Do Credit Guarantee Schemes address credit market failures for small businesses? Preliminary evidence from South Africa[*]

By

Mthimkhulu, AM[♠] and Aziakpono, MJ[♣]

University of Stellenbosch Business School

Abstract

This paper attempts to determine the necessity of Credit Guarantees Schemes for small businesses in South Africa. Initially, the nature of the credit market failure limiting capital flows to small businesses is ascertained through an analysis of mortgage loan applications processed by banks. Mortgage loan data is used because home ownership has a direct effect on the entrepreneur's ability to raise capital such that a home loan application expresses to the credit markets an investment that a consumption intent. Using data from Khula Credit Guarantee Fund from 1996 to 2012, the paper then investigates if the intervention has been effective in addressing the market failure. It is found that although there was marked improvement in capital flows to the target groups between 1996 and 1998, on the whole, the outcomes of the credit guarantee scheme and the credit markets are very similar. This finding is taken as indicative of further underlying problems faced by entrepreneurs previously disadvantaged by the pre-1994 apartheid regime. It corroborates what has been an otherwise intuitive argument that in some contexts, access to finance may not be the most critical constraint for small business development. The paper points to the need for further research on these underlying constraints as well as explorative investigations on the alternative institutional models of guarantors suitable for the South African environment.

Key phrases: credit guarantee; credit market failure; small businesses

JEL Classification: G28, O17

---

[*] Paper for presentation at the Africa Development Finance Workshop, 7 - 8 August 2012, University of Stellenbosch Business School, Cape Town, South Africa

[♠] Corresponding author: PhD Candidate, University of Stellenbosch Business School, P.O. Box 610, Bellville 7535, South Africa, Email: alfredmbe@gmail.com

[♣] Professor of Development Finance, University of Stellenbosch Business School

1 Introduction

The problem of information asymmetry in the credit markets and the aspirations for social equity by policy makers motivate interventions to support small businesses. Because information on small businesses is limited and costly to gather, financiers may misprice attributable cost of capital, demand excessive collateral cover, or withdraw altogether from serving small firms. On their side, small firms may respond by taking on riskier ventures in hope of higher returns to meet the financiers' requirements or concede to being rationed out of the credit markets. For policy makers, the large numbers of entrepreneurs is too significant to be ignored. In reality, the large numbers present a constituency to which developmental and indeed populist policies can be targeted. One of the intervention tools used in this regard is a credit guarantee scheme. With South Africa as the context, this paper interrogates the necessity of credit guarantee schemes by examining the extent to which they address credit market failure which is revealed by analysing mortgage loan applications to the credit markets. The paper then assesses the extent to which the country's main credit guarantee intervention, Khula Credit Guarantee Fund, has demonstrated progress towards policy aspirations for social equity.

A credit guarantee scheme is designed to operate within the formal financial system where the guarantee given to a bank acts as an incentive to lend to enterprises that would otherwise not have been funded. The guarantor underwrites a portion of capital loss by the bank in the event of default by the borrower. The portion guaranteed generally ranges between 50 and 80 percent of the loan with the balance being the bank's exposure. Loans can be individually approved by the guarantor or the bank can have complete discretion up to an agreed amount to finance a predetermined portfolio of enterprises. In essence, the credit guarantee scheme is a risk sharing mechanism for the bank while to the guarantor it is a method to extend support by engaging the credit markets' expertise in business appraisal and risk management, (Green, 2003; Freedman, 2004). The borrower, through the bank, pays a premium for the guarantee and the loan is fully administered by the bank throughout its tenure. Besides facilitating access to credit to enterprises with riskier cash flows, some guarantors encourage banks to relax collateral requirements for applicants. As a result of such collateral waivers, the barrier of access to capital attributable to limited initial endowments of entrepreneurs is mitigated.

A recent study of 164 interventions globally found that, unlike other interventions to increase finance to small businesses[1], credit guarantees 'may generate fewer distortions in the credit market and are

[1] Other interventions include direct lending and subsidised loans.

more consistent with a well-functioning banking system', (G20-IFC, 2010:85). But this impression of credit guarantees as having 'a natural place in the market' could lead to exaggerated expectations and claims by some of its custodians especially in publicly funded schemes, (Honohan, 2010; Beck, Klapper and Mendoza, 2008). However, as the same study points out, there is very limited empirical research on credit guarantees to help improve their design, implementation and overall appreciation by relevant stakeholders. It is hoped that as more studies are done, some of the more critical aspects of the scheme will emerge for deliberation, (Green, 2003; Honohan 2010).

Freedman (2004) identifies four criteria which a well-designed credit guarantee scheme should meet. Firstly, there must be some market inefficiency limiting the flow of capital to small businesses. Secondly, there must be an increase in financing to small businesses[2] and that increase must have been triggered by the credit guarantee scheme. Thirdly, the scheme must induce neither reckless lending by bank nor deliberate default by entrepreneur. Finally, the scheme itself as a funding mechanism must be sustainable or self-sustaining. This paper confines itself to the first two criteria that seem to question and examine the merit of having a credit guarantee scheme in place. The last two criteria are more operational evaluations to ascertain efficiencies and thus seem to imply that the first two tests have been passed. What seems critical is to show credit market failure in a context and ask if as a result of the guarantee scheme credit markets open up for the small businesses.

Although it is difficult to be precise on defining credit market failure in a set context, its existence can be inferred from a large SME sector and along with it, poverty, income inequalities, and general social unease, (La Porta and Shleifer, 2011). Besides the Millennium Development Goals' benchmark of 'less than $1.00 per day' as indicating poverty, another widely cited proxy of livelihood disparities in a country is the GINI coefficient which show Botswana, Lesotho, Namibia and South Africa as the most unequal countries in the world[3] albeit on unsynchronised timeframes. In Latin America, the list includes Bolivia, Colombia, Haiti and Honduras with slightly lower coefficients. In these countries, especially the more populous ones like South Africa and Colombia, the view that small businesses are engines of economic growth tend to become an integral part of the economic development policy. It is with this background that the current paper focuses on South Africa.

[2] This is referred to as additionality in most of the Euro-based literature and in this paper or incrementality in North America.

[3] These four economies and Swaziland form the Southern African Customs Union, a trading bloc largely under the influence of South Africa and all except Botswana are part of the Rand Monetary Union. The summary of the Gini coefficients is available at http://data.worldbank.org/indicator/SI.POV.GINI/

As is the case globally, the capacity of small businesses to create jobs is emphasised by policy in South Africa (The New Growth Path, 2011). The official unemployment rate is 25% while the real one is estimated to be as high as 40%. It is estimated that 22% of the population live on less than the national poverty line of R418[4] per month. On the other hand, South Africa is also a middle income economy with a sophisticated financial system, (World Bank, 2011). In a comparative study on the impact of pro-poor policies in Mauritius and South Africa, Duclos and Verdier-Chouchane (2010) find increased inequality in South Africa. The authors also find that the national poverty head count living on the middle income countries' benchmark of 'less than $3 per day' remained unchanged between 1995 and 2005 at 41 percent. The dual nature of the economy reflects yesteryear policies of apartheid with, in relative terms, most of the unemployed and poor being the blacks, coloureds and those of Indian origin collectively referred to as the previously disadvantaged groups by public policy. Consequently, the relative welfare of the previously disadvantaged groups and the whites is often juxtaposed as empowerment policies seek to uplift the former.

The National Strategy for the Development and Promotion of Small Business in South Africa of 1995 is the main reference document for SME policy. Anchored in the view that supporting small businesses can deliver inclusive development, the National Strategy underscores the need for government interventions while also encouraging involvement of other stakeholders in availing that support. Following the policy document, The Small Business Act was passed in 1996 defining small businesses as those having between 5 and 50 employees. As a result, numerous institutions dedicated to extend support to small businesses were set up. In that year, two credit guarantee schemes were launched: the Khula Credit Guarantee Fund and Thembani International Guarantee Fund. While the Khula Credit Guarantee scheme (KCGS) is a publicly funded facility, Thembani International Guarantee Fund is registered as a non-governmental organisation under Section 21 of the Companies Act and has its capital raised through the issue of debt notes by its promoter, Shared Interest, a US-based non-profit social investment fund[5]. In 2008, USAID introduced its Development Credit Authority facility in South Africa which is administered within the Agency's Financial Sector Program for Southern Africa. However, with over 6,000 guaranteed loans since 1996 against fewer than 100 for Thembani International Guarantee Fund and about 50 for the USAID Discount Credit Authority facility, the KCGS is the most significant in the market, (Katzin and Rosenbloom, 2011; Shared Interest, 2011; USAID 2011). This paper will therefore focus on the KCGS.

[4] R8 being approximately US$1 in June 2012

[5] References to Thembani International Guarantee Fund in the paper are mainly drawn from Katzin and Rosenbloom (2011).

Using mortgage loan application data disclosed by financial institutions in terms of the Home Loans Mortgage Disclosure Act (2000), this paper demonstrates the failure of credit market in South Africa to extend finance to some segments of the population as advocated by the policy on small business development. The paper then investigates the extent to which the KCGS has addressed this failure using the scheme's data from 1996 to 2012. The paper is structured as follows. Section 2 reviews literature on the theoretical explanation of how the credit guarantee schemes emerge. Section 3 gives an overview of the KCGS and its context. Section 4 conducts the empirical analysis. Section 5 summarises the implications of the findings, the limitations of the study and then concludes.

2 The emergence of credit rationing and small businesses credit guarantees

The seminal work of Stiglitz and Weiss (1981) shows how credit rationing arises in the financial markets with consequences that eventually justify interventions. If applied to small business finance, Stiglitz and Weiss (1981) suggests that once the small business proprietor submits a loan application, the bank is faced with an adverse selection problem because of limited information it has on the applicant. While raising the interest rates could compensate for this risk, it leads to a moral hazard in that the applicant could be rationed away and or be compelled, along with other similar applicants, to submit riskier proposals showing higher returns but likely to default. If approved, such projects will not increase the bank's profits as their expected return will be low due to the increased default risk. As a result, the bank cannot raise the interest rate charged on loans as would be expected in situations where there is more demand than supply. Instead of increasing interest rates, some credit rationing measures ensue such as the use of collateral as 'sorting devices' so that only the well-endowed applicants can access debt capital, (Cowling and Mitchel 2003; Besanko and Thakor 1987; Bester 1985). In this scenario, the credit market is generally presumed to have failed, (Craig, Jackson and Thompson 2004; Cowling and Mitchel, 2003) and the case for government intervention to support those let down by the market is set.

The above describes the theoretical basis for the emergence of interventions in the credit market. However, when interventions are targeted at small businesses, literature and practice takes into consideration nonfinancial constraints. A review of credit guarantee schemes in Ghana, Kenya, Tanzania and South Africa by the French Development Agency and Dalberg Global Development Advisors summarise SMEs' constraints into three main clusters: access to finance, access to markets and, people and training. Interfacing the three constraints clusters with small businesses is an 'enabling environment' which includes the regulatory system and physical infrastructure, (AFD, 2012:12). Although all are accepted as important in the design of small business support, literature has emphasised the financing constraints. To some extent, this has been driven by World Bank Enterprise

Surveys since 2002, (Beck et al, 2008; Ayyagari, Beck and Demirguc-Kunt, 2007). Even so, small business support has in practice tended to address mostly the access to finance problem with nonfinancial interventions such as business management training being add-ons. Following the failures of direct lending and public subsidies to SMEs in the 1980s, research focus on guarantee schemes has been growing over the past twenty years mainly trying to demonstrate their effectiveness and efficiency, (Panetta, 2012).

The literature on guarantee schemes has been generally descriptive. Most of the studies are cross country comparisons of the design feature. They compare coverage ratios, premiums, sizes of funds, default patterns, claims settlement procedures, and forms of ownership among other scheme traits, (OECD, 2011; KPMG 2011; Beck et al, 2008; Saadani, Arvai and Rocha, 2010; Levitsky, 1997). The recent and most cited Beck et al, (2008) surveys 76 guarantee schemes in 46 countries finding that 'government involvement in credit decisions is associated with higher losses' by the guarantee fund due to excessive defaults, (Beck et al, 2008:22). On the whole these studies give a global perspective of credit guarantee schemes but face the challenge of a universally acceptable benchmark since each scheme will, in theory, be uniquely designed to treat context-specific credit market problems making it difficult for definitive comparisons to be established.

Some studies have focused on individual schemes to evaluate their contribution in credit creation and economic development. Bradshaw (2002), for example, assesses the economic contribution of the California State Loan Guarantee Program in terms of guaranteed firms' growth in labour force and incremental sales tax revenues attributable to the scheme. For the Canada Small Business Financing program, Riding and Haines (2001) assess credit creation or financial additionality of the guarantee scheme by using a logistic regression model to determine if guaranteed firms would indeed have been turned down by the credit markets. Lelarge, Straer and Thesmar, (2008) investigate if the French Loan Guarantee Program triggers growth in the number of small businesses start-ups within a defined time of period. As Panetta (2012) observes, the main question this literature tries to answer is if credit guarantee schemes have met the goal of solving the SME finance problem.

While literature uses the concepts of financial and economic additionality to answer this question, it faces the problem of the counterfactual[6] and the practice of intra-portfolio substitution[7] by lenders. It is argued that these two problems render 'inadequate all evaluations of the effectiveness of credit

[6] In the case of credit guarantees the counterfactual would be a world without the credit guarantees.
[7] Intra-portfolio substitution occurs when lenders shift existing or prospective loans to the scheme or make multiple loans to their customers to meet the scheme's portfolio ceilings such that in substance, guarantees are issued to firms that would have been financed without the guarantee, (Riding et al, 2006)

guarantee schemes', (Riding et al, 2006:50; Vogel and Adams, 1997). Furthermore, the attention on financial and economic additionality seems to have implicitly assumed that credit market failure is automatically dealt with by the design features of the guarantee scheme. But given that credit rationing is a fundamental justification for interventions like the credit guarantee schemes, it is surprising that literature has been relatively mute on probing the credit markets. While the literature relates additionality to benefits accruing to banks, SMEs and the economy, it neglects the behavioural changes in the credit markets which, it must be remembered, is what the intervention is intended to influence. From the literature the question: *does the credit guarantee scheme address credit market failure for small businesses?* is left relatively unexplored. Section 4 makes a modest step in addressing the question. As this is a modest step, the limitations of the analysis are described at the end in Section 5. But first an overview of the credit guarantee scheme and its context must be given.

3 Khula Credit Guarantee Scheme and the context

Two years into the new democracy, the South African government established Khula Enterprise Finance Limited in 1996, incorporating it as a public entity within the Department of Trade and Industry. Some of Khula's products to improve the flow of capital to small and medium enterprises include equity funds, loan funds and mentoring services. On establishment in 1996, Khula introduced a credit guarantee scheme to be administered by Khula Credit Guarantee Fund Limited. The aim of the scheme which is also known as the Khula Credit Indemnity Scheme is to assist viable start-ups and expanding SMEs access finance if they are unable to meet banks' lending requirements. Although the qualification criteria underscores that management of the enterprise must have proven and sufficient experience, there is a provision that the entrepreneur can request mentoring services from Khula.

A qualifying firm applies through a participating bank where the application is appraised by the financial institution's own lending criteria. SMEs are encouraged to apply even if they do not have collateral. After approving the application in principle, the bank submits a request for indemnity to the Khula Credit Guarantee scheme (KCGS). The gender, race, and province of the borrower must be disclosed in that submission along with the business plan. Within five working days, the KCGS communicates its decision to the bank. The approved indemnity can only be up to five years. The coverage ratio, which has been reviewed in the 15 years studied, varies depending on the loan amount though the basic (or floor) coverage is 50 percent. As from 2007, for loans up to R250,000 the ceiling has been 90 percent, 80 percent for between R250,001 and R1,000,000 and 70 percent for between R1,000,000 and the maximum amount of R3,000,000. The indemnity fee ranges from 2 percent for the lower bracket loan category of R250,000 and then 3 percent and 3.5 percent respectively. The

interest rate for the higher bracket of between R1, 000,000 and R3, 000,000 is prime rate plus 3 percent and prime rate plus 2 percent for the other two categories.

The bank must report default within 30 days and lodge a claim within a year of the date of final judgement for liquidation. The claim is settled within 30 days of receipt. Accrued interest for up to six months and legal costs can be added to the outstanding loan amount from which proceeds from collateral disposal or firm's liquidation are deducted to arrive at the settlement amount by KCGS as agreed in the indemnity contract. From April 1996, KCGS has authorised 7,579 credit guarantees with 6,056 of these being taken-up indicating a potential financing of R1,6 billion to SMEs. Table 1 summarises the take-up of the KCGS by the four major banks with ABSA accounting for nearly half of that in terms of number of borrowers and monetary advances.

Table 1: Take-up of Khula Credit Guarantee Scheme (1996 to 2012)

	Number of guarantees		Loan amount	
Name of bank	Number	% of total number	Loans (R million)	% of total loans
ABSA	2,751	45.4	781	47.8
FirstRand bank	630	10.4	210	12.9
Nedbank	1,146	18.9	298	18.2
Standard bank	1,051	17.4	263	16.1
Others	478	7.9	82	5.0
Total	6,056	100	1,634	100

Source: Khula Credit Guarantee Fund Limited

To evaluate KCGS, it is important to be fully cognisant of the failures it is meant to address and this goes beyond matching the overt mission statement of the scheme with the outputs from the intermediaries and beneficiaries. What must be known is the nature of the market failure motivating the government to have the scheme in place. In the first instance, this can be drawn from government's founding policy of small businesses. The White Paper on National Strategy for the Development and Promotion of Small Business of 1995 states that on exiting an apartheid economy, 'small business support policies will for a considerable time also have to focus on the particular needs of black enterprises and ways to overcome the remaining consequences of that legacy' and refers to this as an 'important principle of the new national strategy', (White Paper, 1995:11, 17).

Besides racial equity, the National Strategy stresses the need to support women, especially black women, so that they can graduate out of the survivalist enterprises they dominate typically in rural areas. These emphases have been maintained in all government development policies including the New Growth Path policy framework of 2011. Clearly, public policy seeks social equity through supporting small businesses. With a population of 50 million, it is estimated that there are 5.6 million small business owners in South Africa whose contribution to the Gross Domestic Product is at least 30 percent thus justifying the development policy emphasis, (Finscope, 2010:2; SEDA, 2009:13).

Although literature would advise based on empirical findings that access to finance is a major constraints faced by small businesses suggesting that interventions such as KCGS will be appropriate, the limitation of these findings for policy is that they are based mainly on perception surveys of the small business owners and not so much on the credit markets themselves. As a result, empirical evidence in South Africa is very mixed on if indeed access to finance is a problem. It all depends on the sample. At total national enterprise level for example, World Bank Enterprise Surveys (2007) show that it is the smaller firms, especially micro enterprises that say access to finance is a problem. When only the small businesses are the subject, studies show marked differences in responses with whites predominately oblivious to that as a critical issue while the blacks rank it quite high , (Chandra, Moorty, Nganou, Rajaratnam and Schaefer, 2001; World Bank, 2007; Rogerson, 2009). As said, these are the draw backs of perception surveys. Alternatively, what could be asked is what actually happens when a South African entrepreneur approaches the credit markets for funding. Answering this would inform policy if the credit guarantee scheme is addressing the right problem and how well it is doing so.

4 Assessing credit market failure and the impact of credit guarantees in South Africa

4.1 Investigating credit market failure

To ascertain credit market failure in relation to small businesses, an ideal data set to interrogate would be loan applications received and processed by the credit markets from the small businesses. Such a data set would enable the calculation of what Honohan (2010) describes as the 'willingness of banks to make small business loans autonomously'. Although the ideal database is not yet available, there is a fairly good alternative (albeit with a short time series) that is set on the requirements of the Home Loan and Mortgage Disclosure Act 2000. From July 2007, the Act required all financial institution to report to the Department of Human Settlements, listing by the race and then by province, all mortgage loan applications received, approved, declined and disbursed.

Given that a primary residence with a legal title is the most used form of collateral, these disclosures should show who interacts with the credit markets to request finance for this primary asset and how the credit markets respond to such requests. A survey investigating the constraints faced by South African women in accessing finance conducted by the Department of Trade and Industry along with FinMark Trust in 2005 argues that home ownership "has a direct impact on [black] entrepreneurs' ability to raise collateralised credit for business", (IFC, 2006:5). As such, mortgage applications can be seen as indicative of the degree of collateral handicap in the economy. Unlike other applications for debt financing, mortgage loan applications communicate the applicant's investment desire than a consumptive one. Observing how credit markets interact with these requests will give insight on the typical behaviour of the credit market without interventions.

The link between home ownership and small business development is also evident in the approaches of some of the local credit guarantee programs. In 2007, the USAID Development Credit Authority introduced a $20 million five-year housing guarantee scheme in South Africa. By 2011, the Development Credit Authority scheme had a take-up rate of 88 percent which compares favourably to the SMEs' guarantee scheme the Agency introduced in 2009 which by 2011 had only 53 guarantees taken-up against a target of 10,338, (USAID, 2011). Thembani International Guarantee Fund has also been involved in housing finance scheme with the National Urban Reconstruction and Housing Agency, (Maphenduka, 2010; NURCHA, 2010). The guarantors' approaches point to the very intricate relationships between small businesses' access to capital, entrepreneurs' collateral and home ownership. This is explored below by looking into the Home Loans Mortgage Disclosure reports.

Unfortunately, the four big banks with a market share of 84% in terms of total assets as at June 2010 have been very slow to comply with the Home Loans Mortgage Disclosure Act. We focus on the two big banks that have complied and made adequate disclosures in their annual reports. In page 10, Table 2 aggregates Standard Bank and FirstRand Bank disclosures for 2011 and 2010 while the 2009 numbers only relate to Standard Bank since the other did not disclose. An annual trend presentation of the same is given in the Annexure to the paper on page 23. In terms of total assets as at June 2010, the two banks had a market share of 40 percent making the summary representative of the economy's banking sector. On its own, Standard Bank's market share is 25.5 percent, (Bankers Association of SA, 2010).

A total of 989,076 applications were received in the 3 years. 152,809 or 15.5 percent were ultimately disbursed. Although the blacks and the whites' share of total applications are at par, the relative share of blacks declines progressively to end at 34 percent of total disbursements against 49 percent for whites. Some of this decline accrues to the coloureds whose share of disbursement rises from an approval weight of 7.5 percent to a disbursement weight of 9.5 percent. The Indian group also experience a similar increase albeit at an earlier loan processing stage as their share of approvals rises to 5.15 percent from 3.82% share of the total applications submitted.

Table 2: Aggregated Mortgage Loan Application[ð] (2009* to 2011)

	Received	Approved	Disbursed	% of total received	% of total approved	% of total disbursed	Approved/ Total Received	Disbursed/ Total Received
African	420,397	93,883	52,087	42.50	35.18	34.09	9.49	5.27
Indian	37,756	13,753	7,841	3.82	5.15	5.13	1.39	0.79
Coloured	86,048	20,022	14,570	8.70	7.50	9.53	2.02	1.47
White	420,683	132,062	74,984	42.53	49.48	49.07	13.35	7.58
Unknown	24,192	7,162	3,327	2.45	2.68	2.18	0.72	0.34
Total	989,076	266,882	152,809	100	100	100	26.98	15.45

[ð] Applications are nominal and not monetary. * 2009 data is from Standard Bank only

Source: FirstRand Bank Limited; Standard Bank of South Africa

In summary, Table 2 shows that credit markets rationing results in about 85 percent of the loan applications being rejected. It also reveals that accessing mortgage loans is a severe challenge to blacks. On the other hand, it can be inferred that there must be some critical factors explaining why blacks, with a national population weighting of 79.5 percent account for 42.5 percent of mortgage loan applications and even less for approved and disbursed loans at 35 percent and 34 percent respectively, (Statistics South Africa, 2011).

On page 12, Table 3 recasts the aggregated mortgage applications for 2009, 2010 and 2011 on a provincial basis. South Africa has nine provinces with Gauteng, where Johannesburg and Pretoria are, being the country's economic hub and the most populous. Gauteng province accounts for just above half the application and approvals countywide. 46 percent of disbursements in the 3 years reviewed were in Gauteng followed by Western Cape and KwaZulu Natal with 17 percent and 12 percent respectively. For social equity purposes, it may be interesting to compare the percentage of total

disbursements for each province to the province's weighting on the national population. The respective two columns are highlighted in Table 3. It must be stated that the limitation of such a comparison is that some provinces like Gauteng and Western Cape are more urban than others. And, for provinces like Eastern Cape, KwaZulu Natal and Limpopo with a large rural population, the notion of home loan mortgages is of remote relevance since home ownership would in most cases be on communal lands. However, making these comparisons is helpful in indicating how access to financial services could explain and address inter-provincial inequalities in South Africa.

Table 3: Aggregated Mortgage Loan Applications[ð] by Province (2009* to 2011)

	% of National Population[ᴴ]	Received	Approved	Declined	Disbursed	% of total received	% of total approved	% of total disbursed	Approved/ total received	Disbursed/ total received
Eastern Cape	13.50	48,151	12,301	29,314	9,583	4.87	4.61	6.25	1.24	0.97
Free State	5.46	32,246	8,693	19,726	5,558	3.26	3.26	3.63	0.88	0.56
Gauteng	22.39	516,934	137,497	333,930	70,760	52.26	51.52	46.17	13.90	7.15
KwaZulu- Natal	21.39	110,399	31,279	67,795	18,471	11.16	11.72	12.05	3.16	1.87
Limpopo	10.98	20,410	5,488	13,376	2,669	2.06	2.06	1.74	0.55	0.27
Mpumalanga	7.23	40,999	12,071	25,300	6,356	4.15	4.52	4.15	1.22	0.64
Northern Cape	2.17	13,953	3,295	8,387	2,198	1.41	1.23	1.43	0.80	0.22
North West	6.43	29,764	7,892	19,341	5,137	3.01	2.96	3.35	0.33	0.52
Western Cape	10.43	138,707	41,915	87,040	25,656	14.02	15.71	16.74	4.24	2.59
Other	-	37,513	6,448	19,108	6,871	3.79	2.42	4.48	0.65	0.69
Total	100	989,076	266,879	623,317	153,259	100	100	100	26.98	15.50

[ð] Application being absolute numbers and not loan values. * 2009 data is from Standard Bank only. [ᴴ] National population estimate was 50,586,757 in mid-2011.

Source: FirstRand Bank Limited; Standard Bank of South Africa Limited, Statistics South Africa

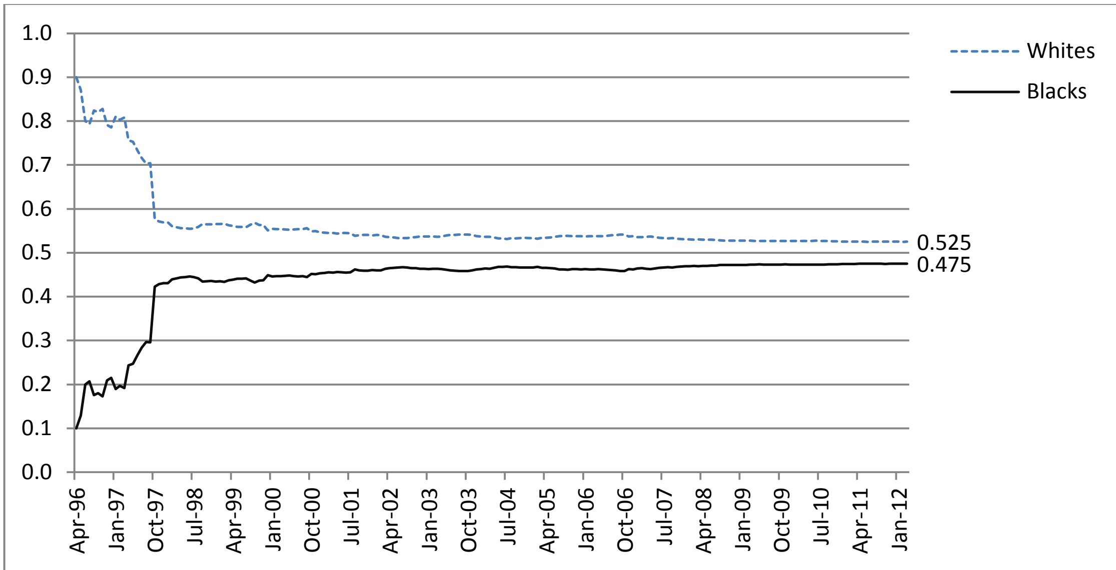
The description above gives a picture of the credit market as it interacts with about one million borrowers over a 3 year period. It shows that in relative terms, blacks are not as forth coming in applying for loans as whites are. It shows that for those blacks that apply, a comparatively lower proportion than whites ultimately get funded. While implications for further investigations into the underlying causes of these differences are discussed in Section 5, what the above also does is to show credit rationing in the banking system and its varying intensities on different groups of borrowers. The description also showed the concentration of credit market transactions in Gauteng resulting in the predominately rural provinces like Eastern Cape, KwaZulu Natal and Limpopo being rather peripheral to the credit markets. Unfortunately, the study was not able to observe the gender dimension as relevant data is not yet part of the disclosure requirements. Nevertheless, it can indeed be concluded that from the picture unveiled in this section, there is merit in having intervention schemes like the Khula Credit Guarantee Scheme in place. In the next section the paper investigates if the intervention addresses the credit market failures. In particular the study intends to find out if KCGS increases flow of capital to small businesses owned by the previously disadvantaged groups.

4.2 Khula Credit Guarantee Scheme and the credit markets

To investigate the extent to which the KCGS addresses credit rationing described in 4.1, the main hypothesis is that KCGS guarantee portfolio as represented by approved guarantee applications and the eventual take-ups will be significantly different from that of the credit market presented earlier in Tables 2 and 3. Furthermore, the expectation is that over the 15 years period to 2012 a progressively increasing ratio of blacks, coloureds and Indians to whites will be financed through the KCGS to reflect the population distribution shown in Table 3. For brevity's sake, blacks, coloureds and Indians are classified as blacks in most of the analyses that follow. The scheme's data enables us to also examine the extent to which the intervention advances the goal of gender equity emphasised in the national policy for small business development.

Figure 1 in page 14 tracks monthly authorisations for the blacks and whites over 15 years monthly. It will be noticed that there was a drastic increase in authorisations to blacks from 1996 pushing up the share of the blacks from 10 percent in April 1996 to 42 percent in October 1997. Thereafter, the trend has been flat.

Figure 1: KCGS - Authorised Guarantees (1996 to 2012) between blacks* and whites

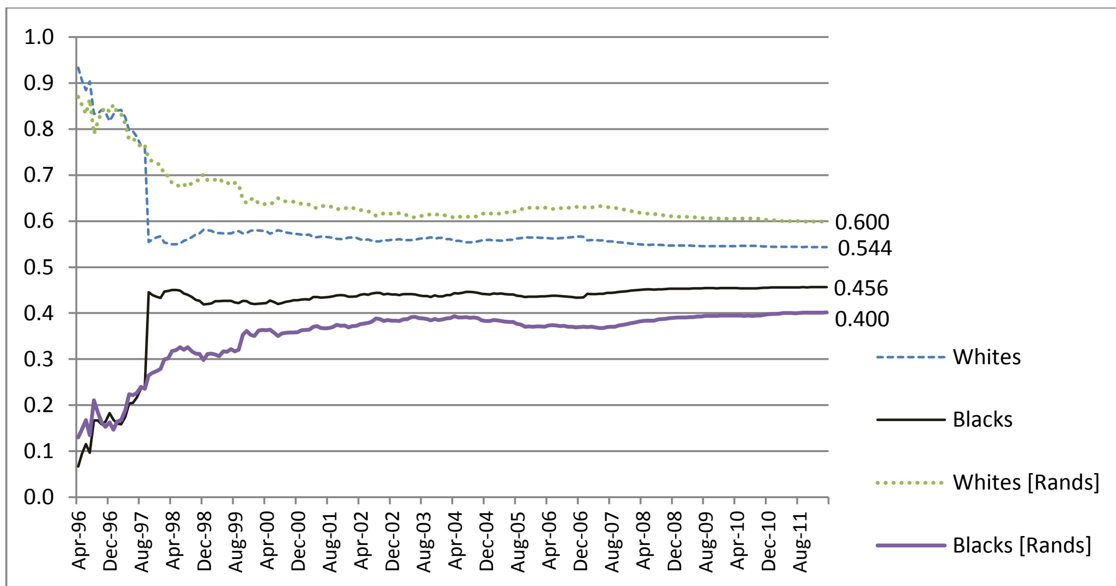


* Blacks includes Coloureds and Indians

Source: Khula Credit Guarantee Fund Limited

Figure 2 is similar to Figure 1 but presents the guarantees taken-up. The proportions of the guaranteed loan values taken-up for whites and blacks are also plotted.

Figure 2: KCGS - Guarantees Taken-up between blacks* and whites



* Blacks includes Coloureds and Indians

Source: Khula Credit Guarantee Fund Limited

In Figure 2, the proportion of guarantees reported to have been taken-up decline for blacks from the approved ratio of 47.5% in Figure 1 to 45.5%. We add on to Figure 2 the respective ratios of guaranteed loan amounts taken-up. It can be seen that the between April 2004 and April 2008 there seemed to be some divergence in the trend more pronounced than when only nominal values were being considered. With the background of the two graphs, it is worth comparing some of these outcomes from KCGS with the credit market approval and disbursements statistics discussed earlier in Table 2 on page 10. In that analysis, 48 percent of the mortgages approved were from blacks. Tracking the 2009, 2010 and 2011 trend, 51 percent of mortgage approvals were to blacks in 2011 up from 46 percent in 2010 and 41 percent in 2009, (see Annexure on page 22 for a trend review of mortgage application processes). It appears KCGS's outcomes are very similar to those from the credit markets it is meant to treat.

Table 4 (on page 16) presents gender analysis of guarantees taken-up along with the provincial distribution of the take-ups. Starting from the outer columns of the Table and in particular with the one entitled 'Province Take-up', it can be seen that Gauteng accounted for 44 percent of the guarantees. It must be remembered that Gauteng accounted for 46 percent of total mortgages disbursements. Three quarters of the guarantees were taken up in Gauteng, KwaZulu Natal and Western Cape provinces as was found in the credit markets analysis. North West, Limpopo, Mpumalanga and Northern Cape collectively account for just above one tenth of guarantees taken-up again similar to the mortgages disbursement results.

At the bottom of the box of Table 4, reading from the first column which shows the proportion of take-ups by black women, it can be seen that 7.35 percent of black women took-up guarantees. This is about a quarter of black men take-up ratio. It can be noted that the take-up for coloured women is also a quarter of coloured males but the same ratio increases to a third for Indians and whites. In total, women took-up 22 percent of the guarantees, three quarters of that going to those in Gauteng, KwaZulu Natal and Western Cape.

Table 4: Gender and Provincial Equity Analysis of KCGS Take-up from 1996 to 2012

	Black Female/ Total Take-up	Coloured Female/ Total Take-up	Indian Female/ Total Take-up	White Female/ Total Take-up	Black Male/ Total Take-up	Coloured Male/Total Take-up	Indian Male/ Total Take-up	White Male/ Total Take-up	Province Take-up
Eastern Cape	0.51	0.12	0.03	0.84	2.16	0.64	0.12	2.79	7.22%
Free State	0.33	0.02	0.00	0.79	1.85	0.13	0.00	2.10	5.22%
Gauteng	4.10	0.35	0.10	5.76	15.59	1.04	0.28	16.81	44.02%
KwaZulu-Natal	1.02	0.10	0.18	2.76	5.68	0.18	0.56	9.16	19.65%
Limpopo	0.40	0.00	0.00	0.41	0.89	0.02	0.00	0.86	2.58%
Mpumalanga	0.36	0.03	0.00	0.51	1.25	0.02	0.03	1.17	3.39%
Northern Cape	0.30	0.02	0.02	0.51	0.96	0.10	0.00	1.55	3.45%
North West	0.08	0.07	0.00	0.20	0.54	0.23	0.02	0.48	1.62%
Western Cape	0.25	0.61	0.03	1.45	1.39	2.87	0.07	6.19	12.86%
	7.35%	1.30%	0.36%	13.24%	30.32%	5.23%	1.07%	41.12%	100%
Summary									
Black Females	9.02%								
White Females	13.24%								
Black Males	36.62%								
White Males	41.12%								
	100%								

Source: Khula Credit Guarantee Fund Limited

From the statistics in the outer columns of Table 4 above, it can be seen that the beneficiaries of the scheme are the Gauteng Province and the men. This is also confirmed by the highlighted results inside the box (15.59 percent for black men and 16.81 percent for white men) which could be interpreted as: *from the 15 years beginning 1996, it can be expected that for every three guarantees issued by Khula one will be to a man in Gauteng.* On the other hand, for all women, that likelihood in Gauteng is one in ten. Aggregating the blacks, coloureds and Indians women into one group, the summary at the bottom of Table 4 shows that the women group has had the least benefits from the intervention accounting for only 9 percent of the guarantees taken-up. It would be implied that the impact of such marginalisation would be severe in the remaining provinces especially North West which has the lowest take-up rate.

In summary, this section has shown that the guarantee scheme's intervention results are very similar to those of the credit markets. Furthermore, the intervention outreach to women has been very minimal with 22 percent of women being guaranteed. This is lower than that of the USAID facility where women account for 35 percent of the issued guarantees from 2009 to mid-2012, (USAID, 2012). The next section discusses the implications of these findings.

5 Study limitations, implications and conclusion

The aim of the paper was to investigate the necessity of a credit guarantee scheme in South Africa and for that to be done the nature of credit market failure had to be first ascertained. Two banks were used to proxy the credit markets and the data of about one million mortgage applications over 2009, 2010, and 2011 was analysed. However, in those three years, the effects of the global financial crisis were being felt. A longer time series for this data and more financial institutions would have given a more holistic picture. However this was not possible because the Home Loans and Mortgages Act disclosures only became effective from July 2007 and some of the major banks are yet to fully comply and publicise that information. It was noted in the discussion that mortgages are remotely relevant in a rural setting raising valid concerns on the universality of a home as collateral, (see DeSoto, 2000). Nevertheless, the paper makes a contribution in showing credit markets failure in South Africa and how an intervention to minimise the resultant credit rationing impact on small businesses has performed in trying to redress that failure.

The paper showed that disproportionately less blacks access finance from the credit markets. On investigating if the Khula Credit Guarantee scheme addresses credit rationing, the paper tracked guarantees authorised and taken-up for the 15 year period to March 2012. It found that although the share of guaranteed blacks improved in the initial two years, the trend has remained largely unchanged with the whites receiving more guarantees. Blacks, however, are less likely to apply for guarantees than whites a pattern that was also observed in mortgage applications to banks. The paper also found that the credit rationing intensity is severe on black women outside the main provinces of Gauteng and Western Cape.

The implication of these findings is that there are other critical constraints faced by blacks that the credit guarantee scheme is not addressing. This extends support those that have argued that access to finance is not the most critical constraint for small business development. It is an argument rarely substantiated by empirical evidence and this study has made some contribution in that regard. Indeed is quite clear in the paper that there must be some underlying factors explaining in the first instance, why blacks are not as forth coming in approaching credit markets as whites. In the secondary, what could be interesting is to investigate why rationing in the credit markets tends to be more severe for black and why the credit guarantee interventions has not had marked effects in addressing the problem. In both instances, further research is imperative. Whereas the literature would suggest that some of these reasons include quality of education, business management skills as well as cultural factors, what is necessary is to determine as much as feasibly possible the relative weights of each of these reasons in South Africa. In that regard, what would be more valuable for policy is for

researchers to explore other methods other than perception surveys by, for example, interrogating the operations of credit markets and training institutions. Evidence from such approaches will enable policy to avoid generic interventions.

The evidence from Khula Credit Guarantee Fund and the banks can also be interpreted as raising doubt on whether an intervention so entrenched in the credit markets as a guarantee scheme can alter their behaviour being also wholly dependent on the same credit market for success. To that end, it is important for research to contrast outcomes of alternative credit guarantee schemes within a context to determine which delivers better. The case for a social enterprise-based model presents interesting options of ensuring that the informational advantage of the guarantor over lenders about small business proprietors is maintained such that the intervention does not replicate the credit market as was seen in the analysis of the Khula Credit Guarantee Fund. Although Thembani International Guarantee Fund indicates the merit of the social enterprise model (see Katzin and Rosenbloom, 2011), it remains to be investigated how such models can be scaled-up in terms of volume of guarantee business and profile of the guaranteed enterprises to target not only micro but small businesses of between five and fifty employees.

In conclusion, it is important to reiterate that before definitive conclusions are drawn on the success or failure of interventions like the Khula Credit Guarantee Scheme, there is need to know and understand the underlying factors that could explain why some groups targeted by the intervention are not forth coming in approaching credit market in the first place. This also calls for research to explore alternative ways of integrating nonfinancial interventions within mechanisms such as credit guarantee schemes to pick up some of these indistinct underlying factors.

References

Ayyagari, M., Beck, T. and Demirguc-Kunt, A. (2007): Small and Medium Enterprises across the globe, *Small Business Economics, December 2007, 29(4), 415-434.*

Beck, T. and Demirguc-Kunt, A. 2006: Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint, *Journal of Banking and Finance, 30 (11), 2931-2943*

Beck, T., Klapper L.F., and Mendoza, J.C., (2008): The Typology of Partial Credit Guarantee Funds around the World, *Policy Research Working Paper 4771*, The World Bank, Washington D.C.

Besanko, D. and A. Thakor (1987): Collateral and Credit Rationing: Sorting Equillibria in Monopolistic and Competitive Credit Markets, International *Economic Review 28(6) 671-689*

Bester, H. (1985): Screening vs. Rationing in Credit Markets with Imperfect Information, American *Economic Review 75(5), 850-855*

Bradshaw, T.K. (2002): The contribution of small business loan guarantees to economic development, *Economic Development Quarterly 16 (4), 360-369*

Cowling, M. and Clay, N. (1994): Factors influencing take-up rates on the loan guarantee scheme, *Small Business Economics 7: 141-152*

Cowling, M. and Mitchell, P. (2003): Is the Small Firms Loan Guarantee Scheme Hazardous for Banks or Helpful to Small Business? *Small Business Economics, Vol. 21(1), 63-71*

DeSoto, H. (2000). The mystery of capital: Why capitalism triumphs in the west and fails everywhere else, New York: Basic Books

Department of Trade and Industry (South Africa), 2008: Annual review of small business in South Africa, 2005 – 2007, Department of Trade and Industry, South Africa

FirstRand Bank Limited Annual Report 2011

FirstRand Bank Limited Annual Report 2010

Finscope (2010): Finscope South Africa Small Business Survey 2010, FinMark Trust South Africa

Freedman, P.L. (2004): *Designing loan guarantee schemes to spur growth in developing countries*, US Agency for International Development, Washington D.C.

G20-IFC, 2010: *Scaling-Up SME Access to Financial Services in the Developing World, Report by the SME sub-group of the G20 Financial Inclusion Experts Group*, International Finance Corporation

Green, A. (2003): Credit Guarantee Schemes for Small Enterprises: An Effective Instrument to Promote Private Sector-Led Growth? *Working Paper No. 10*, UNIDO

AFD and Dalberg Global Development Advisors (2012): Assessing Credit Guarantee Schemes for SME Finance in Africa Evidence from Ghana, Kenya, South Africa and Tanzania, *Working Paper 123,* Agence Française de Développement, Paris

Hayes, G. (1996): Credit Access for High-Risk Borrowers in Financially Concentrated Markets: Do SBA Loan Guarantees Help? *Small Business Economics, 8(6), 449-461*

Honohan, P. (2008): Partial Credit Guarantees: Principles and Practice, *Journal of Financial Stability 6 (1), 1-9*

Honohan, P. (2008): Partial Credit Guarantees: Principles and Practices, *Paper for Conference on Partial Credit Guarantees,* Washington DC, March 13-14, 2008

Hoogeveen, J.G. and Osler, B. (2005): Not separate, not equal: poverty and inequality in post-apartheid South Africa, *William Davidson Institute Working Paper Number 739*, University of Michigan Business School

Jackson III, W.E., Alessandri, T.M. and Black, S.S. (2005): The price of Corporate Social Responsibility: the case of Black Economic Empowerment transactions in South Africa, *Federal Bank of Atlanta Working Paper Series 2005-29*

Katzin, D. and Rosenbloom (2011): Unlocking local capital development: Shared Interest's Guarantee Fund for South Africa, *Community Development International Review 7 (1) 42-57,* Federal Reserve Bank of San Francisco

Kropp, R. (2012): Shared Interest to Reach More Low-Income South Africans, www.socialfunds.com/news/article.cgi?sfArticleId=3506 accessed on 28 June 2012

La Porta, R. and Shleifer, A. (2011): The unofficial economy in Africa, *NBER Working Paper Series W16821*, National Bureau of Economic Research, Cambridge M.A.

Levitsky, J. (1997): Credit guarantee schemes for SMEs – an international review", *Small Enterprise Development 8 (2), June, 4-17*

Levitsky, J. (1993): Credit Guarantee Funds and Mutual Guarantee Systems", *Small Enterprise Development 4 (2), June, 4-15*

Maphenduka, E, (2010): Incremental housing finance: Perspective of Thembani International Guarantee Fund, www.rhlf.co.za/file-directory/2010/RHLF-TIGF%202010.ppt accessed 7 July 2012

Marais, H. (2011): *South Africa pushed to the limit – the political economy of change*, UCT Press, South Africa

McGrath, D. (2005): Skills for productive citizenship for all': the place of skills development for micro and small enterprises in South Africa, *Journal of Education and Work, Vol. 18, No. 1, March 2005, pp. 111–125*

McKenzie, D. (2005): Impact assessment in finance and private sector development: what have we learned and what should we learn? *Policy Research Working Paper 4944*, World Bank

Nichter, S. and Goldmark, L. (2009): Small firm growth in developing countries, *World Development Vol. 37, No. 9, 1453–1464*

Nigrini, M. and Schoombee, A. (2002): Credit guarantee schemes as an instrument to promote access to finance for small and medium enterprises: an analysis of Khula Enterprise Finance Ltd's individual credit guarantee scheme, *Development Southern Africa 19 (5), 735-751*

NURCHA Annual Reports: (2010), http://www.nurcha.co.za/annual-review/annual-reports.html accessed on 7 July 2012

Panetta, I.C. (2012): An analysis of Credit Guarantee Schemes: Suggestion provided by literature, *In Leone, P. and Vento, GA (ed.): Credit Guarantee Institutions and SME Finance*, Palgrave MacMillan, New York

Riding, A., and G. Haines (2001): Loan Guarantees: Cost of Default and Benefits to Small Firms. Journal of Business Venturing, 16(6): 565-612

Riding, A., Madill, J. and Haines, G. (2006): Incrementality of SME Loan Guarantees, *Small Business Economics 29, 47-71*

Rogerson, C.M. (2008): Tracking SME development in South Africa: issues of finance, training and regulatory environment, *Urban Forum Vol. 19, 61-81*

Rogerson, C.M. (2004): The impact of the South African government's SMME programmes: a ten-year review (1994 – 2003), *Development Southern Africa, 21 (5), 765-784*

SEDA, (2009): Xhariep SMME Development and Support Plan, *Small Enterprise Development Agency*, Department of Trade and Industry, South Africa

Shared Interest Notes Prospectus, 2011, accessed 7 July 2012: https://www.microplace.com/shared/prospectus/shared_interest_2011-04-18. pdf

Standard Bank of South Africa Annual Report (2011)

Standard Bank of South Africa Annual Report (2010)

Standard Bank of South Africa Annual Report (2009)

Steel, W.F. (1994): Changing the institutional and policy environment for small enterprise development in Africa, *Small Enterprise Development, Vol. 15, 4-9,*

Stiglitz, J.E. (1991): Government, Financial Markets and Economic Development, *NBER Working Paper Series Number 3669*, National Bureau of Economic Research, Cambridge M.A.

Stiglitz, J.E. and Weiss, L. (1981): Credit Rationing in Markets with Imperfect Information', *American Economic Review 71(3), 393-410*

The New Growth Path (2011), South Africa Department of Economic Planning, http://www.economic.gov.za/communications/publications/151-the-new-growth-path-framework

Urban, B. (2008): Social entrepreneurship in South Africa: delineating the construct with associated skills, *International Journal of Entrepreneurial Behaviour and Research 14 (5), 1355-364*

USAID, (2011): Evaluation of the Financial Sector Program, *Mid-Term Evaluations of the South Africa International Business Linkages (SAIBL) and Financial Sector Program (FSP),* USAID, Washington D.C.

USAID (2012): Where USAID Unlocks Lending Around the World, http://storymaps.esri.com/stories/usaidcredit/?utm_source=July+2012+Newsletter&utm_campaign=July+Newsletter&utm_medium=socialshare accessed 7 July 2012

Vogel, R. and D. Adams (1997): Costs and Benefits of Loan Guarantee Programs, *The Financier 4(1&2), 22-29*

White Paper (1995): National Strategy for the Development and Promotion of Small Business in South Africa, Department of Trade and Industry, South Africa, http://www.thedti.gov.za/sme_development/docs/White_paper.pdf accessed 9 July 2012

World Bank, (2011): South Africa Economic Update: Focus on savings, investment and economic growth, *Africa Region Poverty Reduction and Economic Management, Issue 1*, The World Bank, Washington D.C.

World Bank, (2007): South Africa - Enhancing the effectiveness of government in promoting micro, small and medium enterprise, *Report No. 38627-ZA, Private Sector and Finance Africa Region*, The World Bank, Washington D.C.

Annexure

Table 5: Trend Review of Mortgage Applications and Disbursements - 2009* to 2011

		Received	Approved	Declined	Disbursed	% of total received	% of total approved	% of total disbursed	Approved/ Total Received	Disbursed/ Total received
2011	Black	203,748	52,911	132,076	25,656	44.30	37.90	37.95	11.50	5.58
	Indian	17,194	7,104	9,593	3,367	3.74	5.09	4.98	1.54	0.73
	Coloured	39,667	10,727	23,985	6,854	8.62	7.68	10.14	2.33	1.49
	White	188,318	65,123	105,229	30,442	40.94	46.64	45.03	14.16	6.62
	Unknown	11,043	3,755	4,504	1,290	2.40	2.69	1.91	0.82	0.28
	Total	459,970	139,620	275,387	67,609	100	100	100	30.35	14.70
2010	Black	178,583	31,912	126,718	20,634	41.84	34.11	32.20	7.48	4.83
	Indian	14,724	4,183	10,027	2,741	3.45	4.47	4.28	0.98	0.64
	Coloured	38,048	7,017	25,024	5,953	8.91	7.50	9.29	1.64	1.39
	White	182,536	47,116	111,421	32,908	42.76	50.36	51.36	11.04	7.71
	Unknown	12,982	3,337	6,204	1,837	3.04	3.57	2.87	0.78	0.43
	Total	426,873	93,565	279,394	64,073	100	100	100	21.92	15.01
2009*	Black	38,066	9,060	29,006	5,797	37.23	26.89	27.44	8.86	5.67
	Indian	5,838	2,466	3,372	1,733	5.71	7.32	8.20	2.41	1.70
	Coloured	8,333	2,278	6,055	1,763	8.15	6.76	8.34	2.23	1.72
	White	49,829	19,823	30,006	11,634	48.74	58.83	55.07	19.39	11.38
	Unknown	167	70	97	200	0.16	0.21	0.95	0.07	0.20
	Total	102,233	33,697	68,536	21,127	100	100	100	32.96	20.67

*2009 data is for Standard Bank only

Source: FirstRand Bank Limited; Standard Bank of South Africa Limited