LENDING METHODOLOGY FOR SMMES IN THE SOUTH AFRICAN CONSTRUCTION INDUSTRY

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ACKNOWLEDGEMENT

My sincere gratitude goes to all the commercial banks that took the time and effort to answer my questions. I dedicate this report to my late brother Richard Tsoka Chilligo (may he rest in peace), parents, brother, sister, girlfriend, relatives and friends for all their support and patience.

ABSTRACT

A lending methodology refers to the design of the service and the way in which it is delivered. Components of a lending methodology include: product design and pricing; collateral; screening mechanisms; disbursement and repayment procedures; and delinquency management procedures.

Although finance is available from various institutions namely government agencies, Non Governmental Organisations (NGOs) and the private sector, Small Medium Micro and Survivalist enterprises (SMMEs) in the construction industry are still experiencing problems in accessing finance to fund their projects. Current domestic and international literature suggests that the lack of finance is attributed to political interference and inefficiencies in government and NGOs operations; mistrust of third party agencies by SMMEs and ineffective service provision. Commercial banks on the other hand are ideally placed to provide finance to SMMEs because they are well regulated institutions and have vast branch networks. However, commercial banks are wary of providing microfinance to SMMEs because they do not have the appropriate lending methodology to provide the required finance and still make a return adequate enough to make the services provided to SMMEs sustainable.

By administering questionnaires to regional managers of the SMME divisions of various commercial banks in the Greater Johannesburg Metropolitan Area (GJMA), this research report investigates whether commercial banks in the GJMA have the appropriate lending methodology to provide microfinance to SMMEs in the construction industry. This study concludes that commercial banks do not have the appropriate lending methodology to provide microfinance to SMMEs in the construction industry. The findings of the study further indicate that an opportunity exists to create lending methodology for SMMEs in the construction industry by reducing transaction costs and adopting relationship lending techniques utilised by Micro Finance Institutions (MFIs) internationally.

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

CGAP	Consultative Group to Assist the Poor
DFI	Development Financial Institutions
DTI	Department of Trade and Industry
FISCU	Finance and Investment Sector Coordinating Unit
FIDIC	Fédération Internationale Des Ingénieurs-Conseils (International Federation of Consulting Engineers)
GJMA	Greater Johannesburg Metropolitan Area South Africa
IDC	Industrial Development Corporation of South Africa
JBCC	Joint Building Contracts Committee
MFRC	Micro Finance Regulatory Council
MIS	Management Information Systems
NGO	Non Governmental Organisation
NTSIKA	Ntsika Enterprise Promotion Agency
PBA	Principal Building Agreement
SACCO	Savings and Credit Co-operative
SADC	Southern African Development Community
SARS	South African Revenue Service
SBU	Small Business Units
SEDA	Small Enterprise Development Agency
SHG	Self Help Group
SMME	Small, Medium, Micro and Survivalist Enterprises
SME	Small and Medium Scale Enterprises
SSA	Sub-Saharan Africa
STATS SA	Statistics South Africa

KEY DEFINITIONS

Access to finance

Financial services and insurance are critical to business growth and security in both the formal and informal economies. Access to credit is important to start businesses, to assist with cash flow problems, to diversify and to invest in business assets. Formal and informal businesses need facilities to save their money. They also need to be in a position to insure their business assets. The difference between formal and informal business is that those working in the informal economy are not serviced by the private sector who generally consider them to be too risky. (Lund *et al*, 2003:18)

Commercial banks

Financial intermediaries licensed to make loans and issue deposits, including deposits against which checks can be written (Begg *et al*, 2003: 525). For the purposes of this study the words bank and commercial bank are used interchangeably.

Microfinance

Microfinance is the provision of a broad range of financial services (credit, savings, insurance, etc.) to low income clients. Microcredit refers to small loans offered by banks or other financial service providers. Microfinance is the preferred term given that the term microcredit implies that credit (loans or debt) is the only financial service that is relevant. (Goss & Mitten, 2007:2)

Microfinance institutions (MFIs)

Microfinance institutions (MFIs) can be any type of organization offering microfinance services. These may include informal community based financial institutions, banks, non-profit organizations, and credit cooperatives. (Goss & Mitten, 2007:2)

Small, Medium and Micro – enterprises (SMMEs)

The White Paper on National Strategy for the Development and Promotion of Small Business in South Africa 1995 defines and categorises SMMEs as follows:

a) *Survivalist enterprises* – informal enterprises by people with virtually no skills who are unable to find employment or get into an economic sector of their choice. Income usually falls far short of minimum income standards with little capital invested and no growth prospects;
b) *Micro-enterprises* - usually very small family businesses with maximum five employees. They lack formality, have a limited capital base and possess rudimentary technical or business skills. Have the potential to, and indeed many micro-enterprises advance into viable small businesses;
c) *Small enterprises* – formal (tax registered) and usually controlled and managed by the owner with five to 50 employees and business premises; and
d) *Medium-sized enterprises* - formal and owner/manager controlled with up to 200 employees.

SMMEs in the construction industry

According to Milner (1996), emerging contractors are categorised based on their level of development as follows:

a) *Trade skills* - obtains piecework using a trade skill;
b) *Labour only subcontractor* - employed by a main contractor on large contracts;
c) *Labour only contractor* - does not subcontract but would contract directly on small contracts; and
d) *Small contractor* - operates for own account and supplies labour and materials.

This study refers to the categories of emerging contractors outline by Milner (1996) as SMMEs in the construction industry, small contractors or contractors.

Lending methodology

In micro enterprise lending, the term "methodology" refers to the design of the service and the way in which it is delivered. The same methodology could be employed in a variety of institutional types. For example, an NGO, a SACCO, or a commercial bank could employ a solidarity group lending methodology. Components of methodology include: product design and pricing; collateral; screening mechanisms; disbursement and repayment procedures; and delinquency management procedures. A microfinance organization is bound to fail if its methodology is not well designed and implemented. (Umsobomvu Youth Fund, 2004:7)

Project finance

Financing of a particular economic unit in which a lender is satisfied to look initially to the cash flows and earnings of that economic unit as the source of funds from which a loan will be repaid and to the assets of the economic unit as collateral for the loan. Nevitt (1983, cited by Merna & Njiru, 2002)

The term "project finance" is used to refer to a wide range of financing structures. However, these structures have one feature in common – financing is not primarily dependent on the credit support of the sponsors or the value of the physical assets involved. In project financing, those providing the senior debt place a substantial degree of reliance on the performance of the project itself. (Merna & Njiru, 2002:5)

CHAPTER 1: INTRODUCTION

1.1 The problem statement

According to Berry *et al* (2002:34) the 1995 White Paper on National Strategy for the Development and Promotion of Small Business in South Africa was the first comprehensive policy initiative by the South African government. The intention was to create an enabling environment for Small, Medium and Micro Survivalist Enterprises (SMMEs) growth, address the inequalities brought about by Apartheid and the unemployment problem facing the then fledgling democracy. The white paper provided the first comprehensive definition of SMMEs and the mechanisms for small business support outlined in the white paper became constitutional through the National Small Business Act 1996 which legalised the establishment of new institutions, affirmative procurement reform, and the formation of an advisory board to review SMMEs' legal and regulatory environment. The newly formed institutions e.g. Ntsika Enterprise Promotion Agency (Ntsika), Small Enterprise Development Agency (SEDA) etc. each had a specific task e.g. 'democratising' the issue of small business development; coordinating, monitoring and evaluating the implementation of the strategy; building the technical and financial capacity of non-financial and financial retail service providers and providing non-financial support to SMMEs etc.

In theory, the policy interventions of the 1995 white paper seemed to be the answer to the problems facing SMMEs at that time. However, it seems that practical implementation of these policies in the South African construction industry has not been very effective. Maas & Herrington (2006:19), reported that although there seems to be sufficient funds available it remains difficult to access these funds, especially for start-ups.

When asked how they financed their cash flow requirements during their last contracts, contractors and developers indicated that they used a combination of mechanisms. 37% used retained profits. 27% mentioned progress payments. Of these, only 55% claim to have received regular progress payments. On average, just fewer than 6 payment claims are submitted per project, with an average of 23 days to payment. Just under a quarter

(23%) used payment terms from suppliers. While 85% indicated they would use this mechanism again, only 63% (the lowest of all financing types) said they were happy with the service they received and 72% reported they could get cheaper financing elsewhere. While respondents reported the lowest need for security for this type of financing, it is unlikely such facilities would be provided without a cession of project income to the supplier. Using a business loan or used a bank overdraft was cited by 14% of respondents.

Interestingly, only 6% had obtained a specific construction finance facility for the project. While 58% indicated they were required to provide security (the highest of all financing types), this source of financing also had the highest levels of satisfaction (79%). Given the inherent benefits of construction finance outlined earlier, this shows a huge need to make construction finance more readily available to emerging Contractors and developers. (Gardner, 2006:11)

In 2002 Berry *et al* (2002:36) examined the impact of the policy measures prescribed by the 1995 white paper and found that the heart of the problem lies in the fact that these policy measures suffer from sub-optimal implementation due to a general distrust of external agencies by SMMEs on the one hand, and the incapacity of support institutions to persuasively raise awareness about their existence and effectiveness on the other. Moreover, the poor coordination of service providers results in a replication of services, and clustering of institutions in urban areas.

Evidence from the Southern African Development Community (SADC) region also seems to suggest that generally, Development Financial Institutions (DFIs) in Africa have had problems in providing access to finance to SMMEs. The Finance and Investment Sector Co-ordinating Unit (FISCU) in 1998 (cited by The SADC development finance centre annual report, 2006:75) found that African DFIs suffer from a variety of problems which all relate back to corporate governance or the lack there of. Some of these problems are as follows: 1) Political influence which resulted in credit diversion and the subordination of efficiency and profitability objectives to political priorities; 2) DFI

operations often aggravated rather than corrected the inadequacies of local banking and financial systems resulting in lower levels of financial intermediation and contributed (along with other macroeconomic policies) to obstructing capital market development; 3) DFI lending in Sub Saharan Africa (SSA) was considered to have also contributed negatively to growth and income distribution. By directing credit to parastatals and the subsidiaries of multinationals, DFIs crowded out more efficient smaller private firms from formal credit markets, forcing them to rely on retained earnings or borrowing from informal markets at exorbitant cost; and 4) By allocating resources on the basis of fiat rather than market signals DFIs failed to allocate credit productively.

Further evidence by Hinton (2007:5), suggests that government controlled Small and Medium Scale Enterprise (SME) banks internationally have historically been subjected to undue political influence and many have failed or not become sustainable. This is particularly true of most of the development banks in the SADC region, for example, the Zambian Development Bank and Tanzanian Investment Bank, which although not banks were established to assist SMEs.

The literature above suggests that government institutions and DFIs have historically neither been very efficient nor effective in providing finance to SMMEs. Although finance is available it is difficult to access especially for SMMEs at the lower end i.e. survivalist small enterprises and micro-enterprises. If then a gap or an opportunity does exist and there are so many SMMEs in need of finance, why have commercial banks not seized this opportunity to add SMMEs to their portfolio? Would commercial banks not be more efficient and effective in providing access to finance to SMMEs given that commercial banks are well regulated institutions, are profit driven and are not subject to the political influence subjected to DFIs and government institutions? Would SMMEs not benefit from a source of credit which is readily available through the commercial banks' vast branch network? Further, would commercial banks not be able to dispel the general distrust SMMEs have for external agencies as discussed by Berry *et al* (2002:36)?

Results from a study by Baydas *et al* (1997:3) indicate that commercial banks seem to have a special edge over non bank, micro-lending Non Governmental Organisations (NGOs) because of the following: 1) They are regulated institutions fulfilling the conditions of ownership, financial disclosure, and capital adequacy that help ensure prudent management; 2) Many have physical infrastructure, including a large network of branches, from which to expand and reach out to a substantial number of microfinance clients; 3)They have well established internal controls and administrative and accounting systems to keep track of a large number of transactions; 4) Their ownership structures of private capital tend to encourage sound governance structures, cost-effectiveness, and profitability, all of which lead to sustainability; 5) Because they have their own sources of funds (deposits and equity capital), they do not have to depend on scarce and volatile donor resources (as do NGOs); and 6) They offer loans, deposits, and other financial products that are, in principle, attractive to a microfinance clientele.

However, commercial banks are wary of lending to SMMEs because they perceive SMMEs to have a higher risk of default and the majority of credit applications are rejected because SMMEs do not meet the criteria necessary to acquire a loan. Mutezo (2005:79) found that a sample of two hundred entrepreneurs in the Tshwane Metropolitan Area (TMA) highlighted that the most prominent reason for failing to award credit applications is a lack of collateral (31%), poor business plan (18%), and a bad credit record (14.5%).

A recent study commissioned by the Gauteng Enterprise Propeller (GEP), working with the FinMark Trust, found that credit extension to small businesses is so low that it raises questions about whether banks will achieve their commitments under the Financial Sector Charter. The survey found that 41% of small businesses in Gauteng are unbanked. While banks are servicing the upper sector of the small business market with a wide variety of products, the lower end of the market is either not using financial products at all or making do with a simple savings account and an ATM card. Only about 2% of Gauteng's small businesses say they borrow at all, the FinScope small business survey found, and a similarly negligible percentage borrowed to start up their businesses. Non-South African

small business owners had a higher negative perception of South African banks. (Hinton, 2007:7). Further, according to van Ruyen & Mills (2003:6), the poor are not serviced by banks because banks: 1) Focus on higher-income clients; 2) Require minimum deposits, discouraging small, regular deposits from poorer clients; 3) Charge high fees, thereby reducing the impact of interest on small transactions, and discouraging savings; and 4) Are located outside the areas where the poor live, thereby increasing transaction costs to the poor. The poor are additionally excluded from credit through requirements such as collateral security, formal employment, payroll deductions and pension and provident fund guarantees.

According to Baydas *et al* (1997:2), bankers perceive small businesses and microenterprises as bad credit risks. The perception is that small clients do not have stable, viable businesses for which to borrow and from which to generate repayment. Moreover, these potential clients lack traditional collateral to guarantee their loans. Finally, banks no doubt also recognise they do not have appropriate lending methodologies to serve these clienteles (that is, correct screening mechanisms to separate good from bad credit risks).

1.2 Hypothesis

a) Commercial banks do not have the appropriate lending methodology to provide microfinance to SMMEs in the South African construction industry;
b) Commercial banks do not have the appropriate lending methodology because transaction costs in micro finance are high; and
c) An appropriate lending methodology is the key to reducing transaction costs for commercial banks hence making provision of microfinance viable for commercial banks.

1.3 Objectives of the study

1.3.1 Primary objective

The primary objective of this study is to investigate whether commercial banks have the appropriate lending methodology to provide microfinance to SMMEs in the South African construction industry.

1.3.2 Secondary objective

Based on the outcome of the primary objective, the secondary objectives are as follows:

a) To examine the opportunities and obstacles for creating lending methodology for SMMEs in the South African construction industry; and
b) If an opportunity exists, to make recommendations on ways of creating a lending methodology suitable for SMMEs in the South African construction industry.

1.4 Scope of the study

This study targets commercial banks in the Greater Johannesburg Metropolitan Area (GJMA) in the province of Gauteng with a view to providing micro finance to SMMEs in the construction industry in this area.

Given that GJMA is South Africa's largest industrial area, and contains the largest black townships, a study of GJMA's SMMEs is useful for understanding local economic development in South Africa. Further, research by the Department of Trade and Industry (DTI) suggests that Gauteng has the highest density of SMME firms, accounting for 34 percent of the national total (DTI, 1997). In light of the South African economy's level of urbanization, and the fact that Johannesburg represents an integral part of South Africa's industrial sector, lessons from the Johannesburg LED pilot are likely to be applicable to South Africa's other metropolitan areas and the broader national economy. (Chandra *et al*, 2001:2).

1.5 Limitations of the study

The study is limited to the GJMA only and the findings may not accurately reflect the economies of other areas. Further, interviews will be conducted with the GJMA regional managers of the SMME divisions of each commercial bank; these regional managers are responsible for strategy and supervision of the various branches and the views of the regional managers may not accurately reflect the day to day experiences of their staff at branch level.

The decision by individuals whether or not to respond to an opportunity to start a business is influenced by an additional set of factors referred to as entrepreneurial framework conditions**.** These conditions refer to the following nine factors: access to finance; government policies; government programmes; education and training; transfer of research and development; the commercial, legal and financial infrastructure; the openness of the domestic market; access to physical infrastructure; and the extent to which cultural and social norms support the choice of starting the business as a career option (Maas & Herrington, 2006:13). This study is further limited to constraints in accessing finance and not the other entrepreneurial framework conditions.

The aim of the study is not to carry out a detailed investigation of banking regulations and banking supervision but where relevant to give brief descriptions and reference the source. Lastly, each bank has a unique culture and organizational structure and the recommendations of the study may not apply to all banks.

1.6 Constraints of the study

The time set aside for the study is not adequate enough to cover such a complex topic. In addition, the respondents of the questionnaires have limited time to answer the questionnaires due to work commitments and hence, some respondents do not answer the questionnaires. Lastly, some respondents do not divulge sensitive financial information about their lending methodology due to fear that this information will be passed on to competing banks.

1.7 Significance of the study

In order to meet its socio-economic development agenda, South Africa must mobilise the construction capacity of as many players as possible. The large and growing housing backlogs, ambitious agendas relating to the development and upgrading of community, educational and civic buildings and the pressure exerted on the construction sector by projects of national importance such as Gautrain and the World Cup in 2010 all contribute to this. In addition, the stated need to encourage and support the development and growth of the SMME sector creates a further challenge. (Gardner, 2006:2)

Small, Medium and Micro-enterprises (SMMEs) in the construction industry contribute to the overall building process through provision of services, manufacturing goods of value (locally based suppliers and fabricators), or through work done (small building works or subcontracting to larger firms). To make a meaningful contribution, SMMEs in the construction industry require finance to start and expand a business, pay for overheads and to cover day to day operating expenses e.g. raw materials, wages and labour.

From an economic perspective, however, enterprises are not just suppliers, but also consumers and their demand for industrial or consumer goods has the ability to stimulate the activity of their suppliers, just as their own activity is stimulated by the demands of their clients. This demand is in the form of investment and plays a dual role, both from a demand-side (with regard to the suppliers of industrial goods) and on the supply-side (through the potential for new production arising from upgraded equipment). In addition, demand is important to income-generation potential of SMMEs, and their ability to stimulate the demand for both consumption and capital goods. (Berry *et al*, 2005:4)

Increased demand for consumer and industrial goods could be the key to solving the chronic unemployment problem in South Africa in the long run. According to Stats SA Bulletin of Statistics (2008:48), South Africa has approximately 16,984,000 economically active people and an estimated 4,336,000 of these people are unemployed; the unemployed represent approximately 25.5% of all economically active people.

According to Berry *et al* (4-5), SMMEs have, at least in theory, the potential to generate employment and upgrade human capital. Economic historians have demonstrated the importance of this phenomenon in Europe's industrialisation and the subsequent development of other emerging economies. As technological progress in agriculture liberated the agrarian labour force, this unskilled excess labour force was absorbed into small manufacturing industries and exposed to business experience, thereby encouraging a "learning-by-doing" effect. This combination of the employment of a vacant labour force, and improvement of their skills through business exposure, strongly characterised the process of industrialisation and development.

South Africa's current economic situation is comparable to the above scenario: the excess labour force is "released," not so much from the agricultural sector, but rather large enterprises in the secondary and tertiary sector. Generally, these enterprises are not necessarily facing economic recession, but rather are growing and transforming themselves in such a way that their demand for unskilled labour is decreasing. This results in an abundant pool of unskilled labour, which SMMEs can possibly employ and upgrade. (Berry *et al*, 2005:5)

1.8 Overview of research report

An in depth literature review is carried out in Chapters two and three. Chapter two discusses the concepts of project finance, cash flows, risks common in financing construction projects and the costs that arise during a lending transaction. Chapter three briefly discusses the more important aspects of lending methodologies as utilised by MFIs and commercial banks.

Chapter four outlines the design of the research and the techniques used to collect, compile and analyse data. Chapter five compiles and analyses the data based on the research design in chapter four and literature review in chapters two and three. Chapter six is the concluding chapter and recommendations are made based on the results in chapter five and the literature review in chapters two and three.

CHAPTER 2: PROJECT FINANCE, CASH FLOWS AND RISK

2.1 Introduction

This chapter aims to give an insight into the various means of finance available to contractors and the risks and transaction costs lenders encounter when providing finance.

2.2 Financing projects

This section discusses the various methods of finance available to contractors as follows.

2.2.1 Project finance

According to Merna & Njiru (2002), in assessing the creditworthiness of the borrower, it is important to differentiate between project finance and corporate finance. Corporate finance is traditional finance where payment of loans to lenders comes from the organisation, backed by the organisation's entire balance sheet and not from a project alone. Lenders tend to look at the overall financial strength or balance sheet of an organisation as a prerequisite to lending for a project. So even if a particular project fails, the lenders will still remain confident of being repaid because the organisation owning the project has a strong financial base. This does not mean, however, that the project will not be appraised for economic viability. In project finance, the future income stream of the project is the most critical element and is dependent on an assured income stream from the project, since lenders and investors only have recourse to the income streams generated by the project once it is completed, and assets of the project that may not have any residual value. The project sponsors, therefore, have to demonstrate evidence of future income through various means such as power sales contract for a power plant, a concession agreement for a toll road project allowing the collection of tolls, or tenant leases for commercial real estate projects.

2.2.2 Trade Credit

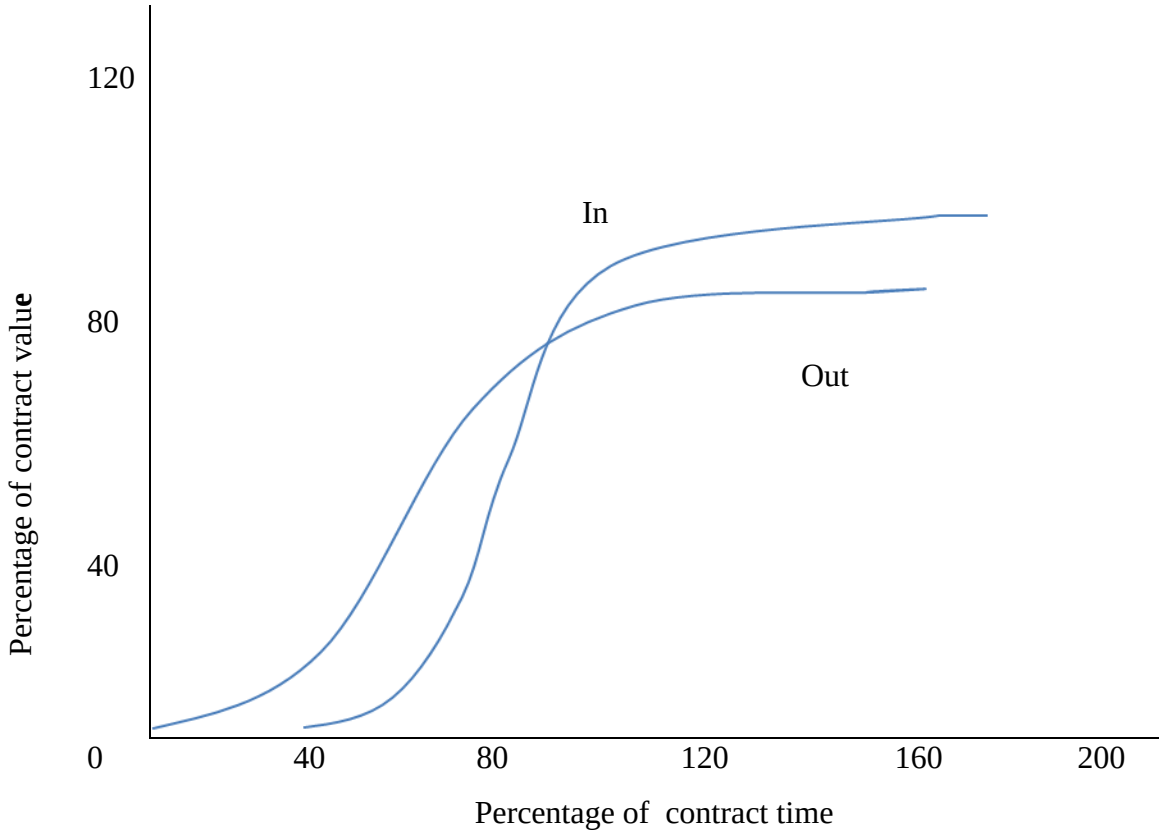
According to Gavin (1988:12), trade credit or accounts payable is a popular form of short term finance with no explicit cost as it is an interest free source of credit. The contractor has the option of credit terms ranging from 30 to 90 days and a discount which is subject to negotiation of magnitude and settlement date. A good credit standing will ensure improved terms and continuous use. Trade credit may ease the initial cash flow deficit and subsequent financial pressure on the firm until the first and second payment certificates have been paid to the contractor.

According to Zikalala (1983) however, trade credit is easier to access for larger more established contractors as they have greater reputations and an established service record (balance sheets, profit and loss accounts etc.) as well as financial and managerial skills. These attributes are advantageous when negotiating with suppliers for trade discounts, financial institutions for loans and overall costing of the projects. Emerging contractors don't have these advantages and usually have investments or capital reserves less than the loans that they intend to acquire.

2.2.3 Retained profits - project cash flows

At tender stage, most contractors will be required to submit a cash flow forecast. During tender adjudication the cash flow forecast will be used to determine the estimated expenditure on the project and the rate at which funds will be required. According to Kenley (2003:30), construction project cash flows are a subset of cash flow for the organisation and consist of inward cash flows and outward cash flows. The net cash flow is the difference between the inward flow of cash and the outward flow of cash. Figure 1 illustrates that for a project to be profitable, the net cash flow has to be positive i.e. the inward cash flow has to be greater than the outward cash flow.

Figure 1 Typical component cash flow



Source: Kenley (2003:163)

Figure 1 also shows that outward cash flows are greater than inward cash flows in the initial stages of construction and the contractor operates at a loss. The shape of the graph is called a construction "S-curve" and further shows that construction accelerates in the middle stages of the project where expenditure is highest but smoothes out towards the end as the project reaches completion.

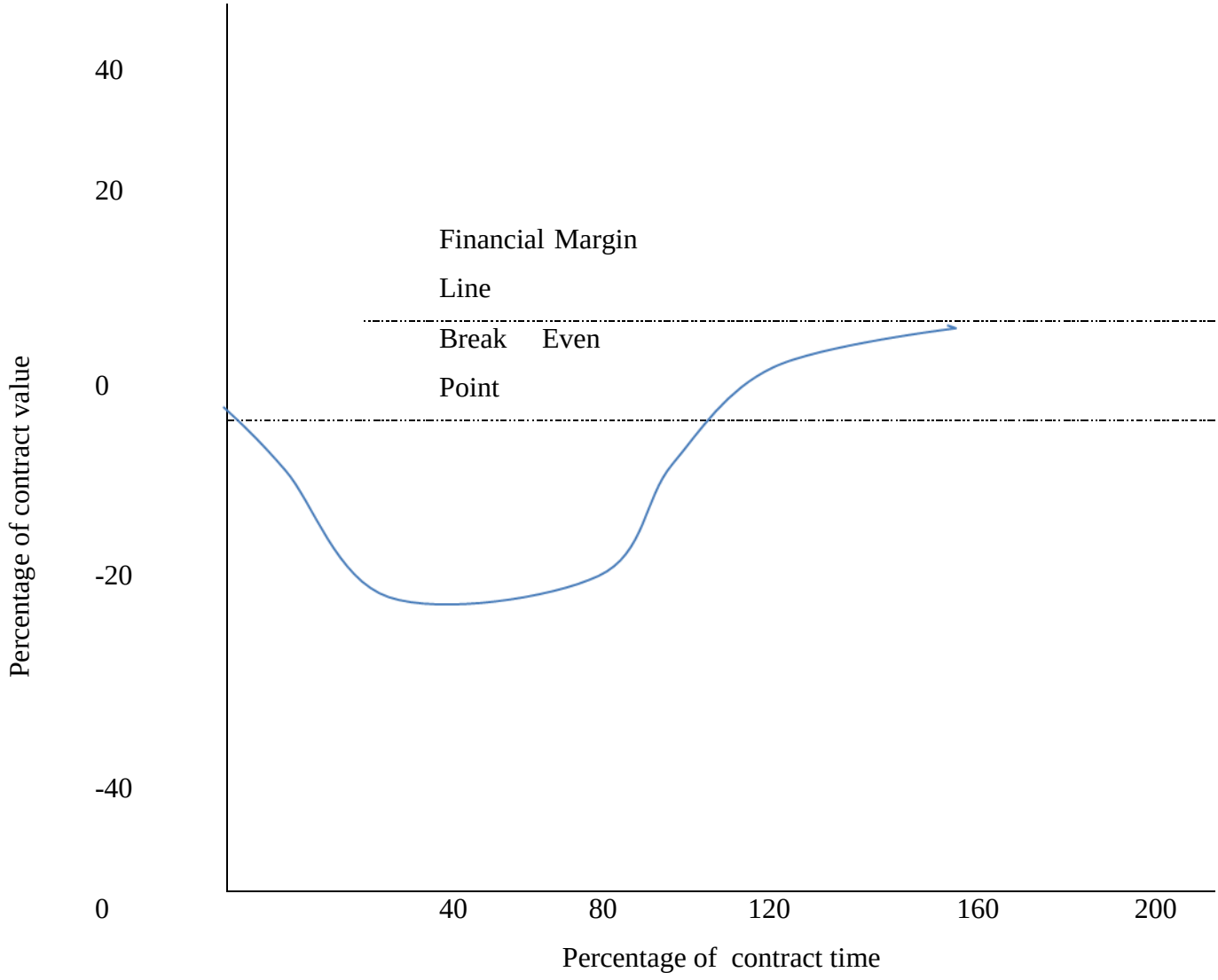
Further according to Kenley (2003), inward cash flows from the client to the contractor are generally in the form of periodic payments called ‘progress payments’. Building contracts generally provide for progress payments in order to provide a mechanism whereby the contractor may recover money for work in progress instead of funding the project from his own pocket and to restrict payments to set periods (usually one month) in order to reduce the amount of administration required by all parties.

Outward cash flows are payments to suppliers of plant and equipment, subcontractors and direct costs incurred in the construction period. These payments follow disparate contracts and agreements that exist between the contractor on one hand and the subcontractors and contracted suppliers on the other, and also occur on an as required basis as labour and materials are called up and used during the construction of the project. Payments may be made daily, such as purchases from local stores, weekly as wages or payments for goods on seven day terms such as concrete or reinforcing steel, or monthly for subcontractors. At the end of the month many of the subcontractors and suppliers will be eligible for payment. Outward cash flow may be seen as an almost continuous (but variable) series of small lump sums, with a concentration about the end of the month.

It is not clear when a contractor breaks even during the life of a project this is because unlike periodic progress payments, outward cash flows are more difficult to ascertain and quantify. For instance, subcontractors may be paid on a fortnightly basis while material suppliers may be paid based on a credit agreement with payment months after actual delivery. Further, sundry site expenses occur in a hap hazard fashion and are paid for as and when they happen. What is clear however is that during the early stages of the contract the contractor has to source material, pay for equipment and overheads using money from his own pocket.

Figure 2 provides a graphic illustration of when the contractor breaks even and also the fact that for most of the project duration the contractor operates at a loss.

Figure 2 Typical net cash flows



Source: Kenley (2003:163)

According to Soares (1990:12) the break-even point on a typical project is often reached by the contractor at some stage near completion of the project. Therefore, in addition to the funds provided by the client, the contractor must provide funds of his own in order to continue the progress of the project until it becomes self-financing. Different factors can affect a contractor's cash flow. According to Soares (1990:12) these are categorised as follows:

a) Speed of construction - if the contractor takes a "front-loading" approach, costs will accumulate quickly in the early stages of the project and relatively slowly as the project nears completion. On the other hand, if the contractor's rate of construction is slow at first, costs will accumulate more quickly towards the end of the construction period, as the rate of construction increases. Furthermore, if the contractor is ahead of schedule, two situations may arise, namely: 1) Completion of the project before the due date; or 2) The contractor's rate of construction will decrease and the project will be completed at the predicted time. If however, the contractor is running behind schedule the project will be completed late, or the rate of construction will increase and the completion will occur before the due date;

b) Changes to the contractor's expected programme of work;

c) Delays during the construction period – delays due to inclement weather, strike action, employee lockout etc. will cause the contractor's expected cash flow curve to change. In addition, the contractor may have to incur certain expenses during the delay, and construction costs may increase in order for the project to be completed on time;

d) Escalation of building costs - the rate at which building costs increase; and

e) The quantity surveyor's valuation of work completed - if the quantity surveyor undervalues the work completed by the contractor, the contractor will be paid less than anticipated, and vice versa. This could result in over borrowing or under borrowing of funds by the contractor.

Gardner (2006:11) states that on average, just fewer than 6 payment claims are submitted per project, with an average of 23 days to payment. The Joint Building Contracts Committee (JBCC) Principal Building Agreement (PBA) is a form of contract commonly used for most building works and stipulates that work valued on the 20th of each month is certified by the Principle Agent on the 25th of the same month and payment to the contractor occurs 30 days after the day the Principle Agent certifies the work. If one considers the JBCC PBA terms of payment conditions then this suggests that it takes approximately 58 days (25 days for certification plus 23 days for actual payment) for the contractor to receive his payment. Another common form of contract for engineering works is International Federation of Consulting Engineers (FIDIC) Red Book form of contract which stipulates that work valued at the end of each month is certified by the Engineer within 28 days of receipt of valuation from contractor. Payment by the client to the contractor should occur within 56 days after the day the engineer certifies the work. In both forms of contract, the contractor utilises his own capital until the payment is received from the employer.

Cash flow is constrained by, amongst other factors, a lack of retained capital from previous projects (due to lack of work consistency, poor internal financial controls) to finance the initial costs of new contracts. A further constraint is the progress payment terms of employers, compounded by administrative inefficiencies in the payment process by certain employers (e.g. certain provinces take on average longer to process payments, or for instance the use of cheques may lead to payment delays requiring bridging finance). Cash flow problems are exacerbated by the low margins on many projects. For instance, rural housing projects are costed on the same basis as urban projects, and are often subject to much higher transportation costs. In addition, it is not uncommon for

subsidised housing contracts to be undertaken for a 14% profit margin, which can only be realised with the final VAT reclaim on a project from SARS.

Negative project cash flows due to margin differences across contract milestones are also a problem. Milestone payments proportions are arbitrarily determined, and do not necessarily accurately reflect the actual costs of different stages of the construction process in different environments. Therefore, Contractors and developers often need to cross-finance during the life of a project. For example, foundations often cost more than the milestone payment amounts, while higher profits are made later in the development process. Contractors and developers therefore require financing to bridge the foundation stage until the later stages of a project. (Gardner, 2006:10)

2.3 Risks associated with projects

The Oxford dictionary defines risk as "exposure to the chance of injury or loss; a hazard or dangerous chance." Every project has risks associated with it. These risks may occur prior to the project starting or during the life of the project. Merna & Njiru (2002) lists the risks commonly encountered in project finance which are summarised below as follows:

2.3.1 Interest rate risk

Interest rate risk is an exposure to movements in interest rates. It directly affects both the borrowing and the investing entity. The exposure depends on the maturity of the funds raised and the developments in the financial market from where funds have been raised.

2.3.2 Commercial risks

Commercial risks are broadly classified as the risks relating to 1) Completion of the project e.g. cost overruns (because of delays or an underestimation of costs) etc.; 2) Operation of the project – when the project does not operate with the desired efficiency or encounters legal issues such as environmental liabilities or a natural calamity such as fire; and 3) Input and output of the project - every project depends on certain supplies (resources) to produce something else, which is in demand by some other entity – the supply side risk and the demand side risk. The *supply side risk* exposes the cost of

production and the *demand side risk* exposes the revenues of the company. Supply side risk may involve an inadequate or inconsistent supply of raw material or other inputs or price increase by the input suppliers. Demand side risk could be an inadequate demand for the project output (either in terms of price per unit or in terms of quantity).

2.3.3 Liquidity risk

This risk arises when a project is not able to generate sufficient resources to meet its liabilities or if an entity cannot meet payments when they fall due e.g. borrowing at an excessive rate of interest, facing penalty payments under contractual terms, or selling assets at below market prices etc.

2.3.4 Counterparty or credit risk

Any financial transaction involves two parties. Both the parties run the potential risk of default by the other party. If a company has tied a line of credit from a bank or financial institution then it runs the risk of the lender not being able to meet its commitments in providing the funds at the right time. On the other hand, after the loan has been dispersed the lender runs the risk of default in repayment and interest payment by the borrower.

2.3.5 Project risks

Project risks are numerous but they can be broadly classified into four categories: completion risk, operation and maintenance risk, input and output risk and financing risk. The various risks are discussed as follows:

a) *Completion risk* – completion risk is classified as the risk of delay in completion of the project due to contractor's delays, the risk that completion of the project will involve cost overrun and the risk that the project fails to meet performance specification on completion;

b) *Operation and maintenance risk*- operation and maintenance risk is classified as the risk that the project is unable to run at the desired efficiency due to deficiencies in equipment, the risk that the cost of operation and maintenance of the project turns out to be more expensive than projected, the risk of project operation being delayed due to legal issues e.g. environmental liabilities, fire and other natural events;

c) *Risk of inputs and outputs* - the risk of inputs and outputs is classified as the risk of an inadequate, sub-quality and inconsistent supply of raw material and other utilities, the risk of breach of contract by suppliers of raw materials and purchasers of the output, the risk of an increase in price of inputs as compared to the estimated price and the risk of inadequate demand for the output of the project; and

d) *Risks related to financing the project* – the risk related to financing the project is classified as the risk related to an increase in the servicing cost of money raised for the project, the risk of exchange rate fluctuation and the risk of inadequate funds in the event of cost escalation.

2.3.6 Capital or solvency risk

Further to the risks highlighted by Merna and Njiru (2002) as discussed above, Koch (1995:109), describes capital risk as the probability of a bank's insolvency or potential decrease in net asset values before economic worth is zero, and is closely related with financial leverage, which in turn, refers to the use of debt and preferred stock paying fixed rates as a part of a firm's capital structure that increases volatility in income because of the mandatory interest payments.

2.4 Costs of financial transactions

In financing any project, lenders will consider the risks associated with the project and will assess whether the return is adequate to compensate for the risk taken. These risks are factored into the interest rate and fees at which the lender charges the borrower. According to (Shankar, 2006: 3), there are three kinds of costs that a lending institution incurs when it provides a loan: the cost of the money that it lends; the cost of prudent financial practices and the cost of transaction. The different costs are discussed below.

2.4.1 Cost of capital (money lent to borrowers)

According to Begg *et al* (2003:326-327), a central bank is the banker to the government and to the banks. It conducts monetary policy. The discount rate is the interest rate that the central bank charges when banks want to borrow cash.

2.4.2 Cost of prudential financial practices

According to Begg *et al* (2003:329), lenders are required by the central bank to maintain a capital adequacy ratio which is a required minimum value of bank capital relative to its outstanding loans and investments. When a bank makes a small loss due to default by a client or a poor investment decision, the capital reserve should be sufficient to ensure that the bank's portfolio does not decapitalise. If a bank makes a big loss it may go bankrupt.

2.4.3 The cost of transaction

According to Shankar (2006:6), transaction costs comprise of direct costs and indirect costs. Direct costs capture the human resource cost of the branch and these are summarised below as follows:

a) *Cost of appraisal* – this is the cost of processes for appraising/grading the borrower before the sanction of a loan;

b) *Cost of documentation* - this is the cost of documents and the completion of documentation formalities relating to the loan;

c) *Cost of disbursement* – this is the cost of completing formalities relating to disbursement of funds;

d) *Cost of other direct administrative activities* - this is the cost of time spent by the field worker in completing administrative formalities such as report and format completion, reporting to immediate supervisor (usually the branch manager), filling up movement registers, filling up expense claims for travel and bank related duties. Since the branch manager closely supervises the entire loan process and in many cases also helps in appraisal / documentation/ disbursement, the allocated (per loan) supervision cost of the branch manager is also included; and

e) *Monitoring cost* – this is the cost of loan utilisation checks and collection of instalments.

Indirect transaction costs are explained by Shankar (2006:7) as fixed costs of the branch office, regional office and head office which are allocated to the loans. Each branch has to cover costs such as rent, electricity and facility maintenance. Regional offices and head

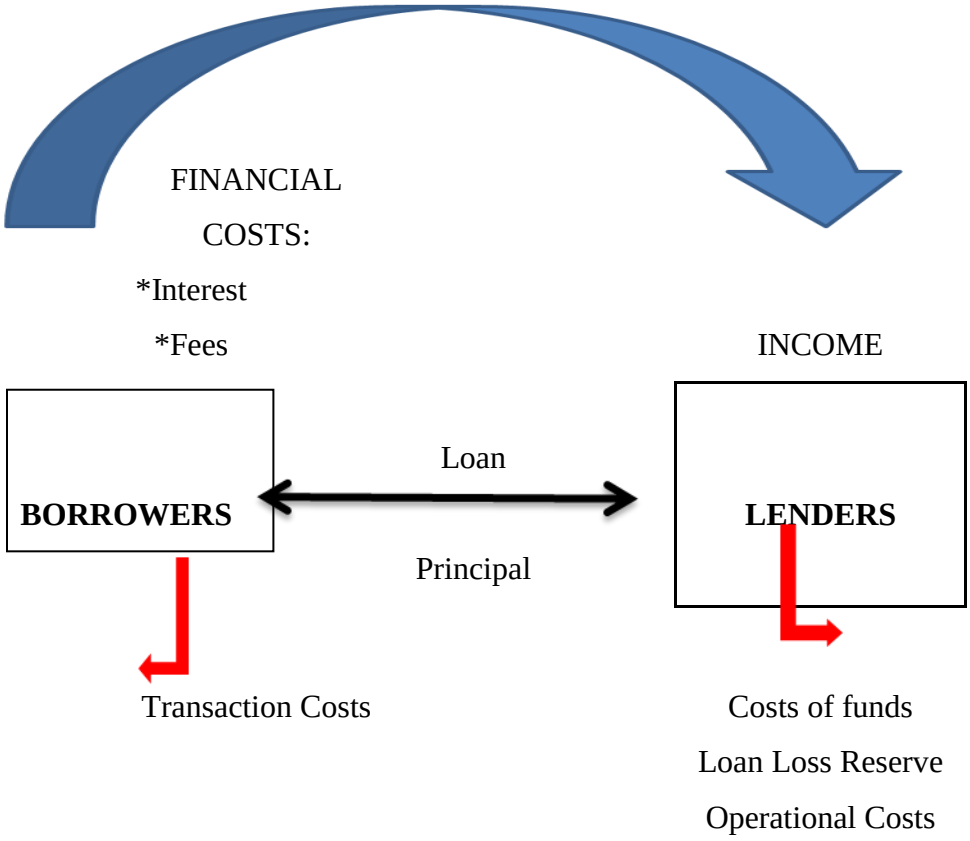
offices do not conduct direct business with the borrowers but incur costs when supervising the branches. Other indirect costs according Tsilikounas & Kljaic (2004:6) are as follows:

a) *Market research and internship costs* e.g. travel and accommodation for focus groups and assessments, coordinator and manager's time, technical advisors time, designing monitoring forms, preparing a competition analysis, training, data collection, data analysis, product design and reporting etc.;
b) *Opportunity costs* e.g. free training and pilot testing etc.; and
c) *Staff time management opportunity costs* e.g. designing the tools, informing/training staff and designing new products etc.

The financial institution covers the costs discussed above with income generated from the interest and fees charged on loans. Stearns (1991:1-2) extends the theory of transaction costs further by investigating the experience of the borrower when he approaches a lender. The total cost of a loan from the borrower's perspective is made up of financial costs and transaction costs. Financial costs are the direct cost of the money in the form of the interest paid for the use of the loan and the fees paid to the lender for processing and disbursing the loan. Financial costs provide income to the lender. Transaction costs on the other hand are indirect costs incurred to obtain loans e.g. bus fares to the lender's place of business, the cost of obtaining documents (like financial statements) required for the loan, the cost of the time spent by the borrower fulfilling the requirements for the loan, and any other costs related to acquiring the loan. Transaction costs also include costs due to inefficiencies in lender delivery systems, such as missed investment opportunities because of delays in loan disbursement; the extra time spent processing a loan because the lending institution misplaces a document etc. Transaction costs are often greater than financial costs if lenders are inefficient in their loan approval or disbursal process. Because transaction costs benefit neither the lender nor the borrower, lenders should minimise them to the greatest extent possible. It follows that, lenders that minimise transaction costs, make it easier for their borrowers to afford higher financial costs.

Figure 3 shows the flow of cash from borrowers and lenders during a loan transaction. What the borrower pays in financial costs becomes the lender's income, which is used to pay for expenses. What the borrower pays in transaction costs is lost to both the borrower and the lender. The loan principal goes back and forth between the borrower and the lender.

Figure 3 Cash flow of lending transactions.



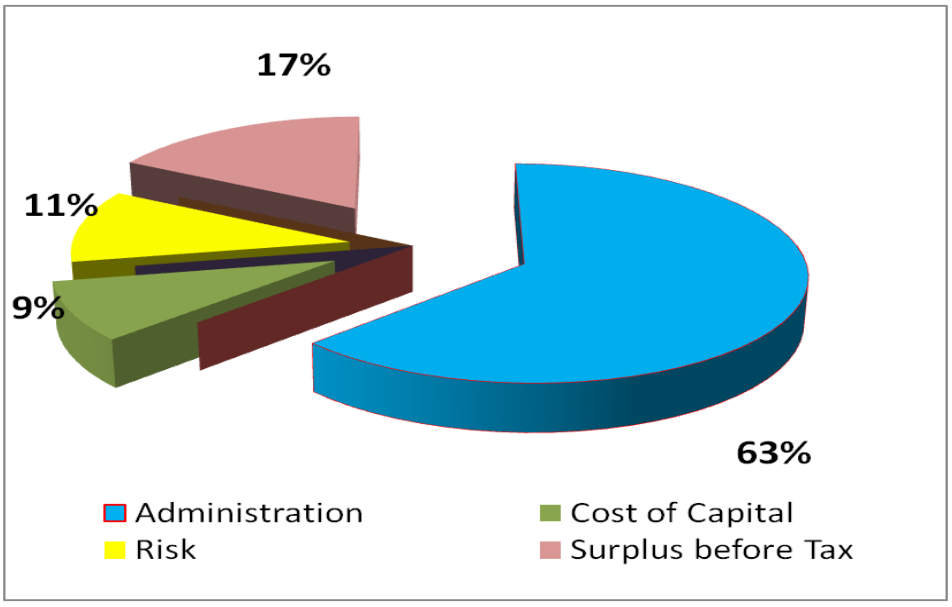
Source: Stearns (1991:3)

2.4.4 Non – recoverability of costs and the influence on lack of credit supply to SMMEs

Mohane *et al* (2002:5) show that one of the key factors influencing the lack of credit supply to SMMEs is the non-recoverability of costs. These findings are based on a survey carried out by the Micro Finance Regulatory Council (MFRC). The findings show that the bulk of costs in short term lending are from administrative costs and changes in prime

rates or other standard measures of the cost of capital will have a negligible effect on the cost structure. Figure 4 illustrates the costs associated with cash lenders who disburse loans lasting one to thirty days based on findings by Mohane *et al* (2002:6). The greatest cost component is administration followed by risk.

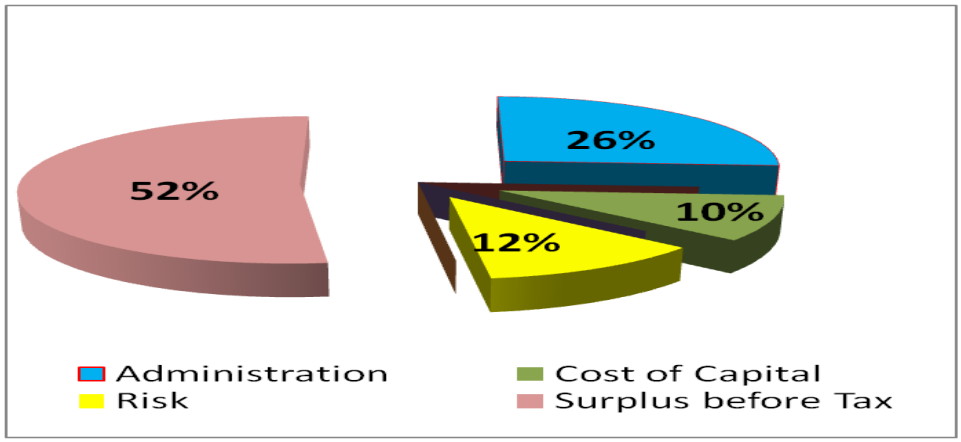
Figure 4 Cost components of cash lenders (1 – 30 days)



Source: Mohane *et al* (2002:6)

Figure 5 illustrates the costs associated with cash lenders who disburse loans lasting one to six months based on findings from Mohane *et al* (2002:6). In this category the administration costs have decreased and the risk has increased slightly. When comparing the two pie charts it seems that cost of capital and risk cost are not as significant as administration costs. Furthermore, changes in prime rates or other standard measures of the cost of capital will have a negligible effect on the cost structure of micro lenders.
Anything that increases administration costs would most definitely have an effect on these institutions and especially the smaller institutions, thus the cash lenders.

Figure 5 Cost components of cash lenders (0 – 6 months)

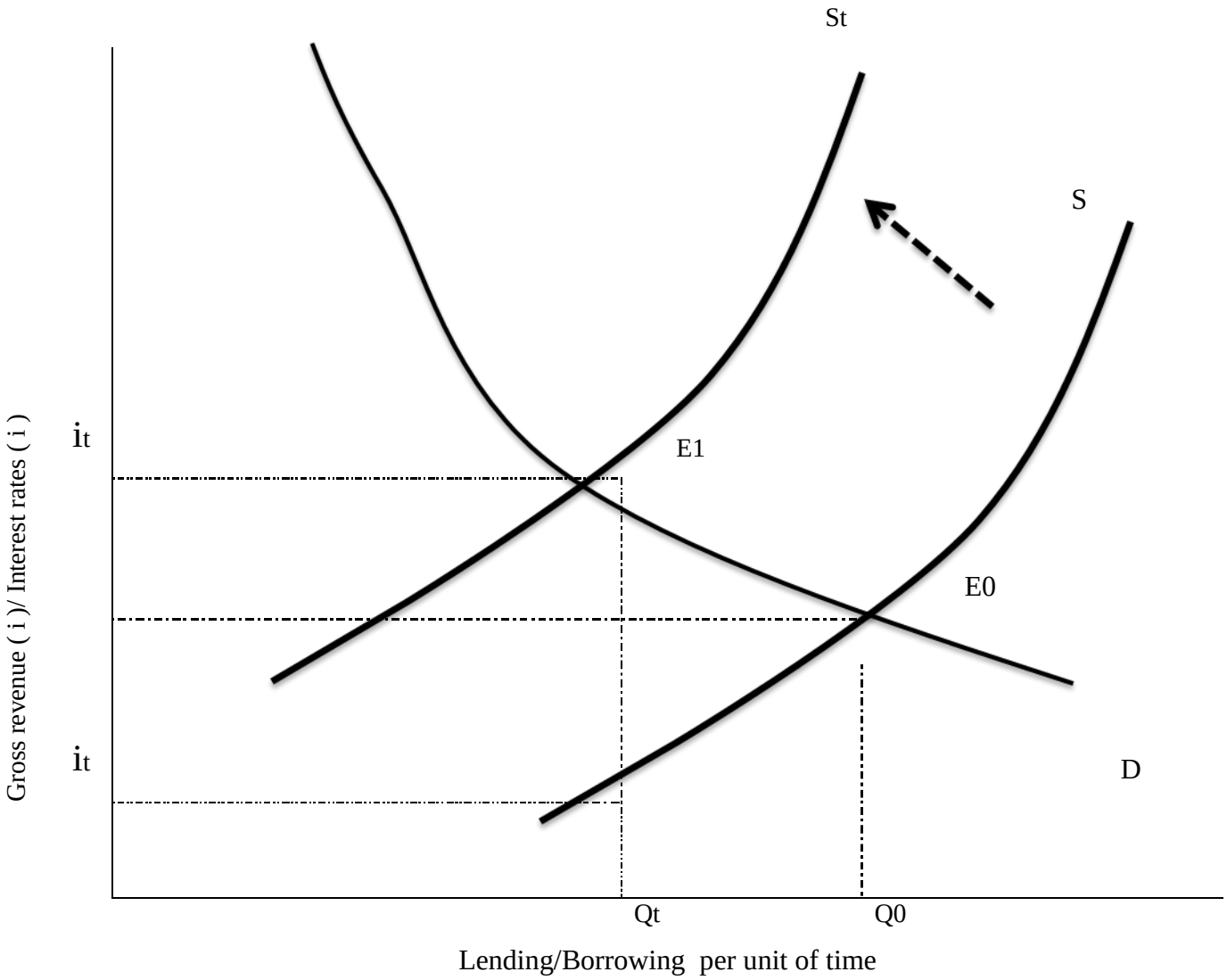


Source: Mohane *et al* (2002:6)

2.4.5 An economic perspective of operating costs and the impact of operating costs on demand and supply of credit.

From an economic perspective, operating costs have a big impact on supply and demand of credit. Fernando (2006:11) demonstrates that operating costs result in a wedge between the interest rate borrowers pay and the return lenders receive. Reducing operating costs increases lenders' returns on quantity of loans supplied. On the demand side, reduced operating costs lead to a fall in interest that borrowers pay and an increase in the quantity of borrowing. This is illustrated in figures 6 and 7. The horizontal axis in figures 6 and 7 measures the quantity of lending and borrowing per unit time. The vertical axis measures the interest rate (r) borrowers pay and the gross return (i̇) lenders receive. The demand curve (D) shows the economy's demand for microcredit. The supply curve (S) shows the industry's supply of microcredit if there were no lender operating costs. (St) is the industry's supply curve of microcredit with operating costs. In figure 6 the lender incurs an initial level of costs and the borrowers pay an interest rate of (rt) and the lender's gross return after deducting operating costs is (i̇t). The quantity borrowed (lent) is Qt.

Figure 6 Operating costs and the supply and demand of credit



D= Economy demand for micro credit without operating costs

S= Supply of microcredit without operating costs

St= Supply of microcredit with operating costs

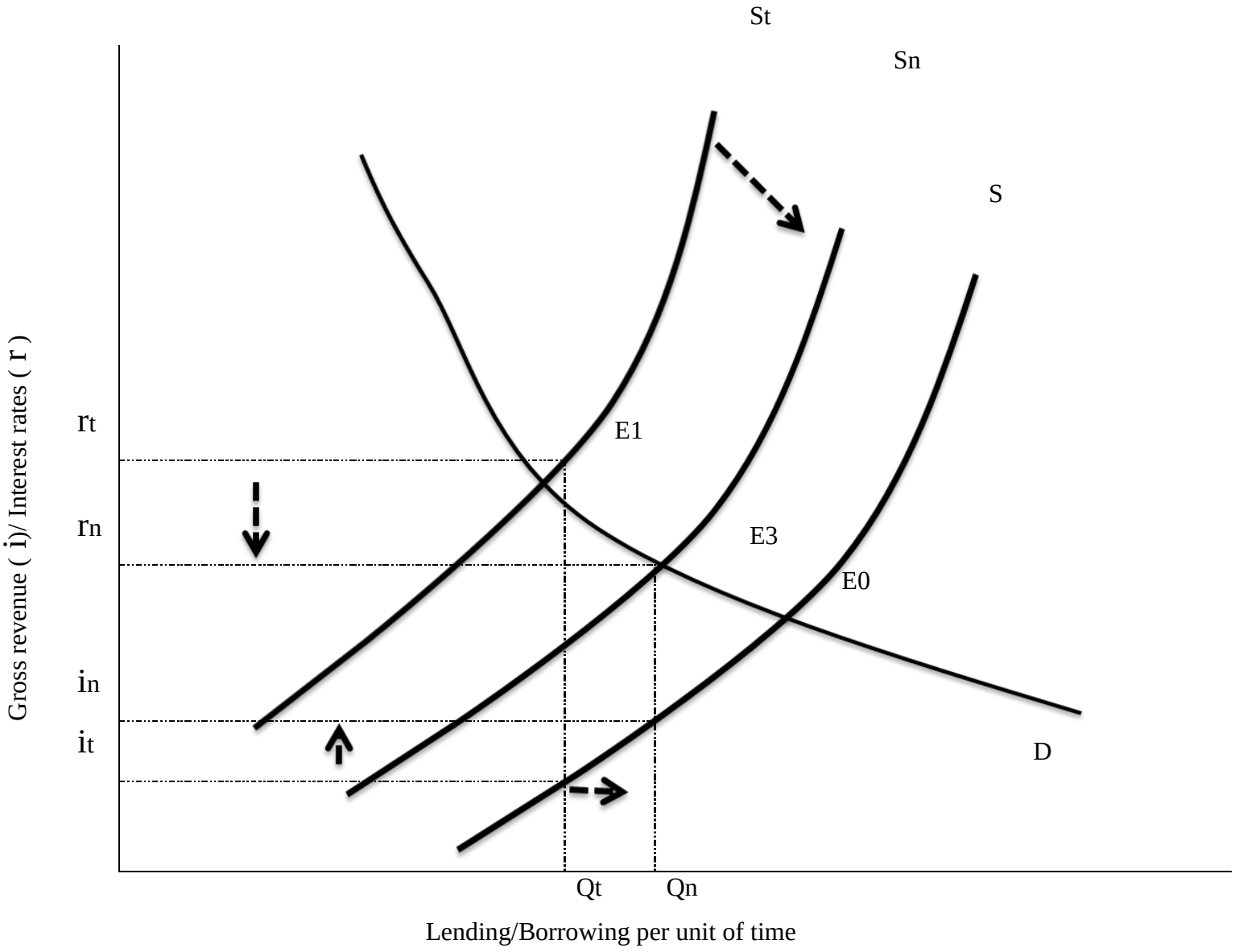
rt= Interest rates for borrowers

it = Lenders gross return after deducting operating costs

Source: Adopted and simplified from Fernando (2006:12).

Now assume a reduction in operating costs through some innovations and improvements in financial infrastructure. Figure 7 depicts the impact of this innovation and the supply curve shifts to (Sn). This shift from (St) leads to an increase in the amount of microcredit lent (borrowed) from (Qt) to (Qn) and the gross return to lenders increases from (it) to (in). The interest rate charged to borrowers declines from (rt) to (rn)

Figure 7 Impact of a reduction in operating costs on the supply and demand of credit



Sn = Supply of microcredit with reduced operating costs due to cost saving innovation by lender

rn = Interest rates for borrowers after implementation of innovation

in = Lenders gross return after implementation of new innovation

Source: Adopted and simplified from Fernando (2006:12)

Fernando (2006:13) concludes that microcredit interest rates are high because micro-lending remains a high cost operation. The key to reducing these rates in a sustainable manner is to reduce costs through improved market competition, innovation, and efficiency.

2.5 Conclusion

Lenders incur transaction costs when providing loans and these costs arise partly because the lender has procedures that are set up to minimise the risk of providing the loan. Contractors will utilise the financing method most convenient to them and in order for commercial banks to actively participate in the microfinance market they may have to reduce the costs of transaction which are high especially in microfinance.

CHAPTER 3: LENDING METHODOLOGY

3.1 Introduction

This chapter discusses the important aspects of an MFI's lending methodology in order to gain an understanding of the requirements for provision of microfinance. The areas discussed are as follows:

a) *Client profiling* – this includes poverty targeting, whether the lender will operate in urban or rural areas, gender etc.;

b) *Group lending and individual lending methodologies* – this section outlines the difference between lending to individuals and lending to groups;

c) *Product design* – this section outlines aspects of product design which include loan terms, payment frequencies, life insurance etc.;

d) Screening mechanisms – this section discusses the reasons why screening mechanisms are used and the different types of screening mechanisms used by lenders.

e) Reports and monitoring – this section discusses the importance of reports and monitoring and the different methods of tracking loans

f) *Delinquency management procedures* – this section defines and discusses delinquency and the problems that lenders face as a result of delinquency; and

g) *Incentives and disincentives for defaulting customers* – this section discusses incentives and disincentives for encouraging borrowers to repay their loans.

The microfinance lending methodologies discussed in this chapter are based on literature of international best practices in the field of micro lending e.g. Grameen bank. These methods are to be used as a guide for the purposes of this study only. Conventional lending methods e.g. screening mechanisms, collateral are also discussed below in order to provide an insight on why these are required by commercial banks.

3.2 Client profiling

Client profiling determines the type of client to serve. Below are the important aspects of client profiling:

3.2.1 Targeting

Before choosing an appropriate lending methodology, one must first identify the target market. A typical example would be to target all SMMEs.

3.2.2 Segmentation

Once the target market has been identified, the firms are divided into segments and below are the five most frequent methods of segmentation:

3.2.2.1 Choice between urban and rural areas

Bauman (2005:101) comments that microfinance outreach to rural areas is difficult because the poor lack access to basic means of production and live in crowded rural villages squeezed between commercial farm land (no longer exclusively white) and tourist oriented game reserves. Further, South African MFI loan officers lack independent transportation and generally rely on an inadequate public transportation system to reach their clients e.g. taxis, walking etc.

Parikh (2006:11) found that collection and disbursement of money in rural areas was problematic for rural clients who are mostly uneducated and do not understand complex banking methods; cash transactions are clearly most convenient. However, transporting cash in and out of villages exposes the loan officer to theft. Further, cash provides loan officers with an opportunity for fraud. In several cases it was found that loan officers under represented loan repayments.

3.2.2.2 Gender

Lenders may target both male and female clients or provide products which cater for only a specific gender. South African policy has increasingly made efforts to include women because women have historically been regarded as the most disadvantaged individuals. The white paper on national strategy for the development and promotion of small

business in South Africa (1995:11) acknowledges the discrimination faced by women due to apartheid, restrictions in terms of access to land and marriage laws which reduced women to unions with no contractual capacity at all. According to Matiwane (2005:10), other factors that contribute to the poverty of women in South Africa are the gendered division of labour in the household, the low value accorded to women's work (with the concomitant clustering of women in low paid jobs) contributes to female poverty. Furthermore, pressure to run a home, look after children and care for the husband and family limit women.

A study by Roodman & Qureshi (2006:10) observed that women are more likely to channel the support to their children, are more vulnerable and submissive, less mobile (thus easier to track down if they do not pay). Further, for cultural reasons, the "shame factor" of public banking worked better with women, precisely because of their relative lack of power. Lastly, women are more sensitive to and accountable for how their family is seen within the community and in some cultures, women are more susceptible to peer pressure. This was evident in rural Bangladesh where women repaid more reliably and a loan officer explained that in contrast, male members do not come to meetings, they are arrogant, they argue with the bank workers (sometimes even threaten and scare the bank workers).

3.2.2.3 Poverty level

According to Khan (n.d:10), some of the most common elements in poverty targeting are population or community profile; socioeconomic profile of the area built on information available in census reports or developed by the organizations through proxy indicators; geographical and topographical conditions; gender construction; and finally community's attitude, initiative and responsiveness to undertake development project. Further, poverty targeting depends on a number of factors which include: the perception of poverty in local context; the methodology adopted to define poverty and identify the poor in which the social organizer and activists play a significant role; choices between organizational sustainability and poverty targeting; and the interventions modus operandi and the terms and condition of participation and participation cost.

Findings from the Umsobomvu Youth Fund (2004:10) show that poverty lending is more expensive than lending to the middle or upper level micro-markets because: loan sizes start smaller and grow more slowly; it takes an extra 12 or more months for a fieldworker to build to full client capacity (and full capacity is somewhat lower than for mid level programs); clients need more support and aftercare; and clients are more sensitive to increases in interest rates. Rook & Freeland (2007:1) state that poverty targeting is perceived to be a social uplifting tool. The rationale for targeting is that, especially when resources are limited, it is better to give a smaller group (such as the poor) a greater amount of support, rather than provide everyone with a smaller amount of support. The indirect costs associated with poverty targeting are:

a) Potential beneficiaries may incur costs (time, fees, and lost income) in order to prove their eligibility;
b) Beneficiaries may change their behaviour to become (or remain) eligible for a grant; and geographical targeting may encourage migration;
c) Stigma, deterioration of community cohesion, and erosion of informal support networks are potential social costs. A common complaint by communities who are asked to identify beneficiaries for targeted programmes is that "*we are all poor*"; and
d) Targeting criteria can be manipulated or abused by politicians to favour their constituencies and garner political support. Moreover, focusing benefits on the poor risks the erosion of political support from the wealthier, and may thus reduce the sustainability of programmes.

3.2.2.4 Type of activity

Institutions might target their products specifically to the type of economic activity carried out by the beneficiaries. For example, the Industrial Development Corporation of South Africa Ltd (IDC) is a self-financing, state-owned national development finance institution that provides bridging finance and/or revolving credit to entrepreneurs and businesses engaged in various industries e.g. mining, transport, paper, construction etc. through Small Business Units (SBUs).

3.2.2.5 Enterprise level

According to Umsobomvu Youth Fund (2004:11), enterprises at different levels have different financial needs and these needs are illustrated in Table 1 as follows:

Table 1 Financial needs of enterprises at different enterprise levels

Enterprise Level	Financial Need
Survivalist	• Working Capital Loans • Liquid Savings Accounts
Middle	• Working Capital Loans • Perhaps Small Fixed Asset • Liquid Savings • Some Fixed Term Deposits • Some Payments Services
Upper	• Needs begin to resemble the needs of small business operators • A combination of fixed asset and working capital loans. • Tailored repayment terms, perhaps some grace period, monthly payments • Line of credit would be useful • Payment transfers and current accounts become more important for this segment

Source: Umsobomvu Youth Fund (2004:11)

Depending on the lenders policy, the products will be tailor made to accommodate the level at which the enterprise is at that time. Also the lender will assess whether the enterprise will graduate into a higher enterprise level after a certain period.

3.3 Individual and group lending methodologies

After segmentation, the lender will decide whether to provide finance to individuals or to a group of individuals. In group lending, individuals come together to form groups and acquire the loan as a group. According to Roodman & Qureshi (2006:2), a typical example of group lending is the solidarity group lending which both Acción and Grameen developed. In this lending methodology borrowers form groups of three to seven members (most commonly five) to acquire loans for which they are jointly and severally liable for. Disbursements and repayments are regimented, begin immediately after disbursement, are due weekly, and are constant over the life of the loan. Member entry into the regimen is staggered within a group: first two women take their loans and begin to repay, then two more, and then the fifth. When a loan is repaid, the borrower becomes immediately eligible for a larger one as long as all group members are in good standing and approve the individual loan requests. Eight solidarity groups are federated into a larger group called the "centre", which gathers each week with a loan officer to perform all financial transactions. Other group lending methodologies are the village banking methodology developed in 1984 in Bolivia by John Hatch and the Self-Help Group (SHG) system that dominates microfinance in India. An important feature of group lending is the effect of peer pressure which ensures timely repayment as honour is a matter not only of public reputation but is also a private concept. The public nature of group lending and the resulting play of honour and shame thus appear to be as crucial to ensuring timely repayment as formal co-guarantees by group members.

The second method discussed by Roodman & Qureshi (2006:6) is a more conventional form of lending based on individual clients. In contrast with traditional lending, individual micro lending offers smaller loans, on the order of $1,000, and relies less on traditional sources of security, such as marketable collateral, credit reports, and formal legal recourse. It also relies heavily on character assessment through character and reputation checks from interviews with friends, neighbours, and business associates. In conclusion, Roodman & Qureshi (2006:7) found that individual lending is unattractive

for lenders at the low end of the loan scale as too expensive, while group lending is unattractive to borrowers at the high end as too burdensome. The two forms of methodologies are compared by Umsobomvu Youth Fund (2004:16) as follows:

Table 2 Comparison of lending methodologies

Advantages	
Group lending	**Individual lending**
•Reassurance/comfort for weaker enterprises	• More tailored / flexible service for stronger enterprises
• Generally less costly staff	• Low transaction costs for clients
• Smaller loans less risky	• Larger loans support sustainability
• Less information needed	• Individual credit histories easily tracked
• Group guarantee and collection	• Don't need to worry about group cohesion
• Standardized products	
• Economies of scale	
• Can reach lower level segment	
Disadvantages	
Group lending	**Individual lending**
• Costs and risks borne by client	• Costs and risks borne by institution
• Need to train in group facilitation	• Need to train in business assessment
• Need to maintain group cohesion	• Need a more expensive level of staff
• Service constrained/limited for stronger enterprises	• Cannot generally reach same productivity levels
• Group cohesion breaks down when individual loan sizes grow beyond a certain point (around R3,000)	• Cannot generally serve survivalist level

Source: Umsobomvu Youth Fund (2004:16)

Lenders will therefore select the lending methodology which best suits the type of loan advanced to the borrower. The products offered to the borrower depend on a variety of factors which are discussed in the rest of the chapter.

3.4 Product design

Once the client profiling is complete, and the lender has selected the type of client he wishes to serve, he then proceeds to product design. In product design the lender faces challenges in keeping costs below revenue. It is often difficult for MFIs to keep costs low and maintain profitability. Roodman & Qureshi (2006:10) outline that some the challenges which MFIs face are:

a) *Building volume* - the ability to spread fixed costs of lending over a large portfolio helps lenders reduce their operating costs as a percentage of assets. This makes building loan volume particularly important for MFIs with small average loan balances who want to reduce costs;
b) *Keeping loan repayment rates high* - searching for defaulters and cajoling or threatening them into repaying is extremely expensive for small loans. Moreover, default can spread, since people will ask, "Why should I repay if she did not?" This puts a premium on keeping arrears extremely low;
c) *Retaining customers* - even the most efficient MFIs find it hard to cover costs on the smallest accounts; most need to cross-subsidize through larger loans to clients who have proven their ability to pay. This makes it essential for MFIs to grow with their customers, moving to progressively larger accounts;
d) *Charging high rates* - high interest rates are a well known and controversial aspect of microfinance. But MFIs cannot succeed in the commercial sense if they do not cover their costs;
e) *Compliance with prudential regulations* - banking regulations have much to say on what financial institutions can and cannot do. Many MFIs, for example, are not licensed to take deposits; and

f) *Minimizing scope for fraud* - this is a real challenge for MFIs in developing countries with corruption-ridden state banking sectors.

In order to overcome the challenges listed above a variety of innovations and products have been introduced and these are listed as follows:

3.4.1 Forced savings

According to Roodman & Qureshi (2006:13), forced savings are common in group lending and are collected during the group meetings, members usually pay no interest and cannot be withdrawn till the member exits the group. The lender has recourse to the forced savings in the case of loan default by a member or if the entire group fails. Lenders offer two main reasons for collecting forced savings: 1) To serve as cash collateral for loans, and 2) To inculcate the habit and discipline of regular saving.

Forced savings reduce lender financial exposure when a group ceases to function. Indeed, the threat of losing savings can deter such failure. The fact that lenders often do not return forced savings till a member leaves the program thus makes business sense. Furthermore, using forced savings to cover the missed payments of individual clients helps the lender recover losses and by making the group share the financial cost of default, social pressure is exerted on clients to make timely payments and to offer cross-loans to each other to cover the shortfall when difficulties arise.

3.4.2 Life insurance

Life insurance is also common as an additional feature to compulsory savings. Lenders may require their members to a take a credit life insurance product. Credit insurance helps the client by reducing risk in terms of death, disability or accident. The lender benefits by earning a fee income at low administrative expense. According to Roodman & Qureshi (2006:15), insurance lowers the direct risk from death of the borrower. It reduces risk for the group because the members are protected from having to choose between running after the deceased's grieving family or covering the loss themselves. Assuming it is mandatory for all members and only covers accidental death, it minimises adverse selection, which is when people join the lending program because they know they are particularly likely to need the insurance.

3.4.3 Progressive lending

Lenders usually start with small and offer bigger loans if the first ones are repaid, and so on. Economists say that these expanding cycles create a "dynamic incentive" for clients, because what a client does today affects her options tomorrow. Roodman & Qureshi (2006:15), state that progressive lending is a mechanism used to first test the waters with a new client and also winnowing out risky customers. But progressive lending is also worrying, in that for borrowers who lack the capacity to repay, it may create a powerful incentive to go to a second lender for a bridge loan, to be repaid as soon as the new, larger loan comes through from the first lender. It can thus feed a cycle of debt, concealing, deferring, and exacerbating the ultimate confrontation with trouble.

Further Roodman & Qureshi (2006:15), state that progressive lending is better suited to individual lending as the lender can more freely tailor individual loans in terms of lending periods, interest rates, and repayment schedules. And in scaling up, they do not need to worry about imposing inordinate risk on poorer, jointly liable fellow borrowers. Individual lenders are better positioned to use such cost saving devices as automatic loan renewals and parallel loans for repeat borrowers. Therefore progressive lending is not ideal for group lending because group lending is highly standardized and has rigid loan ladders which specify a maximum loan size for each loan cycle.

3.4.4 Frequent transactions and short loan terms

Loan repayment periods vary from fortnightly to over a certain amount of years. These will depend on the magnitude of the loan, collateral offered and whether the client has a good track record. According to (Simanowitz, 2000:132), long repayment periods for small loans result in difficulties in maintaining the business. Particularly at the start of the business, it is easier for a member to manage repayments over a shorter time period. As loan sizes increase, so should the repayment period.

3.4.5 Limited product offerings and streamlined procedures

According to Roodman & Qureshi (2006:10) another way to keep transactions efficient is to limit the diversity of product offerings. This is one reason why loans tend to have inflexible repayment schedules, and why associated products such as forced savings and credit life insurance tend to be formulaic too. It also explains why MFIs have found it difficult to offer transaction accounts (like checking accounts) which give the client control over the timing, frequency and size of transactions. In sum, the drive for transactional efficiency has earned microfinance the mildly disapproving label of "supplier-driven." Streamlining procedures will facilitate better understanding between the lender and the borrower; in this way the lending transaction is kept simple and reducing the frequency of transactions reduces the administrative burden on the lender. It is therefore imperative for lenders to streamline transaction processing. One way to do this is to limit interaction time per client.

3.4.6 Loan size

Loan size will be determined by the lender's policy. In poverty targeting the loan sizes will be very small since it is the poorest of the poor who are targeted. Also extending very large loans might result in credit diversion where the clients utilise the loans for other means.

A loan which is too large for a business may create problems and lead to business failure, however, no cases of this have been reported from the people interviewed so far. Similarly a loan which is too small, for example, to buy enough stock to be viable, may result in the member having to spend household money which puts a strain on the household and results in money being taken from the business. (Simanowitz, 2000:132)

3.4.7 Collateral substitutes

"Collateral substitution" is a technique that: (1) replaces conventional assets by objects without a significant market value and (2) which excludes judicial proceedings. It has often been asserted that in the absence of collateral there would be no incentive for the borrower to repay loans in time which would lead to poor recoveries in small loans. Instead of making use of legally enforceable claims, collateral substitutes secure a loan by ways of moral, social or other pressure. Several microfinance institutions in different parts of the world have adopted collateral substitutes or a combination of conventional and unconventional forms of collateral (Balkenhol, 2001:8). Listed below is a summary of examples of collateral substitutes as discussed by Balkenhol (2001: 19-20):

a) *Peer pressure* - this is utilised in self-help, solidarity and joint liability groups. Generally, commercial banks have adopted group collateral much less than MFIs and this may be because the transaction costs involved in ensuring continuous contact and supervision;

b) *Pledging of household goods and personal belongings* - common in southern parts of India, poor people often pledge gold ornaments and jewels as the preferred form of savings method. For the banks, the advantages lie in the relatively low costs of loan monitoring and supervision. In the case of default, banks are free to resort to public auction of the pledged ornament. Three factors influence the bank's decision to accept such a security: the honesty of the person who appraises the pledged ornament, safe custody of the items, and the volatility of the price of gold or jewels;

c) *Documents in custody* - documents showing the ownership of a vehicle are kept in the bank's safe until the borrower pays back the loan. As a consequence, the borrower cannot sell the respective assets. However, the bank cannot claim the assets in court either. The pressure it can exercise on the borrower is moral. Occasionally debtors managed to obtain new ownership titles, pretending that the originals had been lost, and sold the asset; and

d) *Linking of credit to savings* - a number of Indian banks (Syndicate Bank, United Bank of India, United Commercial Bank, Canara Bank) require prior deposits before making a loan. In the Bolivian "time-deposit modality", agents are

appointed by the bank on a commission basis to collect small savings from day-labourers, traders, and transport operators on a daily or weekly basis. These depositors are granted priority by the banks while considering loan proposals since banks consider the ability to save positive. In other Indian MFIs, such as the SEWA Bank, only members with a solid track record and good savings behaviour become eligible for a loan.

3.4.8 Collateral free lending

Institutions may give out collateral free loans. According to Balkenhol (2001:19), waiving the collateral requirement does, of course, not mean that the loan is disbursed at high risk. Banks waive collateral in various cases such as: a good track record of the borrower as regards savings and credit behaviour; personal integrity and reputation of the borrower and his / her standing with the lending institution; a borrower's primary security has potential for value appreciation; a high social standing of the borrower; viability of the proposed activity; experience of the borrower in the business proposed; particular commitment of the borrower to the activity proposed; and fear of losing good clients.

3.5 Screening mechanisms

According to Ledgerwood, 2001; Beck and de la Torre, 2004; Schmidt and Zeitinger, 1994 (cited by Vilanculo, 2007:20), lenders often subject applicants to thorough initial screening processes, which are critical for reducing the probability of adverse selection and moral hazard and above all for ensuring that once in the actual credit relationship the clients can actually stay in it without harming others and themselves by failing to repay their loans. In establishing the credit worthiness of an applicant, loan officers collect the necessary data from both the business premises and the home of the applicant, since in dealing with the target group it is difficult to draw a clear distinction between investment and consumption.

3.5.1 Collateral

Balkenhol (2001:8) describes collateral as an asset pledged to the lender which may be seized and sold in case of default. Collateral screens potential borrowers and is an incentive to respect the repayment obligation. Further collateral has its limitations when recovering claims including moral hazard when the loans are collateralised by movable goods which can be easily hidden by the debtor; social customs, political context may prohibit or discourage the acquisition of assets seized after insolvency and sold at an auction etc. Bankers see in collateral primarily a psychological device; they do not really expect to go to court for repossession. Balkenhol (2001:17) also adds that collateral should be capable of providing the bank the possibility of exerting moral pressure on the borrower**.**

Collateral has traditionally been used to mitigate adverse selection and moral hazard (Brau and Woller, 2004). It serves to discourage bad risk clients from taking loans which they know they are not capable of repaying (Krahnen, 2000). This allows the lender to avoid attracting a pool of clients who cannot sustain long-term credit relationships. Asking to pledge collateral does not only help lenders establish borrowers' credit worthiness, but also prevents irresponsible use of borrowed money (moral hazard) due to knowledge that collateral will be forfeited in the event of default (Ghosh *et al*., 2000). Vilanculo (2007:23).

Balkenhol (20-23) discusses some of the factors influencing a bank's choice of collateral at length and states that the choice of collateral is the bank branch manager's decision which is governed largely by tradition, personal judgment and local practices. Some of the factors influencing the choice of collateral are summarised below as follows:

- Present and anticipated transaction costs in establishing and enforcing property rights;
- The position towards other creditors in case of insolvency;
- Speed of foreclosure - banks prefer collateral that can be more easily realised in case of default and tend to avoid collateral which entails time consuming and cumbersome repossession procedures e.g. residential housing. Banks prefer near-

cash assets and liquid securities not only for their market value, but also because of easier repossession i.e. the banks should not have to seek recourse to the courts in case of default;

- Cost of legal proceedings – these include various fees which are either fixed or expressed in relation to loan size. These costs can be ten percent of the loan size; the actual costs of legal proceedings connected with repossession exceed expectations. Adjournments and delays in the settlement of court cases also pose a problem. The court's costs are borne by the losing party which reduces the incentive of debtors to seek court intervention in baseless cases; and
- Other – cost of identifying and controlling the collateral, the internal administrative and risk costs associated to specific forms of collateral, loan size and likely hood of default caused by poor management or a depressed business climate.

Balkenhol (18-19), discusses the conventional types of collateral commonly used by banks and these are summarised below as follows:

- *Mortgage of fixed assets* - land is a traditional form of saving or investment and the most commonly available security in agricultural economies. The borrower submits ownership documents to the lender as security for a loan;
- *Personal guarantee* - third-party personal guarantee is an arrangement where a third party takes responsibility to ensure the repayment of the loan and interest in the event that the borrower defaults. Some banks prefer co-obligation to third party-guarantee as this allows the lender to have parallel and simultaneous recourse to the co-obligant without having to exhaust their recourse against the borrower; and
- *Chattel mortgage* – defined as pledge of personal property as collateral on a debt;
- *Linking of credit to savings* - mainly by Bolivian cooperatives and MFIs for clients with a stronger economic capacity whose cash-flow is sufficiently high. In case of default the client has to abandon her savings to the bank.

Other forms of conventional collateral commonly used by banks are 1) Cession of investments e.g. shares, unit trusts etc.; 2) Cession of assurance policies; 3) Special notarial bond of equipment or value of equipment; and 4) General notarial bond.

3.5.2 Credit rationing

In credit rationing banks may refuse loans to borrowers even if the borrower is willing to pay more than the market interest rate, accept a smaller loan than required or put up more collateral than demanded. Stiglitz & Weiss (1981:393) state that credit rationing exists because prices do not do their job. Stiglitz & Weiss (1981:394) explain that credit rationing seems to occur when there is an excess demand for loanable funds and hence even among loan applicants who appear to be identical some receive a loan and others do not. Further the rejected borrowers would not receive a loan even if they offered to pay higher interest rates. Another variation of credit rationing according Stiglitz & Weiss (1981:395) seems to be a situation where there are identifiable groups of individuals in the population who, with a given credit, are unable to obtain loans at any interest rate even though with a larger supply of credit they would.

Further according to Stiglitz & Weiss (1981: 408 - 409), increasing interest rates and increasing collateral requirements could increase the riskiness of the bank's loan portfolio, either discouraging safer investors, or by inducing borrowers to invest in riskier projects, and therefore could decrease the bank's profits. Hence neither instrument will necessarily be used to equate the supply of loanable funds with the demand for loanable funds. Under those circumstances credit restrictions take the form of limiting the number of loans that the bank will make.

3.5.3 High interest rates

High or above market interest rates are charged in order to cover operational and administrative costs, and to ensure the sustainability of the lender (Littlefield, et al., 2003; Littlefield, 2004). Additionally they have a screening effect. They compel borrowers to take loans on the basis of expected returns and not in order to take advantage of subsidies

(Brau and Woller, 2004). Again charging above market rates ensures that only clients who are willing and can sustain long-term credit relationships enter the relationship hence increasing its quality. (Vilanculo 2007:24)

3.6 Reports and monitoring

According to Roodman & Qureshi (2006:27), data collection helps in identifying any signs of repayment troubles and workers involved in the collection absorb messages about what constitutes good performance. Monitoring may be carried out by field workers and for all information to be useful, Management Information Systems (MIS) must be in place to transmit information efficiently, reliably, and quickly. In the rich world, a good MIS is seen as synonymous with high technology with computers as the nerve centre.

3.6.1 Loan utilisation checks

According to Simanowitz (2000:129) monitoring of loan utilisation helps members to take their businesses seriously and to avoid destroying the business by taking money from the business for their families. The monitoring also gives an early warning of problems, which can then be dealt with.

Grant (2008:1) explains that traditional microcredit projects throughout the world have faced loan diversion as a result of borrowers using their loans not for the purpose given on the loan application form or prescribed by the project, but for another more pressing purpose. Often loans are diverted for "providential" or "non-productive" purposes, to meet emergency medical or education expenses (both of which, incidentally, can also be seen, in the long run at least, as "productive") or loans are diverted because the borrower sees another more viable or lucrative opportunity. Lopez (2005:17) states that loan utilisation is used to assist management to develop systems that provide information to field workers and enable them to conduct the effective and timely follow-up of loans; and to manage their portfolio efficiently. Utilisation checks also made it easier for the field staff to figure out whose payments were due and when, and who was late and by how much, the more time they could spend with the borrowers.

3.6.2 Drop out monitoring

Drop out monitoring is another tool used for reporting. According to Simanowitz (2000:115) interviews with program drop-outs are an important source of information, and they are incorporated into a number of impact-assessment systems. Drop-outs provide a very valuable source of information for MFIs' failure, program improvement, relating both to the performance of the MFI in relation to client needs, and more generally to how an MFI relates to client livelihoods and external conditions. Further according to Simanowitz (2000:117), by understanding reasons for drop-outs, directors can gain a picture of problems in program design and application. Lastly, Simanowitz (2000:123) explains various reasons for drop outs which may include death in the family; illness, business failure **(**too much selling on credit, money not re-invested into business etc.) group formation, loan period wrong (too long or too short); high transport costs; left alone in the group etc.

3.7 Delinquency management procedures

According to Goss & Mitten (2007:5) as clients are strapped for cash, they are less likely to repay outstanding loans. This situation is called delinquency. Goss & Mitten (2007:6-7) further explain that a major problem affecting financial performance and sustainability is delinquent loans. Delinquency management is necessary because of the following reasons: delinquency can increase expenses; late payments can negatively affect cash flow resulting in the delay or loss of interest income and decreased profitability or sustainability; and in some cases, an MFI's loan portfolio can comprise up to 80 percent of its total assets and delinquency can lead to a significant depletion of the institution's asset base. This asset loss may erode institutional capital or member savings that cannot be re-lent in the form of loans to new or existing microfinance clients. In markets with high prevalence rates, MFIs may find their profitability/ sustainability is affected when their existing savings and loan products meet the needs of fewer and fewer of their clients.

3.8 Incentives and disincentives for defaulting customers

According to the Consultative Group to Assist the Poor (CGAP) (2008:6) default occurs when a borrower cannot or will not repay his or her loan and the MFI no longer expects to receive repayment. The MFI may continue its collection efforts. Usually a loan is declared in default when the borrower has stopped payment on a loan for more than two or three due dates. Further according to Merna & Njiru (2002), each loan or bond has a *cross default* clause provision and the debt may be called back by the lenders for immediate repayment even if it is not due for repayment. If this provision is triggered then the company may face even more liquidity problems and may be forced to declare bankruptcy.

To reduce the possibility of defaulting customers MFIs may introduce incentives or disincentives. The CGAP (2008, 12) states that, borrowers behave rationally based on the incentives and disincentives to repay. The MFI needs to create more incentives and reduce disincentives to encourage repayment and prevent defaulting loans. According to CGAP (2008, 13) incentives may include larger follow up loans, access to training, savings or other program services, access to advice from credit officers, award or prizes for timely repayment, lower interest rates on second / third loans, interest rebates etc. CGAP (2008, 13) further lists disincentives which may include penalty fees for late payments, delay future loans, loss of access to future loans, legal action and costs, loss of collateral, loss of access to other program services etc.

3.9 Conclusion

According to Berger and Udell (2005); Kano *et al (* 2006) (cited by Vilanculo (200:17)), recent financial intermediation literature on lending to SMMEs shows that commercial lenders can successfully reach the target group by drawing on non-conventional lending technologies in extending credit to these enterprises. Further, Boot (2000) (cited by Vilanculo (2007:19)) states that the non-conventional lending technology described as *relationship lending* is perceived to be appropriate for lending to low income individuals and small businesses that often do not have standard financial records and conventionally acceptable guarantees such as houses and land titles. This non-conventional lending technology is based on what Berger and Udell (2002, 2005) call 'soft information' which includes character, reliability and estimates of the cash flows of the applicants.

In order for commercial banks to provide microfinance to SMMEs in the construction industry, they may have to consider relationship lending in lieu of the more conventional screening mechanisms.

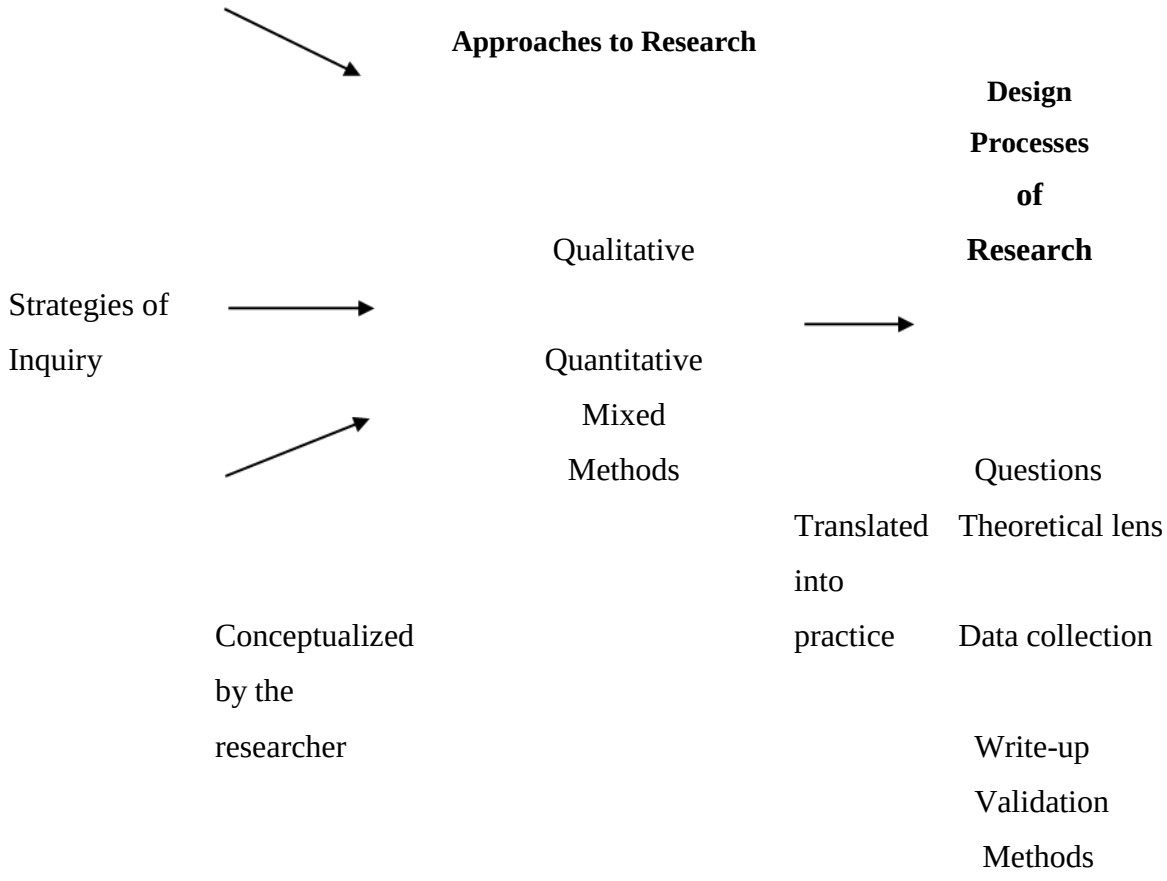
CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

Research is discovering things that no-one knew and creating things that never were. It is a never-ending process: discoveries and creations lead to new discoveries and new creations…. (Melville & Goddard, 1996: xiii). The backbone of a successful research is the research methodology. Leedy & Ormrod (2005:12) define a research methodology as the general approach the researcher takes in carrying out the research project.

This chapter outlines the design of the research and the techniques used to collect, compile and analyse data. Creswell (2003:4) shows that the design of research is a three step process. The first step is the inquiry stage where the researcher explores the knowledge around the particular subject he wishes to study. The outcome of this first step is the research problem and hypotheses. In the second stage the researcher designs a strategy of how to conduct the research. The third and last stage is the practical implementation of stage two where the researcher conducts data collection and analysis and concludes the research. These three important stages are graphically represented by Creswell (2003:5) and illustrated in Figure 8.

Figure 8 Knowledge claims, strategies of inquiry, and methods leading to approaches and the design

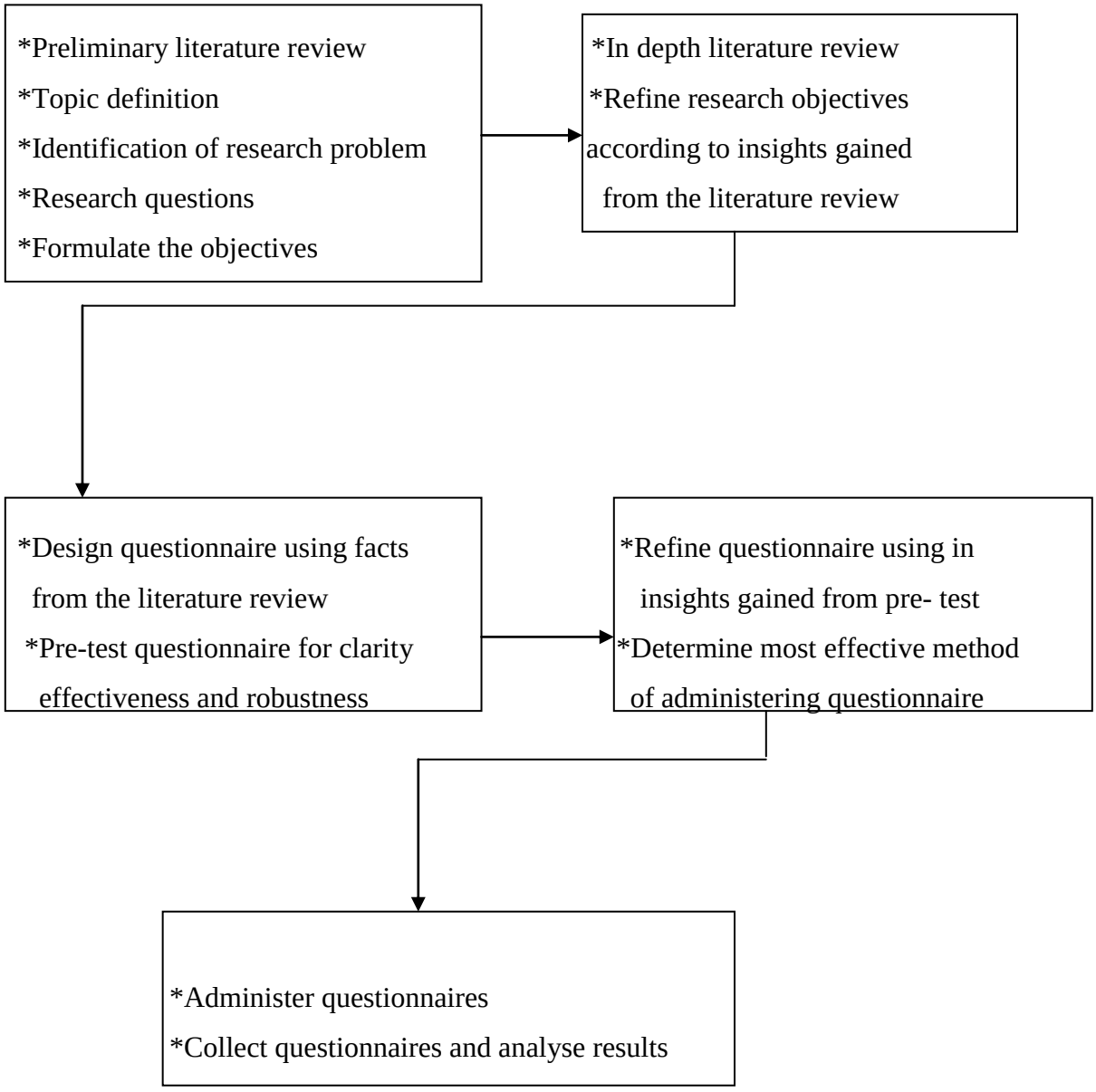


Source: Creswell (2003:5)

4.2 Research design

When we talk about a general strategy for solving a research problem, we talk about a research design. The research design provides an overall structure for the procedures the researcher follows, the data the researcher collects, and the data analyses the researcher conducts. Simply put, research design is *planning.* (Leedy & Ormrod, 2005:85). The steps taken to carry out the research are summarised in figure 9.

Figure 9 Research design flow chart



According to Melville & Goddard (1996; 3-5), research can be classified by the methods used and these are listed below:

a) *Experimental research* – One is primarily interested in cause and effect. Researchers identify the variables of interest and seek to determine if changes in one variable (called the *independent variable*, or cause) result in changes in another (called the *dependent variable*, effect);
b) *Creative research* – involves the development of new theories, new procedures and new inventions. Unlike experimental research, creative research is much less structured and cannot always be pre planned;
c) *Descriptive research* – a specific situation is studied either to see if it gives rise to any general theories or to see if existing general theories are bourne out by the specific situation;
d) *Ex post facto research* - ex post facto means 'from after the fact' and typically occurs when data is available which could not be generated by experimental research. Unlike experimental research which exposes similar groups to different treatments to see the effects of the treatments (moving from cause to effect), ex post facto research looks back at an effect and tries to deduce the causes. For ex post facto research to be valid, one must eliminate all other possible cause;
e) *Action research* – applied research which is aimed at solving the problem immediately;
f) *Historical research* – studies of the past to find cause and effect patterns to examine a current situation and predict future situations; and
g) *Expository research* – research based purely on existing information and normally results in 'review' type reports.

This study is descriptive in nature. The lending methodologies of commercial banks in the GJMA are examined to determine whether they are appropriate for providing microloans to SMMEs in the South African construction industry. Based on the results, recommendations are made based on existing literature.

Descriptive research can either be qualitative or quantitative. Qualitative research has the following characteristics:

a) *Takes place in the natural setting* – enables the researcher to develop a level of detail about the individual/place and to be highly involved in actual experiences of the participants;
b) *Uses multiple methods that are interactive and humanistic* – involves active participation of the subjects in the data collection using open-ended observations, interviews etc. The researcher does not disturb the site anymore than is necessary and seeks to build a rapport and credibility with the subjects;
c) *Emergent rather than tightly pre-figured* – It is dynamic and is refined as the inquirer learns what to ask and to whom it should be asked;
d) *Fundamentally interpretive* – the researcher makes an interpretation of the data by developing a description of the individual/setting, analyzing data for themes or categories, and finally making an interpretation or drawing conclusions about its meaning personally and theoretically, stating the lessons learned, and offering further questions to be asked; and
e) Social phenomenon is viewed holistically hence the reason why qualitative research appears broad, panoramic views rather than micro-analyses.

According to Locke *et al* (1993:99), the focus of attention is on the perceptions and experiences of the participants. The researcher is not seeking the kind of verifiable and absolute "truth" that functions in a cause and effect model of reality.

A contrast to qualitative research is quantitative research. According to Leedy & Ormrod (2005:179), quantitative research either involves identifying the characteristics of an observed phenomenon or exploring possible correlations among two or more phenomena.

It is descriptive in nature and examines a situation as it is but does not involve changing or modifying the situation under investigation, nor is it intended to determine cause and effect relationships. This study is qualitative in nature because:

a) The focus of attention is on the perceptions and experiences of the regional managers of each bank's SMME division;
b) The study involves active participation of different commercial bankers via personal interviews and questionnaires. The participants will provide broad and panoramic views based on their day to day experiences;
c) Data collected is interpreted by developing a description of the individual/setting, analyzing data for themes or categories, and finally making conclusions and recommendations about its meaning personally and theoretically, stating the lessons learned, and offering further questions to be asked; and
d) The purpose of the study is not to explore possible correlations among two or more phenomena as is the case with Quantitative research.

The common types of Qualitative Research according to Leedy & Ormrod (2005:135-139) are:

a) *Case study* – a particular individual, programme, or event is studied in depth for a defined period of time. A researcher may focus on a single case because it's unique or multiple cases to make comparisons. A case study is especially suitable for learning more about a little known/poorly understood situation. It may also be useful for investigating how an individual or programme changes over time, perhaps as the result of certain circumstances or interventions. It is useful for generating or providing preliminary support for hypotheses. Its major weakness is that especially when only a single case is involved, we can't be sure that the findings are generalisable to other situations;
b) *Ethnography* – the researcher looks at an entire group – more specifically a group that shares a common culture-in depth. The group is examined in its natural setting for a lengthy period of time to determine everyday behaviour in-order to determine norms, beliefs, social structures etc. it allows flexibility in the choice of methods used to obtain data which can either be advantageous (to the astute

researcher who knows what to look for) or disadvantageous (to the novice who may be overwhelmed and distracted by unimportant details;

c) *Phenomenological study* – attempts to understand people's perceptions, perspectives, and understandings of a particular situation. By looking at multiple perspectives on the same situation, the researcher can then make some generalizations of what something is like from an insider's perspective;
d) *Grounded theory study* – uses a prescribed set of procedures for analyzing data and constructing a theoretical model from them. The study focuses on a process related to a particular topic, with the ultimate goal of developing a theory about that process;
e) *Content analysis* – this is a detailed and systematic examination of the contents of a particular body of material for the purpose of identifying patterns, themes, or biases. Most commonly utilized to examine forms of human communication e.g. books, newspapers etc. of all the methods described, content analyses requires the greatest amount of planning at the front end of the project.

This study is a phenomenological study as it attempts to understand the commercial banks' perceptions, perspectives and understandings of whether they have an appropriate lending methodology for SMMEs in the construction industry. Multiple perspectives will be taken into consideration and generalisations will be made based on the lender's perspectives.

4.3 The population, sampling frame, sampling size and sampling technique

4.3.1 Target population

According to Melville & Goddard (1996:29) a population is any group that is the subject of research interest. The population of this study is commercial banks registered with the Reserve bank of South Africa. According to the Reserve bank website www.reservebank.co.za, the registered banks operating in South Africa fall under the following categories as illustrated in Table 3.

Table 3 Banks registered with the Reserve Bank of South Africa

Registration category	Number of banks in category
Locally controlled	14
Foreign controlled	6
Branches	14
Registered mutual banks	2
Foreign banks – representative offices	30
Total	66

Source – www.reservebank.co.za (2008)

Appendix 2 provides details of the banks summarized in the table above. Commercial banks have been targeted because according to Baydas *et al* (1997:3) they are well regulated institutions with sound governance structures have a greater outreach through a large network of branches, have the potential to expand and have their own source of funds. Further, commercial banks are not subject to the same level of political influence and interference experienced by African DFIs and which has in the past resulted in credit diversion and the subordination of efficiency and profitability objectives to political priorities as outlined by FISCU in 1998 (cited by The SADC development finance centre annual report, 2006). Hinton (2007:5) also points out that Government-controlled SME banks internationally have historically been subjected to undue political influence and many have failed or not become sustainable. This study aims to represent the characteristics of the population at a 95 % confidence interval with a 55 margin of error.

4.3.2 Sampling frame

This study focuses on commercial banks operating in the (GJMA) in the province of Gauteng. According Chandra *et al* (2001:2), the GJMA is South Africa's largest industrial area, and contains the largest black townships, and a study of GJMA's SMMEs is useful for understanding local economic development in South Africa. Further, Chandra *et al* (2001:2) cite statistics from a research report by the Department of Trade

and Industry (DTI) in 1997 which suggests that Gauteng has the highest density of SMME firms, accounting for 34 percent of the national total and a study and lessons in GJMA are likely to be applicable to South Africa's other metropolitan areas and the broader national economy.

4.3.3 Sampling size

Of the 66 banks registered with the South African Reserve bank, only the categories of locally controlled (14), Foreign controlled (6) and Branches (14) are considered. Of the three categories in consideration two banks are in liquidation or final liquidation hence excluded from this study bringing the total number of banks in consideration to 32. The registered mutual banks (2) are excluded as they are located outside the GJMA. The representative offices (30) are excluded because according to the Banks Act, 1990 (ActNo.94 of 1990) a foreign bank is defined as an institution which has been established in a country other than the Republic and which lawfully conducts in such other country a business similar to the business of a South African bank and any Representative office of a foreign bank may not conduct the business of a bank in South Africa in terms of the ACT.

4.3.4 Sampling technique

A sample is a subset of the target population and the sample is selected with a view to generalising the characteristics of the population from the sample findings. Samples are usually employed in large populations as it is often not practical nor possible to study an entire population. The different types of sampling methods are discussed as follows:

4.3.4.1 Probability sampling

In quantitative data (data that will be statistically analysed), probability sampling is used to ensure that each element is given equal opportunity of being selected by chance. The essence is to minimise bias and ensure that the characteristics and nature of the selected sample size closely resembles the characteristics and nature of the population, thus a sampling frame is required to calculate the probabilities (Mbachu, 2004). The types of probability sampling are as follows:

a) *Simple random sampling* - simple random sampling is used to draw a representative or actual sample sizes from small sampling frames, such that each subject has equal probability of being drawn. The essence is to avoid bias (having a select number of subjects to the exclusion of others in the group), and to ensure that the sample characteristics and quality closely approximate those of the target population. It is important to adopt sampling by replacement so that the probability of selecting an element in subsequent sampling is not dismissed (Mbachu, 2004). The limitations of this type of sampling according to Melville *et al* (1996:31), is that it is impossible in large populations and economically unviable.

b) *Stratified random sampling* - used where the target population consists of various groups of elements, with no defined group boundaries and there is a need to obtain representative views from each group. If the sample size is proportional to the stratum size, the sampling is said to be proportional otherwise it is disproportional. The latter is appropriate if stratum variability is large and the ample size should be increased to improve precision. It can drastically reduce the sample size without introducing bias. However for most groups encountered in practice there may not be an equal distribution of elements within the population. The first task is to segregate the population along groups of elements and determine the number in each group. (Mbachu, 2004)

c) *Systematic sampling* - In this approach, every *kth* element is selected from the sampling frame after a random start. If N is the size of the sampling frame, and n is the required sample size, the K=N/n. this simply divides the sampling frame into n groups each with k elements. The next step is to randomly select a number between 1and k. Each subsequent number chosen is added to the cumulative total of the previously chosen numbers until all n numbers are chosen. This method is easier to use especially if the population is large. (Mbachu, 2004)

d) *Cluster sampling* - the population is sub-divided into sub-groups called clusters. One then randomly selects a sample of clusters, and randomly selects members of the cluster sample to serve as the population sample. Can be done to more than one level and the division into clusters is based on spatial separation alone. Least reliable of the sampling methods but often used as the last resort. Does away with the need for a large sampling frame (Melville *et al*, 1996:32).

4.3.4.2 Non-probability sampling

Chance selection procedures are not used in the selection of the samples from the sampling frame. It is therefore not possible to determine how representative the sample is of the population, and techniques of statistical reference cannot be used to accord a measure of certainty or reliability in the findings and conclusions drawn to them. Non-probability sampling techniques are therefore used in qualitative data gathering (i.e. data that may not be subjected to robust statistical analysis) and these include convenience sampling, purposive sampling or snowball sampling. However, if bias is eliminated in the sampling process, the data obtained through non- probability sampling could be subjected to statistical analysis (Mbachu, 2004). The types of non probability sampling techniques are as follows:

a) *Convenience sampling* - the criterion for selecting sample elements is convenience to the sampler. It is unlikely to be representative of the population from which it is drawn and it is used for gathering qualitative data. It is therefore, mainly used for exploratory work for pre-testing questionnaires or in cases where time is short and quick opinion is required. It is not intended to be representative of the sampling frame, but needs to be sufficient to identify recurring themes or constructs for use in designing the quantitative survey stage questionnaires. The method is called convenience sampling because the number of subjects involved is such as the researcher could obtain in the circumstance (Mbachu, 2004);

b) *Purposive or judgemental sampling* - a sample is drawn using judgemental selection procedures rather than the laws of probability. It is mainly used in case studies to select unique cases (Mbachu, 2004). In purposive sampling people or other units are chosen as the name implies, for a particular *purpose*. For instance, we might choose people who we have decided are "typical" of a group or those who represent diverse perspectives on an issue. Leedy & Ormrod (2005:206). Purposive sampling may be appropriate for certain research problems. However, the research should always provide a rationale explaining why he or she selected the particular sample of participants. Leedy & Ormrod (2005:206);

c) *Quota sampling* - this method involves selecting representative quotas from various segments of the population. However, the individual units are not selected at random. Proportional or disproportional quota sampling may be used depending on the variability or size of the various segments or strata of the population. It can be used to obtain practical and cost effective convenience samples of respondents from two or more target populations where the target populations are large. (Mbachu, 2004); and

d) *Snowball sampling* - used in situations where the entire population for the study is unknown, and difficult to determine, but a relatively small sample size is obtained at the onset. Thus it begins with a few respondents who provide referrals for additional respondents. (Mbachu, 2004).

The method chosen for the data collection is non – probability sampling and is preferred to probability sampling because chance selection procedures are not utilised and the study is qualitative in nature.

The type of non – probability sampling method chosen is purposive sampling as the sample will be drawn using judgemental selection procedures rather than the laws of probability. Commercial banks have SMME divisions in each region and these SMME divisions are responsible for providing products and support to SMMEs in different sectors at branch level. This study will not approach each individual branch in the GJMA

but will approach the regional managers of the SMME division in the GJMA because the regional managers have a deep knowledge of SMMEs, are responsible for making strategic decisions and are responsible for ensuring that strategic goals and objectives are implemented at branch level.

4.4 Research instrument

One has to measure data somehow. Any device used for this measurement is called an **instrument**…. (Melville *et al*, 1996:37).

Melville *et al* (1996:37), further explains that an instrument has two qualities. The first quality is reliability which means measurements made are consistent: if the same experiment is performed under the same conditions, the same measurements will be obtained. The second quality is validity. Measurements have to be correct and the instrument should measure what it is intended to measure, and that it measures this correctly. The instrument chosen for this study is a questionnaire. According to Leedy & Ormrod (2005:185), questionnaires are used to learn about people's behaviours, characteristics, attitudes and opinions. This is done through a combination of a checklist and a rating scale. A checklist is a list of behaviours, characteristics, or other entities that a researcher is investigating. Either the researcher or participants (depending on the study) simply check(s) whether each item on the list is observed, present, or true; or else *not* observed, present or true. A rating scale on the other hand was developed by Rensis Likert in the 1930s and is more useful when a behaviour, attitude, or other phenomenon of interest needs to be evaluated on a continuum of, say, "inadequate" to "excellent," "never" to always," or "strongly disapprove" to "strongly approve".

4.4.1 Pre-test of the questionnaires

The questionnaire is pre-tested in order to develop clear and concise questions and to determine any weaknesses in the questions. Professor A. Talukhaba of the University of Witwatersrand pre-tested the questionnaire as he has a deep knowledge and understanding of the topic.

4.4.2 Administration of the questionnaire

Administration of the questionnaires is through personal interviews where the respondents answer the questionnaires in the presence of the author. Where it is not possible for personal interviews to be arranged, the questionnaires are administered using electronic means primarily e-mail and fax.

4.4.3 Format of questionnaire

Section 1: *Demographic information* - this section examines the respondents organisational set up, type of market the respondent caters for as well as general questions in order to determine the respondent's background and current activities;

Section 2: *Transaction costs* – this section examines the costs incurred by both lenders and borrowers during a lending transaction and innovations to reduce transaction costs;

Section 3: *Risk* – this section examines the risks the lender is exposed to when financing a project, the requirements needed in order for a borrower to qualify for a loan as well as screening mechanisms and risk management procedures;

Section 4: *Prudential financial practices* – this section examines the effectiveness of methods used for assessing loans;

Section 5: *Collateral* – this section examines the types of collateral commonly used, reasons for selecting collateral as well as collateral substitutes and collateral free lending;

Section 6: *Loan repayments* - this section examines methods to encourage on time payments and there advantages and disadvantages of these methods

Section 7: *Monitoring and reporting* - this section examines the methods used for monitoring and reporting on loans once disbursed; and

Section 8: *Microfinance lending methodologies* - this section examines the level of preference for utilising the group lending methodology and individual lending methodology.

4.5 Data analysis and statistical techniques

This section details the data analysis method used to analyse data received from the questionnaires. The multi-attribute method (Mbachu, 2004) is utilised in the analysis of data obtained from the questionnaire survey. This involves computing the mean rating (MR) of each attribute or variable with a subset of factors. In each computation, the total number of respondents (TR) rating for each variable are obtained, and used to calculate the percentages of the number of the respondents associating the particular rating point to each variable. The computations are as follows:

Mean rating (MR): computed as the sum of the products of each rating point (RP) and the corresponding percentage response to the (R %), out of the total number of responses (TR) involved in the rating of the particular variable. Equation 1 below demonstrates this:

$$\mathbf{MR = \sum(Rp\mathit{i}XR\mathit{i}\%)} \qquad (1)$$

Rpi = RATING POINT I (RANGING FROM 1-5)

Ri% = percentage response to rating point, I

Relativity index (RI): Used to compare the MR values of the variables in a given subset. It is computed as a unit of the sum of MRs in a subset of variables as shown below in Equation 2

$$\mathbf{RI = MR/(\sum MR)} \qquad (2)$$

RI = Relativity Index

MR = Mean Rating

The results of the questionnaire are compiled and analysed in chapter five. Chapter six makes recommendations and conclusions based on the analysis of the results in chapter five.

4.6 Conclusion

A pilot interview is not carried out because it is felt that the literature is sufficient to identify recurring themes and constructs and the relatively small sampling size. Once the questionnaires are returned, the data is compiled and analysed and recommendations made based on the results of the study.

CHAPTER 5: DATA ANALYSIS

5.1 Introduction

This chapter compiles and analyses the questionnaires. Conclusions are made from the results of the questionnaires and comments are made with reference to the literature in chapters two and three. Personal interviews were carried out with regional managers of the SMME divisions of commercial banks in the Greater Johannesburg Metropolitan Area (GJMA) where convenient and where not convenient questionnaires were distributed via e-mail and fax to the respondents. The response was fair with 22 out of the 32 respondents (69%) responding. The majority of the lenders felt that the questions asked were relevant and the respondents felt that the questionnaire was quite long. The results of the background section of the questionnaire are set out below.

5.2 Analysis of section one of questionnaire: background

Section one of the questionnaire examines the respondents organisational set up, type of market the respondent caters for as well as general questions in order to determine the respondent's background and current activities.

Table 4 Type of lending institution

Type of lending institution	Response	%
Commercial bank	22	100
Insurance related	0	0
Credit union	0	0
Community based organisation	0	0
Co-operative	0	0
Village banker	0	0
Pawn broker	0	0
Micro – finance provider	0	0
Other	0	0
Total responses	**22**	**100**

The results of Table 4 show that 100% of the respondents are commercial banks. This demonstrates the reliability of the responses based on their knowledge of how commercial banks operate.

Table 5 Length of practice as a lender

Length of practice as a lender	Response	%
< 2 years	0	0
> 2 years ---> 5 years	3	14
> 5 years ---> 10 years	0	0
> 10 years	19	86
Total responses	**22**	**100**

The results of Table 5 show that 86% of the respondents have been lenders for a period of more than ten years and hence one can reasonably label their responses as reliable and accurate because of the length of experience as lenders.

Table 6 Business structure of lender

Business structure	Response	%
Individual ownership	0	0
Partnership	0	0
Close co-corporation	0	0
Public company	22	100
Private company	0	0
Section 21 company	0	0
Other	0	0
Total responses	**22**	**100**

The results of Table 6 show that 100% of the respondents are listed as public limited companies in accordance with the requirements of the Banks Act, 1990. The company is a form of business ownership which has to meet certain requirements. Some of the requirements a company has to meet include appointment of a board of directors, appointment of an auditor, filing of annual returns with the Registrar, the holding of an Annual General Meeting (A.G.M.), the holding of extraordinary general meetings of shareholders to pass special resolutions, selling of shares to the public and making information about the company freely available to the public. These requirements are prescribed to ensure that the lenders are transparent and accountable to their clients.

Table 7 Number of employees employed by lender

Number of employees	Response	%
0	0	0
>1--->5	0	0
>5--->10	0	0
>10--->20	0	0
>20--->50	0	0
>50	22	100
Total responses	**22**	**100**

The results of Table 7 show that 100% of the respondents employ more than fifty employees in the GJMA. This demonstrates the capacity and ability of the banks to provide a wide range of services.

Table 8 Types of economic sectors services are provided to by lender

Types of economic sectors services are provided to	Response	%
Transport and logistics	0	0
Mining and quarrying	1	5
Manufacturing	0	0
Wholesale and retail	0	0
Tourism and hospitality	0	0
Agriculture	0	0
Electricity, gas & water supplies	0	0
Construction	0	0
Community, social & personal services	0	0
All economic sectors	21	95
Other	0	0
Total responses	**22**	**100**

The results of Table 8 show that 95% of the respondents provide services to all sectors of the economy. This demonstrates the depth of expertise and knowledge which the lenders have as a result of the diversified range of services provided to the different economic sectors of the GJMA.

Table 9 Types of enterprise levels services are provided to by lender

Types of enterprise levels services are provided to by lender	Response	%
Survivalist	0	0
Micro enterprises	0	0
Small enterprises	0	0
Medium enterprises	0	0
Large enterprises	0	0
All categories	20	91
Others	2	9
Total responses	**22**	**100**

The results of Table 9 show that 91% of the respondents offer services to all categories of enterprise levels. This demonstrates that the respondents are knowledgeable of the needs of enterprises at various stages and are aware of the requirements for the development of enterprises from one enterprise level to another.

Table 10 Types of products offered by lender

Types of products offered by lender	Response	%
Fixed term deposits	0	0
Working capital loans	0	0
Personal loans and overdrafts	0	0
Investing	0	0
Insurance	0	0
Liquid savings	0	0
Transaction accounts	0	0
Payment services	0	0
Start up capital	0	0
Home loans	0	0
Credit cards	0	0
Mzansi	0	0
Bridging finance	0	0
Other	4	18
All	18	82
Total responses	**22**	**100**

The results of Table 10 show that 82% of the respondents offer all services. This demonstrates that the lenders have the capacity to provide different services and hence are able to cater for the different needs of the borrowers.

5.3 Analysis of section two of questionnaire: transaction costs in providing micro loans

Section two of the questionnaire examines the costs incurred by both lenders and borrowers during a lending transaction and innovations to reduce transaction costs.

Table 11 The respondents were asked whether interest rates are high because micro lending is a high cost operation

Interest rates are high because micro lending is a high cost operation.	**Response**	**%**
Yes	19	86
No	3	14
Total responses	**22**	**100**

The results of Table 11 show that 86% of the respondents responded in the affirmative.

Table 12 The respondents were asked what proportion of interest rate charges on microloans certain components form

*Proportion of interest rate charges: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		*Proportion of interest rate charges					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
Components of interest rate charges		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Cost of capital	13.64	63.64	9.09	4.545	9.09	22	3.68	0.26	26	3
2	Cost of prudential financial practices	45.45	31.28	9.09	9.091	4.55	22	4.05	0.29	29	2
3	Operating expenses	50.00	27.27	22.73	-	-	22	4.27	0.31	31	1
4	Profit	4.55	-	4.55	36.36	54.55	22	1.64	0.12	12	4
5	Other (*please specify*)	-	-	-	13.64	-	22	0.27	0.02	2	5
Totals								**13.9**	**1**	**100**	

The results of the multi attribute analysis in Table 12 show that "Operating expenses" are the greatest proportion of interest rate charges on micro loans. According to Mohane *et al* (2002:5), one of the key factors influencing the lack of credit supply to SMMEs is the non recoverability of costs. Mohane *et al* (2002:6) further explain that a survey carried out by the MFRC shows that the bulk of costs in short term lending are from administrative costs. Fernando (2006:3) explains that making and recovering small loans is costly on a per unit basis. Often loan recovery is executed by staff visits to clients. These staff visits increase costs as a result of time taken and transportation used. Poor physical infrastructure e.g. inadequate road networks, transportation, and telecommunication systems etc. in many countries in which micro lenders operate also increases administrative costs and adds significantly to the cost of microfinance operations. These high operating costs diminish the potential for profits which would otherwise accrue to the lending institution.

Table 13 The respondents were asked what proportion of the operating expenses of providing microloans do direct transaction costs form

*Proportion of operating expenses: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		*Proportion of operating expenses					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
Direct transaction costs		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Cost of identifying and screening clients	50.0	31.818	13.636	4.54545	0	22	4.27	0.19	19	1
2	Cost of documentation	4.50	45.455	27.273	136364	9.090909	22	3.23	0.14	14	4
3	Cost of appraisal	50.0	22.727	18.182	0	9.090909	22	4.05	0.18	18	2
4	Cost of processing loan applications	31.8	36.364	4.5455	13.6364	13.63636	22	3.59	0.16	16	3
5	Cost of disbursement	0.0	9.0909	18.182	22.7273	50	22	1.86	0.08	8	7
6	Monitoring cost *(utilisation checks, following up of instalments etc.)*	18.2	22.727	22.727	13.6364	22.72727	22	3.00	0.13	13	5
7	Costs of collecting repayments	4.50	13.636	27.273	36.3636	18.18182	22	2.50	0.11	11	6
8	Other (*please specify*)	0.0	0	0	9.09091	0	22	0.18	0.01	1	8
Totals								**22.7**	**1**	**100**	

The results of the multi attribute analysis in Table 13 show that "The cost of identifying and screening clients" is the direct transaction cost which forms the greatest proportion of operating expenses when providing microloans.

According to Fernando (2006:13), a lender wants to have as much information as possible about the potential borrower in order to ascertain the applicant's credit-worthiness before granting a loan. According to Ledgerwood, 2001; Beck and de la Torre, 2004; Schmidt and Zeitinger, 1994 (cited by Vilanculo, 2007:20), lenders often subject applicants to thorough initial screening processes, which are critical for reducing the probability of adverse selection and moral hazard and above all for ensuring that once in the actual credit relationship the clients can actually stay in it without harming others and themselves by failing to repay their loans. Vilanculo (2007:20) further adds that in establishing the creditworthiness of an applicant, loan officers collect the necessary data from both the business premises and the home of the applicant, since in dealing with the target group it is difficult to draw a clear distinction between investment and consumption.

Table 14 The respondents were asked what proportion of the operating expenses of providing microloans do indirect transaction costs form

*Proportion of operating expenses: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		*Proportion of operating expenses					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
Indirect transaction costs		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Branch overheads	-	0	21.74	59.091	18.18.18	22	2	0.1	10	6
2	Allocated head office/regional office overheads	9.09	8.696	47.83	22.727	9.09091	22	2.8	0.13	13	5
3	Designing procedures and tools	27.27	43.48	13.04	9.0909	4.54545	22	3.7	0.18	18	2
4	Product research and development	50.00	17.39	13.04	9.0909	9.09091	22	3.9	0.18	18	1
5	Staff training	40.91	8.696	13.04	27.273	9.09091	22	3.4	0.16	16	3
6	Security measures *(fraud prevention etc.)*	9.09	17.39	39.13	22.727	9.09091	22	2.9	0.14	14	4
7	Depreciation of fixed assets	-	4.348	21.74	18.182	54.5455	22	1.7	0.08	8	7
8	Other (*please specify*)	-	8.696	0	9.09909	4.54545	22	0.6	0.03	3	8
Totals								**21.00**	**1**	**100**	

The results of the multi attribute analysis in Table 14 show that "Product research and development" is the indirect transaction cost which forms the greatest proportion of operating expenses when providing microloans.

According to Roodman & Qureshi (2006:10), in product design the lender faces challenges in keeping costs below revenue while maintaining profitability. Roodman & Qureshi (2006:10) further outline the challenges which MFIs face when designing products including building volume, keeping loan repayment rates high, retaining customers, charging reasonable rates, compliance with prudential regulation and minimizing scope for fraud.

Product design and testing is also considered as an opportunity cost. According to Tsilikounas & Kljaic (2004:6), product design includes free training and pilot-testing and staff time. These opportunity costs consist of staff having less time available for program outreach and administrative work. Tsilikounas & Kljaic (2004:7) further explain that these opportunity costs result in staff having to work extra hours. In product design management have to design the tools, inform/train staff and design new products. Tsilikounas & Kljaic (2004:7) refer to these as management opportunity costs.

Table 15 The respondents were asked to rate the indirect transaction costs incurred by SMMEs according to how greatly they reduce the affordability of microloans for SMMEs

*Levels of reduction in affordability: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		*Levels of reduction in affordability					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
		5	4	3	2	1	TR	MR			
Indirect transaction costs		%	%	%	%	%	TR	MR	Index	%	Rank
1	Transportation costs to and from the lenders premises	-	4.545	50	22.727	22.7273	22	2.4	0.23	23	3
2	The cost of obtaining documentation *(financial statements etc.)*	13.64	36.36	40.91	4.5455	4.54545	22	3.5	0.34	34	2
3	Cost of time spent fulfilling the lender's requirements	59.09	18.18	13.64	4.5455	4.54545	22	4.2	0.41	41	1
4	Other (*please specify*)	-	4.545	0	0	0	22	0.2	0.02	2	4
Totals								**10.3**	**1**	**100**	

The results of the multi attribute analysis in Table 15 show that the "The cost of time spent fulfilling lender's requirements" is the indirect transaction cost which reduces the affordability of micro loans for SMMEs the most.

Lenders requirements include business plans, financial statements, guarantees etc. These requirements are required by lenders in order to reduce the risk of default. If the borrower is perceived to be a high risk, then lenders will require more documentation and the borrower will spend even more time trying to meet the lender's requirements.

Table 16 The respondents were asked whether transaction costs are greater if the lender is inefficient in processing and disbursing loans

Transaction costs are greater if the lender is inefficient in processing and disbursing loans.	Response	%
Yes	22	100
No	0	0
Total responses	**22**	**100**

The results of Table 16 show that 100% of the respondents indicate "yes".

Table 17 The respondents were asked to rate indirect costs resulting from lender inefficiencies in processing and disbursing loans according to how greatly they discourage borrowers from applying for microloans

*Levels of discouragement: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		*Levels of discouragement					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
		5	4	3	2	1	TR	MR			
Indirect costs		%	%	%	%	%	TR	MR	Index	%	Rank
1	Missed investment opportunities due to delays in disbursement of loans	22.73	27.27	45.45	18.182	9.09091	22	4	0.61	61	1
2	Cost of extra time spent processing the loan because the lender misplaced documentation	4.55	27.27	22.73	13.636	13.6364	22	2.4	0.36	36	2
3	Other (*please specify*)	-	4.545	0	0	0	22	0.2	0.03	3	3
Totals								**6.6**	**1**	**100**	

The results of the multi attribute analysis in Table 17 show that "Missed investment opportunities due to delays in disbursing loans" is the indirect cost resulting from lender inefficiencies in processing and disbursing loans that discourages borrowers from applying for microloans the most.

Delays in receiving finance may result in the risk of the contractor losing out on a potential contract as the client may want the project complete by a certain date. According to Merna & Njiru (2002), the contractor may be exposed to supply side risk which may involve an inadequate or inconsistent supply of raw material or other inputs or price increase by the input suppliers. Other risks that the contractor may be exposed to are exchange rate fluctuations resulting in increased cost of materials and plant.

Soares (1990:12) explains that during the construction period, delays will cause the contractor's expected cash flow curve to change. In addition, the contractor may have to incur certain expenses during the delay, and construction costs may increase in order for the project to be completed on time. These potential cost increases may mean that the contractor may miss out on the opportunity to invest in plant and other assets or be unable to retain sufficient capital to fund his next project.

Table 18 The respondents were asked whether the key to making microloans affordable is to reduce transaction costs

Making microloans affordable by reducing transaction costs.	**Response**	**%**
Yes	19	86
No	3	14
Total responses	**22**	**100**

The results of Table 18 show that 86% of the respondents indicate "yes".

Table 19 The respondents were asked to rate certain innovations according to effectiveness in reducing transaction costs

*Levels of effectiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

	Innovations designed to reduce transaction costs	*Levels of effectiveness					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Simplifying documentation	13.64	22.73	27.27	27.273	27.27.27	22	3.2	0.14	14	4
2	Streamlining operating procedures	31.82	40.91	22.73	4.5455	4.54545	22	4	0.18	18	1
3	Information sharing systems between lenders	-	4.545	36.36	27.273	27.2727	22	2.1	0.09	9	7
4	Flexible products	-	13.64	27.27	50	50	22	2.9	0.13	13	6
5	Limited products	22.73	18.18	31.82	18.182	18.1818	22	3.4	015	15	3
6	Reduced lending requirements	22.73	31.82	22.73	18.182	18.1818	22	3.6	0.16	16	2
7	Decentralised loan application, approval and collection procedures	13.64	13.64	31.82	27.273	27.2727	22	3	0.13	13	5
8	Other (*please specify*)	4.55	0	0	0	0	22	0.2	0.01	1	8
Totals								**22.5**	**1**	**100**	

The results of the multi attribute analysis in Table 19 show that “Streamlining operating procedures” is the most effective innovation in order to reduce transaction costs. Roodman & Qureshi (2006:16) suggest that frequent transactions increase the administrative burden on the lender and therefore it is imperative to streamline transaction processing. Another way of keeping transactions efficient as discussed by Roodman & Qureshi (2006:16) is to limit the diversity of product offerings. Limiting product diversity is one reason why loans tend to have inflexible repayment schedules, and why associated products such as forced savings and credit life insurance tend to be formulaic.

5.4 Analysis of section three of questionnaire: risk

Section three of the questionnaire examines the risks the lender is exposed to when financing a project, the requirements in order for a borrower to qualify for a loan, screening mechanisms and risk management procedures.

Table 20 The respondents were asked whether lenders are exposed to risk when providing microloans to SMMEs for a construction project

Lenders are exposed to risk when providing microloans to SMMEs for a construction project.	**Response**	**%**
Yes	22	100
No	0	0
Total responses	**22**	**100**

The results of Table 20 show that 100 % of the respondents indicate "yes".

Table 21 The respondents were asked to rate the risks common in construction projects according to how much exposure the lender is subjected to when financing a construction project by an SMME

*Levels of exposure to risk: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		*Levels of exposure to risk					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
Risks common in construction projects		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Completion risk (*Inability to complete the project in time, cost overrun, etc.)*	36.4	41	13.64	9.09	0	22	4.05	0.167	17	1
2	Operation risk (*inefficiencies & delays caused by natural disasters, legal issues etc.)*	4.55	32	36.36	22.7	4.55	22	3.09	0.128	13	5
3	Input and output risk	9.09	32	50	9.09	0	22	3.41	0.141	14	3
4	Liquidity risk (*project not able to generate sufficient resources to meet its liabilities*)	31.8	45	13.64	4.55	4.55	22	3.95	0.163	16	2
5	Counterparty risk (*risk of the lender and borrower both not meeting their commitments*)	9.09	23	54.55	13.6	0	22	3.27	0.135	14	4
6	Interest rate risk	4.55	14	13.64	31.8	36.4	22	2.18	0.09	9	6
7	Financing risk (*exchange rate fluctuations, escalation etc.)*	0	5	18.18	40.9	36.4	22	1.91	0.079	8	8
8	Solvency risk (*potential decrease in net asset values before economic worth is zero*)	0	9	27.27	31.8	31.8	22	2.14	0.088	9	7
9	Other (*please specify*)	4.55	0	0	0	0	22	0.023	0.009	1	9
Totals								**24.2**	**1**	**100**	

The results of the multi attribute analysis in Table 21 show that “Completion risk” is the greatest risk facing lenders when financing a construction project by an SMME.

Numerous factors contribute to the inability to complete a project in time or result in the inability of a project generating sufficient resources to meet its liabilities. One reason highlighted by Kenley (2003:163) is because outward cash flows are greater than inward cash flows in the initial stages of construction and the contractor operates at a loss. Further, during the early stages of the contract the contractor has to source material, pay for equipment and overheads using money from his own pocket.

According to Soares (1990:12), the break-even point on a typical project is often reached by the contractor at some stage near completion of the project. Therefore, in addition to the funds provided by the client, the contractor must provide funds of his own in order to continue the progress of the project until it becomes self-financing. Gardner (2006:11) reports that on average, just fewer than 6 payment claims are submitted per project, with an average of 23 days to payment. If one considers the JBCC PBA contract and Gardner's findings, it then means that from the start of the project it will take approximately 58 days (25 days for certification plus 23 days for actual payment) for the contractor to receive his payment.

Cash flow is constrained by, amongst other factors, a lack of retained capital from previous projects (due to lack of work consistency, poor internal financial controls) to finance the initial costs of new contracts. A further constraint is the progress payment terms of employers, compounded by administrative inefficiencies in the payment process by certain employers (e.g. certain provinces take on average longer to process payments, or for instance the use of cheques may lead to payment delays requiring bridging finance). Cash flow problems are exacerbated by the low margins on many projects. For instance, rural housing projects are costed on the same basis as urban projects, and are

often subject to much higher transportation costs. In addition, it is not uncommon for subsidised housing contracts to be undertaken for a 14% profit margin, which can only be realised with the final VAT reclaim on a project from SARS.
(Gardner 2006:10).

Table 22 The respondents were asked whether greater exposure to risk resulted in higher interest rate charges on a loan

The greater the exposure to risk the higher the interest rate charged on a loan	**Response**	**%**
Yes	22	100
No	0	0
Total responses	**22**	**100**

The results of Table 22 show that 100% of the respondents indicate "yes".

Table 23 The respondents were asked to rate the prerequisites required by SMMEs when securing a loan according to how greatly they reduce a lenders exposure to risk when providing microloans to SMMEs in the construction industry.

* Levels of reduction in exposure to risk: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		* Levels of reduction in exposure to risk					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
Prerequisites in order to reduce lender's exposure to risk		5 %	4 %	3 %	2 %	1 %	TR TR	MR MR	Index	%	Rank
1	Sound overall financial strength or balance sheet of the borrower	36.4	41	9.091	13.6	0	22	4	0.201	20	1
2	Future income stream of a project greater by a specified ratio than total loan (*loan life cover ratio)*	4.55	18	36.36	22.7	18.2	22	2.7	0.135	14	5
3	Project cash flows are greater by a specified ratio than repayments (*debt cover ratio*)	22.7	36	18.18	13.6	9.09	22	3.5	0.176	18	4
4	Borrower has no outstanding accounts payable	0	5	9.091	50	36.4	22	1.8	0.092	9	6
5	Borrower has sufficient capital and equipment to finance the project from start to a certain point	27.3	32	36.36	4.55	0	22	3.8	0.192	19	3
6	Borrower has contingency fund	0	0	0	0	0	22	0	0	-	8
7	A Good credit record	31.8	36	18.18	13.6	0	22	3.9	0.195	19	2
8	Other *(please specify)*	0	5	0	0	0	22	0.2	0.009	1	7
Totals								**19.9**	**1**	**100**	

The results of the multi attribute analysis in Table 23 show that “Sound overall financial strength or balance sheet of the borrower” is the prerequisite required by lenders that reduces a lender’s exposure to risk the most when providing microloans to SMMEs in the construction industry.

According to Merna *et al* (2002:5), in assessing the creditworthiness of the borrower, it is important to differentiate between project finance and corporate finance. Corporate finance is traditional finance where payment of loans to lenders comes from the organisation, backed by the organisation’s entire balance sheet and not from a project alone. Lenders tend to look at the overall financial strength or balance sheet of an organisation as a prerequisite to lending for a project. Therefore, even if a particular project fails, the lenders will remain confident of being repaid because the organisation owning the project has a strong financial base. It follows from the above that a good credit and financial history will reduce the lender's exposure to risk as the lender is able to look at the borrower's past as an indication of future performance.

Table 24 The respondents were asked whether one of the challenges facing SMMEs in the construction industry is that lenders perceive them as risky and hence not creditworthy.

Lenders perceive SMMEs as risky and hence not creditworthy	**Response**	**%**
Yes	20	91
No	2	9
Total responses	**22**	**100**

The results of Table 24 show that 91% of the respondents indicate "yes".

Table 25 The respondents were asked to rate a list of innovations according to effectiveness in minimizing a lender's exposure to risk when providing microloans to SMMEs in the construction industry.

* Levels of effectiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		* Levels of effectiveness					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
Innovations designed to minimise lender's exposure to risk		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Forced Savings	4.55	18	27.27	22.7	27.3	22	2.5	0.132	13	3
2	Life Insurance	0	0	40.91	31.8	27.3	22	2.1	0.113	11	5
3	Progressive lending	40.9	32	13.64	9.09	4.55	22	4	0.209	21	1
4	Frequent Transactions	0	9	18.18	45.5	27.3	22	2.1	0.11	11	6
5	Short-term loans	27.3	18	36.36	13.6	4.55	22	3.5	0.185	18	2
6	Small loans	0	18	13.64	22.7	45.5	22	2	0.108	11	7
7	Maintaining a good relationship with the borrower	0	27	13.64	40.9	18.2	22	2.5	0.132	13	3
8	Other *(please specify)*	4.55	0	0	0	0	22	0.2	0.012	1	8
Totals								**19.0**	**1**	**100**	

The results of the multi attribute analysis in Table 25 show that "Progressive lending" is the most effective innovation that can be utilised to minimise a lender's exposure to risk when providing microloans to SMMEs in the construction industry. According to Roodman & Qureshi (2006:15), lenders usually start with small and offer bigger loans once the initial loans are repaid, and so on. Economists say that these expanding cycles create a "dynamic incentive" for clients, because what a client does today affects her options tomorrow. By first testing the waters with a new client, progressive lending can also be viewed as another mechanism for winnowing out risky customers. Progressive lending is better suited to individual lending as the lender can more freely tailor individual loans in terms of lending periods, interest rates, and repayment schedules. And in scaling up, they do not need to worry about imposing inordinate risk on poorer, jointly

liable fellow borrowers. Individual lenders are better positioned to use such cost saving devices as automatic loan renewals and parallel loans for repeat borrowers.

5.5 Analysis of section four of questionnaire: prudential financial practices

Section four of the questionnaire examines the effectiveness of methods used for assessing loans.

Table 26 The respondents were asked if credit assessments help a lender measure whether potential borrowers will be able to meet their loan obligations.

Do credit assessments help a lender measure whether potential borrowers will be able to meet their loan obligations	**Response**	**%**
Yes	22	100
No	0	0
Total responses	**22**	**100**

The results of Table 26 show that 100 % of the respondents indicate "yes".

Table 27 The respondents were asked to rate a list of requirements for assessing creditworthiness according to effectiveness in assessing the creditworthiness of SMMEs in the construction industry.

* Levels of effectiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

	Requirements in assessing creditworthiness	* Levels of effectiveness					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Detailed business plan	40.9	32	27.27	0	0	22	4.14	0.189	19	1
2	Detailed financial statements	27.3	32	13.64	18.2	9.09	22	3.5	0.16	16	3
3	Binding building contract agreement	22.7	27	18.18	27.3	4.55	22	3.36	0.154	15	4
4	Approved drawings and specifications	0	36	27.27	31.8	4.55	22	2.95	0.135	14	5
5	Proof of insurance on life, business etc. and whether adequate enough to enable liquidation of business on demise	0	0	9.091	54.5	36.4	22	1.73	0.079	8	7
6	Supporting audited statements showing that (up to the time when they loan their money) all materials, wages and other bills have been paid.	0	0	40.91	31.8	27.3	22	2.14	0.098	10	6
7	Credit bureau reports	36.4	23	31.82	9.09	0	22	3.86	0.177	18	2
8	Other *(please specify)*	0	5	0	0	0	22	0.18	0.008	1	8
Totals								**21.9**	**1**	**100**	

The results of the multi attribute analysis of Table 27 show that “Business plan” is the most effective tool for assessing the creditworthiness of SMMEs in the construction industry. According to the Standard Bank's guide to creating a business plan (n.d.), a

business plan is a detailed overview of the current position of a business, where it wants to go, and how it plans to achieve its goals. It is a summary of a business's past, present and future. Potential business partners need to know how their investment will be used, and ultimately, what it will achieve for the business. In this sense, the business plan is like an ambassador. The business plan shows how the various elements of the business are integrated into a vibrant whole. The added benefit of writing a business plan is that it requires the borrower to actually sit down and think, brainstorm and discuss business matters or strategy with all the key players in his business.

According to Deloitte & Touche LLP (2003:1), a successful business plan is a document that conveys the exciting prospects and growth potential of a company. It might be best viewed as a selling document. It sells the business to potential financial and other backers. By effectively selling the business as a whole, a business plan makes a strong case for specific projects. For instance, a plan may be used to seek funding to cover the expenses associated with developing and marketing a new product. Or it may be intended to secure a bank loan for additional manufacturing equipment.

5.6 Analysis of section five of questionnaire: collateral

This section of the questionnaire examines the types of conventional collateral commonly used and reasons for selecting collateral when disbursing loans. This section further examines collateral substitutes and collateral free lending methodologies commonly utilised by MFIs internationally.

Table 28 The respondents were asked to rate how decisive a list of factors are in influencing a lender's choice of collateral when providing microloans to SMMEs in the construction industry.

* Levels of decisiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		* Levels of decisiveness					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
Decisive factors influencing a lender's choice of collateral		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Speed of foreclosure (*ease with which an asset can be repossessed*)	22.7	27	18.18	22.7	9.09	22	3.3	0.111	11	1
2	Present and anticipated transaction costs	9.09	18	36.36	27.3	9.09	22	2.9	0.098	10	5
3	Probability of borrower defaulting	13.6	23	22.73	31.8	9.09	22	3	0.101	10	4
4	Cost of legal proceedings during repossession	9.09	14	36.36	31.8	9.09	22	2.8	0.095	9	6
5	Size of the loan	0	9	13.64	50	27.3	22	2	0.069	7	10
6	Moral hazard	0	9	13.64	31.8	45.4	22	1.9	0.063	6	11
7	Loan term	4.55	14	27.27	27.3	27.3	22	2.4	0.081	8	9
8	Position with regards to other creditors in case of insolvency	0	23	27.27	31.8	18.2	22	2.5	0.085	9	8
9	Ease of liquidation	18.2	27	13.64	27.3	13.6	22	3.1	0.104	10	2
10	Credit manager's personal judgement	18.2	18	27.27	22.7	13.6	22	3	0.102	10	3
11	Tradition	4.55	9	40.91	27.3	18.2	22	2.5	0.085	9	7
12	Other *(please specify)*	4.55	0	0	0	0	22	0.2	0.008	1	12
Totals								**29.8**	**1**	**100**	

The results of the multi attribute analysis in Table 28 show that “Speed of foreclosure” is the most decisive factor in influencing a lender's choice of collateral when providing microloans to SMMEs in the construction industry.

According to Balkenhol (2001:17), banks naturally have a preference for easily marketable and near-cash securities without having to seek recourse to the courts in case of default. Collateral should be capable of providing the bank the possibility of exerting moral pressure on the borrower. Balkenhol (2001:17) adds that although banks have a preference for easily marketable and near-cash securities they have to take into account the ‘supply side’ as well, i.e. the security the borrower has to offer. The actual decision on acceptance or rejection of collateral is usually with the manager of a bank’s branch and is governed largely by tradition, personal judgment and local practices.

Further according to Balkenhol (2001:8), banks prefer some forms of collateral more than others, depending on present and anticipated transaction costs in establishing and enforcing property rights, the ease of liquidation and the position towards other creditors in case of insolvency. Banks are conscious of the limitations of collateral in recovering claims. Many bankers see in collateral primarily a psychological device; they do not really expect to go to court for repossession.

Table 29 The respondents were asked to rate conventional forms of collateral according to levels of preference as security for microloans to SMMEs in the construction industry.

* Levels of preference: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		* Levels of preference					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
		5	4	3	2	1	TR	MR			
Conventional forms of collateral		%	%	%	%	%	TR	MR	Index	%	Rank
1	Mortgage of fixed assets	27.3	32	22.73	9.09	9.09	22	3.6	0.15	15	1
2	Third party personal guarantee (*Surety*)	18.2	23	40.91	9.09	9.09	22	3.3	0.139	14	2
3	Chattel mortgage *(pledge of personal property)*	0	5	22.73	18.2	54.5	22	1.8	0.074	7	9
4	Cession of investments e.g. shares, unit trusts etc.	13.6	23	36.36	9.09	18.2	22	3	0.128	13	4
5	Cession of assurance policies	9.09	18	27.27	18.2	27.3	22	2.6	0.11	11	5
6	Cession of debtors	9.09	14	18.18	18.2	40.9	22	2.3	0.097	10	6
7	Special notarial bond of equipment or value of equipment	0	5	13.64	36.4	45.5	22	1.8	0.074	7	8
8	General notarial bond	0	9	18.18	22.7	50	22	1.9	0.078	8	7
9	Fixed deposits	22.7	18	27.27	31.8	0	22	3.3	0.139	14	3
10	Other *(please specify)*	4.55	0	0	0	0	22	0.2	0.01	1	10
Totals								**23.9**	**1**	**100**	

The results of the multi attribute analysis in Table 29 show that "Mortgage of fixed assets" is the most preferred conventional form of collateral that may be used as security for microloans when providing loans to SMMEs in the construction industry.

According to Balkenhol (2001:18), land is a traditional form of saving or investment and the most commonly available security in agricultural economies. Charges on land, buildings or other real property is the most important collateral instrument for small loans in Bolivia, India and Tanzania and nearly all financial institutions make use of it. The borrower submits ownership documents to the lender as security for a loan. Balkenhol (2001:8) further outlines that the limitations when the loans are collateralised by movable goods are moral hazard (the goods can easily be hidden by the debtor); social customs or the political context may prohibit or discourage the acquisition of assets seized after insolvency and sold at an auction.

Table 30 The respondents were asked whether one of the challenges facing SMMEs in the construction industry is the lack of sufficient assets to use as collateral.

SMMEs do not have sufficient assets to use as collateral	Response	%
Yes	21	95
No	1	5
Total responses	**22**	**100**

The results of Table 30 show that 95 % of the respondents indicate "yes"

Table 31 The respondents were asked to rate collateral substitutes according to effectiveness as substitutes for conventional forms of collateral when providing microloans to SMMEs in the construction industry.

* Levels of effectiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		* Levels of effectiveness					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
		5	4	3	2	1	TR	MR			
Collateral substitutes		%	%	%	%	%	TR	MR	Index	%	Rank
1	Peer pressure	0	0	9.091	22.7	68.2	22	1.4	0.152	15	4
2	Pledging of household goods and personal belongings	0	5	36.36	40.9	18.2	22	2.3	0.245	25	3
3	Documents in custody	0	27	22.73	31.8	18.2	22	2.6	0.279	28	2
4	Linking of credit to savings	13.6	23	22.73	31.8	9.09	22	3	0.324	32	1
5	Other (*please specify*)	0	0	0	0	0	22	0	0	-	5
Totals								**9.3**	**1**	**100**	

The results of the multi attribute analysis in Table 31show that "Linking of credit to savings (prior deposit before securing a loan)" is the most effective substitute for conventional forms of collateral when providing microloans to SMMEs in the construction industry.

According to Balkenhol (2001:18), linking of credit to savings is used mainly by Bolivian cooperatives and MFIs for clients with a stronger economic capacity whose cash-flow is sufficiently high. In case of default the client has to abandon her savings to the bank. According to Roodman & Qureshi (2006:13), forced savings are common in group lending. The savings are collected during the group meetings, members usually pay no interest and savings cannot be withdrawn till the member exits the group. The lender has recourse to the forced savings in the case of loan default by a member or if the entire group fails. MFIs offer two main reasons for collecting forced savings: 1) to serve as cash collateral for loans, and 2) to inculcate the habit and discipline of regular saving.

Table 32 The respondents were asked to rate situations when lenders would most likely decide to waive their requirement for collateral when providing microloans to SMMEs in the construction industry.

* Levels of likelihood: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

	Situation when lender would most likely waiver requirement for collateral	* Levels of likelihood					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Good credit record of the borrower	0	5	22.73	27.3	45.5	22	1.9	0.086	9	5
2	Personal integrity/reputation of the borrower and his / her standing with the lender	0	5	40.91	36.4	18.2	22	2.3	0.107	11	4
3	Viability of the proposed project	36.4	36	13.64	9.09	4.55	22	3.9	0.181	18	1
4	Experience of the borrower in the project proposed	4.55	0	18.18	27.3	50	22	1.8	0.084	8	6
5	High social standing of the borrower	0	0	22.73	27.3	50	22	1.7	0.08	8	7
6	Particular commitment of the borrower to the activity proposed	27.3	23	31.28	13.6	4.55	22	3.5	0.164	16	2
7	Primary security has potential for value appreciation	0	0	4.545	22.7	72.7	22	1.3	0.061	6	8
8	For fear of losing good clients	0	0	0	27.3	72.7	22	1.3	0.059	6	9
9	Never	18.2	27	36.36	18.2	0	22	3.5	0.16	16	3
10	Other *(please specify)*	0	9	0	0	0	22	0.4	0.017	2	10
Totals								**21.6**	**1**	**100**	

The results of the multi attribute analysis in Table 32 show that "The viability of the proposed project" is a situation where a lender would most likely decide to waive the requirement for collateral when providing microloans to SMMEs in the construction industry.

According to research by Balkenhol (2001:19), a high number of institutions in Bolivia (77%), Tanzania (60%) and India (no % given) indicated that they were happy to give out collateral free loans. Balkenhol (2001:19) further comments that waiving the collateral requirement does, of course, not mean that banks lend at high risk.

According to Merna *et al* (2002:5), the term "project finance" is used to refer to a wide range of financing structures. However, these structures have one feature in common in that financing is not primarily dependent on the credit support of the sponsors or the value of the physical assets involved. In project financing, those providing the senior debt place a substantial degree of reliance on the performance of the project itself. Further according to Nevitt (1983, cited by Merna *et al* 2002), the term 'project finance' is described as financing of a particular economic unit in which a lender is satisfied to look initially to the cash flows and earnings of that economic unit as the source of funds from which a loan will be repaid and to the assets of the economic unit as collateral for the loan.

In project finance, the future income stream of the project is the most critical element and is dependent on an assured income stream from the project, since lenders and investors only have recourse to the income streams generated by the project and assets of the project that may not have any residual value once the project is completed. The project sponsors, therefore, have to demonstrate evidence of future income through various means such as a power sales contract for a power plant, a concession agreement for a toll road project allowing the collection of tolls, tenant leases for a commercial real estate project etc.

5.7 Analysis of section six of questionnaire: loan repayments

This section of the questionnaire examines methods to encourage on time payments and the advantages and disadvantages of these methods.

Table 33 The respondents were asked to select a method more effective in encouraging on time repayments.

Method more effective in encouraging on time repayments.	**Response**	**%**
Incentives	15	68
Disincentives	7	32
Total responses	**22**	**100**

The results of Table 33 show that show that 68% of the respondents indicate "Incentives".

Table 34 The respondents were asked to rate a list of incentives according to effectiveness in encouraging on time repayments.

* Levels of effectiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		* Levels of effectiveness					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
Incentives to encourage on time repayments		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Larger loans	22.7	14	18.18	9.09	4.55	22	2.45	0.233	23	1
2	Follow-up loans	0	18	27.27	18.2	4.55	22	1.95	0.185	19	4
3	Interest rebates	9.09	14	22.73	18.2	4.55	22	2.09	0.198	20	3
4	Access to training	0	9	18.18	9.09	31.8	22	1.41	0.134	13	5
5	Lower interest rates	13.6	18	13.64	18.2	4.55	22	2.23	0.211	21	2
6	Other *(please specify)*	4.55	5	0	0	0	22	0.41	0.039	4	6
Totals								**10.5**	**1**	**100**	

The results of the multi attribute analysis in Table 34 show that "Larger loans" are the most effective incentive for encouraging on time repayments. According to Roodman & Qureshi (2006:15), lenders usually start with small and offer bigger loans if the initial loans are repaid and so on. Economists say that these expanding cycles create a "dynamic incentive" for clients, because what a client does today affects her options tomorrow. Progressive lending, by first testing the waters with a new client is as another mechanism for winnowing out risky customers. Further, according to Roodman & Qureshi (2006:15), progressive lending is better suited to individual lending as the lender can more freely tailor individual loans in terms of lending periods, interest rates, and repayment schedules. In scaling up, they do not need to worry about imposing inordinate risk on poorer, jointly liable fellow borrowers. Individual lenders are better positioned to use such cost saving devices as automatic loan renewals and parallel loans for repeat borrowers.

Table 35 The respondents were asked to rate a list of disincentives according to effectiveness in encouraging on time repayments.

* Levels of effectiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

	Disincentives to encourage on time repayments	* Levels of effectiveness					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Penalty fees	13.6	14	4.545	0	0	22	1.4	0.236	24	2
2	No further access to loans	9.09	9	4.545	9.09	0	22	1.1	0.197	20	3
3	Interest	18.2	9	4.545	0	0	22	1.4	0.244	24	1
4	Collection of collateral	4.55	14	4.545	4.55	4.55	22	1	0.181	18	4
5	Legal action	0	0	22.73	4.55	4.55	22	0.8	0.142	14	5
6	Other *(please specify)*	0	0	0	0	0	22	0	0	-	6
Totals								**5.8**	**1**	**100**	

The results of the multi attribute analysis Table 35 show that "Interest" is the most effective disincentive for encouraging on time repayments. Interest will be charged on the loan if payments are not met. According to Goss & Mitten (2007:5) as clients are strapped for cash, they are less likely to repay outstanding loans. This situation is called delinquency. Goss & Mitten (2007:6) further explain that a major problem affecting financial performance and sustainability is delinquent loans and left unchecked, delinquency can increase expenses, and late payments can negatively affect cash flow resulting in the delay or loss of interest income and decreased profitability or sustainability. Unmanaged, delinquency can lead to a significant depletion of the institution's asset base and this asset loss may erode institutional capital or member savings money that cannot be relent in the form of loans to new or existing clients.

5.8 Analysis of section seven of questionnaire: monitoring and reporting

This section of the questionnaire examines the methods used for monitoring and reporting on loans once disbursed.

Table 36 The respondents were asked whether they carry out loan utilisation checks to monitor loan utilisation by borrowers.

Do you carry out loan utilisation checks	Response	%
Yes	22	100
No	0	0
Total responses	**22**	**100**

The results of Table 36 show that show that 100 % of the respondents responded in the affirmative.

Table 37 The respondents were asked to rate the most effective method for monitoring loan utilisation.

* Levels of effectiveness: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

	Methods for monitoring loan utilisation	* Levels of effectiveness					Rating		Relativity index (RI)		
		VH	H	M	L	VL					
		5	4	3	2	1	TR	MR			
		%	%	%	%	%	TR	MR	Index	%	Rank
1	Manual (field workers etc.)	0	0	0	0	0	22	0	0	-	2
2	Technology	27.3	27	9.091	4.55	0	22	2.82	1	100	1
3	Other (*please specify*)	0	0	0	0	0	22	0	0	-	2
Totals								**2.8**	**1**	**100**	

The results of the multi attribute analysis in Table 37 show that "Technology" is the most effective method for monitoring loan utilisation. According to Roodman & Qureshi (2006:28), for all information to be useful, Management Information Systems (MIS) must be in place to transmit data collected efficiently, reliably, and quickly. In the rich world, a good MIS is synonymous with high technology and with computers as the nerve centre.

Table 38 The respondents were asked if they carried out delinquency management procedures.

Do you utilise delinquency management procedures	**Response**	**%**
Yes	22	100
No	0	0
Total responses	**22**	**100**

The results of Table 38 show that 100 % of the respondents indicate "Yes".

Table 39 The respondents were asked whether they carry out drop out monitoring.

Do you carry out drop out monitoring	Response	%
Yes	18	82
No	4	18
Total responses	**22**	**100**

The results of Table 39 show that 82% of the respondents responded in the affirmative

5.9 Analysis of section eight of questionnaire: microfinance lending methodologies

This section of the questionnaire examines the level of preference for utilising either the group lending methodology or individual lending methodology when disbursing loans.

Table 40 The respondents were asked to rate the two common methodologies for providing microfinance according to preference in providing loans to SMMEs in the construction industry.

* Levels of preference: 5 = Very High (VH); 4 = High (H); 3=Moderate (M); 2 =Low (L); 1 = Very Low (VL).

MR = Mean Rating (Equation 1); TR = Total Responses; RI = Relativity Index (Equation 2).

		* Levels of preference					Rating		Relativity index		
		VH	H	M	L	VL			(RI)		
		5	4	3	2	1	TR	MR			
Lending methodologies		%	%	%	%	%	TR	MR	Index	%	Rank
1	Individual lending	45.5	32	4.545	0	0	22	3.68	0.81	81	1
2	Group lending	13.6	5	0	0	0	22	0.86	0.19	19	2
Totals								**4.5**	**1**	**100**	

The results of the multi attribute analysis in Table 40 show that the individual lending methodology is the more preferred methodology for providing loans to SMMEs in the construction industry. According to a report by the Umsobomvu Youth Fund (2001:16), individual lending has the following advantages over group lending:

- More tailored / flexible service for stronger enterprises;
- Low transaction costs for clients;
- Larger loans support sustainability;
- Individual credit histories are easily tracked; and
- Do not need to worry about group cohesion, which is common in group lending.

According to Balkenhol (2001:19), commercial banks have adopted group collateral much less than MFIs, possibly because the transaction costs involved in ensuring continuous contact and supervision.

5.10 Conclusion

The results of the analysis in this chapter are summarised in chapter six. Chapter six further makes conclusions and recommendations based on the analysis in this chapter and the literature review in chapters two and three.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter is the concluding chapter to the research. The results of the detailed analysis carried out in Chapter five are summarised and conclusions and recommendations are made based on the literature review carried out in chapters two and three.

6.2 Summary of the findings

6.2.1 Back ground

The results of this section show that commercial banks have the capacity and expertise to provide loans to different enterprise levels and economic sectors of the South African economy. Furthermore, commercial banks are well regulated institutions and are listed as public limited companies in accordance with the requirements of the Banks Act 1990. The regulations and type of ownership structures ensure that the banks are accountable and transparent when dealing with the public. The regulations and ownership structure further ensure that banks are not subject to the political influence experienced by African DFIs as reported by FISCU in 1998 (cited by the SADC development finance centre annual report, 2006:75), the undue political influence experienced by government SME banks as explained by Hinton (2007:5) nor the distrust SMMEs have for external agencies as discussed by Berry *et al* (2002:36).

6.2.2 Transaction costs in providing microloans

Interest rates in micro lending are high because micro lending is a high cost operation and the greatest proportion of interest rates charges on micro loans arises from operating expenses. Operating expenses comprise of direct and indirect transaction costs and the cost of identifying and screening clients is the direct transaction cost which forms the greatest proportion of operating expenses while product research and development is the indirect transaction cost which forms the greatest proportion of operating expenses when providing microloans. Transaction costs are greater if the lender is inefficient in processing and disbursing loans and may result in the borrower missing an investment opportunity.

Lenders also have requirements that a borrower has to fulfil in-order for the borrower to qualify for a loan. The time spent fulfilling these requirements is an indirect transaction cost on the part of the borrower due to costs such as transportation to and from the lender's premises and is the indirect transaction cost that reduces the affordability of micro loans for SMMEs the most. Reducing transaction costs is the key to making microloans affordable and the most effective innovation in order to reduce transaction costs is streamlining operating procedures.

6.2.3 Risk

Lenders are exposed to risk when providing loans to SMMEs for a construction project and lenders perceive SMMEs as risky and hence not creditworthy. The greater the exposure to risk the higher the interest rate charged on a loan and Completion risk (inability to complete the project on time) is the greatest risk facing lenders when financing a construction project by an SMME.

The prerequisite required by lenders which reduces a lender's exposure to risk the most when providing microloans to SMMEs in the construction industry is a sound overall financial strength or balance sheet of the borrower and progressive lending is the most effective innovation that may be used to minimise a lender's exposure to risk when providing microloans to SMMEs in the construction industry.

6.2.4 Prudential financial practices

Credit assessments help a lender measure whether potential borrowers are able to meet their loan obligations and a detailed business plan is the most effective tool for assessing the creditworthiness of SMMEs in the construction industry.

6.2.5 Collateral

One of the challenges facing SMMEs in the construction industry is the lack of sufficient assets to use as collateral. This is as a result of commercial banks' preference in utilising conventional forms of collateral for securing loans. The most common form of conventional collateral preferred by commercial banks is mortgage of fixed assets.

Linking of credit to loans is considered the most effective substitute for conventional forms of collateral and commercial banks would most likely waive the requirement for collateral depending on the viability of the proposed project.

6.2.6 Loan repayments

Incentives are more effective than disincentives in encouraging on time repayments. Smaller loans initially then larger loans later if the borrower meets payments when they are due is the most effective incentive for encouraging repayment. Further, interest is the most effective disincentive for encouraging on time repayments.

6.2.7 Monitoring and reporting

Commercial banks carry out loan utilisation checks to monitor loan utilisation and drop out monitoring to monitor why clients dropout of a system. Technology is the most effective tool used to monitor loan utilisation and dropouts. Further, delinquency management procedures are utilised to minimise delinquency.

6.2.8 Micro finance lending methodologies

Commercial Banks prefer the individual lending methodology rather than the group lending for providing loans to SMMEs in the construction industry.

6.3 Conclusions and recommendations

The study indicates that commercial banks do not have the appropriate lending methodology to provide access to finance to SMMEs in the construction industry. This is due to the preference of the respondents in utilising conventional forms of collateral and traditional screening mechanisms to determine the credit worthiness of the clients. In order to succeed in providing micro loans to SMMEs, commercial banks may have to adopt the non-conventional lending technology called “relationship lending” as suggested

by Boot (2000, cited by Vilanculo (2007:19)) which is based on what Berger and Udell (2002, 2005, cited by Vilanculo (2007:19)) call 'soft information'. Soft information includes character, reliability and estimates of the cash flows of the applicants. Some of the non-conventional lending methodologies are discussed in greater detail in chapter three of this study.

The study also indicates that micro lending is a high cost operation and SMMEs are perceived to be risky hence not creditworthy. The study further indicates that an opportunity to create a lending methodology for SMMEs in the construction industry exists by carrying out the following:

a) Reduction of transaction costs by simplifying documentation, reducing lending requirements and reducing the cost of identifying and screening clients;
b) Reduction of the risk lenders are exposed to when disbursing loans to SMMEs, introducing prerequisites for assessing creditworthiness based on the strength of the project and implementing progressive lending;
c) Adopting a relationship lending approach in lieu of traditional screening mechanisms and conventional forms of security;
d) Improving existing incentives and implementing further incentives in lieu of disincentives in order to encourage on time repayment; and
e) Utilisation of technology to make the tracking and monitoring of loans more efficient.

However, there might be challenges in creating a lending methodology. The first challenge is the reliance of small firms in utilising trade credit. According to Gavin (1988:12), trade credit or accounts payable is a popular form of short term finance with no explicit cost. It is an interest free source of credit with payment terms normally ranging from 30 – 90 days. Trade credit may ease the initial cash flow deficit and subsequent financial pressure on the firm until the first and second payment certificates have been paid to the contractor. In order for the lending methodology to be viable, it has to be more attractive to SMMEs than trade credit. The mechanisms of trade credit are discussed in greater detail in chapter two of this study.

Secondly, Kenley (2003:163) illustrates that the contractor breaks even closer to the end of the project while Gardner (2006:10) reaffirms Kenley's findings by stating that foundations often cost more than the milestone payment amounts, while higher profits are made later in the development process. Contractors and developers therefore require financing to bridge the foundation stage until the later stages of a project. The literature illustrates that the risk to the lender is greatest at the early stages after a project commences and decreases closer to project completion. The challenge for commercial banks maybe to encourage repayment in the early stages when the contractor is operating at a loss and in the later stages when the contractor becomes profitable and decides to use the profits for other reasons other than repayment of the loan, savings or investments. Strong incentives are needed to ensure that the contractor is committed to paying off his loan.

Lastly as experienced during the interview and administration of questionnaires, the lenders are very wary of outsiders investigating their lending methodology for fear of giving out information to competitors and this apprehension of outsiders may make it difficult to create a lending methodology suitable for SMMEs in the construction industry.

6.4 Areas of further research

The next step is to investigate whether a lending methodology suitable for SMMEs in the construction industry is viable. This might require analysing existing facilities e.g. normal transaction accounts, deposits accounts, Mzansi accounts etc. and improving them to suit SMMEs in the construction industry or if no facilities exist for SMMEs in the construction industry, to create a new product specifically targeting SMMEs in the construction industry.

If there is a need to develop a new product to facilitate access to finance, then according to Wright *et al* (2002:3), effective product development is driven by a desire to become client responsive, a commitment to respond to the market and a desire to become demand

driven. Wright *et al* (2002:4) further explain that the microfinance industry is largely characterised by top-down or "bath-tub" product development which consists of a senior manager having what appears to be a good idea in the bath and then instructing all branches to offer the resulting new product as of a specified date. Under this model, there is little or no market research, inadequate costing/pricing of the new product, no attempt to describe the product in clear, concise client-language, no pilot testing, and no attempt at a planned roll-out of the new product often times leading to product failure. In order to create an effective product Wright *et al* (2002:5) suggest a five step procedure which has been summarised below as follows:

a) Evaluation and preparation – analysis of institutional capacity and readiness and assembly of a product development team;
b) Market research;
c) Concept prototype design - define initial product concept, map out operational logistics and processes, under take cost analysis and revenue projections to complete initial financial analysis of product;
d) Pilot testing - install and test systems, draft procedures manuals, develop marketing materials, train staff etc.; and
e) Product launch and roll out - transfer of product prototype into mainstream operations.

The product designed for SMMEs in the construction industry would have to take into account a contractor's cash flow, the turnaround time between valuation of work done and receipt of payments from the client and other forms of financing e.g. trade credit, products offered by both government and non- bank private institutions. Further the product would have to be based on the non-conventional lending technology called "relationship lending" as most SMMEs are impoverished and are not able to meet the requirements of lenders.

---- End ----

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APPENDIX A1 : SAMPLE OF QUESTIONNAIRES

Research Questionnaire

Lending Methodology for SMME's in The South African Construction Industry

by

Mr Edward Naphambo

School of Construction Economics and Management
Faculty of Engineering and the Built Environment
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Any problems please contact **Edward (cell: (082) 624 1889)** **Return fax: (086) 516 8834**

Section 1: Background

1.1. What type of lending institution are you?

Commercial Bank		Co-operative	
Micro Finance Provider		Village Bank	
Insurance Related		Pawn Broker	
Credit Union			
Community based organisation			

Other(please specify) _____

1.2. How long have you been practicing as a lending institution?

<2yrs		5--->10yrs	
2--->5yrs		>10yrs	

1.3. Which business structure is your organisation classified as?

Individual Ownership		Private Company	
Partnership		Public Company	
close-corporation		Section 21 Company	

Other(please specify) _____

1.4. How many employees do you employ?

0		>10--->20	
>1--->5		>20--->50	
>5--->10		>50	

1.5. Which economic sectors do you provide services to?

Transport and Logistics		Agriculture	
Mining & Quarrying		supplies	
Manufacturing		Construction	
Wholesale & Retail		Community, Social & Personal Services	
Tourism & Hospitality		All economic sectors	

Other(please specify) _____

1.6. Which enterprise levels do you provide services to?

Survivalist		Medium enterprises	
Micro - enterprises		Large enterprises	
Small enterprises		All categories	

Other(please specify) _____

1.7. What type of products do you offer?

Fixed term deposits		Payment services	
Working capital loans		Start up capital	
Personal loans and Overdrafts		Home loans	
Investing		Credit Cards	
Insurance		Mzansi	
Liquid savings		bridging finance	
Transaction Accounts		All	

Other(please specify) _____

Please e-mail the answers to edwardn@venn-milford.co.za. Or fax to (086) 516 8834**. Thank you for your time and effort**

Section 2: Transaction Costs in providing Microloans

2.1. "Interest rates on microloans are high because micro lending remains a high cost operation" Do you agree with this statement?

Yes ☐ No ☐

If you answered "yes" to question 2.1 please answer questions 2.2, 2.3, 2.4 & 2.5. If you answered "no" to question 2.1 please jump to question 2.5

2.2. What proportion of the interest rate charges on microloans do the components below form?

*Proportion of interest rate charges : 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Proportion of interest rate charges					
		VH	H	M	L	VL	No
	Proportion of interest rate charges	5	4	3	2	1	Idea
1	Cost of capital						
2	Cost of prudent financial practices (*provisions for loan defaults, risk management etc.*)						
3	Operating expenses						
4	Profit						
5	Other *(please specify*)						

2.3. What proportion of the operating expenses of providing microloans do the direct transaction costs below form?

*Proportion of operating expenses: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Proportion of operating expenses					
		VH	H	M	L	VL	No
	Direct transaction costs - proportion of operating expenses	5	4	3	2	1	Idea
1	Costs of identifying and screening clients						
2	Cost of documentation						
3	Cost of appraisal						
4	Cost of processing loan applications						
5	Cost of disbursement						
6	Monitoring cost (*utilisation checks, following up of instalments etc* .)						
7	Costs of collecting repayments						
8	Other *(please specify*)						

2.4. What proportion of the operating expenses of providing microloans do the In-direct transaction costs below form?

*Proportion of operating expenses: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Proportion of operating expenses					
		VH	H	M	L	VL	No
	In - direct transaction costs - proportion of operating expenses	5	4	3	2	1	Idea
1	Branch Overheads						
2	Allocated Head office/Regional office overheads						
3	Designing procedures and tools						
4	Product research and development						
5	Staff training						
6	Security measures e.g. *Fraud prevention etc.*						
7	Depreciation of fixed assets.						
8	Other *(please specify*)						

2.5. Please rate the in -direct transaction costs incurred by SMMEs below according to how greatly they reduce the affordability of microloans for SMMEs ?

*Levels of reduction in affordability: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Levels of reduction in affordability					
		VH	H	M	L	VL	No
	Reduction in affordability due to in-direct transaction costs	5	4	3	2	1	Idea
1	Transportation costs to and from the lenders premises						
2	The cost of obtaining Documentation (financial statements etc.)						
3	Cost of time spent fulfilling the lender's requirements						
4	Other *(please specify*)						

Section 2: Transaction Costs in providing Microloans (Contd…)

2.6. "Transaction costs are greater if the lender is inefficient in processing and disbursing loans" Do you agree with this statement?

Yes ☐ No ☐

If you answered "yes" to question 2.6 please answer questions 2.7 & 2.8. If your answer to question 2.6 is "no" please skip question 2.7 and answer question 2.8.

2.7. Please rate the In-direct costs below resulting from lender inefficiencies in processing and disbursing loans according to how greatly they discourage borrowers from applying for microloans?

*Levels of discouragement: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	In -direct costs due to lender inefficiencies	*Levels of discouragement					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Missed investment opportunities due to delays in disbursement of loans						
2	Cost of extra time spent processing the loan because the lender misplaced documentation						
3	Other *(please specify)*						

2.8. "The key to making microloans affordable is to reduce transaction costs" Do you agree with this statement?

Yes ☐ No ☐

If you answered "yes" to question 2.8 please answer question 2.9 & 2.10. If your answer to question 2.8 is "no" please answer question 2.10 only.

2.9. Please rate the innovations below according to effectiveness in reducing transaction costs.

*Levels of effectiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Innovations designed to reduce Transaction costs	*Levels of effectiveness					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Simplifying documentation						
2	Streamlining operating procedures						
3	Information sharing systems between lenders						
4	Flexible products						
5	Limited products						
6	Reduced lending requirements						
7	Decentralised loan application, approval and collection procedures						
8	Other *(please specify)*						

2.10.Do you have any *comments or additional information* about transaction costs in providing microloans or any other issues relevant to the topic?

Please e-mail the answers to edwardn@venn-milford.co.za. Or fax to (086) 516 8834**. Thank you for your time and effort**

Section 3: Risk

3.1. "lenders will be exposed to risk when providing microloans to SMMEs for a construction project" Do you agree with this statement?

Yes ☐ No ☐

If you answered "yes" to question 3.1 please answer questions 3.2, 3.3 , 3.4 & 3.5. If your answer to question 3.1 is "no" please answer question 3.5

3.2. Please rate the risks below according to how much exposure the lender is subjected to when financing a construction project by an SMME.

*Levels of exposure to risk: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Exposure to risks in financing construction projects	*Levels of exposure to risk					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Completion risk (*Inability to Complete the project in time, cost overrun, project failure to meet performance specification on completion*)						
2	Operation risk (*inefficiencies and delays caused by natural disasters, legal issues etc.*)						
3	Input and output risk (*inadequate supply of materials, inadequate demand for the projects output etc.*)						
4	Liquidity risk (*project not able to generate sufficient resources to meet its liabilities*)						
5	Counterparty risk (*risk of the lender and borrower both not meeting their commitments*)						
6	Interest rate risk (*exposure to movements in interest rates*)						
7	Financing risk (*exchange rate fluctuations, escalation etc.*)						
8	Solvency risk (*potential decrease in net asset values before economic worth is zero*)						
9	Other *(please specify*)						

3.3. "The greater the exposure to risk the higher the interest rate charged on a loan. " Do you agree with this statement?

Yes ☐ No ☐

3.4. Please rate the pre-requisites below according to how greatly they reduce a lenders exposure to risk providing microloans to SMMEs in the construction Industry?

*Levels of reduction in exposure to risk: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Prerequisites in order to reduce lender's exposure to risk	*Levels of reduction in exposure to risk					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Sound overall financial strength or balance sheet of the borrower						
2	Future income stream of a project greater by a specified ratio than total loan (*loan life cover ratio)*						
3	Project cash flows are greater by a specified ratio than repayments (*debt cover ratio*)						
4	Borrower has no outstanding accounts payable						
5	Borrower has sufficient capital and equipment to finance the project from start to a certain point						
6	Borrower has contingency fund						
7	A Good credit record						
8	Other *(please specify*)						

Section 3: Risk (Contd…)

3.5. "One of the challenges facing SMMEs in the construction industry is that lenders perceive them as risky and hence not creditworthy" Do you agree with this statement?

Yes ☐ No ☐

If you answered "yes" to question 3.5 please answer questions 3.6. & 3.7. If your answer to question 3.5 is "no" please answer question 3.7 only

3.6. Please rate the innovations listed below according to effectiveness in minimizing a lender's exposure to risk when providing microloans to SMMEs in the construction industry.

*Levels of effectiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Innovations designed to minimise lenders' exposure to risk	*Levels of effectiveness					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Forced Savings						
2	Life Insurance						
3	Progressive lending (*small loans first then bigger loans if repayments made when scheduled*)						
4	Frequent Transactions						
5	Short-term loans						
6	Small loans						
7	Maintaining a good relationship with the borrower						
8	Other *(please specify*)						

3.7. Do you have any *comments or additional information* about risk or any other issues relevant to the topic?

Section 4: Prudential Financial Practices

4.1. " Credit assessments help a lender measure whether potential borrowers will be able to meet their loan obligations" Do you agree with this statement?

Yes ☐ No ☐

4.2. Please rate the list of requirements below according to effectiveness in assessing the creditworthiness of SMMEs in the construction industry?

*Levels of effectiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Effectiveness of requirements in assessing creditworthiness	*Levels of effectiveness					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Detailed Business Plan						
2	Detailed financial statements						
3	Binding building contract agreement						
4	Approved drawings and specifications						
5	Proof of Insurance on life, business etc.. and whether adequate enough to enable liquidation of business on demise						
6	Supporting audited statements showing that (up to the time when they loan their money) all materials, wages and other bills have been paid.						
7	Credit bureau reports						
8	Other *(please specify*)						

4.3. Do you have any *comments or additional information* about Prudential Financial Practices or any other issues relevant to the topic?

Please e-mail the answers to edwardn@venn-milford.co.za. Or fax to (086) 516 8834**. Thank you for your time and effort**

Section 5: Collateral

5.1. Please rate how decisive the factors listed below are in influencing a lender's choice of collateral when providing microloans to SMMEs in the construction industry?

*Levels of decisiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Levels of decisiveness					
		VH	H	M	L	VL	No
	Decisive Factors influencing a lender's choice of collateral	5	4	3	2	1	Idea
1	Speed of Foreclosure (*ease with which an asset can be repossessed)*						
2	Present and anticipated transaction costs						
3	Probability of borrower defaulting						
4	Cost of legal proceedings during repossession						
5	Size of the loan						
6	Moral Hazard						
7	Loan term						
8	Position with regards to other creditors in case of insolvency						
9	Ease of liquidation						
10	Credit manager's Personal judgement						
11	Tradition						
12	Other *(please specify*)						

5.2. Please rate the conventional forms of collateral below according to levels of preference as security for microloans to SMMEs in the construction industry.

*Levels of preference: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Levels of preference					
		VH	H	M	L	VL	No
	Conventional forms of collateral	5	4	3	2	1	Idea
1	Mortgage of fixed assets						
2	Third party Personal Guarantee (*Surety*)						
3	Chattel Mortgage (*pledge of personal property*)						
4	Cession of Investments eg. Shares, unit trusts etc.						
5	Cession of assuarance policies						
6	Cession of debtors						
7	Special notarial bond of equipment or value of equipment						
8	General notarial bond						
9	Fixed Deposits						
10	Other *(please specify*)						

Section 5: Collateral (Contd….)

5.3. "One of the challenges facing SMMEs in the construction industry is that they do not have sufficient assets to use as collateral" Do you agree with this statement?

Yes ☐ No ☐

If you answered "yes" to question 5.3 please answer questions 5.4, 5.5 , 5.6 & 5.7. If your answer to question 5.3 is "no" please answer question 5.7 only

5.4. Please rate the methods below according to effectiveness as substitutes for conventional forms of collateral when providing microloans to SMMEs in the Construction Industry

*Levels of effectiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Collateral Substitutes	*Levels of effectiveness					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Peer Pressure						
2	Pledging of household goods and personal belongings						
3	Documents in custody						
4	Linking of Credit to savings (prior deposit before securing loan)						
5	Other *(please specify*)						

5.5. Please rate the situations below according to when lenders would most likely decide to waive their requirement for collateral when providing microloans to SMMEs in the construction industry.

*Levels of likelihood: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L); 1=Very Low (VL)

	Collateral free lending	*Levels of likelihood					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Good credit record of the borrower						
2	Personal integrity/reputation of the borrower and his / her standing with the lender						
3	Viability of the proposed project						
4	Primary security has the potential for value appreciation						
5	Experience of the borrower in the project proposed						
6	Particular commitment of the borrower to the activity proposed						
7	High social standing of the borrower						
8	Fear of losing client						
9	Never						
10	Other *(please specify*)						

5.6. Apart from Collateral substitutes and Collateral free lending, are there any other ways of overcoming the challenge mentioned in question 5.4 above.

1	
2	

5.7. Do you have any *comments or additional information* about collateral or any other issues relevant to the topic?

Please e-mail the answers to edwardn@venn-milford.co.za. Or fax to (086) 516 8834**. Thank you for your time and effort**

Section 6: Loan repayments & Delinquency

6.1. Listed below are two methods used to encourage on-time repayments. Which method is more effective in encouraging on-time repayments.

Incentives		Dis - incentives	

If you answered "incentives" in question 6.1. please answer questions 6.2 & 6.4. If you answered "dis -incentives" in question 6.1. please answer questions 6.3 & 6.4.

6.2 Please rate the list of incentives below according to effectiveness in encouraging on-time repayments.

*Levels of effectiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Levels of effectiveness					
		VH	H	M	L	VL	No
	Incentives to encourage on-time repayments	5	4	3	2	1	Idea
1	Larger loans						
2	Follow-up loans						
3	Interest rebates						
4	Access to training						
5	Lower interest rates						
6	Other *(please specify*)						

6.3 Please rate the list of dis-incentives below according to effectiveness in encouraging on-time repayments.

*Levels of effectiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

		*Levels of effectiveness					
		VH	H	M	L	VL	No
	Dis -incentives to encourage on-time repayments	5	4	3	2	1	Idea
1	Penalty fees						
2	No further access to loans						
3	Interest						
5	Collection of collateral						
5	Legal action						
6	Other *(please specify*)						

6.4. Do you have any *comments or additional information* about repayments or any other issues relevant to the topic?

Section 7 : Monitoring and Reporting

7.1 Do you carry out loan utilisation checks to monitor loan utilisation by borrowers?

Yes		No	

If you answered "yes" to question 7.1 please answer questions 7.2 , 7.3 & 7.4 . If your answer to question 7.1 is "no" please skip 7.2 and answer question 7.3, 7.4 below.

7.2. How effective are the methods below in monitoring loan utilisation?

*Levels of effectiveness: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Methods of loan utilisation	*Levels of effectiveness					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Manual (field workers etc.)						
2	Technology						
3	Other *(please specify*)						

7.3 Do you carry out delinquency management procedures?

Yes		No	

7.4 Do you carry out drop out monitoring?

Yes		No	

If you answered "yes" to question 7.4 please answer questions 7.5 & 7.6 . If your answer to question 7.4 is "no" please answer question 7.6.only.

7.5. Please rate the list of tools for conducting drop out monitoring below according to effectiveness in assessing the reasons for clients dropping out.

*Levels of effectiveness : 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Tools used to conduct drop out monitoring	*Levels of effectiveness					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Survey Based client exit interview						
2	In Depth Case study approach						
3	Other *(please specify*)						

7.5. Do you have any *comments or additional information* about MONITORING AND REPORTING or any other issues relevant to the topic?

Section 8: Microfinance Lending Methodologies

7.1. Please rate the two common methodologies for providing microfinance according to preference in providing loans to SMMEs in the construction industry.

*Levels of preference: 5 = Very high (VH); 4= High(H); 3=Moderate(M); 2=low(L) ;1=Very Low (VL)

	Lending methodology	*Levels of preference					
		VH	H	M	L	VL	No
		5	4	3	2	1	Idea
1	Individual lending						
2	Group lending						

7.2. Do you have any *comments or additional information* about Microfinance Lending Methodologies or any other issues relevant to the topic?

END

Please e-mail the answers to edwardn@venn-milford.co.za. Or fax to (086) 516 8834**. Thank you for your time and effort**

APPENDIX 2: LIST OF BANKS REGISTERED WITH THE RESERVE BANK

1.0. Registered Banks

	1.1. Locally Controlled	**Institution Telephone**	**E-mail**
1.1.1	ABSA Bank Limited	(011) 350-4000	www.absa.co.za
1.1.2	African Bank Limited	(011) 256-9000	http://www.africanbank.co.za
1.1.3	Bidvest Bank Limited	(011) 407-3000	http://www.bidvestbank.co.za
1.1.4	Capitec Bank Limited	(021) 809-5900	www.capitec.co.za
1.1.5	FirstRand Bank Limited	(011) 282-4000	http://www.firstrand.co.za
1.1.6	Grindrod Bank Limited	(031) 333-6600	www.grindrodbank.co.za
1.1.7	Imperial Bank Limited	(011) 879-2000	http://www.imperialbank.co.za
1.1.8	Investec Bank Limited	(011) 286-7000	http://www.investec.co.za
1.1.9	MEEG Bank Limited	(043) 702-9600	http://www.meegbank.co.za
1.1.10	Nedbank Limited	(011) 294-0999	www.nedbank.co.za
1.1.11	Regal Treasury Private Bank Limited (In liquidation)	(012) 344-4315/ (011) 839 3920	
1.1.12	Sasfin Bank Limited	(011) 809-7500	http://www.sasfin.co.za
1.1.13	TEBA Bank Limited	(011) 203-1500	http://www.tebabank.co.za
1.1.14	The Standard Bank of South Africa Limited	(011) 636-9111	http://www.standardbank.co.za

	1.2. Foreign Controlled	**Institution Telephone**	**E-mail**
1.2.1	Albaraka Bank Limited	(031) 307-2972	http://www.albaraka.co.za
1.2.2	Habib Overseas Bank Limited	(011) 834-7441	http://www.habiboverseas.co.za
1.2.3	HBZ Bank Limited	(031) 360-0400	http://www.hbzbank.co.za
1.2.4	Islamic Bank Limited (In Final Liquidation)	(011) 484-7860	
1.2.5	Mercantile Bank Limited	(011) 302-0300	http://www.mercantile.co.za
1.2.6	The South African Bank of Athens Limited	(011) 832-1211	http://www.bankofathens.co.za

	2.0 Branches	**Institution Telephone**	**E-mail**
2.1.1	ABN AMRO Bank N.V.	(011) 685-2000	
2.1.2	Bank of Baroda	(031) 209-0133	www.bankofbaroda.com
2.1.3	Bank of China Johannesburg Branch	(011) 520-9600	
2.1.4	Bank of Taiwan South Africa Branch	(011) 880-8008	www.bot.com.tw/english
2.1.5	Calyon (trading as Calyon Corporate and Investment Bar	(011) 448 3300	http://www.calyon.com
2.1.6	China Construction Bank - Johannesburg Branch	(011) 520-9400	http://www.ccbjhb.co.za
2.1.7	Citibank N.A.	(011) 944-1000	http://www.citigroup.com
2.1.8	Commerzbank Aktiengesellschaft	(011) 328 7600	www.commerzbank.com
2.1.9	Deutsche Bank AG	(011) 322-6700	http://www.db.com
2.1.10	JPMorgan Chase Bank (Johannesburg Branch)	(011) 507-0300	http://www.jpmorgan.com
2.1.11	Société Générale	(011) 448-8400	http://www.socgen.com
2.1.12	Standard Chartered Bank	(011) 217-6600	http://www.standardchartered.com
2.1.13	State Bank of India	(011) 778-4500	http://www.statebank.co.za
2.1.14	The Hongkong and Shanghai Banking Corporation Limi	(011) 676-4200	http://www.hsbc.co.za

	3.0. Mutual Banks	**Institution Telephone**	**E-mail**
3.1.1	GBS Mutual Bank	(046) 622-7109	www.gbsbank.co.za
3.1.2	VBS Mutual Bank	(015) 516-3542/ 4410	www.vbsmutualbank.co.za

4.0. Foreign Banks - Representative Offices		Institution Telephone	E-mail
4.1.1	Banco BPI,SA	011 622-4376/86	
4.1.2	Banco Espirito Santo e Comercial de Lisboa	011 616-5382/9	
4.1.3	Banco Privado Português, S.A.	(011) 666-1605	http://www.bpp.pt
4.1.4	Banco Santander Totta S.A.	(011) 656 3156	
4.1.5	Bank Leumi Le-Israel BM	(011) 328-1700	
4.1.6	Bank of Cyprus Group	(011) 784-3941	
4.1.7	Bank of India	(011) 883 9902	
4.1.8	Barclays Bank Plc	(011) 772-7000	
4.1.9	Barclays Private Client	(011) 772-7000	
4.1.10	Bayerische Hypo- und Vereinsbank Aktiengesellschaft	(011) 877-0900	http://www.hvbgroup.com
4.1.11	BNP Paribas Johannesburg	(011) 440-3941	http://www.bnpparibas.com
4.1.15	Credit Suisse	(011) 505-0007	http://www.credit-suisse.com
4.1.16	Credit Suisse Securities (Europe) Limited	(011) 505-0007	http://www.CSFB.com
4.1.17	Dresdner Bank AG	(011) 380-0610	
4.1.18	Dresdner Kleinwort Limited	(011) 380-0610	
4.1.19	Export-Import Bank of India	(031) 584-6118/9	www.eximbankindia.com
4.1.20	Fairbairn Private Bank (Isle of Man) Limited	(011) 480-1691	http://www.gerrardpb.com
4.1.21	Fairbairn Private Bank (Jersey) Limited	(011) 480-1698	http://www.gerrardpb.com
4.1.22	First Bank of Nigeria	(011) 784-9922/784-9925	
4.1.23	Fortis Bank (Nederland) N.V.	(011) 883-3861/884-6931	http://www.fortisbank.com
4.1.24	Hellenic Bank Limited	(011) 783-0155	http://www.hellenicbank.com
4.1.25	HSBC Bank International Limited	(011) 676-4216	
4.1.26	Icici Bank Limited	(011) 676-7801	
4.1.27	JSCB Imexbank	(021) 702-0050	
4.1.28	KfW Ipex-Bank GmbH	(021) 702-0050	
4.1.29	Lloyds TSB Offshore Limited	(011) 783-4350	
4.1.30	Millenium BCP	(011) 622-0847/0857	
4.1.30	National Bank of Egypt	(011) 268-0500	
4.1.30	NATIXIS Southern Africa Representative Office	(011) 684-1498	http://www.nxbp.banquepopulaire.fr
4.1.30	Royal Bank of Scotland International Limited	(011) 303-5993	www.rbsint.com

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

APPENDIX 3: SAMPLE COVER LETTER

7th November 2008

TO WHOM IT MAY CONCERN

RESEARCH ON PROBLEMS FACED BY EMERGING CONTRACTORS IN ACCESSING PROJECT FINANCE

It is widely perceived that Small, Medium and Micro –enterprises (SMMEs) in the South African construction industry are facing problems in accessing project finance.
Prior research suggests that lenders do not have the appropriate Lending Methodology to cater for this type of market. To test these perceptions, research by means of a research report entitled **"Lending Methodology for SMMEs in the South African Construction Industry"** is being carried out through the School of Construction Economics and Management of the University of the Witwatersrand, Johannesburg.

This questionnaire is compiled to elicit your opinion on this very important subject. The information obtained will be used purely for academic purposes. Your response will be treated with the strictest confidence and we would like to ask you to please answer the questions as objectively as possible. Should you have any problems please contact Edward at (082) 624 1889.The results of the study will be forwarded to you should you require it.

Your response will be highly appreciated.

Yours faithfully

Edward Naphambo (Researcher)

Professor A. Talukhaba (Supervisor)