RURAL CREDIT MARKETS IN SOUTH AFRICA: A REVIEW OF THEORY AND EMPIRICAL EVIDENCE

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Abstract

The demand for and supply of financial services in general and credit instruments in particular by rural South Africa still remains a confounding problem. The aim of this paper is to determine the status of rural credit markets in South Africa by reviewing theory and evidence from empirical studies. It is observed that financial markets in South Africa are fragmented between formal and informal markets. Formal financial markets generally serve urban and peri-urban areas with a thin distribution of services to people living in rural areas. Rather, informal financial institutions such as savings clubs (*stockvels*), co-operatives, moneylenders (*mashonisas*) and village banks are the more dominant providers of financial services. Commercial banks and other formal financial institutions cite high operating costs such as information gathering, monitoring and enforcement as some of the reasons for limited participation in rural financial markets. Such attitudes have been observed to retard entrepreneurial innovation and growth among small to medium size enterprises and smallholder farmers. Results of this analysis have policy implications in the areas of reduction of unemployment, poverty and sustainable economic growth in South Africa. Policies directed at increasing financial intermediation via formal financial institutions are recommended.

Keywords: Rural Credit Markets, Agriculture, South Africa

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1 Introduction

In developing economies, a large share of the population typically depends, for its livelihood on the informal economy. Most of their income comes from subsistence farming or from operating small unincorporated enterprises (Blades, Ferreira and Lugo, 2011:S1). Access to financial services has been recognised as an important element of development, and more emphasis is being given to extending financial services to low- income households (Claessens, 2006:234; Hinson, 2011:320). The search for an explanation of an optimal structure of rural financial markets in developing countries has for decades been elusive. Rural financial markets in developing countries can be categorised into formal and informal sectors (Spio and Groenewald,

1997:121). The formal sector consists of banks, credit cooperatives and public sector organisations which act as intermediaries between borrowers and savers or borrowers and government. Included in the category of institutional providers of financial services are public and private firms, regulated and unregulated firms, those primarily providing short-term debt capital and those providing equity capital. In the informal sector, private individuals provide credit largely out of their own funds. Hoff and Stiglitz (1992) and Spio and Groenewald (1997:121) opine that the informal sector has three facets:

- 1. commercial money lending by farmers, traders, pawnbrokers, salaried employees or professional moneylenders;
- 2. arrangements between friends, relatives, and neighbours, often at zero interest rates and
- 3. the availability of self-help organisations, such as rotating savings and credit associations.

There exist several useful previous studies covering important aspects of the now vast literature on rural financial markets and household consumption behaviour in the face of risk and uncertainty. Previous works which guide this study include Adams and Vogel (1986), Braverman and Guasch (1986), Qureshi et al. (1996), Spio and Groenewald (1997), Moyo and Coetzee (2002-05) and Conning and Udry (2005). The DGRV South Africa Working Paper Series 1 (2000) was also consulted extensively.

While considerable overlap with these previous studies is unavoidable, an attempt to differentiate this paper has been made by focusing in depth on the financial intermediary role of the nonbank financial institutions in South Africa and how they attempt to bridge the void created by the formal financial institutions' lack of risk appetite for the rural and marginalised population. Specifically, the paper examines how formal rural financial institutions such as Non-Governmental Organisations (NGOs), credit unions, commercial banks and informal financial intermediaries such as *mashonisas* (moneylenders), *stockvels* (savings clubs) and societies mobilise savings

and extend credit to the rural poor for investment purposes and sustainable development under conditions of risk and uncertainty. As the majority of South Africans live and work on the farms, emphasis is placed on the activities of rural financial institutions in the agricultural sector. In the process, the paper also attempts to answer the question "what are the determinants of the extent and efficacy of the financial instruments available to the rural economy?"

The main purpose of this paper is to present an analysis of rural financial markets in developing countries in general and South Africa in particular. It gives attention to the role of financial markets in the development process and formal and informal financial markets. The paper discusses literature on the theory of rural finance, providing evidence on the challenges facing the rural population in general and the smallholder farmers in particular in accessing credit from formal financial markets, especially commercial banks. The main reason often given by banks for not lending to agriculture is high default risk, uncertainty and risk inherent in agricultural production and marketing (Owusu-Antwi and Antwi, 2010:46). Other reasons cited are the high cost of lending to small farmers, lack of collateral, the low rate of interest on agricultural loans, and the long-term nature of agricultural loans which is not compatible with bank lending, particularly in situations of high risk. negligible number of rural borrowers obtain credit from institutional sources. This paper therefore argues that South Africa's credit institutions are not helping the country accelerate sustainable agricultural growth and reduce poverty. Policies and strategies to improve performance in the rural economy and efficiency in financial institutions still remain a challenge and need to be expedited.

This paper proceeds as follows: Section 2 describes the characteristics of rural financial markets. Section 3 discusses the theory of rural credit markets. Section 4 presents the challenges in rural credit markets. Section 5 presents the organisation of the rural credit markets in South Africa. Section 6 presents an overview of the supply of financial services in South Africa. Section 7 concludes the paper and presents policy recommendations.

2 Characteristics of rural credit markets

2.1 Rural credit markets are fragmented

Rural credit markets have often times been described as *fragmented*. Different segments of borrowers are observed to be systematically sorted across different loan types and lending intermediaries. This distribution is based on the characteristics of the borrowers, the lenders and the activities financed and other variables in trading environment (McKinnon, 1973:5). Conning and Udry (2005:7) extend the description of fragmented rural credit markets as follows:

"Through a combination of limited access and choice, firms in the same market end up using financial instruments that can substantially differ as to interest

rate charges, the type and quantity of collateral required on loans, resources spent on monitoring and enforcing contract terms, and whether or not credit is tied to transactions on other markets. In some markets would-be borrowers may find themselves excluded or dissuaded from obtaining access to certain credit instruments, or rationed to smaller loans than they might have optimally chosen, by collateral requirements and other non-price terms. They may then adjust by turning to substitute, but possibly more expensive financing sources or may modify their first best allocation plans in other ways."

Empirical evidence shows that there is great variability in the interest rate charged by lenders for superficially similar loan transactions within the same economy. In Nepal, Yadav et al. (1992:434) observed that two factors cause segmentation in the rural financial markets. First, regulated interest rates in the formal sector lead to credit rationing that favours farm households with collateral. Borrowers without collateral are excluded and therefore have to resort to the informal credit market. In addition, these loans are characterised by wide interest rate spreads between borrowing and deposit rates in many financial markets in developing economies. Second, the problem of information asymmetry in the rural financial market is less pronounced in the informal than the formal credit market. Thus, given the differential informational structure, the formal sector tends to specialise in the provision of production loans, whereas the informal sector plays the major role in the provision of consumption loans.

There is also strong and growing evidence that many enterprises, particularly rural enterprises, have very high rates of return to capital that may persist over time for some enterprises because of the highly fragmented nature of financial markets. The following questions by Conning and Udry (2005:9) remain unanswered and pose a challenge to provide a framework to make sense of these striking features of rural financial markets.

- Why are there such high rates of return to capital for at least many borrowers?
- How do large spreads persist between deposit and borrowing rates?
- Why is there such a diversity of contract forms and intermediary structures?
- How are different households and firms matched to each, and
- Why do such highly variable interest rates persist in equilibrium across borrowers?

Moneylenders and financial intermediaries in the rural economy include most importantly input suppliers, rural product traders (including agro-industry exporting firms), and banks. They often invest heavily in screening and monitoring their clients, and may also intervene to significantly shape their clients' choice of technology and other production decisions. Writing in the early 20th century, British colonial officer Sir Malcolm Darling (1925) in Conning and Udry (2005:10) commented on the rural moneylender of Punjab:

"He is always accessible, even at night; dispenses with troublesome formalities, asks no inconvenient questions, advances promptly, and if interest is paid, does not press for repayment of principal. He keeps in close personal touch with his clients, and in many villages shares their occasion of weal or woe. With his intimate knowledge of those around him he is able, without serious risk, to finance those who would otherwise get no loan at all."

Marcoul and Veyssiere (2010:1051) showed that traders and contract farming firms typically contract to market or process a farmer's harvest in exchange for credit and often other services like technical assistance and farm input sales. An important characteristic of this form of lending is that the loan contract often involves much less collateral than would a similar bank loan, and at times, no collateral other than a crop pledge. Traders and contract farming firms are also often able to better value some of the items a farmer might provide as collateral. A trader for instance will be much more willing to accept a farmer's crop as collateral than a bank.

2.2 Government intervention

Rural financial markets have experienced government intervention since the times of Babylon and Mesopotamia (Conning and Udry, 2005:11). Interventions ranged from regulating the operation of credit for farmers and merchants, "including caps that limited interest rates to 33 and one third percent on loans of grain and regulations that limited what could be collected on agricultural debts in the event of drought or certain other natural disasters" (Goetzmann,

1996). An earlier study by Bhatt (1989:16) revealed that public or government intervention is essential to promote and develop a sound credit system. Bhatt (1989:16) argues further that the public agency that must perform this function is the central bank, which has to act as a leader, promoter, coordinator, and regulator of the entire financial system. However, there are mixed views on the role of government in facilitating access to finance, particularly by the poor. Claessens (2006:207) argues that government interventions to directly broaden access to finance are "costly and fraught with risks, among others the risk of missing the targeted groups."

Contrary to assertions by Claessens (2006:207) on the negative effects of government intervention in the rural agricultural credit markets, Swinnen and Gow (1999:34) using evidence from Central and Eastern European Countries (CEECs), see government intervention as necessary. They argue that governments often intervene in agricultural credit markets by providing guarantees to banks for loans, by setting up credit institutions specific to agriculture and by subsidising credit to agricultural producers. Also in CEECs, governments have intervened by providing interest rate subsidies on specific forms of short-term credit and by providing government guarantees for long-term machinery and capital investments to overcome the collateral problem.

The characteristics of rural credit markets were more succinctly elaborated by Braverman and Guasch (1986:1255) and are presented as Table 1 below.

Table 1. Characteristics of rural financial markets

Basic flaws

Weakness of competitive forces.

Weak legal enforcement of contracts.

Corruption and lack of accountability in institutions, patronage and income transfer practices, which are partly due to poorly designed or non-existent incentive mechanisms to induce accountability on both sides of the market.

Significant information problems and uncertainty regarding the ability of borrowers to meet future loan obligations.

Inability to monitor the use of funds.

Lack of collateral often due to land tenure arrangements or ill-defined property rights (e.g. parts of Africa).

Lack of coherent financial savings mobilisation program.

Higher opportunity cost of capital in other sectors because of interest rate ceilings.

Persistent problems

Credit loans to wealthy farmers, small farmers rationed out of the credit market.

Loans for agricultural programs diverted to non-agricultural uses.

Credit policies that encourage consumption and discourage savings.

The term structure of agricultural loans contracts or fails to expand.

Low adoption rates of cost-saving technologies in agriculture and in financial services.

Low recovery rate.

Significant distortions in the optimal allocation of resources across markets.

Extensive use of interlinking credit contracts with labour and land contracts.

Adapted from: Braverman and Guasch (1986:1255)

Hoff and Stiglitz (1990:236) extended the list of the characteristics of rural credit markets which are at least as important and equally puzzling as high interest rates. The additional features are, inter alia:



- The formal and informal sectors coexist, despite the fact that formal interest rates are substantially below those charged in the informal sector.
- Interest rates may not equilibrate credit supply and demand: there may be credit rationing, and in periods of bad harvests, lending may be unavailable at any price.
- Credit markets are segmented. Interest rates of lenders in different areas vary by more than plausibly can be accounted for by differences in the likelihood of default; and local events a failure of a harvest in one area seem to have significant impacts on the availability of credit in local markets.
- There is a limited number of commercial lenders in the informal sector, despite the high rates charged.
- In the informal sector interlinkages between credit transactions and transactions in other markets are common.
- Formal lenders tend to specialise in areas where farmers have land title.

2.3 International perspectives in rural credit markets

This section presents cross-country evidence of lending practices in rural areas. Today some leading developing countries internationally have created financial mechanisms and systems that serve the increasing number of poor people. For instance in Bangladesh, the leading case of the Grameen Bank's group lending approach has been a success story adapted by other countries such as Kenya, Indonesia and Ghana (Mashigo, 2010:10). The same approach is also followed by BancoSol of Bolivia (Van Tassel, 1999:4).

The group lending approach was first practised by informal financial institutions that gave credit to groups of poor people. One of the most distinguishing features of group loan contracts is the aspect of joint liability (Van Tassel, 1999:3). Joint liability makes each group member mutually liable for the whole group's unpaid credit obligations. Under these terms, each group member is held in default unless all loan repayments are met. Van Tassel (1999:23) demonstrated that under certain conditions, joint liability may be utilised as part of a screening mechanism to assist a credit provider differentiate heterogeneous borrowers. Van Tassel (1999:23) also showed that: (i) agents will always form groups with agents of the same type; (ii) agent types can be distinguished according to the rate at which they are willing to trade increased (joint) liability commitments for lower interest rates. It was also shown that joint liability contracts offer a means of screening borrowers, not through reliance on collateral or credit history, but on the information endowments held among the borrowers themselves. Under the group lending scheme, borrowers have better information on each other's risks than does the lender.

With one of the largest and fastest growing economies in the world, China provides many puzzles. For instance, China has been singled out as a counterexample to the large stock of empirical evidence linking finance and growth. Allen et al. (2005:57)

argues that neither its legal nor financial system is well developed, yet it has one of the fastest growing economies. The informal financial sector in China, also referred to as the non-standard financial sector, consists of nondelegated monitors such as pawnbrokers and moneylenders, as well as delegated lenders such as private money houses and informal banks that operate without state charters and are explicitly banned by the People's Bank of China (Ayyagari et al., 2010:3054). The delegated informal lending institutions are illegal, although the enforcement of the law banning them by central and local government agencies is uneven and inconsistent over time. The size of the informal financial sector is estimated to be at least one- quarter of all financial transactions (Tsai, 2004).

Informal lending institutions in China take various forms. Interpersonal lending (minjian jiedai) based on personal credit and reputation and trade credit (hangye xinyong) are largely legal and very commonly used among entrepreneurs (Ayyagari et al., 2010:3054). Another form of informal financing is the pawnshop. Pawnshops are legal in some areas and illegal in others and as of 2000 were classified as a special kind of industrial and commercial enterprise regulated by the State Economic and Trade Commission. Rotating credit associations or hui (hui means community or association or club) are organised by individuals, and while they are tolerated by the state in some provinces, they are shut down in other provinces and do not have access to formal legal channels (Tsai 2004). There are also private money houses and underground lending organisations that function like banks but charge very high interest rates above the state-mandated interest rate ceilings and are therefore not ratified by the People's Bank of China (Tsai, 2002).

What is evident from literature is that entrepreneurs in China are credit constrained (Lu, 2010:225; Ayyagari et al., 2010:3048). With the paucity of formal bank credit, access to the informal market is usually based on networking through common friends, and the cost of accessing informal credit varies depending on the structure of local social network. The informal lenders rely on trust and reputation or coercion and violence for repayment of the loans and very often do not require collateral or guarantees. The informal lenders that require collateral are more lenient than banks in the types of collateral that they require, including oxen or personal assets such as motorcycles (Tsai, 2002), and are willing to renegotiate loan terms and contracts. Where credit is granted, the enforcement mechanism of the informal institutions is not through the legal system or through government connections but through informal means, including violence as in the case of the illegal private money houses (Ayyagari et al., 2010:3055).

3 Theory of rural credit market

Hoff and Stiglitz (1996) proposed three theories of rural credit markets. The first theory hypothesises that village moneylenders in the informal market are monopolists, charging the highest interest rate possible

so as to maximise profits. Secondly, it is hypothesised that the rural credit market is almost perfectly competitive with market clearing equilibrium, where high interest rates indicate high risk of borrowers. The third school of thought, the imperfect information theory, suggests that the informal credit market is characterised by uncertainty, high transaction costs, and information asymmetry, which typically leads to moral hazard and adverse selection.

Rauchhaus (2009:871) observes that whereas moral hazards occur when an insured party has an opportunity to take hidden action once a contract is in effect, adverse selection is the result of asymmetric information prior to entering into a contract. Failing to distinguish between these two types of principal-agent problems may lead to policy advice that is irrelevant or potentially harmful. To eliminate the adverse effects of asymmetric information, credit providers employ indirect (passive) or direct (active) screening mechanisms to determine the quality (risk level) of borrowers. In the case of indirect screening, the interest rate may play a dual role. First, the interest rate may be used for pricing purposes and secondly as an indirect screening instrument. Indirect screening, therefore, often leads to credit rationing.

4 Challenges in rural credit markets

Common problems in rural financial markets have been identified in previous studies and categorised as the screening problem, the incentive problem and the enforcement problem (Owusu-Antwi and Antwi, 2010:47).

4.1 The screening problem

The screening problem entails assessing the risk of the borrower, which may vary considerably. With information asymmetry, comes adverse selection. Information asymmetry is typically evident when two parties enter a contract. One of the parties may have information that would – if it were known to the other party – change the nature of the contract (Long, 1994 in Owusu-Antwi and Antwi, 2010:47). In this view, Hoff and Stiglitz (1990:237) posit that borrowers differ in the likelihood that they will default, and it is costly to determine the magnitude of that risk for each borrower.

4.2 The incentive problem

It is costly to ensure that borrowers take those actions which make repayment most likely. This is the incentive problem (Hoff and Stiglitz, 1990:237). The problem of borrowers' incentives is often referred to as moral hazard, a phenomenon that emanates from incomplete information (Owusu-Antwi and Antwi, 2010:47). This means that after a contract has been concluded between a lender and a borrower, one party to the contract, usually the borrower may act in a way prejudicial to the lender. For example, after receiving a loan for a specific project or purpose, the borrower might divert the funds to a more risky project without

the knowledge or consent of the lender. In some instances the borrower may have no incentive to make the project successful as he has no equity invested in it. To curb this behaviour, lenders usually offer incentives for the completion of the project or through up-stepping monitoring efforts. This way, the lender quickly gets to know any changes in the planned project.

4.3 The enforcement problem

It is difficult to compel repayment. This is referred to as the enforcement problem (Hoff and Stiglitz, 1990:237). It is argued that central to the difference between rural credit markets in developing countries and credit markets in other parts of the globe is the issue of enforcing loan repayment (Besley, 1994:32). The enforcement problem is defined by Besley (1994:33) as "a situation in which the borrower is able but unwilling to repay." Two broad types of enforcement are discussed in this section. First, the lender must attempt to enforce repayment after a default has occurred (Besley, 1994:33). To derive maximum benefit from the enforcement, the lender ought to conduct a costbenefit analysis first. In this way, the lender will determine whether the benefit of enforcement exceeds the cost. Examples of costs involved in the enforcement process include liquidation of collateral which entails seizing assets pledged by the borrower as security and selling them. However, seizing of collateral may not be the only cost involved in the enforcement process. It is sometimes argued that rich farmers who default on payments are not penalised because the political costs are too high (Khan, 1979:474, Rajan and Ramcharan, 2011:1896). This lack of sanctions weakens incentives for borrowers to invest in good projects and strengthens those rent seeking.

Second, the enforcement problem is worsened by the poor development of property rights. Both developed and developing countries use collateral to back-up credit agreements. However, in developing countries, the ability to foreclose on many assets is far from straightforward (Besley, 1994:33). For example, so much controversy surrounds the foreclosure of land, which as a fixed asset, might be thought of as an ideal candidate to serve as collateral. In many countries property rights to land are poorly codified, which severely restricts its usefulness as collateral. Besley (1994:33) also observes that it is the challenges encountered during enforcement which also help to clarify the widespread use of informal financial arrangements in developing countries. Such informal arrangements tend to replace conventional arrangements such as physical collateral.

5 Organisation of the rural credit markets in South Africa

Access to financial services is an important contributor to enterprise productivity. As reported by Coetzee (2011:1), little is known about the demand for, the supply of and effective access to rural and agricultural

finance and about the policies, institutions and many other factors that determine them in South Africa.

5.1 Who are the clients of rural financial services providers?

The Strauss Commission (1996b) identified women farm workers, male farm workers, the landless, unemployed rural poor, pensioners, smallholder farmers, contract farmers, rural business women, businessmen/small scale employers and large scale rural employers (including commercial farmers) as the large pool of potential clients for the different types of financial service providers. The classification of potential rural clients by the Strauss Commission (1996b) shows the source of income and/or gender as the most important differentiating variables. Each subgroup would have a unique demand for types of financial services. This serves as a suitable point of departure when estimating demand for the financial services and the type of services to provide.

5.2 The state of retail finance in South Africa's rural areas

After identifying the consumers of rural financial services, what is left is to describe the coverage of rural areas by financial institutions. Table 2 below presents observations made by the Strauss Commission (1996b)

summarising available information. According to the Strauss Commission, an analysis of the institutions in Table 2 and their clients yields the following observations:

- More rural clients have access to savings transmission facilities than to credit facilities. However, the transaction costs per client to use these facilities are quite high.
- Rural entrepreneurs have only limited access to formal loan facilities. Empirical evidence provided by Chisasa and Makina (2012:779) helps to demonstrate the low supply of credit to smallholder farmers which remained a small proportion of the total domestic private sector credit (see Figure 1 below).
- The majority of the services indicated by providers in rural areas are offered in the larger towns in than rural areas. Rural dwellers therefore have to travel distances and incur a range of costs to access these services.

Commenting on the survey results which are presented in Table 2, Coetzee (2002; 2005) argues that "the market is not playing its role as we do not see formal commercial bank activities covering all the rural areas and it seems as if the trends are against rural areas." It is also observed that successful private sector smaller financial retailers tend to concentrate in the urban areas.

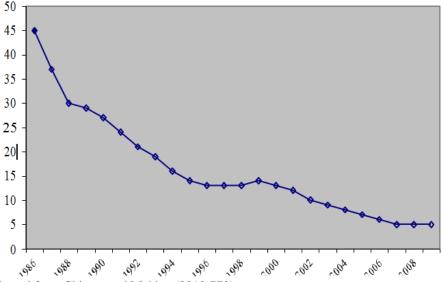


Figure 1. Ratio of smallholder credit to total domestic private sector credit

Source: Adapted from Chisasa and Makina (2012:778)

As the focus of this paper is on the financing of agriculture, the next section will be dedicated to a

review of both institutional and non-institutional sources of smallholder finance in South Africa.

Table 2. Summary of formal retail institutions and exposure to rural areas (and the agricultural sector) in South Africa (estimates dated between 1995 and 1997)

Retail	Amount(Rmillion)		Number of	Rural coverage [*] in % of			
institutions			branches			clients	
			and			reached/contracts	
	Loans	Savings	agencies	branches	clients	Loans	Savings
	outstanding	mobilised					
Land Bank	5 799	84	25	90+	90+	30 000	?
Agric. Credit	1 331?	-	1	-	90+?	14 000	-
Board							
Provincial	196	458	70	50+	70+	35 000	720 000
parastatals							
Post Office	-	1 100	2 3 6 5	?	60+	-	2 400 000
outlets							
NGOs	8	?	17	?	35	10 240	?
Village Banks	-	1	3+	100	100	-	871+
Co-operatives	4 404	?	1 200	80+	60+	100 000+	?
Commercial	7 909+	?	4 055	33	?	?	?
banks							
Retail stores	1 500+	-	?	?	?	?	?
TEBA Cash	1	?	172	40	?	?	?
FAF	24	45	20	100	100	17 000	33 000
Private (to	3 164+	?	-	-	?	?	?
agriculture)							
Small loans	10 100	-	20 500	20?	20?	6 150	-
industry						000	
Informal sector	?	?	?	?	?	?	?

^{*}Broad definition of rural areas as non-metropolitan areas.

Source: Coetzee (not dated)

6 Overview of the supply of financial services in rural South Africa

It is estimated that the majority of the rural population still has no access to formal financial services. Previous studies have indicated a decline of commercial bank branches in rural areas (Moyo and Coetzee, 2002; 2005). The specific circumstances of smallholder farmers with respect to support services and specific financial support services are also believed to be deteriorating (Chisasa and Makina, 2012). Formal sources of finance for smallholder farmers in South Africa can be categorised as public and private sector sources. Public sector institutions include the Land Bank, provincial parastatals and the Post Office Savings Bank. Private sector sources consist of nongovernmental organisations (NGOs), village banks,

credit unions, co-operatives, commercial banks, retail stores, TEBA Cash, private sector agricultural firms, the registered small loans industry, short-term cash lenders, medium-term cash lenders, term lenders, housing lenders and pawn lenders. Informal sources include *mashonisas*, stockvels and burial societies. Each of these institutions is described in detail below.

6.1 Public sector institutions

6.1.1 Land Bank

The Land Bank together with the now defunct Agricultural Credit Board was established to service the credit needs of commercial farmers (Machethe, 2005:7). Today it is the only primary development finance institution working in agriculture and rural

[?] data unavailable or need further explanation or qualification.

⁺ means that the author is convinced that this figure represents an under estimate.

development following the demise of the Agricultural Credit Board. It therefore has a very important role to play in the supply of financial services to the rural poor. The objectives of the Land Bank flow from the Land Bank Act, and are aligned with government policies and the country's socioeconomic needs. The bank is expected to play a pivotal role in advancing agriculture and rural development.

Like other financial institutions, the Land Bank faces cost related distribution challenges. It is also acknowledged by Ellis (2000:295) that private markets in loanable funds operate unevenly, if at all, in rural settings. One of the reasons for the poor functioning of the rural financial markets as observed by Ellis (2000:295) is the high cost of setting up banking operations in rural areas. In South Africa, for example, Moyo and Coetzee (2002; 2005:4) observed the Land Bank to be void of a service structure, operating only 25 branches. To mitigate this challenge, the Land Bank use agents such as the First National Bank (FNB) and the Postbank to distribute their products. The Land Bank's 25 branches service their biggest income sources, namely individual farmers and cooperatives. It does not extend loans to emerging farmers in their bronze range of products (Moyo and Coetzee, 2002; 2005:4).

While the Land Bank has succeeded in reaching more smallholder farmers with loans, the majority of these farmers still do not have access to credit (Machethe, 2004:7; Chisasa and Makina, 2012:771). An empirical study conducted by Chisasa and Makina (2012:780) of trends in credit to smallholder farmers in South Africa revealed that smallholder farmers are still credit constrained and that the supply of credit by the Land Bank to smallholder farmers remains thin. These results are consistent with the Land Bank 2010/11 Annual Report. Table 3 below shows that only a minute portion of the approved funding was allotted to the retail sector of which the smallholder farming sector is a component. Although no detailed information is available on the distribution of credit by sector, it is evident that credit allotted to smallholder farmers by the Land Bank is negligible. A total of 7 percent was disbursed to the retail sector compared to 86 percent that was disbursed to the corporate sector during the same year. The Land Bank also reported that an emerging farmer support facility was approved by Cabinet and it is still in its pilot phase (Land Bank Annual Report, 2010/11:28). What remains to be seen is the extent to which the Land Bank will disburse funds from this facility and the impact it will have on the performance of the emerging farmers.

Table 3. Land Bank approved funding and disbursements

Approved funding	(%)	Disbursements	(%)
Retail long term	17	Retail long term	5
Retail medium term	3	Retail medium term	1
Retail short term	4	Retail short term	1
Corporate long term	7	Corporate long term	7
Corporate medium term	6	Corporate medium term	0
Corporate short term	63	Corporate short term	86

Source: Land Bank Annual Report (2010/11:29)

6.1.2 Provincial parastatals

Increasing access to credit is argued to be one of the strategies to improve agricultural productivity (Machethe, 2004:7). The establishment of parastatal institutions with the objective of increasing access to credit by smallholder farmers is one of the approaches used by governments in developing countries to stimulate smallholder agricultural growth. In South Africa, such parastatals were established in former homelands. Some of the parastatals that were established in the former homelands have collapsed due to the transformation that took place in the country's agricultural sector. This left the smallholder farmers with no access to credit and a challenge for the Land Bank of filling up the void left by the parastatals.

According to Coetzee (2000:8) South Africa experienced a wide array of failures and limited success of provincial financial parastatals with Ithala Development Finance Corporation in KwaZulu Natal being the only successful institution. Ithala is the second largest institution in mobilising savings after the Postbank. Except for Ithala, the rest of the parastatals

have since failed. The DGRVA South Africa (2000:8) reported that a small rural bank has been formed "from ashes of two conventional homeland agricultural banks that were closed". The problem with most of the parastatals is that they did not have branches from which they could service their clients and therefore lacked outreach.

The reformed parastatal banks, such as Khula Enterprise Finance Limited, have similar approaches to the enterprise lenders, however, they boast of a far greater existing investment and base to build from. Some parastatal banks have savings as a resource. For example, Ithala has approximately 800 000 clients while others have institutional investors, which provide them with access to cheaper capital.

6.1.3 Post Office Savings Bank (Post Bank)

The Post Bank has the second largest branch network to commercial banks in South Africa. The majority of the Post Bank's clients are from the rural areas. A summary of its savings portfolio by product type is shown in Table 4 below.

Table 4. Summary of Post Bank's savings product portfolio (2012)

Products	Minimum balance (Rands)
Smart Save	50
Bakgotsi*	No minimum/no maximum
Bonus Save	25
Term Save	1000
Term Save Plus	1000
Flexi-card	35
Mzansi card	10

^{*}Means friends in Sotho. A savings account specially designed for groups who have a constitution or written declaration of goals.

Source: http://www.postbank.co.za

Table 4 shows that the Post Bank has a diverse portfolio of savings products tailored for all levels of society. However, the Post Bank does not extend the much needed credit to the communities it serves. This tends to negate the policy drive of providing low cost credit to the rural poor. Although the statistics for the number of accounts for most of the savings accounts could not be obtained, the Post Bank boasts of over 1 400 000 account holders of the Smart Save account. It is estimated that the other account types could be attracting high patronage.

6.1.4 Private sector institutions

6.1.4.1 Nongovernmental organisations (NGOs)

The mushrooming of NGOs in South Africa has come with some relief to the poor. NGOs are an important cog in the rural financial market set-up, providing finance to small and micro enterprises (DGRV SA, 2000:9). In most developing countries, NGOs have filled in the vacuum left by the closure of many specialised credit institutions. However, it is argued that NGOs have failed to fully service the rural market due to lack of subsidies.

6.1.4.2 Village banks

A village bank is defined as a savings and credit cooperative (DRVA SA, 2000:10). The first village bank in South Africa was formed in 1994 in the North West Province. Since then, the number of village banks in South Africa has increased supported by a considerable demand for collective action formats at the grass roots level. Village banks are organised and owned by members (Coetzee, undated). Their objectives are to provide appropriate financial services at village level, and to link this service with the commercial banking sector. Members save first and obtain credit when the fund has accumulated sufficient savings to extend credit. Member savings may be in the form of shares or normal savings. Prior to the loans being issued, the only source of capital is the savings. These savings are deposited at the nearest commercial bank branch and generate income.

For example, survey results showed that the Bhambanana Village Bank which opened in June 2000 had 3 060 members drawn from a 25-50 kilometre radius had deposits amounting to R290 900 held at First National Bank (Jones and Ballimore, 2009:11). Other results were reported as follows (see Table 5):

Table 5. Village Bank activity in South Africa

Province	Name of village bank	No. of members	Value of deposits (R)
North West	Motswedi	1 451	1 800 000
Mpumalanga	Sakaletfu	515	(not available)
Limpopo	Mbathabatha	279	47 000

Source: Jones and Dallimore (2009:12)

6.1.4.3 Credit Unions

In the 1980s, the Catholic Church led the establishment of the Cape Credit Union League (CCUL), which became the first Savings and Credit Co-operative League (SACCOL) in South Africa (Department of Trade and Industry (DTI), 2012:32). Credit Unions have recorded substantial growth in South Africa. Membership now exceeds 6 000, savings to the extent of just over R10 million contributed by members and a loan book with a balance of R9 million. The development of credit unions has been with minimal

donor or Government support. The contribution of credit unions to the development of the "poorest poor" still remains constrained by lack of resources.

6.1.4.4 Co-operatives

The most popular form of co-operatives in South Africa is agricultural producer co-operatives. Most of these serve their members who are commercial farmers. However, a few of these co-operatives assist with smallholder farmer development projects (DGRV SA, 2000:11). Traditionally, most of the old co-operatives

were involved in providing funding to farmers. At first this seemed to be a simple thing, but the credit committees were driven by sentiment, which meant that funding was not viable at all in some instances. This resulted in high levels of bad debt, hence, pressure on the co-operatives equity and liquidity. In a country report by Kirsten et al. (2010:16) seven agricultural cooperatives situated in all of the major agricultural areas in South Africa were surveyed. It was observed that most of these cooperatives serve as marketing and retail agents for producers. (Lombard, 2003:27). The declining importance of agriculture in the portfolios of banks and the costs associated with the provision of retail financial services in rural areas may provide opportunities for collective action in the form of the rejuvenation financial co-operatives in rural areas.

According to the DTI (2012:36) report, the agricultural sector, which constitutes 25% of registered co-operatives, is still dominant. Factors contributing to this position include that there is still a strong association of co-operatives within the agricultural sector and, that in most rural economies; the only opportunities available are in this sector. Other sectors such as the services sector (17%) and the multipurpose sector (14%) have emerged strongly, challenging the agricultural sector in the co-operative sector.

6.1.4.5 Commercial banks

Commercial banks play a pivotal role in the delivery of financial services (Mashigo and Schoeman, 2011:149). The four largest banks in South Africa are Standard Bank, ABSA, First National Bank and Nedbank. They hold over 80 percent of the market share. Commercial banks only provide a limited range of services in rural areas, although they have the highest incidence of branches in the rural areas, together with the Post Office (Strauss Commission, 1996). South Africa also has a higher ratio of branches per population than elsewhere in Africa (See Table 6). However, this higher incidence of branches is skewed, with rural areas having approximately twice the number of people per branch than urban areas. A sharp decline in rural branches is also evident. It is estimated that whereas in 1995 approximately 50 percent of the South African population had easy access to commercial bank facilities, this number has declined to approximately 30 percent (Moyo and Coetzee, 2002:8).

With increased globalisation and technological development, commercial banks are expected to reduce

their branch network, keeping only those branches that are profitable and hence justify their continued presence. Areas without high net worth demographics, electricity and communication channels will not be part of contemporary banking. According to DGRV SA (2000:13), to all intents and purposes no major expansion of commercial bank activities should be expected in rural areas. One would only expect banks to show more interest in rural areas once technology has been made accessible to rural people. Rural people and smallholder farmers in general, will still save with banks. However, it will become increasingly more expensive to do this as bank branches decrease in number in rural areas. In this regard, Hinson (2011:330) conceptualises a model (Open Federated Brick and Click Model) of mobilebased banking services for poor people in developing country contexts. Hinson argues that this model could be useful in building pathways for increasing financial access to the poor. To this end, Hinson (2011:330) concludes that effort and resources should be directed towards offering banking services through mobile technologies. DGRV SA (2000:13) summarise the future of rural commercial banking as follows:

- Conventional commercial bank presence in rural areas will decline at an increasing rate.
- The farming portion of the commercial bank portfolio will further decline over time.
- Emphasis will be on the agribusiness sector and larger producers.
- Financial services to farmers will be provided by the broad retail sections of banks and farm specific portfolios will decline. This will be based on the diverse income sources of future commercial farmers.

6.1.4.6 Private sector agricultural firms

Private sector agricultural firms were started by the Financial Aid Fund of South African Sugar Association to support private sector processors. This initiative was boosted by the cotton ginners and vegetable processors and agents. Farmers are provided with crop establishment capital and in some instances working capital. Some institutions also provide extension services. This method of finance is quite common in contract farming. It has potential for development on a vast scale in the agricultural sector, especially if commercial farmers can be convinced to contract smallholder farmers to ensure throughput and turnover.

2005 2006 2007 2008 2009 2010 2011 Country Algeria 5 5 5 5 5 5 Angola 3 4 5 6 6 9 11 4 4 Egypt 4 4 5 5 5 Ghana 3 4 4 5 5 5 Nigeria 4 4 5 6 6 6 6 South Africa 7 8 10 11 6

Table 6. Commercial bank branches per 100 000 adults

*Data not available

Source: World Development Indicators (2013)

7 Conclusion and policy implications

The purpose of this paper was to explore the nature, characteristics and span of rural credit markets in South Africa. In this paper, it has been demonstrated that rural credit markets in South Africa comprise of public and private institutions. Like many other developing countries, South Africa's rural population is credit constrained. Commercial banks and other formal credit institutions have been observed to be holding very small amounts of credit granted to smallholder farmers as a proportion of their aggregate credit portfolios. Yet according to Bhatt (1989:15) credit or finance is one of the strategic factors that determine the pace and pattern of socioeconomic development. It facilitates as well as stimulates the development process.

The low level of participation of formal credit institutions in supporting smallholder farmers confirms the theory of credit which states that banks and other institutions do not lend to the retail sector due to asymmetric information and the agency problem which leads to moral hazard and adverse selection. Empirical evidence suggests that the credit market in South Africa is inappropriately structured to provide credit to the poor households due to asymmetric information and low risk returns (Mashigo, 2010). Lack of collateral also worsens the position of smallholder farmers as lenders have no fallback position in the event of default. For this reason, the smallholder farmers are deemed unprofitable and denied access to the much needed credit.

Available credit sources in rural South Africa include institutions such as the Land Bank, village banks, cooperatives and credit unions. Most of these institutions rely on their proximity to the borrowers which gives them access to more borrower information than traditional commercial banks. Empirical evidence has been presented portraying credit constraints in China, Bangladesh, and Ghana among other developing countries. More careful planning still needs to be done to increase the supply of credit and other financial services to South Africa's rural communities in order to stimulate growth. Increased investment in information gathering by leading role players such as commercial banks should be prioritised as a matter of government driven policy on poverty alleviation in order to alleviate the problems associated with a lack of access to financial services in rural markets. In particular, as empirical evidence suggests (Machethe, 2004; Chisasa and Makina, 2013), increasing the supply of credit to the agricultural sector in general and smallholder farmers in particular will lead to an improvement in the livelihood of South Africans, first through increased employment and then increased agricultural output. Accordingly, public and private sector policies should be developed which emphasise on improving the quality and accessibility of financial services in rural South Africa. For instance, this paper advocates for the introduction of mobile banking units to rural

service centres, say once or twice a week, in order to reach out for the remote potential savers and borrowers of South Africa who are currently excluded from mainstream and formal financial intermediation. This has the benefit of reducing the distance travelled by rural clients and hence the total transaction costs.

Although informal financial institutions have made inroads in addressing the problem of access to financial services in rural markets, the importance of established commercial banks in driving this initiative remains critical due to their stronger financial capacity and level of expertise in risk management. About 11.3 million adult South Africans still remain unbanked with the black population and young adults between 18 and 29 years offering the largest opportunities to become banked in the future (FinMark Trust, 2012). As this paper was limited to the exploration of the status of rural financial markets, further research is recommended on comparative studies of the most appropriate lending model to borrowers in rural South Africa in light of the challenges of information asymmetry, adverse selection and enforcement problems which characterise the rural markets.

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