18521	33958	29827	102324	184630
	2.2	6.3	2.7	1.9	3.9	14.8
It's too much hassle or not worth the effort	289772	0	74085	41966	54733	170784
	2.2	0	5.9	2.7	2.1	10.7
It's expensive to have a bank account	704427	0	118471	64218	153525	336214
	5.3	0	9.4	4.1	5.9	19.4
Other	246843	0	30488	0	119962	150450
	1.9	0	2.4	0	4.6	7
Don't know	60723	0	6325	0	0	6325

Table 17: Chi-Square results table 16

Proposition 3: There is a higher incidence in the number of banked individuals who have formal or some type of formal address at the BOP, than those who do not have a formal address or some type of formal address.

Reasons for not having a Bank account - Unbanked. Re-ran on as YES/NO	Total Respondents (100%)	**Total LSM 1-4 unbanked YES**		Average count		Expected
Total Respondents	32777140	5729276		746096.36	9606025	
I don't have a regular income	4762721	1906006				3554616.1
I don't have a job (unemployed or retrenched or retired)	6924702	2666694				4973265.3
I don't have money to save	5221599	2285388				4262146.6
I earn too little to make it worthwhile	817171	360632				672562.6
I don't know how to open an account	254514	105338				196450.7
I don't have proof of residential address	115325	52378				97682.6
I don't understand how it works	576382	355576				663133.4
I use someone else's bank account	149590	30119				56170.6
The bank is too far from where I live, work or travel to	355249	233216				434937.4
I prefer dealing with cash only	723221	301371				562043.5
I don't have an identity document	385829	128565				239768.0
I don't qualify to open an account	593141	280019				522222.9
I don't understand technology	390549	197891				369057.9
I don't need a bank account	657376	304144				567215.0
I will consider a bank account in future	1294173	536557				1000654.9
I do not feel comfortable in a bank	178409	92547				172596.0
I don't believe in it	292938	184630				344326.7
It's too much hassle or not worth the effort	289772	170784				318504.5
It's expensive to have a bank account	704427	336214				627024.1
Other	246843	150450				280582.5
Don't know	60723	6325				11795.8
		10684844				Expected counts
I don't have proof of residential address	115325	52378				97682.6
Average for other reasons		508802.095				948893.2
Tested in two ways - all categories compared and then just the one of interest (vs. an average in the title)						
Chi test p value	0.0000	ALL				
Chi test p value	0.0000	Proof of residential address vs. average for other reasons				

5.6 Proposition Test 4 Results

Proposition 4:

There is a higher incidence in the number of banked individuals who have completed primary school education at the BOP, than among those without any education.

Tables 18 and 19 presents the currently banked / unbanked information by their education level.

Table 18: Currently banked individuals - Education Level by LSM

Proposition 4: There is a higher incidence in the number of banked individuals who have completed primary school education at the BOP, than those without any education.						
Currently Banked Individuals - Education Level	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	19609384	102338	526629	1026240	2221542	3876749
No formal education	227443	0	48237	16705	106779	171721
	1.2	0	9.2	1.6	4.8	15.6
Some primary school	669438	54068	74446	45288	133265	307067
	3.4	52.8	14.1	4.4	6	77.3
Primary school completed	681484	7005	51373	91780	221099	371257
	3.5	6.8	9.8	8.9	10	35.5
Some high school	4409801	41264	171268	394796	737330	1344658
	22.5	40.3	32.5	38.5	33.2	144.5
Standard 8 or Grade 10 leavers	2285835	0	10543	95558	214680	320781
	11.7	0	2	9.3	9.7	21
Matriculated	7238657	0	170763	349363	640666	1160792
	36.9	0	32.4	34	28.8	95.2
Some university	780104	0	0	14442	54466	68908
	4	0	0	1.4	2.5	3.9
University completed	932793	0	0	0	19217	19217
	4.8	0	0	0	0.9	0.9
Any post-graduate qualification completed	921652	0	0	0	31927	31927
	4.7	0	0	0	1.4	1.4
Any other post-matric qualification	861408	0	0	18307	35399	53706
	4.4	0	0	1.8	1.6	3.4
Some technical training, e.g. carpentry, motor mechanics	188992	0	0	0	21475	21475
	1	0	0	0	1	1
Credits from a technikon or other tertiary education	279966	0	0	0	5238	5238
	1.4	0	0	0	0.2	0.2
Completed apprenticeship/technical training, e.g. carpentry, motor mechanics	131811	0	0	0	0	0
	0.7	0	0	0	0	0

Table 19: Currently unbanked individuals - Education Level by LSM

Proposition 4: There is a higher incidence in the number of banked individuals who have completed primary school education at the BOP, than those without any education.

Currently Unbanked Individuals - Education Level	Total Respondents (100%)	LSM1	LSM2	LSM3	LSM4	**Total LSM 1-4**
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
No formal education	559862	60749	127692	141155	80250	409846
	4.3	20.6	10.2	9	3.1	42.9
Some primary school	1059685	43518	320204	128842	192897	685461
	8	14.8	25.5	8.3	7.4	56
Primary school completed	1202432	53607	75129	88261	356646	573643
	9.1	18.2	6	5.7	13.6	43.5
Some high school	5105859	87308	552523	672141	965666	2277638
	38.8	29.6	44	43	36.9	153.5
Standard 8 or Grade 10 leavers	2500942	26861	109250	267336	557788	961235
	19	9.1	8.7	17.1	21.3	56.2
Matriculated	2442728	22848	71325	263809	463470	821452
	18.6	7.7	5.7	16.9	17.7	48
Some university	112145	0	0	0	0	0
	0.9	0	0	0	0	0
University completed	32306	0	0	0	0	0
	0.2	0	0	0	0	0
Any post-graduate qualification completed	31287	0	0	0	0	0
	0.2	0	0	0	0	0
Any other post-matric qualification	48127	0	0	0	0	0
	0.4	0	0	0	0	0
Some technical training, e.g. carpentry, motor mechanics	21027	0	0	0	0	0
	0.2	0	0	0	0	0
Credits from a technikon or other tertiary education	51356	0	0	0	0	0
	0.4	0	0	0	0	0
Completed apprenticeship/technical training, e.g. carpentry, motor mechanics	0	0	0	0	0	0

A Chi-square test was performed on the data as per Table 20 to determine if the frequency distribution differs from the expected distribution. The result of the test clearly supports the proposition.

Table 20: Chi-Square results for tables 18 & 19

Currently Banked Individuals - Education Level	Total Respondents (100%)	Total LSM 1-4 banked	Total LSM 1-4 unbanked	
Total Respondents	19609384	3876749	5729276	9606025
No formal education	227443	171721	409846	581567
Some primary school	669438	307067	685461	992528
Primary school completed	681484	371257	573643	944900
High school	13934293	2826231	4060325	6886556
Higher	4096726	200471	0	200471
		3876747	5729275	9606022
Expected range	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**		
No formal education	234706	346861		
Some primary school	400559	591969		
Primary school completed	381338	563562		
High school	2779239	4107317		
Higher	80905	119566		
Chi test p value	0.0000			
Proposition is supported				
Chi	12678			
Phi coefficient	0.036	very weak positive relationship		

5.7 Proposition Test 5 Results

Proposition 5:

There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.

Tables 21 and 22 presents the data for the banked / unbanked individuals and the times it takes to the nearest bank. In order to simplify the results of the two tables, the various response times were collapsed into two variables being “under 20 minutes” and “20 minutes plus” as per table 23.

Table 21: Currently banked - time it takes to bank by LSM

Proposition 5: There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.

Currently Banked Individuals - time it takes to the nearest bank.	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	19609384	102338	526629	1026240	2221542	3876749
Under 5 minutes	1062188	0	394	6032	15697	22123
	5.4	0	0.1	0.6	0.7	1.4
About 5 minutes	2036945	0	0	4449	24062	28511
	10.4	0	0	0.4	1.1	1.5
About 10 minutes	4478767	17891	50348	74244	190123	332606
	22.8	17.5	9.6	7.2	8.6	42.9
About 15 to 20 minutes	4941619	0	44279	172971	557336	774586
	25.2	0	8.4	16.9	25.1	50.4
About 20 to 30 minutes	2577219	0	113074	92054	432281	637409
	13.1	0	21.5	9	19.5	50
About 30 to 45 minutes	2385715	26192	96094	153855	410614	686755
	12.2	25.6	18.2	15	18.5	77.3
About 1 hour	1240420	27960	147982	398228	344206	918376
	6.3	27.3	28.1	38.8	15.5	109.7
About 2 hours	541097	23374	34043	102311	187566	347294
	2.8	22.8	6.5	10	8.4	47.7
About 3 hours	124990	6921	34382	21088	32897	95288
	0.6	6.8	6.5	2.1	1.5	16.9
You do not travel to the bank	52208	0	6032	0	0	6032
	0.3	0	1.1	0	0	1.1
Don't know	168216	0	0	1008	26761	27769
	0.9	0	0	0.1	1.2	1.3

Table 22: Currently unbanked - time it takes to bank by LSM

Proposition 5: There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.						
Currently Unbanked Individuals - time it takes to the nearest bank.	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
Under 5 minutes	223167	0	0	0	24757	24757
	1.7	0	0	0	0.9	0.9
About 5 minutes	665586	0	0	12374	44609	56983
	5.1	0	0	0.8	1.7	2.5
About 10 minutes	1742718	7374	61656	11352	185019	265401
	13.2	2.5	4.9	0.7	7.1	15.2
About 15 to 20 minutes	2799392	16046	84784	102648	438012	641490
	21.3	5.4	6.7	6.6	16.7	35.4
About 20 to 30 minutes	1872770	41831	203817	181525	489863	917036
	14.2	14.2	16.2	11.6	18.7	60.7
About 30 to 45 minutes	1457454	11927	126033	205425	418386	761771
	11.1	4	10	13.2	16	43.2
About 1 hour	1165605	154877	264313	226008	300146	945344
	8.9	52.5	21	14.5	11.5	99.5
About 2 hours	540261	35227	137127	215554	101062	488970
	4.1	11.9	10.9	13.8	3.9	40.5
About 3 hours	146605	12005	27997	32028	68251	140281
	1.1	4.1	2.2	2.1	2.6	11
You do not travel to the ban	2086334	6279	248876	567161	497843	1320159
	15.8	2.1	19.8	36.3	19	77.2
Don't know	467865	9326	101520	7470	48769	167085
	3.6	3.2	8.1	0.5	1.9	13.7

A Chi-square test was performed on the data as per Table 23 to determine if the frequency distribution differs from the expected distribution. The result of the test clearly supports the proposition.

Table 23: Chi-Square results for table 21 & 22

Proposition 5: There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.									
Currently Banked Individuals - time it takes to the nearest bank.	Total Respondents (100%)	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**			**Currently Banked Individuals - time it takes to the nearest bank.**	Total Respondents (100%)	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**
Total Respondents	19609384	3876749	5729276			**Total Respondents**	19609384	3876749	5729276
Under 5 minutes	1062188	22123	24757			Under 20 minutes	12519519	1157826	988631
About 5 minutes	2036945	28511	56983			20 minutes plus	6869441	2685122	3253402
About 10 minutes	4478767	332606	265401				19388960	3842948	4242033
About 15 to 20 minutes	4941619	774586	641490			Expected range	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**	
About 20 to 30 minutes	2577219	637409	917036			Under 20 minutes	858703	947878	
About 30 to 45 minutes	2385715	686755	761771			20 minutes plus	2375742	2622460	
About 1 hour	1240420	918376	945344			Chi test p value	0.0000		
About 2 hours	541097	347294	488970						
About 3 hours	124990	95288	140281			**Proposition is supported**			
You do not travel to the ban	52208	6032	1320159						
Don't know	168216	27769	167085						

In order to further test, proposition 5, tables 24 and 25 provide data of currently banked / unbanked individuals per LSM and product usage.

Table 24: Currently banked – bank product usage by LSM

Proposition 5: There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.						
Currently Banked Individuals - Bank Product usage	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	19609384	102338	526629	1026240	2221542	3876749
Cellphone transactions (not SMS notifications only) to check balances, transfer money between accounts or pay third parties	1396318	0	6167	4449	29184	39800
	7.1	0	1.2	0.4	1.3	2.9
Village bank or co-operative bank account (not loan)	23229	0	0	0	0	0
	0.1	0	0	0	0	0
Post Office/Post Bank savings or transaction account	855146	0	55376	48377	102134	205887
	4.4	0	10.5	4.7	4.6	19.8
ATM card	18147316	58009	387574	881694	2089738	3417015
	92.5	56.7	73.6	85.9	94.1	310.3

Table 25: Currently unbanked – banked product usage by LSM

Proposition 5: There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.						
Currently Unbanked Individuals - Bank Product usage (never had)	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
Cellphone transactions (not SMS notifications only) to check balances, transfer money between accounts or pay third parties	13143302	294892	1256122	1561544	2616718	5729276
	99.8	100	100	100	100	400
Village bank or co-operative bank account (not loan)	13167756	294892	1256122	1561544	2616718	5729276
	100	100	100	100	100	400
Post Office/Post Bank savings or transaction account	12960398	294892	1250651	1529129	2550566	5625238
	98.4	100	99.6	97.9	97.5	395
ATM card	10799918	294892	1115753	1293033	2231927	4935605
	82	100	88.8	82.8	85.3	356.9

A Chi-square test was performed on the data as per Table 26 to determine if the frequency distribution differs from the expected distribution. The result of the test clearly supports the proposition.

Table 26: Chi-Square results for table 24 & 25

Currently Banked Individuals - Bank Product usage	Total Respondents (100%)	Total LSM 1-4 banked	Total LSM 1-4 unbanked				Total LSM 1-4 banked	Total LSM 1-4 unbanked
Total Respondents	19609384	3876749	5729276	9606025		Expected		
Cellphone transactions (not SMS notifications only) to check balances, transfer money between accounts or pay third parties	1396318	39800	5729276	5769076		Cellphone transactions (not SMS notifications only) to check balances, transfer money between accounts or pay third parties	2199703	13224155
Village bank or co-operative bank account (not loan)	23229	0	5729276	5729276		Village bank or co-operative bank account (not loan)	2184528	13132923
Post Office/Post Bank savings or transaction account	855146	205887	5625238	5831125		Post Office/Post Bank savings or transaction account	2223362	13366387
ATM card	18147316	3417015	4935605	8352620		ATM card	3184789	19146279
	20422009	3662702	22019395					
						Chi test p value	0.0000	
						Proposition is supported		

5.8 Proposition Test 6 Results

Proposition 6:

There is a higher incidence in the number of banked individuals where the costs of transacting are lower at the BOP, than where costs are high.

Tables 27 and 28 present data on banked / unbanked individuals per LSM and responses with regards to costs. The figures provided are however the same and therefore the proposition could not be tested by both frequency analysis and Chi-Square analysis (Table 29). The banked should not have had any data.

Table 27: Currently banked – statement about cost and LSM

Proposition 6: There is a higher incidence in the number of banked individuals where the costs of transacting are lower at the BOP, than were costs are high.						
Currently Banked Individuals	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	32777140	397230	1782751	2587783	4838260	9606024
It's expensive to have a bank account	704427	0	118471	64218	153525	336214
	2.1	0	6.6	2.5	3.2	12.3

Table 28: Currently banked – statement about cost and LSM

Proposition 6: There is a higher incidence in the number of banked individuals where the costs of transacting are lower at the BOP, than were costs are high.						
Currently Unbanked Individuals	Total Respondents (100%)	LSM 1	LSM 2	LSM 3	LSM 4	**Total LSM 1-4**
Total Respondents	13167756	294892	1256122	1561544	2616718	5729276
It's expensive to have a bank account	704427	0	118471	64218	153525	336214
	5.3	0	9.4	4.1	5.9	19.4

Table 29: Chi-Square results for table 27 & 28

Proposition 6: There is a higher incidence in the number of banked individuals where the costs of transacting are lower at the BOP, than were costs are high.			
Currently Banked Individuals	Total Respondents (100%)	**Total LSM 1-4 banked**	**Total LSM 1-4 unbanked**
Total Respondents	32777140	9606024	5729276
It's expensive to have a bank account	704427	336214	336214
Chi-test not possible on figures provided.			

6. Chapter 6: Discussion of Results

6.1 Introduction

The problem of large unbanked populations is not unique to South Africa but the main challenge for the Banks and the regulators has been the increasing number of unbanked individuals in the country. The trend in South Africa is that the number of unbanked has been steadily increasing since 2004 when Finscope first started tracking the number of unbanked. The 2009 Finscope report findings show that for the first time since 2004, a decline in the percentage number of South African adults who are banked from 63% in 2008 to 60% in 2009 (Finscope, 2009). The particular challenge is that only 27% of LSM 1 – 2 is banked and 43% of LSM 3 – 4 is banked when compared to the other LSM's which have banked figures ranging from 60% - 93%.

The decline in the number of banked individuals takes place within the context of all the various initiatives that have been implemented by the government. These initiatives, some of which have been implemented in partnership with the private sector, include: Broad Based Black Economic Empowerment, The Financial Sector Charter, Dedicated Banks Bill and the Mzansi initiative seem to have failed in attaining the goals of full financial inclusion originally hoped for.

The challenge faced by the declining banked individuals in the LSM 1 – 4 is therefore a result of this research.

6.2 There is a higher incidence in the number of banked individuals who are employed, self employed or have some type of income (government grants) at the BOP, than those that are unemployed and have no income.

According to the Finscope 2009 survey, 26% of South African adults are not being financially served (see Figure 1), meaning that they are managing their lives without the use financial products, albeit formal or informal. It further shows that the financially excluded are more likely to be younger than 30, and personally earn less than R500 per month. It is in this context that Sishuba (2005) confirms that a majority of unbanked individuals give their reasons for being unbanked as the lack of money and unemployment. The Finscope survey shows an increase in the number of people claiming to be unemployed or looking for work. It reflects that at least one member per household is unemployed or looking for work (from 65% in 2008 to 69% in 2009) and that income levels remained flat. Imboden (2005) broadens the argument and views the reasons for the bankable population for not taking up financial services as socio-economic, gender considerations, lack of both trust and confidence in financial organisations. Whilst per capita income for the country averaged R827 (Finscope, 2009), per capita income for just over 70% of the population remained very low and most households are poor or vulnerable to becoming poor.

Table 7 presents the number of currently banked individuals for LSM's 1 – 4 by their employment status. The various types of employment has been collapsed into one

figure under the “some type of income” which includes pension, work full time formal/informal, work part-time formal/informal, housewife or househusband and self employed formal/informal. Table 8 is structured on the same basis but for the individuals who are currently unbanked. The trend is evidently clear across the two tables that there are more unbanked individuals (48% more than banked) than those that are banked within the Foundation of the Pyramid. Whilst the total for the unbanked is higher, the trend is reversed when viewed per the income types. There are more banked individuals who have “some type of income’ than there are individuals that have “some type of income” that are unbanked (Table 7). The trend is upheld when viewed under those that are employed formally and those that are employed informally per LSM.

The chi-square analysis under table 9 for the two tables further reflects clear support for the proposition with a chi-square p value of 0.0000.

Table 10 presents the number of currently banked individuals for LSM’s 1 – 4 by the type of income. The various types of income have also been collapsed into one figure under “income types”. Income types includes child grants, disability grants, government old age pension, UIF, any other type of social grant, inheritance, money from family member / friends, piece work or job, self employed informal, domestic workers or farm worker, employer pension, return on investment from third party pension and other income. Table 11 is structured on the same basis as Table 10 but for the currently unbanked individuals. The distribution of the number of respondents is clearly more for the unbanked than for the banked individuals. As per the previous

tables, the number of the income status is however higher for the banked individuals. The percentage distribution banked individuals by income status per LSM is higher (table 10) for the banked and reflects percentages that are in excess of 90% per LSM category whist the unbaked (table 11) shows much lower income lower percentage levels. This trend further supports the proposition that there is a higher incidence in the number of banked individuals who have some type of income than those that are unemployed or have no income. This evidence is further supported by the incidence in both tables under the "does not get money" question where the incidence is higher in table 11 (unbanked per LSM) than table 10 (banked per LSM). Table 16 also give further evidence as one of the highest reasons cited for not having a bank account is that the individual have no regular income and unemployment.

In providing further evidence for the proposition, the totals for the two tables are tabulated under Table 12, where the incidence of income types under banked is clearly higher than in the unbanked. The question of "does not get any money" is higher in the unbanked as expected. A chi-square analysis performed confirms the results which clearly support the proposition.

From the frequency analysis as well as the chi-square results it is evidently clear the proposition is upheld. The proposition further confirms the importance of some type of income or employment in order to improve the level of banking in the LSM in question.

6.3 There is a higher incidence in the number of banked individuals who have access to credit at the BOP, than those who do not have access to credit.

The Government introduced various legislation and policies to socially and economically transform the economical landscape of the country and it is under this context that Beck and De la Torre (2006) argue that broad access to financial services is related to economic and social development. In practice however this access is a challenge as Moyo and Rohan (2006) argue that access to credit for informal and small medium enterprises where the majority of the participants are black is still a huge concern for the country.

The Grammeen Bank and BancoSol models provide evidence that access to credit for the poor is key to economic development and can break the cycle of poverty (Chemnin, 2007; Auwal (1996). The two banks are both MFI's that provide small amounts of credit as well as small-scale type financial services to clients who do not have access to the formal banking system (Schicks, 2007). According to Schicks (2007) and Chemnin (2007) the average household income of a Grameen Bank member is about 50% higher than that of non-members and that there is a positive effect on expenditure per capita, supply of labour and the level of education for the children of the members.

Table 13 summarises the number of responses to the currently banked individuals per LSM around their responses to statements around borrowing or credit.

The distribution of those that are currently borrowing or owe money is relatively low but is even much lower for LSM 2 at 9.2% and the total percentage is 32.6% for the banked. Interestingly though the number of those not borrowing is higher at 66.2%. Whilst those borrowing under table 13 were low, table 14 reflects even lower levels for the unbanked with a total of 11.4% when compared to the 32.6% of the banked. The number of those banked with access to credit or borrowing is clearly higher than in the unbanked. The number of the responses of those not borrowing is also higher at unbanked (86.9%) when compared to the banked of 66.2%. The interesting point is that the percentage of those borrowing in LSM 1 under unbanked is higher than LSM's 2, 3 and 4 but the number of respondents in LSM 2, 3 and 4 are much higher than in 1.

The results of table 13 and 14 are compiled in table 15 and the number of the unbanked is clearly higher than those in the banked but the number of those borrowing is again higher than those in the unbanked.

The Chi-square test performed in this table confirms the findings of the frequency analysis and upholds the proposition that those with access to credit are more likely to be banked than those without access to credit.

6.4 There is a higher incidence in the number of banked individuals who have a formal or some type of formal address at the BOP, than those who do not have a formal address or some type of formal address.

The views by Aurora and Leach (2005) that processes and controls imposed by FICA (Financial Intelligence Centre Act) often end up as constraints to enabling access to financial services. In addition these processes further impose barriers and costs on the use of these services. One of these controls is the verification of the residential address of the prospective client before the Banks enter into a relationship or enter into a transaction. The challenge is that one third of the South Africa population live in informal or traditional dwellings without formal addresses and half of the population lack some of the documents (normally a utility bill or other accounts containing both the name and physical address of the individual) to verify their residential addresses.

The Grameen Bank and the Banco Solidario uses models of lending to small groups of people with mutual, morally binding guarantees in opening of accounts which could be a possible solution to be adapted by the Banks in South Africa in remote areas as well as villages in opening and operating of Bank accounts.

Table 16 presents the reasons for the unbanked LSM 1 – 4 for not having a bank account. There are many reason cited in the table but the most significant ones

relate to income, employment and not having any money to save. In order to make sense of the data, the table was re-run as yes / no basis as per table 17.

There are more individuals in the unbanked sections who state their reason for not having a bank account as not having a proper address than in the banked section. A Chi-square test for both the comparisons upheld the proposition and further shows that there is a higher propensity to be banked where and individual has some type of residential address.

6.5 There is a higher incidence in the number of banked individuals who have completed primary school education at the BOP, than those without any education.

In addition to various other impediments to banking the unbanked, the UNDP (2007) report, cite the fact that the poor often have low levels of literacy and may be unfamiliar with certain goods and services like new technologies and financial services products. In some cases, a more fundamental appreciation of the usage of the products on offer is non-existent, such as the basic understanding of the importance of taking out insurance and saving. Anderson and Billou (2007) further state that many BOP consumers are largely inaccessible to conventional media and building awareness poses a significant challenge for companies wishing to serve low income consumers.

Table 18 summaries responses of banked individuals in LSM's 1 – 4 and their education level from those with no formal education up until and including apprenticeship/technical training. The number of individuals who do not have formal education is very small whilst the number of those with some primary school education is higher in LSM 1 than 2, 3 and 4 percentage wise but the number increases with the increase in LSM's. The next significant incidence is in some high school education category where LSM 4 is significantly higher than the other LSM's. There are no incidents of education level in LSM one beyond Standard 8 or grade 10 leavers and same for LSM 2 where the highest education level is matric. The spread of education beyond this level is minimal in LSM 3 and LSM 4.

The opposite picture is revealed in Table 19 reflecting the unbanked. The level of education does not go beyond matric level. The number of those without any formal education appears higher than for the banked and is distributed across the four LSM's. The more significant number is in the some high school category and the number of those with matric is very small across the four LSM's. The number of incidences for those banked is however significantly higher than the in the unbanked category. These findings seem to support the proposition as there are significantly more banked individuals as the level of education increases per LSM.

The evidence in the frequency analysis is further supported by the information in Table 20. The totals of both banked and unbanked for no formal education, some primary school, primary school completed, high school and higher education are tabulated and it becomes very clear that the number of banked is significantly higher

than the unbanked. The Chi-Square analysis test on the information further upholds the proposition that there is a higher incidence of banked individuals who have completed primary school education. There is however a very weak positive relationship between education and the propensity to be banked due to the low Phi coefficient. The level of education is however an important predictor as per the Chi-square test results.

6.6 There is a higher incidence in the number of banked individuals where there is access to an ATM/Bank or mobile banking service at the BOP, than where no access is available.

One of the profound changes to the South African banking environment was the introduction of the Dedicated Banks Bill (Dedicated Banks Bill, 2004) whose main purpose was to make available banking in areas and to consumers where these services had been non-existent. The crux of the bill was to allow retail groups and cellular service providers into the banking sector with lower overheads, broader footprint by lowering the entry requirements to enable reach in areas previously not serviced to improve access to financial services.

It is in this context that studies by Anderson and Markides (2007) showed that the use of information and communications technologies can reduce costs and accelerate the rate of making the markets more inclusive. One of these strategies is

leveraging existing ICT networks like the over-the-air payment system used by Smart Communications and Globe Telecom in the Philippines which helps to minimise costs of transferring money and can reach even remote rural areas. This mobile system is currently known as mobile banking (m-banking) and is now being offered in many countries including South Africa.

Table 21 presents the incidence results of banked LSM 1 – 4 and the times it takes to the nearest bank. There is small number of individuals under the 5 minutes category. The highest percentage it takes to get to the bank is in the category of 20 – 30 minutes and 30 -45 minutes. The category of about an hour is also very significant especially under LSM 3 and 4. There is also a small percentage of those that take more than or 3 hours to get to the bank but this number is very marginal.

The results of Table 22 which shows the time it takes for the number of unbanked individuals to get to the bank is the opposite of table 21. There are no incidents in the number of people it takes under 5 minutes to get to the bank except a small number in LSM 4. There is large number of respondents that is concentrated around the 20 – 30 minutes category, the 30 – 45 minutes category and about an hour category. The huge contrast however is that there is a large number of respondents who stated that they do not travel to the bank at all. The largest incidence is in LSM's 2, 3 and 4.

It is thus evident that there is a significantly higher incidence in the number of the banked individuals in the less than 20 minutes category. The opposite picture is

reflected in the unbanked where the incidence is much higher in the number of individuals who spend more than 20 minutes to get the bank. The Chi-square test on Table 23 confirms the proposition that individuals are more likely to be banked if access to a bank is closer.

Table 24 tabulated the results of the banked individuals by bank products usage per LSM. It is clearly visible that LSM 1 has no cellphone usage, village bank or post office but the use of an ATM card. The distribution and the usage increases as LSM level increases and LSM 4 has the highest use of ATM's. Whilst the number of respondents under the unbanked appears to be more than the unbanked, the number of incidences does not appear to be correct. The data is then tabulated in table 26 using the Chi-square test which also supports the proposition. The two tests in tables 23 and 26 therefore uphold the proposition that the propensity to be banked is higher where there is access to an ATM/Bank or mobile banking service.

6.7 There is a higher incidence level in the number of banked individuals where the costs of transacting are lower at the BOP, than were costs are high.

The issue around banking costs and charges is a very emotive and personal subject to all South African's across the different LSM's as can be seen in the current media reports during the months of September / October 2010. Whilst the Financial Services Charter specifically targets the LSM's 1-5 and commits itself in providing

affordable and accessible banking, Moyo and Rohan (2006) argue that the success of the Msanzi account has been short-lived and has not addressed the fundamental financial needs of this market.

Aurora and Leach (2005) refer to the high cost of financial services as “price exclusion” as in many low income consumers in developing countries survive on daily wages, meaning that cashflow can tight and are therefore unable to afford the costs of financial services. The challenge however, according to Mendoza and Thelen (2008) for both public and the private sectors, is that due to the difficult geographies and dispersed locations of low income consumers it is often more costly to reach them.

Table 27 and 28 presents the number of respondents by LSM and response with regards to banking costs. The figures provided are however the same and therefore the proposition could not be tested by both frequency analysis and Chi-Square analysis. The banked section should not have had any data. The issue around banking costs is however very important in the LSM 1 – 4 category due to their low income levels as the cost could be a high deciding factor whether they use financial services or not according to the literature.

7. Chapter 7: Conclusion

7.1 Introduction

The intent of the research was to explore some of the reasons for the low access to financial services specifically in South Africa's Foundation of the Pyramid (LSM 1 – 4) and to find possible solutions by building a model that could possibly work based on aspects of the literature. The specific aspects that the model looked at were the various types of income types, employment status, access to credit, formal address, education level, access to financial services (bank/ATM/cellphone banking) and transaction costs. The research found that in terms of the propositions tested, between the banked and unbanked, there is sufficient support for the model. As per previous, research in this field, there may be other reasons for the low access due to complex and inter-related issues which have not been considered in this paper such as trust, financial literacy, culture and language barriers.

7.2 Context

The main aim of the introduction of the various initiatives by the government was to increase the pace of social and economic transformation when it became clear that voluntary initiatives by the private sector were not providing adequate results. The government targeted the financial sector as it plays a crucial role in promoting sustainable development by transforming the social and economic landscape though it's financing activities. In addition the literature showed that broad access to financial

services is related to economic and social development and can empower individuals to better integrate into the formal economy and actively contribute to its growth, reducing poverty at the same time.

The challenge however is that whilst South Africa is seen as the most advanced, productive and economically advanced country in Africa, with a world class financial sector, it has failed to increase access to financial services to the lower LSM categories of the population. This picture remains the same even after the introduction of various initiatives between the government and the financial sector. These initiatives are mostly based on the premise that access, affordability, product features are the primary reasons for this sector of the population remaining unbanked. If the recent media reports around the fact that there is R12 billion rands under South African mattresses, then these cannot be the only reasons. This research as well as others shows that other factors like employment, literacy, trust, the place where people live (address), and costs should be taken into account when trying to find possible solutions.

7.3 Research Questions / Propositions

The research propositions focused on relationships of the banked and unbanked individuals within the LSM 1 – 4 sectors with six key variables being employment status, access to credit, some type of identifiable address / dwellings, education, use

of technology and transaction costs. These propositions were tested using the Finscope 2009 data survey using frequency, descriptive and Chi-square analysis.

7.4 Results

The analysis revealed that all the propositions of the model had been met with The exception of costs. The Chi-square analysis further supported all the propositions except the one around costs. This was mainly due to the limited information on the respondents regarding banking costs. It was clear from the results that employed individuals whether under formal or informal employment or the one's that had "some type of income" had a higher incidence to be banked than in the unbanked category. The proposition therefore confirmed the importance of earnings as a predictor of an individual's banking status. Individuals who had access to credit were more than unbanked category and therefore those with credit were likely to be banked. Access to credit is important to the poor as previous research has shown that credit could lift people out of poverty.

There were more individuals in the unbanked sector that stated that not having an address as a reason for their unbanked status than in the banked section. The importance of address is crucial due to the challenges faced by financial institutions and cellphone companies surrounding compliance with FICA and the recent RICA legislations. The challenges around address are the same as for cellphone banking and access of a bank or ATM. Individuals who had an address or access to banking

services are therefore more likely to be banked than those without. The low level of education of the unbanked could be a prohibitor to accessing financial services as there were no individuals who had completed matric level education. It goes to say that the higher the level of education the more likely an individual would be banked. The data around costs did not enable analysis but is still considered a significant issue around access to banking due to the low level of income at the BOP. In conclusion, the findings of the research show support for the use of the proposed model at the Base of the Pyramid.

7.5 Recommendations based on findings of the model

The government and the financial services sector have done enough on the partnerships as well as enacting legislation to ensure that the environment is conducive for access to financial services, however the information to hand shows that there might be other factors on the macro level that influence the low access especially at the Bottom of the Pyramid. The following issues based on the findings of the model need attention and further consideration.

- The current level of unemployment appears to be a huge stumbling block, exacerbated by the current global recession. If an individual has no form of income it is therefore unlikely that they will be banked. As stated in the questionnaires a large number of respondents cited unemployment as the reason for being unbanked. The government will have to pay particular

attention into poverty alleviation policies and support sectors that can create new employment, especially at the BOP.

- The banks will need to reassess their credit and lending policies. There is however a move currently by the big four banks to start lending (community banking) in this market but mainly to informal business. The adoption of the Grameen Bank and Bancosol models within the community banking divisions will assist in alleviating unemployment and encourage entrepreneurship.
- There problem of squatter camps in the country which means the poor residents are unlikely to have a formal addresses. Whilst the government is building RDP houses, the pace does not meet the demand and one alternative would be to formalise the squatters by giving them title deeds so that they can start building their own homes. This will further sort out the many issues around FICA and RICA legislation.
- The issue around education is a very emotive topic to many South Africans, especially after the recent teachers strike and the poor matric pass rates. The government needs to ensure that the pass rates are increased and most importantly the dropout rates in all the grades is reduced by ensuring that the teaching profession is respected and receives the status it deserves in communities.
- Infrastructure development is the responsibility of the government and it is in this context that to enable access to financial services, the private sector

should partner with the government in setting up infrastructure for mobile phone networks or community internet kiosk like the “e-Choupals” in India.

- The issue of banking costs is an emotive subject and the banks will need to re-examine their structures and ways to diversify their revenue streams in order to make banking affordable to the masses. The fees (ATM withdrawal and cash deposit fees) and interest rates charges should be competitive in order to make it worthwhile for the unbanked to use their services.

7.6 Future Research

It is obvious that the initiatives by the government in conjunction with the private sector have not yielded the results of inclusiveness originally hoped for and according to the latest Finscope survey; the number of banked individuals is reducing. The model proposed in this research will still need to be tested whether it will work in practice. The interdependencies between employment status, access to credit, some type of identifiable address / dwellings, education, use of technology and transaction costs could also be further researched. One further specific area to be researched is the effect of access to credit in this segment and whether it is key to economic development and improvement of the lives of the poor.

7.7 Conclusion

The analysis of the model proposed in this research has been upheld by the tests performed with the exception of one of the propositions. This therefore shows the possibility of this model to work in the context of the challenges faced by the county in reaching the goal of having a fully inclusive financial services sector.

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