CREDIT RISK MANAGEMENT IN DEVELOPMENT FINANCE INSTITUTIONS AND SMME SUSTAINABILITY

By

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DECLARATION

I, Velda Charmaine Derrocks (student number: 208007795), hereby declare that the dissertation for the Master of Philosophy in Development Finance to be awarded is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

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ABSTRACT

Small, Medium and Micro Enterprises (SMMEs) make a significant contribution to the South African Economy. Regardless of size, these businesses have the ability to create employment, make a generous contribution to tax collections, uplift communities and serve as a beacon of hope for those trapped in the cycle of poverty and unemployment. However, SMMEs lack access to much-needed financial resources that are critical for their growth. Development Finance Institutions (DFIs) aim to bridge the gap between the SMME's financial needs and the development of the respective SMME businesses, by providing funding to entrepreneurs with potentially viable businesses and ideas. Debt funding to these SMMEs are based on sound commercial lending principles that take various non-quantitative variables into account. The sustainability of SMMEs is a primary concern to all participants in the economy, as it is known that SMME failure rates are high Therefore, the primary objective of this study was to investigate the impact that the credit risk management practices of DFIs have on the sustainability of SMMEs, by examining a case study of a typical DFI.

An electronic questionnaire survey was considered as an appropriate measurement method for this study. The targeted population of the study included SMMEs in the Eastern Cape that are Trust for Urban Housing (TUHF) clients and 23 SMMEs were identified as part of the study sampling frame. A total number of 14 questionnaires were returned out of the 23 targeted SMMEs - giving a response rate of 61%. The quantitative data was processed using the STATISTICA program, leading to appropriate descriptive statistical analyses. In order to better understand the impact of credit risk management practices on the sustainability of SMMEs, a hypothesis was formulated and linear regression analysis was used to establish the statistical significance of certain credit risk principles and sustainability characteristics. The results of the empirical study revealed that credit risk management practises do impact on the sustainability of SMMEs. Further, by testing the hypothesis, it was also revealed that certain sustainability variables are regarded as more important than others.

Key words: SMMEs, DFIs, sustainability

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BASA	Banking Association of South Africa
BCEA	Basic Conditions of Employment Act No. 75 of 1997
CPA	Consumer Protection Act No. 68 of 2008
CRM	Credit Risk Management
DBSA	Development Bank of Southern Africa
DFIs	Development Finance Institutions
DTI	Department of Trade and Industry
ECTA	Electronic Communications & Transactions Act No. 25 of 2002
EE	Employment Equity Act
FICA	Financial Intelligence Centre Act
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GPF	Gauteng Partnership Fund
IDC	Industrial Development Corporation
ITA	Income Tax Act No. 50 of 1999
LCMS	Loan Cycle Management System
NCA	National Credit Act
NDP	National Development Plan
NEF	National Empowerment Fund
NHFC	National Housing Finance Corporation
NPC	Non Profit Company
NYDA	National Youth Development Agency
NEWHCO	New Housing Company
OHASA	Occupational Health and Safety Act
OPIC	Overseas Private Investment Corporation
PD	Probability of Default
PIC	Public Investment Corporation
SANS	The South African National Standards (construction)

SBD	Department of Small Business Development
SEDA	Small Enterprise Development Agency
SMME	Small, Medium and Micro Enterprises
SSA	Sub-Saharan Africa
STA	Sectional Titles Act, No. 95 of 1986
TEA	Total Entrepreneurial Activity
TUHF	Trust for Urban Housing Finance
USA	United States

CHAPTER ONE

INTRODUCTION AND PROBLEM STATEMENT OF THE STUDY

1.1 INTRODUCTION

South Africa is currently faced with the challenge of slow economic growth, increasing unemployment and skills shortages. As a result of the constrained growth, formal employment in the private sector has been on the decline. In response to this trend, the South African government has been focused on empowering the SMME sector as a possible solution to alleviate the problem of unemployment. To date, various initiatives have been put in place. These include, amongst others, the establishment of an exclusive Small Business Ministry to streamline the activities of this sector of the economy, as well as other support structures and bodies to assist with the development of SMMEs.

As a developing country on the African continent, South Africa has issues of unemployment and poverty to deal with (African Development Bank, 2013). Development and support of the SMME sector can aid the alleviation of poverty as it is accepted that unemployment will ultimately reduce as more entrepreneurs start their own businesses. However, SMMEs face various challenges and often do not have the necessary business skills and key capabilities to ensure business success. In other instances, business owners do have the critical skills necessary to operate a business but are unable to operate, grow or expand due to financial constraints and an inability to raise finance from commercial banks. The inability to raise finance typically stems from a lack of track record, lack of credit record and adequate collateral (Armedariz & Morduch, 2010). The latter, a clear indication of market failure, has led to the establishment of Development Finance Institutions (DFIs). DFIs are mostly, but not in all cases, funded by the government with clear developmental goals specified whilst commercial banks are privately funded with the maximisation of returns to shareholders as a primary goal. For this reason, the existence of DFIs is warranted by being regarded as a catalyst for economic growth and development in key identified sectors.

One of the key principles of financial institutions is risk management which encompasses all activities that affect its risk profile. One of the most prominent risks

that a financial institution faces is credit risk. The Basel Committee on Banking Supervision (2000) defines credit risk as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with the agreed terms. The goal of credit risk management (CRM) is therefore to maximise a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. This risk translates into a potential loss to the lender due to the borrower's inability or unwillingness to repay the obligation (State Bank of Pakistan, 2010). The credit risk management principles that a DFI will then apply should take cognisance of the potential risks that might arise from the transactions that it enters into with borrowers, but at the same time, should still reflect the overarching developmental goal of the institution. This will ensure the sustainability of the SMME sector.

Government institutions that offer financial and advisory support to SMMEs include:

- Small Enterprise Development Agency (SEDA);
- Small Enterprise Finance Agency (SEFA);
- National Empowerment Fund (NEF);
- Industrial Development Corporation (IDC);
- National Youth Development Agency (NYDA);
- Land Bank; and
- Provincial Agencies

  (Department of Trade and Industry Republic of South Africa, 2013).

1.2 THE PROBLEM STATEMENT

In March 1995, the Department of Trade and Industry (DTI) published the White Paper on National Strategy for the Development and Promotion of Small Business in South Africa, which encouraged the establishment of a support framework, in the form of enabling legislation, institutional reform and leveraging financial and other forms of assistance for SMME development. The government has established several institutions mandated to deliver a wide range of key services, including financial and non-financial support services, to SMMEs (Department of Trade and Industry Republic of South Africa, 2013).

Although the success in implementing the objectives of the various institutions could be debated at length, the fact that these institutions were established, emphasises the importance of the SMME sector from the South African government's perspective.

Notwithstanding all these initiatives, indications are that entrepreneurial activity in South Africa is slowing down and deteriorating. Herrington & Jacqui (2013) make reference to the 2013 Global Entrepreneurship Monitor (GEM) African Entrepreneurship Report (Herrington & Kelley,2013), where it was revealed that the established business rate in sub-Saharan Africa (SSA) is high at 16%, but South Africa remains well below the norm at 2.9% as depicted in Table 1.1 below.

Table 1.1: Prevalence rates (%) of entrepreneurial activity amongst the adult population in South Africa, 2001-2013 (Herrington & Jacqui, GEM South Africa 2013 Report (2013)

	2001	2005	2009	2013	Ave SSA
Emerging Entrepreneurial Rate	5.3	3.6	3.6	6.6	15.2
New Business Ownership Rate	1.4	1.7	2.5	4.1	17.1
Total Entrepreneurial Activity (TEA)	6.5	5.2	5.9	10.6	16.0
Established Business Ownership Rate	-	1.3	1.4	2.9	16.0
Discontinuance of Businesses	-	2.9	3.5	4.9	15.8

**Read as 5,3% of the adult population in South Africa in 2001 are engaged in emerging entrepreneurship*

The table above indicates extremely low entrepreneurial activity as it is these types of businesses that have the potential to provide the bulk of employment. The authors further note that, the established business ownership rate trend since 2005 is encouraging and shows a significant increase from a low of 1,30% in 2005. However, the discontinuance or failure rate also continues to grow to a level where the rate of discontinuance or failure is higher than the established business rate, resulting in a net loss of small businesses. The main reasons cited for the discontinuance or failure are that the business is no longer profitable, the entrepreneur has problems acquiring finance or personal reasons (Herrington & Jacqui, 2013).

The reality is that SMMEs are performing poorly and are unable to sustain their businesses. The statistical research findings of the 2013 GEM Report (Herrington & Jacqui, 2013) support this view. The availability of, and access to, finance is

highlighted as one of the biggest factors that impact on the sustainability of SMMEs. Other factors affecting the sustainability of enterprises include a lack of technical support and guidance throughout the loan initiation and application phase as well as inadequate monitoring, control and evaluation of loan facilities after disbursement by institutions.

Against this background, the study conducted a qualitative and quantitative analysis of the credit risk management practices of DFIs and the subsequent impact on the sustainability of SMMEs by evaluating a case study. This was done to prove that the ineffective credit risk management practices of DFIs, and the lack of a "cradle to grave" approach, leads to an underperforming SMME sector.

1.3 RESEARCH OBJECTIVES

1.3.1 Primary Objective

The primary objective of the study was to evaluate the credit risk management practices of the Trust for Urban Housing Finance (TUHF), a DFI and funder of SMMEs in the Eastern Cape, and the impact of its credit risk management practices on the sustainability of SMMEs.

1.3.2 Secondary Objective

To supplement the primary objective of this study, the following secondary research objectives were formulated:

- Conduct a literature review and gain knowledge and understanding on the following:
  - Credit risk management practices in financial institutions
  - Credit risk management practices in Development Finance Institutions
  - SMMEs in South Africa and their role in economic development
  - SMMEs in the Eastern Cape and their role in economic development
  - Factors driving SMME success and survival
  - SMME sustainability and the enabling role of DFIs
- To select an appropriate research methodology and research methods for the study.

- To assess whether TUHF's credit risk management practices have an impact on certain sustainability variables (turnover growth, age of business, ability to service the loan facility, cash flow and financial management, asset management and default management) that have been identified.
- To draw a sample and develop a research instrument.
- To collect and analyse primary data.
- To provide pertinent conclusions and recommendations based on the findings.

1.4 RESEARCH HYPOTHESIS

To assess the impact of credit risk management practices on the sustainability of DFIs, the following hypothesis were formulated:

H_o: Credit Risk Management practices do not impact on the sustainability of SMMEs.

H_1: Credit Risk management practices have an impact on the sustainability of SMMEs.

1.5 DEFINITION OF CONCEPTS

Definitions of concepts that will be applied in this research are set out below.

1.5.1 Development Finance Institution

A DFI is defined as a financial intermediary that aims to improve social welfare by lending to priority sectors or target clients while benefiting from some level of concessionary resources received from the state and/or donors (Yaron, 2004). It is noted by Yaron (2004), that DFIs face high correlated risks, asymmetric information problems and political interventions in credit allocation. Development Finance Institutions are defined as financial institutions that provide finance to the private sector for investments that promote development and hence, they occupy the space between public aid and private investment (Griffith & Evans, 2012). DFIs typically focus on areas where private-sector funding is limited and they also fund the private enterprise or entrepreneur directly. Griffith and Evans (2012) note that DFIs assess impact by taking into account the financial returns of the investment, the economic contribution

through employment and taxes, the social impact on beneficiaries and compliance with social and environmental standards.

1.5.2 Credit Risk Management

The management of credit risk entails the minimisation of loss that arises when a borrower refuses to or is unable to meet its debt obligations (Fatemi & Fooladi, 2006). Credit risk arises from the potential that an obligor is either unwilling to perform on an obligation or its ability to perform such an obligation is impaired, resulting in economic loss (State Bank of Pakistan, 2010). A complimentary two–fold definition of credit risk, as described by the World Bank, is the risk that a counterparty will not be able to perform as agreed, known as default risk, and the risk of loss suffered by the lender as a result of the counterparty's inability to perform as agreed. This is typically in the form of accounting or economic losses (World Bank, ND). Senior management of banks should develop and establish credit policies and credit administration procedures as part of an overall credit risk management. The purpose of these policies and procedures is to provide guidance to the staff on various types of lending, including corporate, SMME, consumer, agriculture, etc. In addition to Board and Senior Management oversight, the organisational structure should comprise of a credit risk management committee and a credit risk management department (State Bank of Pakistan, 2010).

1.6 DEMARCATION OF THE RESEARCH

The research will be limited to the Eastern Cape Province, based on primary data on local SMMEs that was obtained from the Trust for Urban Housing Finance (TUHF) database since the establishment of its Eastern Cape Office in 2011. The SMME data will only comprise of existing TUHF clients that have successfully approached TUHF for funding. The focus of the study was on the sustainability of the SMME sector as a whole, and specifically those that have been funded by TUHF.

1.7 ASSUMPTION

It is assumed that the credit risk management practices that DFIs apply have an impact on the sustainability of SMMEs.

1.8 SIGNIFICANCE OF THE RESEARCH

SMMEs have the ability to perform various economic functions. These assumptions are highlighted by (Spratt, 2009) as follows:

- SMMEs enhance competition and entrepreneurship and create economy-wide benefits in the form of efficiency, innovation and productivity growth.
- SMME growth boosts employment more than the growth of large firms as SMMEs are more labour intensive; and
- SMMEs are more productive than large firms but are impeded in their development by financial market failure as well as by the failure of other institutions.

Vosloo (1994:160) describes SMMEs in South Africa as 'the embodiment of economic freedom and individual liberty and, a practical way of solving problems of unemployment and for enhancing economic growth'.

SMMEs differ in terms of management ability and capability as well as the degree of business acumen and training. Specific sectors that SMMEs operate in also require different skill sets, hence individual factors need to be considered when evaluating the various SMMEs. Due to size, SMMEs are flexible and can adapt quickly to environmental changes and have the ability to demonstrate faster growth than larger companies.

However, SMMEs are excluded from, or have limited access to, equity markets and heavily rely on raising finance to improve liquidity. Liquidity constraints, coupled with the effects of moral hazard and adverse selection, creates a finance gap for SMMEs (Strategic Direction, 2014).

The SMME sector is pivotal in aiding sustainable development. Business sustainability is defined as the inclusion of financial, environmental and social concerns into business decisions (Network for business sustainability, 2013). Sustainable companies create long-term financial value and know how their actions affect the environment. Compared to companies that focus on short-term profits and make decisions based solely on the bottom line, sustainable companies think long-term. They forge strong relationships with employees and members of the community. As a

result, sustainable companies endure, thereby surviving major shocks like global recessions, worker strikes, executive scandals and boycotts by environmental activists (Network for business sustainability, 2013).

The definition above would be applicable in South Africa if SMMEs received the necessary support (in the form of less or limited constraints), education and guidance. The development of sustainability indicators specific to SMMEs in the context of DFIs and credit risk management were developed as part of the study.

1.9 RESEARCH DESIGN AND METHODOLOGY

The research procedures which the study followed to investigate the primary and secondary objectives are presented by means of the following:

1.9.1 Literature study

In order to achieve the objectives of this study, a relevant literature review examining development finance institutions, risk management, entrepreneurial activity, the difficulties that entrepreneurs encounter when attempting to operate sustainable businesses, as well as an analysis of the 5 Cs of credit assessment, provided the conceptual framework for this research. Various sources of information were used, such as books, journal articles, electronic databases, the internet and other relevant sources.

1.9.2 Empirical study

The empirical study consisted of the following:

1.9.2.1 Sample selection

To carry out the empirical study, a minimum of twenty TUHF clients were identified from the list of clients on the TUHF database in the Eastern Cape.

1.9.2.2 Measurement instrument

In order to obtain empirical perspectives, a questionnaire was designed from the literature review analysis and TUHF will distribute this via email to its clients. The

questionnaire was created with the Excel program and the information provided was systematically captured in a spreadsheet.

1.10 STRUCTURE OF THE STUDY

The rest of the research study consists of six chapters which are organised as follows**:**

Chapter Two: SMMEs, Development Finance Institutions and Risk Management

Chapter two presents the literature review regarding the importance of SMMEs in the economy and the concept of entrepreneurship. The critical success factors and some constraints faced by small businesses are discussed and finally, an overview of Development Finance Institutions and risk management is provided.

Chapter Three: Case Description: TUHF workflow and credit risk management process.

Chapter three mainly reviews the TUHF workflow and credit risk management and assessment process.

Chapter Four: Theoretical Framework

Chapter four reviews the theoretical framework that was adopted for the study.

Chapter Five: Research Design and Methodology

Chapter five discusses the research design and methodology, the data collection and data analysis plan.

Chapter Six: Empirical Results and Data Analysis

Chapter six reports the results of the empirical study after analysing the data collected.

Chapter Seven: Conclusions and Recommendations

Chapter seven concludes the study and gives recommendations. The conclusions are based on both the literature study and the empirical findings.

1.11 CHAPTER SUMMARY

The aim of Chapter one is to place the study into perspective, by stating the problems of the research along with the primary and the secondary objectives. The remaining chapters aim to achieve the objectives of the study. The next chapter presents the concepts of SMMEs, DFIs and risk management.

CHAPTER TWO

DEVELOPMENT FINANCE INSTITUTIONS, RISK MANAGEMENT AND SMMEs

2.1 INTRODUCTION

In this chapter, a literature review is provided which focuses on Development Finance Institutions in South Africa and their purpose, credit risk management in financial institutions, the role of the SMME sector in development, the finance gap, constraints to SMME growth and development, as well as SMME sustainability and the measurement thereof.

2.2 DEVELOPMENT FINANCE INSTITUTIONS IN SOUTH AFRICA

South Africa has a diverse range of DFIs with different organisational structures and operational mandates. They also differ in the weight of their financial resources and the nature and scale of the projects they finance. There is, however, a common thread that defines them which is that they have all assumed some centrality in South Africa's 'developmental state' objectives, particularly since 1994. South Africa's post-apartheid regional strategy, of which its DFIs are pivotal instruments, takes its cue from the government's 'developmental' priorities. The South African government views its DFIs as instruments aimed at achieving a range of objectives intended to improve its citizens' quality of life; enhance public service delivery; increase economic growth; improve infrastructure; and create jobs (Soko & Qobo, 2015).

Active primary DFIs in South Africa that provide finance directly to SMMEs include:

- SEFA (Small Enterprise Finance Agency)
  - Small Enterprise Finance Agency (SOC) Ltd., commonly known as SEFA, was established on the 1st April 2012 as a result of the merger of South African Micro Apex Fund, Khula Enterprise Finance Ltd. and the small business activities of IDC. SEFA's mandate was to foster the establishment, survival and growth of SMMEs and contribute towards poverty alleviation and job creation, and has a regional footprint of 9 offices around the country (SEFA, 2016).

- IDC (Industrial Development Corporation)
  - Established in 1940, the national development finance institution was set up to promote economic growth and industrial development. The DFI is owned by the South African government under the supervision of the Economic Development Department (Industrial Development Corporation, 2016).
  - The organisation is a key industrial development actor in the country and has the dual role of being both a financing institution and a development agency. The IDC's support role is varied and includes both finance and non-finance mechanisms (Soko & Qobo, 2015).
- NEF (National Empowerment Fund)
  - Established by the National Empowerment Fund Act, No. 105 of 1998 (NEF Act), the National Empowerment Fund (NEF) is a driver and thought-leader in promoting and facilitating black economic participation by providing financial and non-financial support to black empowered businesses, and by promoting a culture of savings and investment among black people. The operations of the NEF are governed by the Public Finance Management Act, No. 1 of 1991 (PFMA), including the National Treasury Regulations, the King III Report on Governance for South Africa and the Protocol on Corporate Governance in the Public Sector, 2002 (National Empowerment Fund, 2016)
- TUHF (Trust for Urban Housing Finance)

All of the DFIs listed above are wholly or predominantly owned by the government, except for TUHF, which is funded by external debt providers and investors who have invested equity. Its shareholders include the National Housing Finance Corporation (NHFC), with an interest of 33,39%, the Public Investment Corporation (PIC), with an interest of 14,62%, and Future Growth, with an interest of 14,62%. TUHF Non Profit Company (NPC), the original non-profit organisation which was established in 2013, holds an interest of 33.53%. Private investors who believe in the TUHF philosophy and who have invested money to date, include Atlantic Asset Management, Gauteng Partnership Fund (GPF), Stanlib, Cadiz, Mergence, Development Bank of Southern Africa (DBSA), and New Housing Company (NEWHCO). TUHF was established when the NHFC granted an interest-free loan of R10 million to the organisation in 2003 for

the purpose of providing cost-effective solutions to the inner-city improvement challenge. The organisation has a 13-year track record of enabling access to finance for entrepreneurs, regenerating the inner cities of South Africa, financing the provision of affordable and decent rental accommodation, and enabling the creation of jobs (TUHF, 2015).

TUHF provides real estate funding to new, emerging and established entrepreneurs in major city centres that are in urban decline, are close to schools, transport systems and places of work, and that are economically sustainable (TUHF, 2016). The Overseas Private Investment Corporation (OPIC) is the development finance institution of the United States government and mobilises private capital to help solve critical development challenges (OPIC, 2016). Development finance institutions like OPIC, play a key role in the development of low-income housing by providing debt and working capital to structure mortgages in a way that is affordable to poor families. Unlike TUHF, that provide working, construction, bridging and medium-term mortgage finance to developers and entrepreneurs, OPIC only provides a development loan facility to developers who are responsible for the construction of the low-cost housing units. These units are then sold to end purchasers that are funded by OPIC (OPIC, 2016).

Gutierrez, Rudolph, Homa, & Beneit (2011) note that, the most common target market for DFIs around the world is the SMME market, as worldwide small and medium enterprises represent 95% of all firms and are therefore an important source of employment and a key driver of economic growth in a country. The authors proceed to explain that the market fails to address the all-important economic driver adequately and that SMME banking requirements in particular are too large for micro-finance solutions and too small to be serviced by corporate banking models. Corporate banking models are considered too risky or too costly to service the SMME market. This lack of available financing for SMEs has been called the “missing middle”. As DFIs operate in riskier segments than commercial banks, highly specialised risk-management skills and practices are required to not under-price risks.

2.3 CREDIT RISK MANAGEMENT IN FINANCIAL INSTITUTIONS IN GENERAL

The management of credit risk entails the minimisation of loss that arises when a borrower refuses to or is unable to meet their debt obligations (Fatemi & Fooladi, 2006). Credit risk arises from the potential that an obligor is either unwilling to perform on an obligation or its ability to perform such an obligation is impaired, resulting in economic loss (State Bank of Pakistan, 2010). A complimentary two–fold definition of credit risk, as described by the World Bank, is the risk that a counterparty will not be able to perform as agreed, known as default risk, and the risk of loss suffered by the lender as a result of the counterparty's inability to perform as agreed. This is typically in the form of accounting or economic losses (World Bank, ND). Senior management of banks should develop and establish credit policies and credit administration procedures as part of an overall credit risk management. The purpose of these policies and procedures is to provide guidance to the staff on various types of lending, including corporate, SMME, consumer, agriculture, etc. In addition to Board and Senior Management oversight, the organisational structure should comprise of a credit risk management committee and a credit risk management department (State Bank of Pakistan, 2010)

The ability of DFIs to identify, measure, monitor and control the risks they face, as well as to determine that they hold adequate capital against those risks, is a critical component of the overall corporate governance framework and ultimately an essential determinant of performance. Credit risk is the main risk faced by DFIs (Calice, 2013).

In addition to the shortcomings in corporate governance, slack credit standards and poor portfolio risk management have been recurrent causes of failure for DFIs around the world. It is therefore imperative that DFIs have an appropriate credit risk framework in place, operate under a sound credit-granting process, maintain adequate credit administration and ensure controls over credit risk. Credit risk management principles should also be applied in conjunction with sound practices related to the assessment of asset quality, the adequacy of provisions and reserves, and the disclosure of credit risk (Calice, 2013).

A study by (Nieuwenhuizen & Kroon, 2003) found that financial institutions should consider providing finance to entrepreneurs with little security but who comply with

important criteria affecting their success. The authors proceed to note these criteria as an evaluation of the important success factors of entrepreneurs, including leadership, the knowledge and skills of the applicant, market orientation, financial insight and management, creativity, innovation and risk orientation. By providing finance to an applicant who proves to possess the qualities of a successful entrepreneur, but has insufficient start-up or growth capital for a business, the growth of small and medium businesses and the economy will improve (Nieuwenhuizen & Kroon, 2003).

2.4 CREDIT RISK MANAGEMENT AT TUHF

From an overall risk management perspective, financial risks are identified and managed on a group basis but the responsibility for risk management resides at all levels. Overall, risk management policies and risk appetite, are established and reviewed by senior management and where appropriate, approved by the board of directors (TUHF, 2015).

The credit risk that TUHF faces, arises mainly from commercial loans and advances. The group has specific policies, procedures and processes dedicated to controlling and monitoring risk from all such activities. While credit exposures principally arise in loans and advances, the group may be exposed to credit risk arising from other financial assets, and these exposures compromise loan commitments and contingent liabilities. The risks are managed in a similar way to those loans, in loans and advances, and are subject to the same or similar approval and governance processes. Credit granting is a major source of income to TUHF and is therefore one of the most significant risks. The group dedicates considerable resources to controlling it effectively (TUHF , 2015).

TUHF has a rather robust loan cycle management system (LCMS), which forms the foundation of their risk management system. Loans and related documentation are logged from lead stage, throughout approval and until the date of final repayment. They are also managed on a daily basis. The granting of credit is considered on a project-by-project basis. Various hurdle rates are considered in terms of the loan and credit policy, which is compliant with the National Credit Act (NCA). As security, TUHF registers a mortgage bond per property to the value of 120% of the loan facility amount.

Further to this, an additional 30% of the amount is provided for legal and other incidental costs, thus effectively resulting in a mortgage bond cover of 150%.

2.5 THE SMME SECTOR AND ITS ROLE IN THE SOUTH AFRICAN ECONOMY

SMMEs have the ability to perform various economic functions. These assumptions are highlighted by (Spratt, 2009) as follows:

- SMMEs enhance competition and entrepreneurship and create economy-wide benefits in the form of efficiency, innovation and productivity growth.
- SMME growth boosts employment more than the growth of large firms as SMMEs are more labour intensive; and
- SMMEs are more productive than large firms but are impeded in their development by financial market failure as well as by the failure of other institutions.

Vosloo (1994:160) describes SMMEs in South Africa as, ‘the embodiment of economic freedom and individual liberty and a practical way of solving problems of unemployment and of enhancing economic growth’.

The year 2014 was a landmark year for SMMEs as the Department of Small Business Development (SBD) was established. The SBD's mandate is to create a favourable environment for SMMEs to thrive and to support the goals of the National Development Plan (NDP) (National Planning Commission, 2014), which anticipate that 90% of jobs will be created by small and medium businesses (Thulo, 2014).

Despite government’s commitment to growing and supporting the country’s SMMEs, these firms continue to face an extremely hostile business environment, including lack of skilled staff, burdensome regulations, tough local economic conditions, lack of finance and the high costs associated with employing staff. The NDP’s targets for job creation in the SMME sector depends on the creation of a business environment that supports the growth and sustainability of existing SMMEs, a culture of entrepreneurship, and which enables new SMMEs to prosper (SBP Alert, 2014). The new Small Business Development Ministry, under the leadership of Lindiwe Zulu, has an important role to play in achieving this. It was established to deliver dedicated and

focused support for small businesses, as well as to ensure that the common challenges confronting the sector are addressed in a co-ordinated way.

The Banking Association of South Africa (BASA) states that SMMEs have been identified as productive drivers of inclusive economic growth and development in South Africa and around the world. It is estimated that, in South Africa, small- and medium-sized enterprises make up circa 91% of formalised businesses and provide employment to about 60% of the labour force. (The Banking Association of South Africa, ND).

As mentioned previously, one of the NDP focus areas is SMMEs, which are seen as key to future growth, transformation and job creation. All over the world SMMEs are regarded as primary creators of employment due to their labour-intensive nature (Nene, 2014). The then Minister of Finance further notes that, havng a high proportion of SMMEs in a country has been key to weathering adverse socio-economic conditions and for being able to adapt to changing economic circumstances. Examples cited, include India and Indonesia during the recent global recession. Currently, SMMEs contribute to between 35% to 52% of the Gross Domestic Product (GDP). Most SMME activity in South Africa (78%) is retail orientated, with 10% in manufacturing and a further 5% in agriculture (Nene, 2014).

2.6 SMME GROWTH AND DEVELOPMENT CONSTRAINTS

SMMEs differ in terms of management ability and capability as well as the degree of business acumen and training. Specific sectors that SMMEs operate in also require different skill sets, hence individual factors need to be considered when evaluating the various SMMEs. Due to their size, SMMEs are flexible and can adapt quickly to environmental changes. They also have the ability to demonstrate faster growth than larger companies.

However, SMMEs are excluded, or have limited access to equity markets, and this places a heavy reliance on raising finance to improve liquidity. Liquidity constraints, coupled with the effects of moral hazard and adverse selection, creates a finance gap for SMMEs (Strategic Direction, 2014).

Spratt (2009) further distinguishes between the types of private-sector lending, transactions lending and relationship lending, with the former referring to quantitative information, on which the lending decision is based, and the latter referring to qualitative decision-making. Relationship lending is based on ‘soft’ data that the loan officer has access to. This often gives rise to agency problems, adverse selection and a moral hazard (Armendariz & Morduch, 2010).

Brey & Mhlaba (2014), note that survey results indicate that vast strides have been made in the development of the SMME sector but that three constraints remained common among survey respondents, and include access to finance, the regulatory burden and fragmented support programmes. The authors note that access to finance, makes reference to the cost of finance but also the strict criteria imposed by public-sector funding programmes. In this regard, specific comments were made regarding the strict and rigid criteria imposed by these institutions.

The regulatory burden refers to the red tape and bureacracy that constrain the growth of SMMEs, whilst the fragmented support programmes, refers to government assistance or initiatives that are not comprehensive enough to meet the needs of the SMMEs (Brey & Mhlaba, 2014).

2.7 SMME SUSTAINABILITY

As highlighted previously, the SMME sector is pivotal in aiding sustainable development. Business sustainability is defined as the inclusion of financial, environmental and social concerns into business decisions (Network for business sustainability, 2013). Sustainable companies create long-term financial value and know how their actions affect the environment. Compared to companies that focus on short-term profits, and that make decisions based solely on the bottom line, sustainable companies think long-term. These companies forge strong relationships with employees and members of the community. As a result, sustainable companies endure, thereby surviving major shocks, like global recessions, worker strikes, executive scandals and boycotts by environmental activists (Network for business sustainability, 2013).

O'Gorman (2001), explored the factors that determine the sustainability of growth in small- and medium-sized enterprises (SMMEs). It was noted that previous research

had shown that SMME growth may be the consequence of the strategic choices of entrepreneurs, or the structural characteristics of the external environment (O'Gorman, 2001). O'Gorman (2001), found that the first key managerial choice is, “where to compete”, but that this is followed by other key choices concerning, “how to compete”, and it is in the combination of these that sustained growth is found.

The definitions cited above would be applicable in South Africa if SMMEs received the necessary support (in the form of less or limited constraints), education and guidance. The development of sustainability indicators, specific to SMMEs and in the context of DFIs and credit risk management, will be developed as part of the proposed study.

2.8 CHAPTER SUMMARY

The main purpose of this chapter was to obtain an insight into the DFIs in South Africa and what they do. The concept of credit risk management in financial institutions was discussed, followed by a brief summary of what credit risk management at TUHF entails. The role of SMMEs and their role in the South African economy was highlighted, followed by notes on SMME growth and development constraints. The chapter concluded by introducing the concept of what a sustainable SMME entails.

Chapter three will provide an overview of the TUHF business as a DFI in South Africa, its workflow process and risk management process.

CHAPTER THREE

CASE DESCRIPTION: THE TUHF WORKFLOW AND CREDIT RISK MANAGEMENT PROCESS

3.1 INTRODUCTION

Chapter two provided an overview of the scholarly literature on the role of SMMEs in the South African economy, the various development finance institutions that exist to provide finance to SMME's, the credit risk management practices, SMME growth and the accompanying development constraints, as well as the importance of SMME sustainability. Chapter three describes and analyses the TUHF business, their workflow process and their credit risk management model, to provide context for the study.

3.2 TUHF BACKGROUND

In the early 90s, at the peak of the migration out of Johannesburg's city centre, the TUHF founding members and directors saw potential in the abandoned infrastructure of previously popular areas, such as Hillbrow and Yeoville. TUHF was founded in 2003 and their vision has multiplied over the past 12 years into five branches and a loan book of over R2 billion invested in the inner cities of South Africa. TUHF was pioneered by leading South African development finance organisations, dedicated to providing effective cost-efficient solutions to the inner-city improvement challenge. Today, the business continues to work closely with these institutions, and have also partnered with other asset managers and commercial banks to bring about inner-city rejuvenation and sustainable economic empowerment (TUHF , 2015).

3.3 TUHF GROUP STRUCTURE

The TUHF group structure is depicted in Figure 3.1 below.

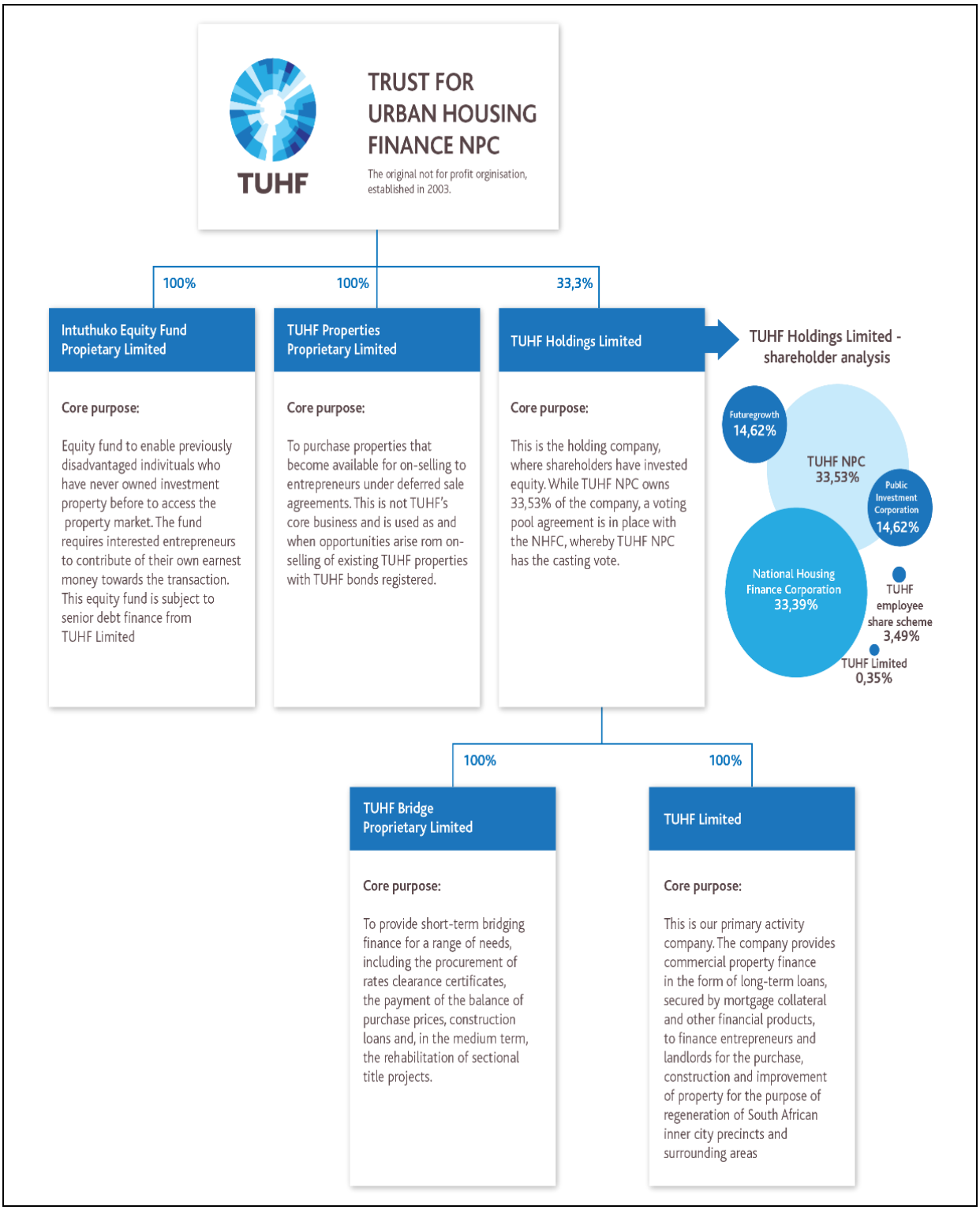


Figure 3.1: The TUHF group structure (TUHF, 2015)

3.4 TUHF FOCUS

TUHF believe in the value of inner cities, their vibrancy, multiple economic drivers and their access to transport and diversity. TUHF clients provide accommodation close to people's places of work. The other reasons why TUHF focuses solely on the inner cities are depicted in Figure 3.2 below.

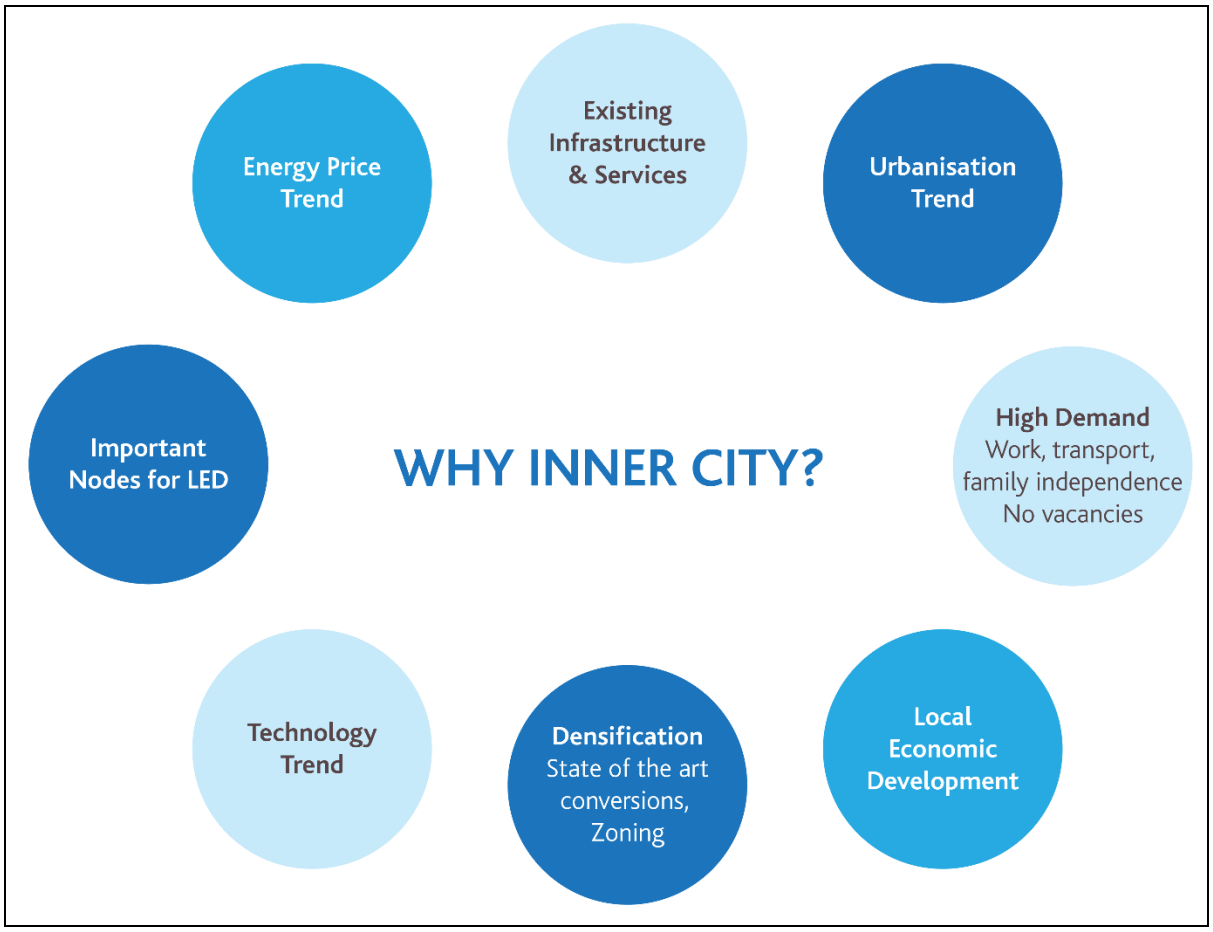


Figure 3.2: TUHF's core focus (TUHF, 2015)

3.5 DEVELOPMENTAL IMPACT OF TUHF

Firstly, TUHF has a commercial profit mandate, and secondly, a developmental mandate. Various positive impacts result from the provision of access to finance for the purchase and refurbishment of inner city residential property (TUHF, 2015). The table below sets out the various developmental impacts that TUHF aims to achieve:

Table 3.1: TUHF's developmental impact (TUHF, 2015)

1. Job Creation	The projects being financed, create jobs during construction and/or refurbishment and through property management afterwards.
2. Green Finance	Wherever possible, TUHF aims to incorporate sustainable, environmentally friendly practices into the projects that are funded, thus adding even greater value to the communities. TUHF projects serve in the long-term.
3. Urban Regeneration	Neglected areas are uplifted, where buildings are recovered and rejuvenated with funding from TUHF.
4. Local Economic Development	Through access to quality affordable housing, people are able to reside within easy reach of good places of work, adding to their economic empowerment and contribution to the country's economy.
5. Access to Finance	The TUHF value proposition and the benefits it provides, place opportunities otherwise unheard of within the grasp of enterprising individuals, enabling them to break-away from the cycle of poverty through carefully managed entrepreneurial ventures.
6. Fiscal Impact	A growing urban community of economically empowered people, ultimately places less strain on government resources by contributing to rates, utilities and taxes, in buildings that were previously non-paying.

3.6 THE TUHF OPERATING MODEL

2015 was a landmark year for TUHF, with the opening of the Western Cape and Bloemfontein branches in addition to the existing Gauteng, Eastern Cape and Kwazulu-Natal branches. A further 154 permanent and 463 short-term jobs were also created over this period, with the loan book exceeding R2 billion and an overall profit growth of 10%. TUHF also signed a R200 million grant agreement with the National Treasury's Job fund which was regarded as instrumental in the long-term debt capital funding strategy for the group. In 2015, TUHF celebrated 12 years of enabling access to finance for entrepreneurs, regenerating the inner cities of South Africa and enabling the creation of jobs (TUHF, 2015).

3.6.1 Organisational Vision and Focus

TUHF's vision is to generate a R5 billion loan book which services every major city in South Africa. The TUHF mission, is for them to be a specialist commercial property financier, providing professional financial services to emerging and established housing entrepreneurs engaged in profitable rental housing businesses. In order to achieve this, TUHF finances low- to moderate-income rental housing and associated commercial property in the inner-city areas of South Africa's major cities. TUHF focuses on specified geographic areas, defined by inner cities, areas of urban decline and areas with large quantities of existing building stock. The local economic growth potential is a critical consideration. The organisation, subject to having the appropriate capacity, will operate in all areas indicating the urban decline attributes as mentioned, and include the metropolitan municipalities of Johannesburg, Cape Town, Ethekwini, Ekurhuleni, Tshwane, Nelson Mandela Bay, Bloemfontein and Buffalo City (Chikomo, 2016).

3.6.2 Characteristics of the TUHF Focus Areas

The TUHF focus areas are characterised by:

- an underutilisation of existing capital investments and a high potential for real increases in property prices, either in respect of the broader property market or based on the ability of TUHF to inject liquidity to create markets;
- a change in property use and densities with concomitant impacts on public and civic infrastructure;
- reasonable pricing per opportunity or per usable square metre;
- a mixture of low and high rise properties where building stock is of reasonable quality and structurally sound;
- a demand for rental accommodation as indicated and which have a tendency towards higher density living close to work opportunities (with transport, educational, religious, medical and recreational facilities nearby);
- an average loan size of below R10 million;
- profiles of the people and families will tend toward new migrant workers, younger mobile couples seeking work and career opportunities and families unable to qualify for home ownership;

- a cadre of entrepreneurs that understand the market; and
- "redlined" areas where stock is degraded.

These focus area characteristics require that TUHF staff have an intimate understanding of the market and market conditions in which lending takes place (Chikomo, 2016).

3.6.3 National Housing Policy and the Financial Services Charter (FSC)

While TUHF finances in areas that meet FSC and National Human Settlements policies, the pricing of rent is left entirely to the entrepreneur. TUHF's only interest is that the rents charged are achievable and within the market norms and that they meet its lending principles. This implies that no affordability judgements will be made on rents other than TUHF's own market assessment.

3.6.4 Lending Approach and Principles

The entrepreneurial character and competence of the borrower is important and forms the basis for the TUHF's character-based lending approach. The character assessment includes an appraisal of the borrower's commitment to the project (motive), how the borrower presents him/herself (presentation), as well as the stability and integrity of the borrower. The transactions must be profitable and economically sustainable over the long-term and should be based on sound business and investment principles. Key character competencies that are assessed, include responsibility, risk attitude, talent and entrepreneurship. Transactions that improve housing stock, promote regeneration and/or BEE, form the core of the business.

TUHF is committed to development impact achieved through scale, and they aim to develop and maintain good and reliable relationships with borrowers, investors and policy makers. The decision-making process is straight forward, while adhering to regulatory and compliance requirements, and remain independent, innovative and apolitical. In addition to enterprise development, urban regeneration is core to TUHF's activities and this is achieved through financing investments that:

- improve buildings, both the external and internal state, through refurbishment and/or management;

- improve the public space in front of or near to a building, (well-maintained street fronts, control of illegal and informal trade, precinct security, etc.); and
- will improve neighbourhoods and/or create precincts.

TUHF actively seeks to co-operate with the local governments and capitalise on local development initiatives. Broad Based Black Economic Empowerment (BBBEE), is an important objective, and as a mechanism for urban land and economic reform, TUHF considers the real estate sector as both an ideal arena to promote broad based and sustainable BEE and as an important initiative to transfer land and business opportunities into the hands of previously disadvantaged individuals (PDIs).

3.6.5 Loan Products

TUHF offers 3 different products to its target market. These are mortgage finance, bridging finance and deferred sale finance.

Mortgage products cover purchase only, purchase plus construction, construction only (includes refurbishment, conversion or new build), conversion, construction loans for sectional title sales or outright sale purposes (up to 24 months), equity release (a loan facility against increased or residual value for the acquisition or improvement of another (different) property) and refinance (either an increase of an existing loan or refinancing a third-party bondholder for the subject property).

Bridging finance products cover rates, clearance certificates, the balance of purchase prices (early profit release) to buyers and sellers, profits from the sale of property, VAT refunds and related transfer transaction costs (e.g. transfer duties).

TUHF offers deferred sale agreement financing, through TUHF Properties (Pty) Limited, to finance high risk projects such as cooperatives, tenant-based organisations, emerging entrepreneurs and other high risk projects. Deferred sale finance (similar to instalment sale or hire purchase) is where property is sold to the entrepreneur in terms of the Alienation of Land Act No. 68 of 1981.

The Intuthuko Equity Fund (IEF), is a fund established to support emerging housing entrepreneurs by providing equity equivalent finance in the form of subordinated loans. This assists the applicant to leverage senior debt funds.

3.6.6 Loan Approval requirements

TUHF is a character-based lender. The assessment of the borrower's character, aptitude and competence is the single most important component of the loan appraisal.

3.6.6.1 Aptitude (Management Risk)

The driving factor in TUHF's business is the borrower's aptitude in property (real estate competency). The aptitudes that a borrower should exhibit are, an ability to get good quality work completed at, or below, market prices, the ability to deal with a wide variety of management and relationship issues inherent in residential real estate businesses, entrepreneurial drive and a pride in ownership.

TUHF is very careful and selective, as borrowers with proven records work to purchase additional properties. The objective therefore, is to progressively support entrepreneurs to become full-time, talented, and responsible owners of multiple buildings.

The practical aptitude of the borrower is developed over time. The borrower's entrepreneurial drive could lead to them over-extending themselves. TUHF follows a disciplined, more conservative approach in assisting a borrower to develop and mature. Owners who "Get ahead of themselves" is a major risk to TUHF's business. Refurbished and fully let buildings, a steady cash flow and good administration, are required before the financing of new buildings will be considered (Chikomo, 2016).

3.6.6.2 Fit (Business Risk)

It is important that the building is properly matched to the skill and entrepreneurial competence of the borrower. TUHF will only fund one building project at a time for a new borrower with an unproven track record. Once a good relationship is developed with the borrower, TUHF will consider financing other buildings.

TUHF will however, consider funding a number of buildings at a time and relax its credit criteria, based on the borrower's ability and the financial feasibility of the projects. All projects are, nevertheless, considered on an individual basis.

3.6.6.3 Character Assessment

TUHF has a well-documented non-financial character assessment which considers the following characteristics during the appraisal of a borrower:

- Character: commitment, motive, presentation, stability and integrity
- Competency: responsible, risk attitude, entrepreneurship and talent.

3.6.6.4 Background, track record and financial standing

Loan officers make financing recommendations based on the judgement of character. Character assessments address real estate competence (technical, financial and interpersonal ability), industry knowledge, honesty, stable relationships (work and personal) and a good track record, which must be evaluated in connection with the extension of the proposed credit. References are thus important.

The main objective of a credit investigation (through an independent credit bureaux, e.g. Experian), is the verification and evaluation of the borrower's and all sureties' character, credit standing and integrity, through a process of data gathering. It is an indicator of the willingness to pay and the discipline to honour commitments to TUHF.

Under certain circumstances, a criminal record check on the entrepreneur is also undertaken.

In all cases, the copies of the borrower's personal bank statements (at least three months) should be reviewed. The borrower's management of their own personal finances provides needed insight into the manner in which they will manage a TUHF facility.

The outcomes of these investigations should match the information given by the borrower, showing that they are knowledgeable and honest about their financial affairs. The findings of these investigations are formalised in the loan proposal, with source documents stored in accordance with an agreed storage protocol

Credit investigation reports are considered to be valid for a period of six months for TUHF's purposes and are therefore to be re-done for repeat borrowers and/ or sureties on each new application submitted later than six months after the previous application.

TUHF lends money to both corporate and individual borrowers. The process in collating information is the same but additional information is obtained from corporate borrowers to include all of the trustees, members or shareholders (Chikomo, 2016).

3.6.6.5 Pricing for risk

Based on the information provided by the borrower and the subjective assessment of the borrower's character by the loan officer, together with the merits and financial returns of the project, each borrower is assigned a risk weighting. The weighting factors are pre-determined by TUHF and they cover the following categories:

a) Character
b) Financials
c) Product
d) Property management post construction and refurbishment
e) Construction
f) Location

Loan Officers assign a weighting between 1 (low score) and 5 (high score) to each category and calculate a margin for the risk score range as follows:

Table 3.2: TUHF Risk Rating (Adapted from an interview with Chikomo, K (2016)).

Entrepreneur Type	Margin for Risk Score Range	Margin for Risk
Entry Level	1-3	Prime plus 0.25% - 5%
Emerging	3.01 – 4	Prime less 0% - 1%
Established	4.01 – 5	Prime less 1.25% - 2%

3.6.7 Loan Cycle Management

TUHF follows a standard project cycle management approach which is customised to its business style. It seeks to develop good practice in development finance. The loan cycle is depicted below:

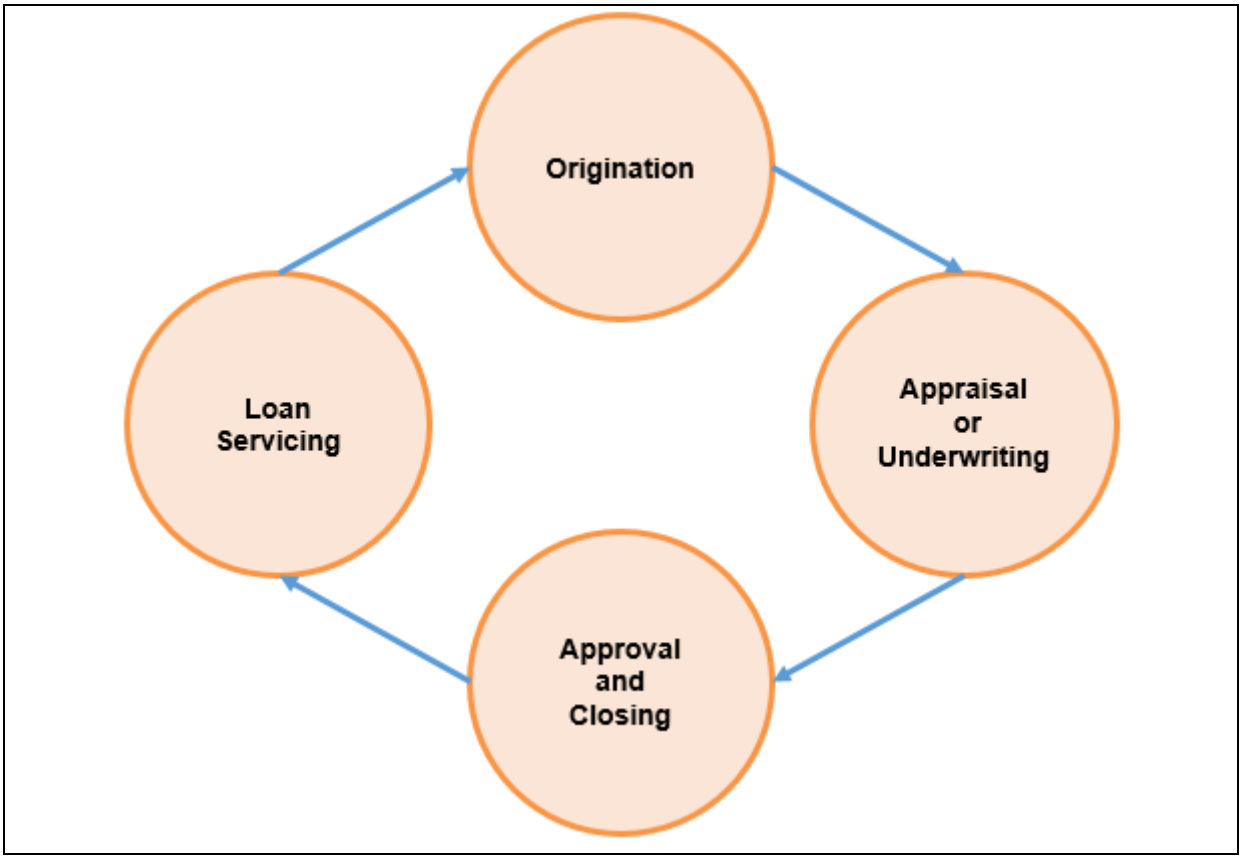


Figure 3.3: TUHF Loan Cycle

<u>Source</u>: Author (2016)

a) Origination is where due diligent pre-assessment and prioritisation take place of the borrower and the deal
b) Appraisal or underwriting (culminating in the loan proposal). This process is led and undertaken by the loan officer. The loan officer has the authority to appoint other professional services to assist them to thoroughly appraise the application and to meet the requirements of this policy
c) Approval and closing (terms sheet and loan contracting)
d) Loan servicing.

Given TUHF's portfolio management approach to loan management, a loan officer is the 'single point of accountability' for the entire project cycle, with the exception of the closing phase. The loan officer will be the borrower's point of contact for all issues relating to the loan. The loan officer can appoint other professionals (internal or on an insourced basis) to assist them at their discretion or as required (Chikomo, 2016).

3.6.8 Loan Appraisal

Loan application appraisals cover the character assessment, building assessment (including rights to build and trade (zoning, ordinance restrictions)), structural, mechanical and electrical conditions, product detail, financial feasibility and review, and the property management solution.

Separate project feasibility studies are completed on all loan applications by TUHF's professional staff. It is an indicator of the ability to pay, i.e. the ability for the project to meet TUHF's key financial conditions, as well as being a viable financial development investment.

First year indicators include:

- Initial yield
- Yield on own investment
- Debt cover ratios
- Loan-to-value ratios, and
- Debt asset ratios

The use of these indicators ensures that the project is cash-flow positive from the end of the rent up period, that the collateral value of the project is adequate and acts as a buffer against rent up and interest rate risk amongst others.

The key ratios applied at TUHF are the debt cover (DCR) and the loan-to-value (LTV). These take precedence over all others. Except with first time borrowers, TUHF does not follow a debt equity formula to lending. It principally relies on loan-to-value criteria for collateral purposes and debt cover for cash flow and debt servicing purposes. All other ratios are used as supporting information and do not form a lending hurdle, save where required by the board from time to time.

TUHF's required first year project indicators are:

- The percentage of loan-to-value (LTV)

  The loan that is advanced, and the security extension against each property, is a percentage of valuation (Net of VAT). The loan-to-value ratio should not exceed

80%. This may only be exceeded in exceptional circumstances with each policy exception specifically argued within a five percent limit, i.e. 85%.

- The debt cover ratio (DCR)

The DCR must be greater than 1.3 as TUHF's standard measure of cash flow. In exceptional circumstances and with existing customers only, TUHF will consider a DCR below 1.3, together with a specific set of breach remedy conditions, but not below 1.1.

- The debt to equity and financial leverage

TUHF has elected to use the debt asset ratio (DAR) as its measure of equity contribution, with the asset valued at a total cost (all costs incurred in the purchase and construction of the project, with no fee, legal, professional service, construction service, tax or any other cost whatsoever) of the project. As a guide a DAR of 80% is sought on all projects. A DAR of greater than 80% is not a policy exception provided that the principal hurdles are met.

TUHF requires that first time buyers inject at least 20% of the purchase price of the building as cash (proof of availability to be ascertained and put in place before registration of transfer), subject to meeting TUHF's LTV and DCR requirements.

For repeat borrowers in good standing, equity requirements are dependent on meeting the LTV and DCR ratios.

- The return or yield

The first year yield on total investment (i.e. before financing) is greater than the borrower's cost of debt for the project.

- The operating cost norms

The operating cost per unit per month: This is an important indicator for TUHF, as it is relatively fixed for various rental products. This norm is established on an annual basis for each of the cities that TUHF operates in by reviewing the operating costs of TUHF's borrowers and other landlords.

The cost income ratios: These are to be within market norms and vary depending on the level of rent, the rental products of the project (higher for rooms with common ablutions and lower for three-bed flats), the size of the building and the nature of the management.

3.6.9 Property Management

The management of TUHF financed properties is an important loan appraisal issue. For this reason, TUHF reserves the right, contractually, to approve and/or to require the appointment of specific property management operators. The proposed property management solution needs to be appraised as appropriate to the size of the project and the competency of the people involved (referred to as “property fit”).

An assessment of “The Big Five” is made and comprises of the services that can be partly or wholly outsourced, depending on the capacity of the borrower relative to the size of the building.

The ‘Big Five’ areas of property management include:

a) Leasing, tenant vetting and contracting
b) Financial administration, statements and payments, including management reporting, vacancy reporting, trend and performance analysis
c) Credit control (arrears management and bad debt)
d) Facility management including security, cleaning, repairs and maintenance.
e) Utilities management, including recoveries, metering and cost control

3.6.10 Security/Collateral

TUHF advances loans over a term of 15 years which is 5 years more than a typical commercial loan term from the commercial banks. The minimum pricing is prime plus 350 basis points (bps). The protection of the credit quality (value and saleability) of the loan portfolio is thus critically important. The quality of the loan book, over time, is managed in a proactive way and the required LTV of 80% at the commencement of the loan is aimed at providing the necessary adequacy of the credit quality.

3.6.10.1 Loan Security

The following minimum protection is required for each loan approved by TUHF:

- A first covering mortgage bond over the property
- The first mortgage bond will be registered for a value of not less than 150% of the initial approved facility amount.
- In addition to this bond value, an additional 30% of the approved facility amount will be registered in terms of TUHF's standard bond document as a provision for contingent costs, which TUHF may be required to disburse in respect of insurance premiums, licences, municipal taxes, repairs, stamp duties, legal and other costs related to an event of foreclosure. This additional amount may not be considered as a continuing covering security for present or future capital funding.

3.6.10.2 Deeds of Surety

- TUHF requires joint and several personal unlimited sureties for the full loan facility amount by the following parties connected to the borrower:
  - All shareholders in a private company
  - All members in a close corporation
  - All the adult beneficiaries of a trust

  If more than one surety is required to bind him/her/itself, each deed of surety will be joint and several. This shall apply in every case where joint sureties are involved.

- In addition to the above, in the event of complex owning structures, e.g. where juristic entities are the shareholders of the borrowing entity, sureties will be obtained from the underlying/ultimate shareholders/members/beneficiaries.

3.7 CHAPTER SUMMARY

The purpose of this chapter was to provide the reader with sufficient background and context as to how TUHF operates, its risk assessment and loan approval criteria, as well as the types of collateral that are required. The TUHF credit risk management process is designed to provide the entrepreneur with a seamless credit experience,

and ongoing support with various training initiatives, to ensure that the businesses remain viable. The design of the credit risk management assessment ensures a developmental impact and plays a crucial role in the economic development.

Chapter four will provide an overview of the theoretical model that was adopted for the purpose of this study.

CHAPTER FOUR

THE THEORETICAL FRAMEWORK

4.1 INTRODUCTION

Chapter three provided a case description of the TUHF credit risk management process and provided context to how TUHF operates and the credit risk management principles that are applied.

Chapter four outlines the theoretical framework of the study. The importance of credit risk management for financial institutions is highlighted and in particular, the management of the probability of default (PD). The importance of financial and non-financial indicators are highlighted. The chapter concludes with a discussion around information asymmetry and the adoption of the '5 Cs' as the theoretical framework for the study.

4.2 BACKGROUND TO THE THEORETICAL FRAMEWORK

The management of credit risk is essential for financial institutions. Kabir, Jahan, Ishrat, Chisty & Hasin (2010), note that, the failure of financial institutions is usually associated with problems in credit portfolios and is less often the result of shrinkage in the value of other assets. The quality of credit portfolios thus become important to the success of the financial institution. Various conventional methods exist to assess credit risk but the ultimate aim is to minimise the PD (probability of default) of the credit portfolio.

Jimenez & Saurina (2003) analysed the determinants of PD as a collateral-type of lender and the bank-borrower relationship, while exploratory variables were noted, such as the macroeconomic environment, characteristics of the borrower (industry and region) and the loan itself (maturity and size). The authors focussed on collateral amongst others, as one of the determinants of PD and concluded that higher-risk borrowers would usually be required to provide collateral whereas lower-risk borrowers would not be required to provide the same level of collateral, if any. However, the existence of collateral could lead to a decrease in screening efforts by

the banks when a loan is granted, as the existence of collateral itself, immediately reduces the PD.

4.3 CREDIT RISK MANAGEMENT AND THE 5 CS

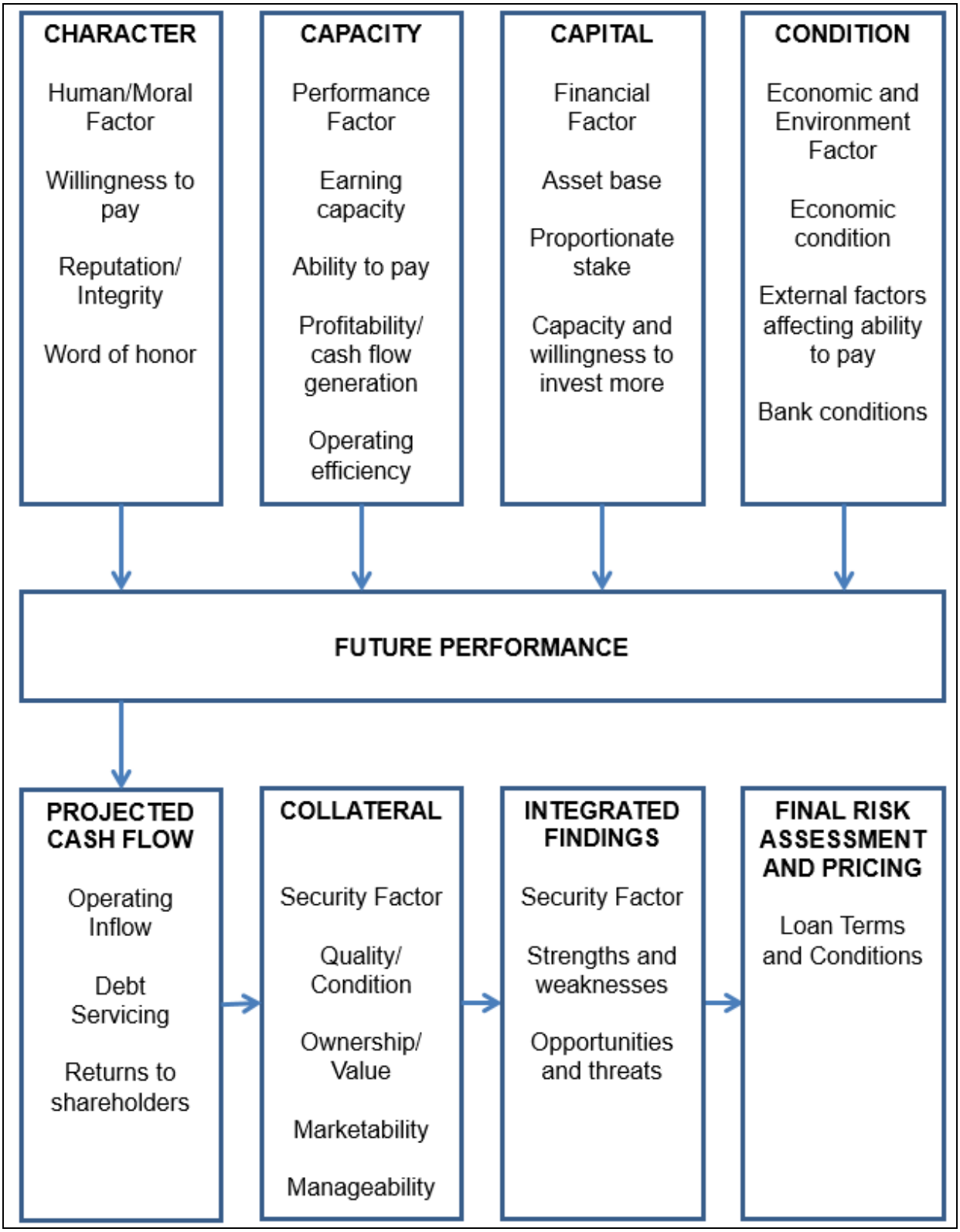
Psillaki, Tsolas, & Margaritis (2010) state that, through the effective management of credit risk exposure, lenders do not only support the viability and profitability of their own businesses, but they also contribute to systemic stability and an efficient allocation of capital in the economy. The authors investigated the role of non-financial factors in credit risk evaluation to determine the probability of borrower default, specifically technical efficiency as a measure of firm performance. The study concluded that, non-financial indicators were useful ex-ante determinants of business failure but that profitability remained a very good indicator of potential firm default. The findings of the study indicated that both financial and non-financial methods of credit risk assessment was necessary to reduce the risk of borrower default.

Information assymetry can be descibed as a situation where one party is not privy to all of the information about another party, in order to make an informed decision. Information asymmetry poses two problems for the provision of debt finance. Firstly, in the form of an inability to observe ex-ante, certain information which is relevant to the decision to enter into the contract., Secondly, the risk that the small business will not perform in a manner consistent with the contract (Binks, Ennew & Reed, 1992). In principle, information could be collected with respect to the abilities of the entrepreneur, the nature of the industry and market, as well as the behavior of the business, once finance has been made available. However, the cost of gathering such information at a single point in time is likely to be high, relative to the risk and return associated with any given project, but is likely to be obtained over time (Binks, Ennew & Reed, 1992). The authors concluded that, information problems can produce financial constraints to SMMEs, either because debt finance is not provided or it is only provided on disadvantageous terms. The authors proceed to note that, from a lender’s perspective, a good relationship between a borrower and lender provides the basis for understanding customer needs and resources, and for identifying the most appropriate ways of meeting those needs (Binks, Ennew & Reed, 1992).

Another approach used to assess credit risk, is the so-called '5 Cs', as detailed by (Kabir, Jahan, Ishrat, Chisty & Hasin, 2010), and relates to the borrower's character, capacity, capital, conditions and collateral, as summarised in the table below.

Table 4.1: (USAID, 2016) & (Kabir, Jahan, Ishrat, Chisty & Hasin, 2010)

Character	*Character is described as the general impression you make on the potential lender. The lender will form a subjective opinion as to whether you are sufficiently trustworthy to repay the loan or generate a return on funds invested in your company. Your educational background and business and industry experience will be reviewed. The quality of your references and the background and experience of your employees also will be taken into consideration.*
Capacity	*Capacity to repay is the most critical of the five factors. The prospective lender will want to know exactly how you intend to repay the loan. The lender will consider the cash flow from the business, the timing of the repayment and the probability of a successful repayment of the loan. Your payment history of existing credit relationships (personal or commercial) is considered as an indicator of future payment performance. Prospective lenders will also want to know about your contingent sources of repayment.*
Capital	*Capital is the money you have personally invested into the business and this is an indication of how much you have at risk should the business fail. Prospective lenders and investors will expect you to have contributed from your own assets, and taken on personal financial risk to establish the business, before asking them to commit to any funding.*
Conditions	*Conditions focus on the intended purpose of the loan. Will the money be used for working capital, additional equipment or inventory? The lender will also consider the local economic climate and conditions, both within your industry and in other industries, that could affect your business.*
Collateral	*Collateral or guarantees are additional forms of security that you can provide to the lender. Giving a lender collateral means that you pledge an asset you own, such as your home, to the lender, with the agreement that it will be the repayment source in case you can't repay the loan. A guarantee, on the other hand, is just that — someone else signs a guarantee document, promising to repay the loan if you can't. Some lenders may require such a guarantee, in addition to collateral, as security for a loan.*



Source: (Kabir, Jahan, Ishrat, Chisty & Hasin, 2010)

Figure 4.1: Borrower Selection Process according to the 5 Cs

The future performance of the borrower depends on their character, capacity, capital and condition, and ultimately affects their future performance, which is reflected in the projected cash flow. The outcome determines whether collateral will be required and leads to the final risk assessment and pricing.

4.4 IMPORTANCE OF GOOD CREDIT PRACTICES

Financial institutions should establish sound and well-defined credit risk practices. Criteria should be clear and the target market well-defined. Lenders should know the purpose for which funds are advanced and the relevant source of repayment. The Basel committee on banking supervision (Basel Committee on Banking Supervision, 2000) provides best practice credit risk recommendations that are in line with those already discussed and which include, amongst others, understanding the borrower's repayment history and current capacity to repay the loan, based on historical financial trends and cash flow projections, the borrower's business expertise as well as the integrity and reputation of the borrower.

In South Africa, lending is generally based on the principles of credit scoring, a system that is primarily driven by credit bureau data and related information on the borrower. Scored lending is founded on scored assessments using credit bureau information together with an assessment of the customer's financial information, particularly their cash flow records. This makes the loan application process easier for those customers borrowing smaller amounts and who do not have comprehensive financial statements. Intuitive lending applies to larger loan amounts and more complex credit products, and uses expert assessments of comprehensive financial records (Standard Bank, 2014). This approach is a standard industry approach and in line with what most lending institutions offer. The weakness in this approach is that a "one size fits all" approach is taken due to the limited flexibility of the credit scoring system. However, the strength of this approach relies on the consistency of the information that is available on all borrowers.

4.5 RELEVANCE OF THE 5 CS TO THE STUDY

The 5 Cs model will be used to explain the research findings, as the fundamental benefit of this approach, is that the model incorporates both qualitative and quantitative measures. The model provides a fair evaluation of the borrower as it does not place

too much reliance on the quantitative indicators but rather provides a balanced perspective by incorporating qualitative indicators as well. This provides an important foundation on which to build secondary and more advanced credit analysis models. Ensuring fair access to finance for SMMEs, as outlined in Figure 4.2, can play a vital role in ensuring that the unique features of various loan applicants are taken into consideration in the credit risk assessment process.

4.6 CHAPTER SUMMARY

This chapter focussed on the theoretical framework on which the study is based. The importance of sound credit management practices were highlighted and the relevance of the 5 Cs model within the context of the study was highlighted. In Chapter five, the research methodology which was be employed for the purpose of the study will be discussed. The discussion will focus on the population studied as well as the sampling techniques used to identify the sample groups. Furthermore, the data collection methods, the design, validity and reliability of the measuring instrument, as well as the data analysis techniques used, will be discussed.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 INTRODUCTION

Chapter four outlined the theoretical framework that was applied and used as a guideline in the study.

This chapter will provide a description of the research design, research methodology and the stages in the research design, such as the population, sample and sampling procedure used for the study. Furthermore, this chapter will also highlight the data collection methods as well as data analysis methods used in the study. The research was conducted in two phases which ran concurrently. The research methodology will therefore be discussed under the two phases.

Data for phase one of the study was collected from internal stakeholders at TUHF, who were directly involved in the credit process. This data was collected by using a structured interview sheet with structured questions. In stage two, a quantitative approach was followed. Data in phase two was collected by way of a structured questionnaire sent to SMMEs who were existing TUHF clients, and servicing loan facilities.

In South Africa, where the unemployment rate is exceptionally high, especially amongst the youth, the survival and sustainability of SMMEs becomes crucial for economic growth and alleviating poverty and related social ills. Therefore, this study intends to expand on the current knowledge and information available, relevant to the sustainability of SMMEs. The focus will be on the impact of the credit risk management practices applied by development finance institutions on the sustainability of SMMEs. In an attempt to achieve the primary and secondary objectives of this study, this chapter gives an explanation of the research methodology that was utilised in order to solve the research problem.

5.2 RESEARCH DESIGN

According to Leedy & Ormrod (2005), the research design provides the overall structure for the procedures that the researcher follows, the data the researcher

collects and the data analysis the researcher conducts. Collis & Hussey (2003), define research design as the art and science of planning procedures for conducting studies in order to get the most valid findings. Kumar (2014), describes research design, as the road map to be followed during the research journey to find answers to research questions as validly, objectively, accurately and economically as possible.

Polit & Hungler (1995), note that research designs differs with how much structure the researcher imposes on the research situation and how much flexibility is allowed while the research is under way. The research design of quantitative studies are highly structured and often derive more accurate results than qualitative studies. The latter is typically less structured and focuses on the depth or richness of the data (Struwig & Stead, 2013). The study allowed for a less structured approach in phase one of the study and a more structured approach for phase two. Data for phase one of the study was collected by way of a structured interview sheet, which contained a mix of open-ended and closed-ended questions. Personal interviews were held with the relevant TUHF representatives to gain a deeper understanding of the credit risk management practices of TUHF. This was the preferred option for capturing the depth of the data, and it also allowed the interviewer to explain questions where the respondents were unsure about the context. Data for phase two of the study was collected by making use of a structured questionnaire that was electronically sent to the clients on the TUHF database in the Eastern Cape. TUHF managed the process in order to protect the identity of the clients.

Survey research involves acquiring information about one or more groups of people by asking them questions and tabulating their answers, with the ultimate goal of learning about a large population by surveying a sample of that population (Leedy & Ormrod, 2005). The aim of the second phase of the study was to determine how SMMEs performed against the fixed set of indicators used by the DFI to determine their sustainability.

5.3 RESEARCH APPROACH

5.3.1 Descriptive Explanatory Design

Collis & Hussey (2003), refer to descriptive research as research that describes phenomena as they exist. The data collected is often quantitative and statistical techniques are used to summarise the information. Analytical or explanatory research is a continuation of descriptive research and aims to understand phenomena by discovering and measuring causal relations amongst them (Collis & Hussey, 2003). Collis & Hussey (2003) further note that, an important element of explanatory research is identifying and possibly, controlling the variables in the research activities. The literature review revealed that numerous studies have been done on credit risk management practices as well as analyses as to why SMMEs fail. This study aims to establish a relationship between the credit risk management practices of DFIs and the sustainability of the SMMEs that they fund. The research was conducted in two phases and two populations were identified for the study. The first population comprised of TUHF staff who were involved in the credit management process, and their roles ranged from origination to post investment monitoring. The second population comprised of SMMEs who had obtained debt facilities from TUHF via loan facilities that were disbursed. An explanatory, descriptive design was thus adopted in this study.

5.4 TRIANGULATION

Triangulation occurs when multiple sources of data are collected with the hope that they will converge to support a particular hypothesis or theory. This is especially common in qualitative research. This approach is also common in mixed-method designs, in which both quantitative and qualitative data are collected to answer a single research question (Leedy & Ormrod, 2005). Simplified, triangulation entails the use of different research techniques in the same study. Struwig & Stead (2013), recommend triangulation as a tool to build trustworthiness into your research. A further benefit of mixed-method design lies in the enhanced validity of the findings (Polit & Hungler, 1995).

Qualitative and quantitative data were collected for phase one of the research study and quantitative data was collected for phase two. The inclusion of the qualitative

approach, in the structured interviews with TUHF staff, provided depth and context to the responses. The quantitative data for phase two of the study was obtained by electronically distributing questionnaires to the TUHF clients in the Eastern Cape. This process was managed by TUHF.

5.5 DATA COLLECTION

The study was conducted at the Eastern Cape branch of TUHF, which is based in Port Elizabeth. The branch reports into its Johannesburg-based head office. The Eastern Cape office has built up an average of just less than thirty clients since the office opened in 2011. The average loan sizes range from R1 million to R10 million, with entrepreneurs having diverse backgrounds and coming from all walks of life.

The study was conducted in two concurrent phases and the methodology used in each of the phases will be discussed separately.

The data for phase one was collected by means of structured interviews with TUHF staff members who were involved in the credit process from the stage of loan origination. It was decided to conduct interviews with local staff as well as head office staff, including those involved at the credit committee level where loans are approved. An interview schedule comprising of a list of questions, both open- and closed-ended, was prepared to ensure uniformity of the information. Uniform information assures comparability of data. The TUHF staff were mainly required to answer questions around the DFI's credit management practices based on the 5 Cs credit framework, from lead stage to post-monitoring stage.

The data for phase two was collected by means of a questionnaire which was distributed by electronic mail (email) to SMMEs on the TUHF database in the Eastern Cape. TUHF managed the end-to-end process in order to protect the clients' identities. The risk of not getting responses from those SMMEs on the electronic mailing list was mitigated by initial sms messages and emails that were sent by TUHF to all participants advising them of the survey. The initial sms and email messages were also used to introduce the study and to assure the participants that the responses would be treated anonymously. The advantage of this approach lies mainly in its cost-effectiveness, and greater degree of anonymity as there are no face-to-face interviews.

5.6 PHASE 1: MIXED METHOD APPROACH

Easterby-Smith, Thorpe, & Lowe (1991), identify four types of triangulation; data triangulation, investigator triangulation, methodological triangulation and triangulation of theories. The data triangulation approach was applied for phase one of the study. This was done to determine the credit risk management practices that TUHF applies based on the 5 Cs of a credit framework.

The rationale for using a mixed method approach for the data collection of this phase of the study, was to look beyond the analytical aspects of the loan cycle in order to gain a deeper understanding of the DFIs credit risk management practices.

5.6.1 Target Population

A population is the combined total (aggregate) of all the elements you are focusing on (Struwig & Stead, 2013). Polit & Hungler (1995) distinguish between the target population and the accessible population. The target population includes all the cases about which the researcher would like to make generalisations, whilst the accessible population meets the required research criteria and is accessible to the researcher. The target population for phase one of the study comprised of all of the TUHF staff were employed in the Eastern Cape and who were involved in the loan process. The accessible population comprised of 3 staff members who were based in the Eastern Cape and who were involved in the loan credit process.

5.6.2 Sample

A sample is made up of some members of the population. Stratified sampling overcomes the potential over- or under-representation of some members of the population by dividing the population in strata and carefully selecting members as to have equal representation (Collis & Hussey, 2003). In the study, care was taken to ensure equal representation of junior and senior staff as well as customer-facing and non-customer-facing staff. At the request of the researcher, TUHF provided the names and contact details of the staff identified according to the stratified sampling method. With the assistance of TUHF, appointments were set up in the diaries of the staff and three interviews were conducted.

5.6.3 Data Collection

Data was collected via personal interviews with the TUHF staff. The questions addressed the analytical and procedural details that surround the loan cycle process as based on the 5 Cs. Over and above the structured interview questions, the following questions relevant to the objectives of the study were asked:

a) What does the TUHF credit risk management process entail?
b) What can TUHF do to make sure that the entrepreneurs that become clients are successful?
c) If there is something that you could change or add in the overall credit risk management process, what would that be?

Participants were also asked to provide biographical data, such as their gender, age, highest educational qualification and their position held in their jobs.

5.7 PHASE 2: QUANTITATIVE/POSITIVISTIC APPROACH

Collis & Hussey (2003) identify two types of paradigms, namely positivistic or quantitative and phenonomological or qualitative paradigms. The authors further cite the benefits of the positivistic paradigm as being able to use large samples with data that could be collected with relative ease and speed. The positivistic approach was applied for phase two of the study to measure the SMMEs against a set of sustainability indicators that were developed specifically for TUHF clients.

5.7.1 Target Population

The target population for Phase two of the study comprised of all of the SMMEs who had been funded by TUHF. The accessible population comprised of 23 SMMEs based in the Eastern Cape and who were TUHF clients.

5.7.2 Sampling

Sampling can be described as employing a process that makes use of a small number of items, or a subset of a population, to make the necessary observations about the entire population (Zikmund, 2003). Sampling is an indicator from which the data is collected. A sample is made up of some of the members of a population. In a

positivistic study, a good sample is one where the results obtained can be taken to be true for the whole population (Collis & Hussey, 2003).

Sampling can be categorised as probability and non-probability sampling techniques, as illustrated in Table 5.2. Probability sampling techniques have statistical importance, due to the fact that the components in the sample all have an accepted probability to be selected. This feature of the probability sampling technique ensures that no bias or favouritism occurs (Pellissier, 2007:32). A non-probability sampling technique is a sampling technique where the units of the sample are chosen on the basis of personal judgement or convenience (Zikmund, 2003:380).

Table 5.1: Sampling techniques

Probability sampling	Non-probability sampling
Simple random sampling: All the factors in the population, which are not yet incorporated, have an equal chance of being selected.	**Convenience sampling:** The items are selected for the convenience of the examiner, due to the fact that the items are readily available, close-by or agreed to participate.
Stratified random sampling: Factors are randomly selected after the population has been selected according to a number of attributes.	**Judgement sampling:** The judgement of the researcher is used to identify items in order to save time or costs.
Cluster sampling: The population is separated into mutually exclusive groups which are internally diverse.	**Quota sampling:** The population is stratified in relation to some attribute. Factors are then selected by means of a non-random technique.
Systematic sampling: Every k_{th} factor is drawn, where k is previously established.	**Snowball sampling:** Factors are selected based on recommendation from other survey respondents who are suitable for the necessary profile.

Source: (Pellisier, 2007)

In the study, loan size was irrelevant, as the sustainability indicators could be applied to any of the TUHF clients regardless of loan size. TUHF took it upon themselves to distribute the questionnaires to the clients and followed a simple random sampling approach as everybody in the population had an equal chance of being selected.

The respondents were advised of the survey via electronic mail and telephone, whichever were the preferred contact method as per the information on file. The questionnaires were sent to the participants. A response time of twenty-one days that was allowed. Telephonic and email reminders and follow-ups commenced after seven days to ensure that completed questionnaires were returned. A total of twenty-three businesses were contacted by TUHF. Questionnaires were sent to the twenty-three entrepreneurs by email. Out of these twenty-three, fourteen completed and anonymous questionnaires were returned to the researcher. This indicated a response rate of 61%.

The objective of the questionnaire was to evaluate the credit risk management practices of TUHF, while at the same time, identifying potential factors from this process that may have had an impact on the sustainability of the SMMEs.

5.7.3 Data Collection

Data was collected by means of a structured questionnaire, with questions that had pre-designated response options. Neuman (2003), described the two types of questions applicable to surveys as being open-ended questions and closed-ended questions. Kumar (2014), notes that open-ended questions provide in-depth information and an opportunity for respondents to express themselves freely. However, Kumar (2014), also notes that the analysis of open-ended questions are difficult and that some respondents might find it difficult to express themselves. Respondents are free to offer any answer to an open-ended question whilst in closed-ended questions, an answer must be selected from a range of pre-defined answers. Closed-ended questions are easier to analyse although they may lack depth and variety.

It is possible to assign ratings to answers. One such rating is the Likert scale, also known as summated-rating, which is commonly used in survey research (Kumar, 2014). Likert scales need a minimum of two categories such as “yes” or “no” for an answer. A score is allocated to a scale and the respondents’ score on a scale is computed by adding the number of responses given by the participants.

Quantitative data was collected in the form of a survey which had structured closed-ended questions. The answers to the questions were based on a Likert-type scale,

ranging from two to five. Respondents selected from options incorporated into the survey. The questions in the survey covered the following sections:

a) Turnover growth
b) Age of business
c) Ability to service debt and debt and interest cover ratios
d) Property management
e) Construction

The complete research instrument (questionnaire) is included as an annexure (Annexure A). The twenty statements pertaining to the SMMEs and the management of their businesses, that were included in the research instrument, can be subdivided in terms of the research variables identified for the study. Table 5.2 illustrates the subdivision of the statements for every variable identified. Annexure B provides an indication of all of the statements included in the questionnaire, as well as which statements support each identified variable of the study.

Table 5.2: Sustainability variables and the number of statements per variable

Statements on	Number of statements
Turnover and business experience	2
Financial indicators of the business (Serviceability)	4
Financial management (Cash flow management)	6
Property/business management (Asset and default management)	8

Source: Adapted from Visser (2012)

Electronic mails were sent to the chief executive officer and Coastal Mortgage Manager of TUHF to confirm that the research was set to commence on a specific date, as an informal information exchange occurred in May 2016 where after approval was given in email format. Letters were sent to the sample group via email, requesting their participation and providing the full details and purpose of the research. TUHF managed the entire information collection process as concerns were raised about client confidentiality. Completed questionnaires were returned to the researcher by TUHF. The request from TUHF to their clients, was that participation was voluntary and completely confidential.

5.6.4 Data Analysis Plan

Data can be analysed by using either descriptive or inferential statistics. Descriptive statistics describe what the data looks like, while inferential statistics makes inferences about large populations by collecting data on relatively small samples (Leedy & Ormrod, 2005). Descriptive statistics were applied to analyse the quantitative data.

The credit risk management of TUHF was identified as the independent variable as they set the credit risk assessment standards. The sustainability of the SMMEs was identified as the dependent variable. The collected data was statistically analysed, through the use of the STATISTICA software, in order to determine the correlation between the dependent and independent variables the correlation coefficient was calculated (Neuman, 2003).

5.6.4.1 Independent variable – CRM practices of TUHF

An independent variable is usually studied as a possible cause of something else and is, most of the time, directly manipulated and referred to as an independent variable (Leedy & Ormrod, 2005).

The independent variables in the context of the study included those credit risk management practices as set by TUHF and included a matrix scoring scale that calculated a weighted average across the following variables:

- Character
- Financials
- Product
- Property management
- Construction

5.6.4.2 Dependent variable – SMME sustainability

A dependent variable is influenced by, and more likely depends on, an independent variable (Leedy & Ormrod, 2005). Sustainability of the SMMEs is dependent on the credit risk management practices of TUHF. The dependent variable (sustainability) in the context of the study was categorised as follows:

- Turnover growth
- Serviceability
- Cash flow management
- Asset management
- Default management

The qualitative data was summarised and categorised and gave valuable insight into the approach taken by TUHF when dealing with the management of credit risk. The discussion of the findings will be presented, according to the themes identified from the data provided, in response to each of the questions. Thereafter the findings will be related to the theoretical framework for the study, i.e. the borrower's selection according to the 5 Cs model.

5.6.4.3 Hypothesis

This hypothesis will be tested by using a correlation analysis as follows:

H^0 There is no relationship between CRM at TUHF and the sustainability of SMMEs

H^1 There is a direct positive relationship between CRM at TUHF and the sustainability of SMMEs

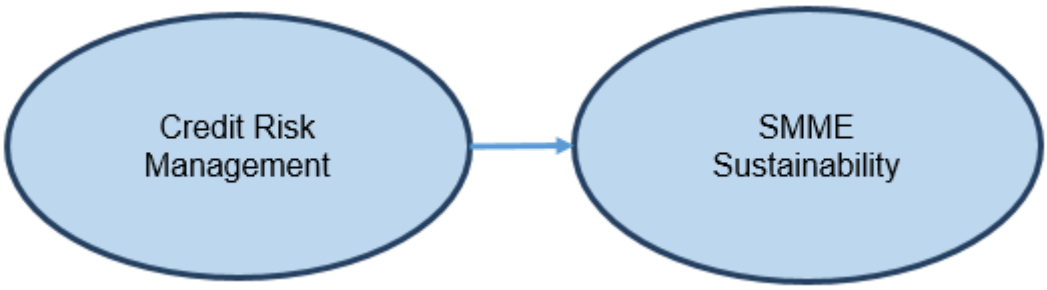


Figure 5.1: Proposed hypothesised model

5.6.5 Reliability and Validity

Reliability is concerned with the findings of the research. The findings can be said to be reliable if the research can be repeated and the same results obtained. Validity is concerned with the extent to which the research findings accurately represent what is happening in the situation (Collis & Hussey, 2003). Kumar (2014), simply states that,

if a research tool is constant and stable, hence predictable and accurate, it is said to be reliable. Thus the greater the degree of consistency and stability in an instrument, the greater its reliability.

The correlation between the responses from the SMMEs and the findings, will confirm reliability.

5.8 CHAPTER SUMMARY

Chapter five discussed the relevant research design and methodology utilised in this study. Reference was made to the various types of sampling techniques, the sample, as well as the target population. The two types of research paradigms, namely phenomenological (qualitative) and positivistic (quantitative) research paradigms, were discussed and compared. It was indicated that this study focused on mainly utilising a quantitative (positivistic) research paradigm. The chapter also provided an explanation on the data collection and the data analysis methods employed, as well as the reliability and validity of the study and the methods utilised.

The results of the research are provided in Chapter six, by presenting, analysing and interpreting the data.

CHAPTER SIX

FINDINGS AND INTERPRETATION OF THE DATA

6.1 INTRODUCTION

Chapter five analysed the details of the research methodology and the research process used to determine the impact of the credit risk management practices of a Development Finance Institution on the sustainability of SMMEs.

Chapter six will commence with a summary of the qualitative side (Phase one) of the study, where TUHF staff members were interviewed in order to understandthe TUHF credit risk management process. The 5 Cs of credit risk management were used as a basis for the interviews and the findings are presented within the framework of the 5 Cs. The chapter is concluded by discussing the results of the linear regression analyses (Phase two of the study) which were used to determine the percentage of variation in the dependent variable, brought about by the variations in the independent variables.

6.2 CREDIT RISK MANAGEMENT AT TUHF

Personal interviews were held with a loan officer, a credit analyst and the TUHF regional manager for the Eastern Cape. The responses from the individuals were similar and the rankings on most statements were in line with one another.

6.2.1 Character

TUHF places a lot of emphasis on the borrower's character when doing an assessment for credit facilities, and ranks the training and knowledge of the entrepreneur, as wellas their experience, financial competency and future plans, as extremely important assessment criteria. The level of training and knowledge matches the borrower to the project complexity and their experience highlights whether the borrower will understand the project. Their financial competency is important for overall enterprise management and their future plans assists in understanding entrepreneurial motive.

Other character traits that are assessed, include commitment, how the entrepreneur spresents themselves, their stabilty and very importantly, their integrity.

6.2.2 Capacity

TUHF determines repayment ability primarily by looking at the quantitative measures of the project in terms of income, expenses, free cash flows and the ability of the project to sustain certain stress test assumptions. After assessment of the commercial viability of the project, TUHF considers the borrower's character. For new clients, this is done by looking at the borrower's credit bureau information, repayment history and other information that is readily available, and which often includes financial statements and management accounts. For existing TUHF clients, portfolio management reports on existing projects and municipal accounts are used as a measure to determine whether an entrepreneur will service the debt.

However, whether an entrepreneur will service their debt is difficult to determine during the assessment and therefore, various assumptions are made, highlighting the importance of a good character assessment.

6.2.3 Commitment

TUHF defines commitment as the ability to honour obligations and not speculate. A committed person pays their loan and remains a client. A committed person also puts down earnest money as an equity contribution. TUHF further considers an entrepreneur's personal circumstances (employment history, etc.) to determine commitment. As a reward for commitment, TUHF does not impose early settlement penalties or any other additional fees over the life of the loan. As a further reward for commitment, TUHF also assumes a philanthropic role and provides an equity support loan to deserving black entrepreneurs who can prove that they have made the earnest money available as equity.

6.2.4 Collateral

Over and above the initial cash equity requirement, TUHF does not call for additional collateral from the entrepreneur, save for a mortgage over the property and a suretyship from the borrower and related entities. TUHF calls for an unlimited

suretyship in support of the facility. Like most financial institutions, the quality of the suretyship determines the risk pricing, as a strong balance sheet of one or more of the sureties typically results in the loan being priced more favourably.

6.2.5 Conditions

Market conditions play an important role when loan facilities are considered by TUHF's credit committee. One of the factors considered, includes the demand and supply for rental accommodation. This is based on the understanding that higher interest rate cycles make it more difficult for people to buy homes and they would therefore rather rent. Another factor taken into account is market vacancy levels and the causes thereof (structural or chain). Lastly, due to inflation, costs increase at a faster pace than rentals which impacts on the viability of projects. For this reason, and as a defensive measure, TUHF focusses on bigger cities and not single-sector economies. TUHF declines loan applications where the projects are not in TUHF-targeted areas and in instances where there is concentration risk to a particular sector, e.g. over-exposure to student accommodation or boarding houses with communal facilities. TUHF prices for risk on a tiered and weighted basis, by scoring a prospective applicant according to character, financial, construction and property management ability. These subjective measures are aggregated to derive a weighted score.

6.2.6 Sustainability

The discipline shown by the borrowers with regards to debt servicing and management of loan facilities impact on the sustainability of their respective businesses. TUHF indicated that they had non-performing loans, but that less than 1% of their loans fall within this category. Post-investment monitoring is one of the most essential components of the TUHF business and they business break this down as follows:

a) Interaction with clients – constant and continuous interaction with clients is important as constant engagement leads to the identification of early warning signals of potential problems. Municipal account statements of TUHF-funded properties are required on a monthly basis. Any indication of late or non-payment is an early warning sign.
b) TUHF Talks – these are quarterly networking events, where one relevant subject is discussed that educates and assists the clients in their respective

businesses. Examples of these are talks on construction, property management, etc.

c) TUHF has developed a training program in partnership with Dr Francois Viruly, from the University of Cape Town, to further enhance the quality of its entrepreneurs.
d) In partnership with the Hope Factory, TUHF has also established a program to equip aspiring entrepreneurs with the necessary business skills to successfully manage an enterprise.
e) TUHF also employs independent contractors to facilitate financial and business management sessions with clients.
f) As part of the portfolio management process, and within ninety days of a businesses' financial year-end, audited financial statements are required. Management accounts are required every quarter.

The loan officers have concluded that TUHF comprehensively covers all of the factors that could potentially impact the quality of the loan book, and which could possibly impact on a borrower's ability to service its debt. It was further concluded that the TUHF business has adequate risk management tools and practices, but that these are not fully or appropriately implemented at times. A lack of buy-in from borrowers result in a gap in the overall portfolio management process, which loan officers and management do not know how to adequately address, especially if there are no arrear payments on the borrower's account.

The loan officers' opinions, on what a sustainable business looks like, were similar with the following key attributes:

- The business should have the ability to maintain, retain and grow turnover and profits by reinvesting surplus cash within the business itself and improving the assets.
- The business should operate in a smart and effective manner.
- The business should offer a unique value proposition.
- The business should understand its customers.

In an effort to ensure that the businesses it funds remain sustainable, TUHF maintains that the keys to success are financial management, property management, continuous

training and up-skilling, securing investment properties at the right price as this determines serviceability, as well as progressive growth within the capacity of the business. This is done by way of portfolio management and health checks on its client base on an ongoing basis, by using various means of communication.

6.3 SMME ANALYSIS

6.3.1 The Instrument

The questionnaire comprised of 20 questions which addressed the various sustainability variables that were identified:

- Turnover growth
- Business experience
- Ability to service debt / debt and interest service cover ratios
- Property management
- Construction

The findings to the questions will be presented under the following headings:

a) Turnover and business experience
b) Financial indicators of the business (Serviceability)
c) Financial management (Cash flow management)
d) Property/business management (Asset and default management)

6.3.2 Response Rate for this Study

An online questionnaire was addressed to TUHF clients by the TUHF PE regional office. The questionnaire, sent with a cover letter, was addressed to a total number of 23 businesses during July 2016, with the cut-off date as the 31 August 2016. The final number of submitted questionnaires was 14, which resulted in a response rate of 61%.

6.3.3 Turnover and Business Experience

6.3.3.1 Turnover

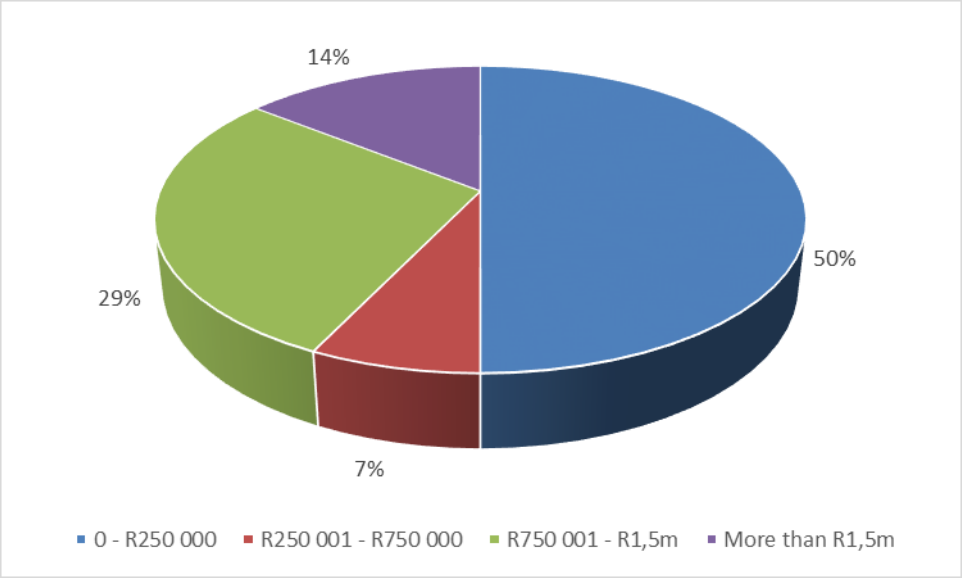
The questionnaire started by determining the size of the business, measured by its turnover. The table below illustrates the frequency distribution of turnover.

Table 6.1: Turnover per SMME

Turnover	Frequency	Percent
0 - R250 000	7	50,0
R250 001 - R750 000	1	7,1
R750 001 - R1,5m	4	28,6
More than R1,5m	2	14,3
Total	**14**	**100,0**

Source: results obtained from the analysis of the empirical study

The various levels of turnover are presented below as a pie chart.



Source: Table 6.1 converted to a pie chart

Figure 6.1: Turnover per SMME

As shown above, 50% of the respondents generates a turnover of up to R250,000 per annum, 7,1% generated a turnover of between R250,000 and R750,000 per annum, 28,6% generated a turnover of between R750,000 and R1,5 million per annum, and 14,3% of the respondents generated a turnover of more than R1,5 million per annum.

6.3.3.2 Business experience

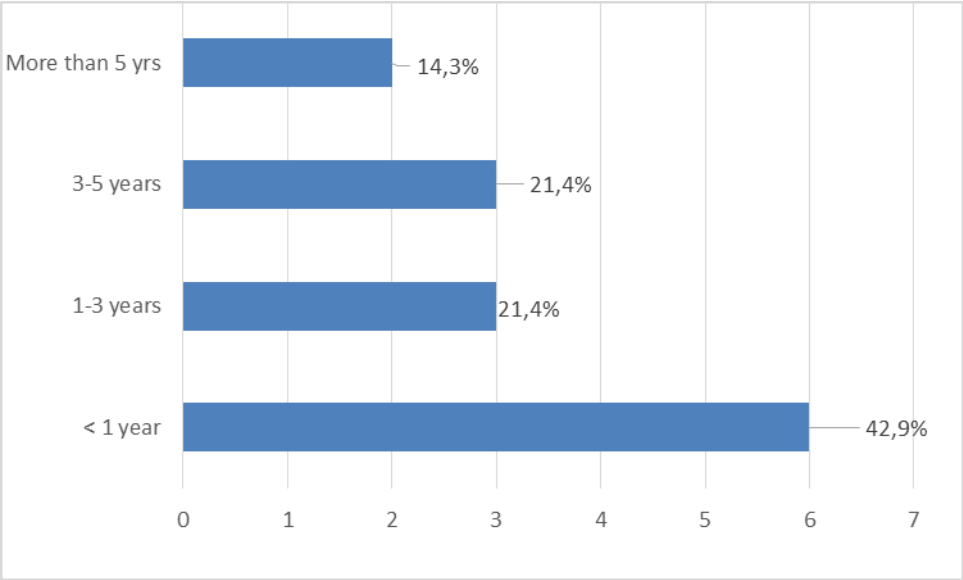
Respondents were required to provide an indication as to how long their businesses had been operating. Table 6.2 shows the frequency distribution of the business experience of the business owners.

Table 6.2: Business experience

Length of Time	Frequency	Percent
< 1 year	6	42.9
1-3 years	3	21.4
3-5 years	3	21.4
More than 5 years	2	14.3
Total	**14**	**100.0**

Source: Results obtained from the analysis of the empirical study

The business experience composition is presented as a bar chart below.



Source: Table 6.2 converted to a bar chart

Figure 6.2: Business experience

As shown above, 42,9% of the businesses had been operating for less than one year, 21,4% had been operating for between one and three years, 21,4% had been

operating for between three and five years and 14,3% had been operating for longer than 5 years.

6.3.4 Financial Indicators of the Business (ability to service debt)

6.3.4.1 Debt serviceability

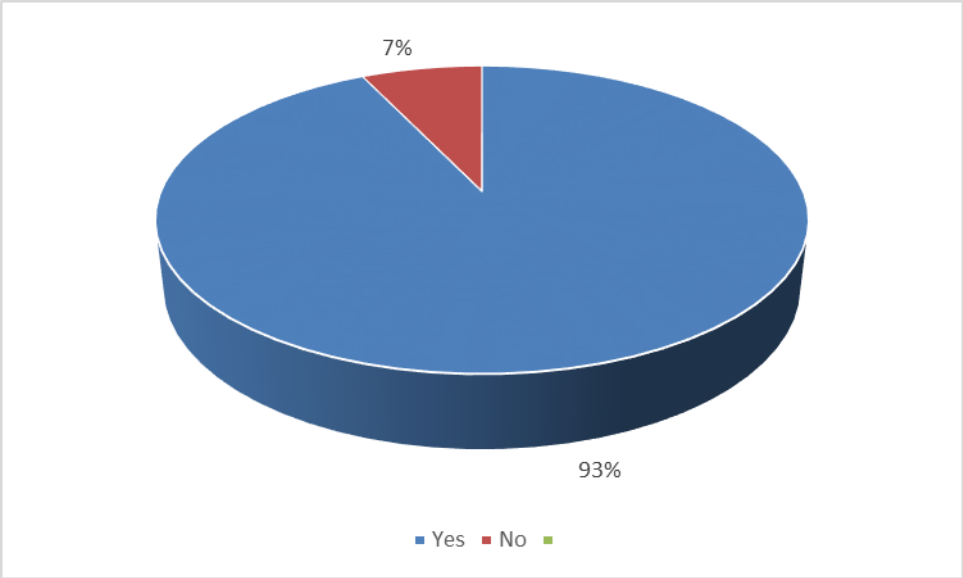
The respondents were required to provide an indication of the level of comfort to service their respective TUHF loans. Table 6.3 illustrates the frequency distribution of debt serviceability.

Table 6.3: Ability to service debt

Serviceability	Frequency	Percent
Yes	13	92,9
No	1	7,1
Total	14	100,0

Source: Results obtained from the analysis of the empirical study

The serviceability table is presented as a pie chart below.



Source: Table 6.3 converted to a pie chart

Figure 6.3: Ability to service debt

As indicated in Table 6.3 and Figure 6.3, 92,9% of the respondents have indicated that they can comfortably service their loans with the income that is generated. Only 7,1% of the respondents indicated that they could not service their loans. The ability to service debt is an indicator of business strain that ultimately affects sustainability.

6.3.4.2 Surplus cash flows

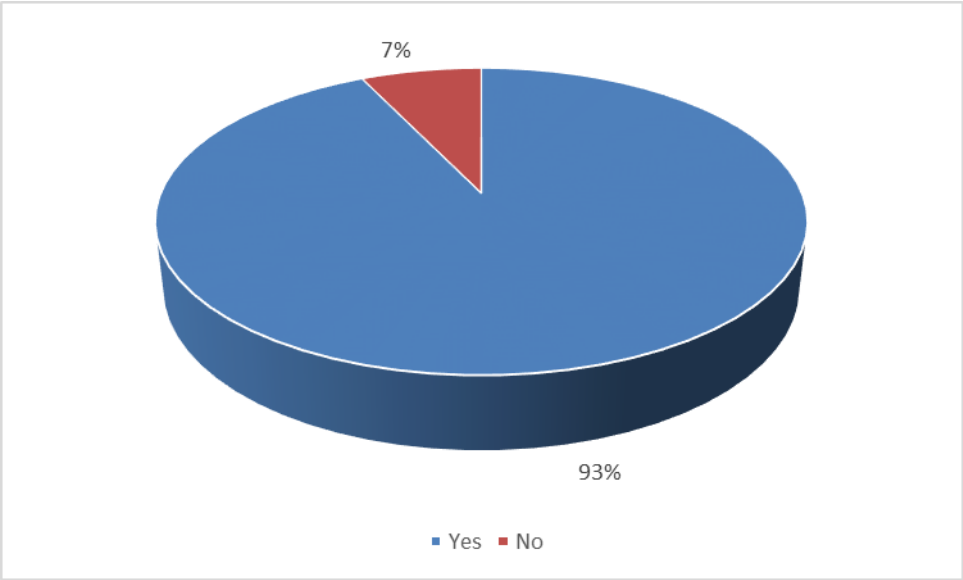
The respondents were required to provide an indication as to whether there was an income surplus or deficit after meeting all debt obligations. A surplus indicates good management of finances that ultimately leads to improved sustainability of the enterprise. Table 6.4 illustrates the frequency distribution of surplus cash flows.

Table 6.4: Surplus Cash Flows

Surplus Cash Flows	Frequency	Percent
Yes	13	92,9
No	1	7,1
Total	**14**	**100,0**

Source: Results obtained from the analysis of the empirical study

The surplus cash flow table is presented as a pie chart below.



Source: Table 6.4 converted to a pie chart

Figure 6.4: Surplus Cash Flows

As indicated in Table 6.4 and Figure 6.4, 92,9% of the respondents indicated that they have surplus cash flows. Only 7,1% of the respondents indicated they did not have surplus cash flows.

6.3.4.3 Management of Income

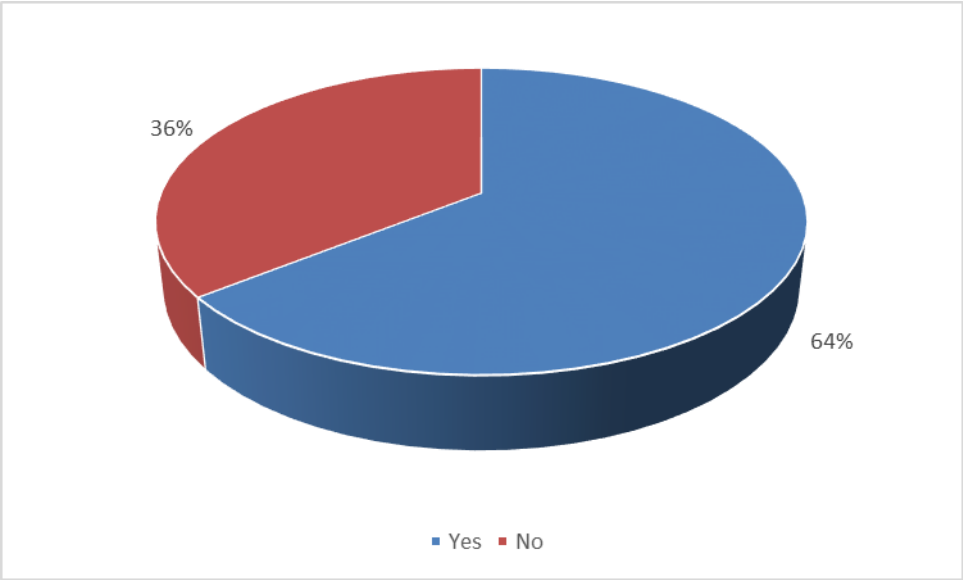
The respondents were required to provide an indication as to how regularly tenants pay on time. When tenants pay on time, entrepreneurs can service and meet their debt obligations in a timely fashion, thereby leading to improved sustainability. Table 6.5 provides the frequency distribution with regards to whether there were late payers or not.

Table 6.5: Tenants that pay late

Tenants that pay late	Frequency	Percent
Yes	5	35,7
No	9	64,3
Total	14	100,0

Source: Results obtained from the analysis of the empirical study

The table above is presented as a pie chart below.



Source: Table 6.5 converted to a pie chart

Figure 6.5: Tenants that pay late

As indicated in Table 6.6 and Figure 6.5 above, 35,7% of the tenants paid late and 64,3% paid on time.

6.3.4.4 Bad debt percentage

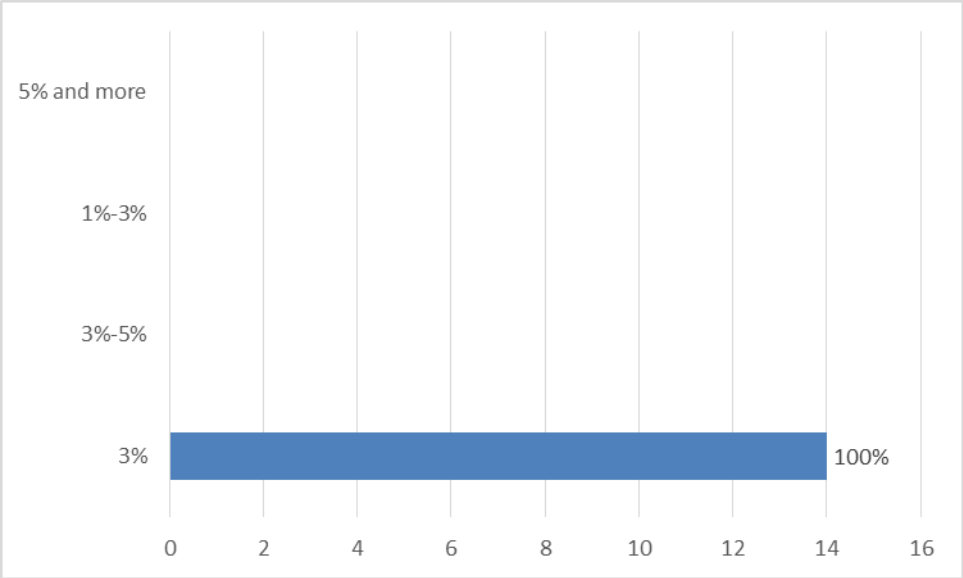
The respondents were required to provide an indication of their bad debt percentage. Table 6.6 summarises the frequency distribution of the results.

Table 6.6: Bad debt percentage

Bad Debt Percentage	Frequency	Percent
3	14	100,0
5	0	
10	0	
<10	0	

Source: Results from the empirical study

Table 6.6 is presented as a bar chart below.



Source: Table 6.6 converted to a bar chart

Figure 6.6: Bad debt percentage

As indicated in the table and bar chart above, all of the respondents had a bad debt percentage of no more than 3%.

6.3.5 Financial Management

6.3.5.1 Surplus Cash Flow levels

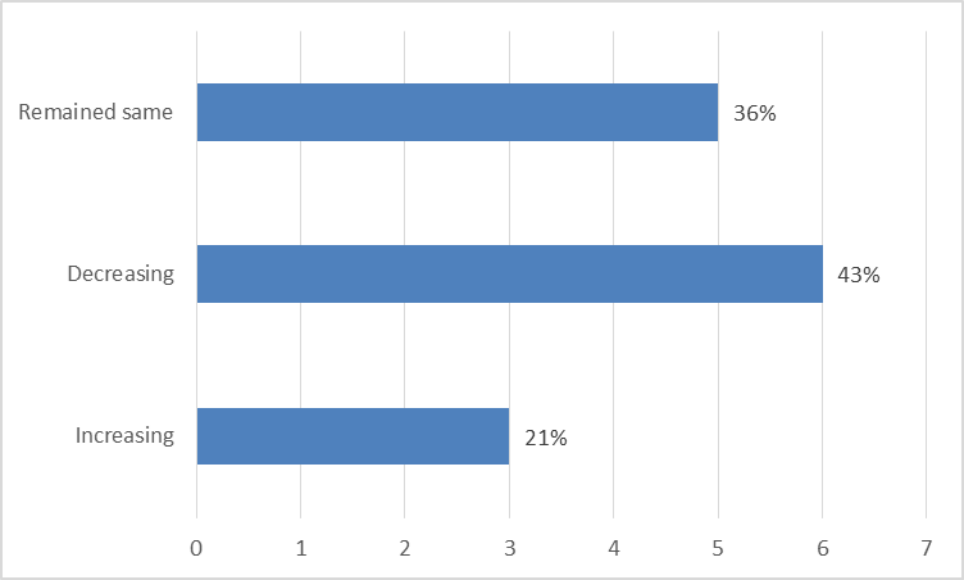
The respondents were asked to indicate whether their monthly surplus income had been increasing, decreasing or remained the same. Table 6.7 summarises the frequency distribution of the results.

Table 6.7: Surplus cash flow trend

Cash Flow Trend	Frequency	Percent
Increasing	3	21.4
Decreasing	6	42.9
Remained the same	5	35.7
Total	**14**	**100.0**

Source: Results from the empirical study

Table 6.7 is presented as a bar chart below.



Source: Table 6.7 converted to a bar graph

Figure 6.7: Surplus cash flow trend

As indicated in Table 6.7 and Figure 6.7, 21.4% of the repsondents indicated that surplus income had been increasing, 42.9% indicated that surplus income had been decreasing and 35,7% indicated that surplus cash remained unchanged.

6.3.5.2 Cash Flow Management

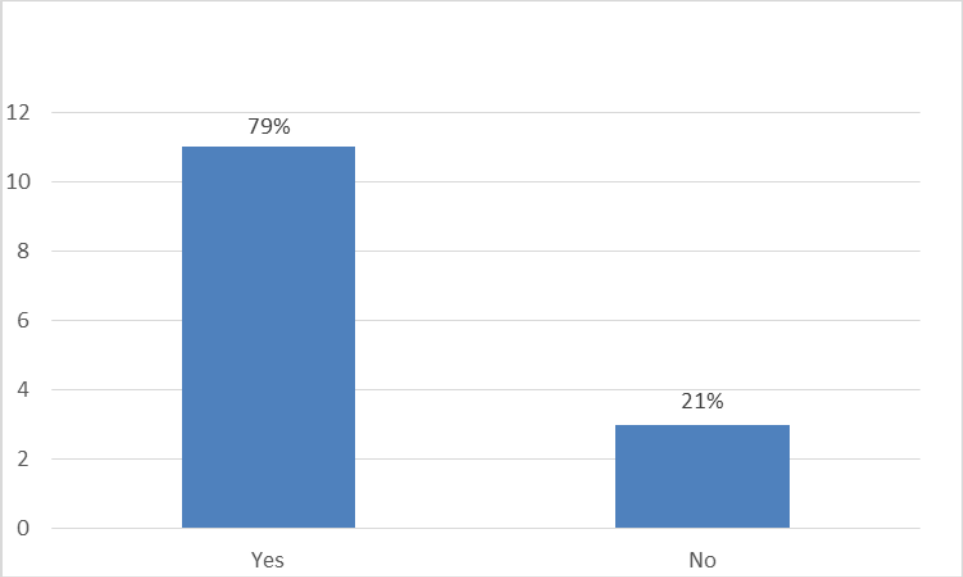
The respondents were asked whether they drew surplus cash flows out of the business. Table 6.8 summarises the frequency distribution of the results.

Table 6.8: Cash Flow Management

Cash Flow Management	Frequency	Percent
Yes	11	78,6
No	3	21,4
Total	14	100,0

Source: Results from the empirical study

Table 6.8 is presented as a bar chart below.



Source: Table 6.8 converted to a bar chart

Figure 6.8: Cash flow management

As indicated in the analysis above, 78.6% of the respondents drew surplus money out of the business, while the remaining 21,4% retained surplus funds within the business. The retention of capital in businesses is important for the analysis of business sustainability. When surplus moneys are drawn from businesses, it needs to be applied and used to the benefit of the business, and like capital retention, it can improves business sustainability.

6.3.5.3 Reinvestment of surplus funds

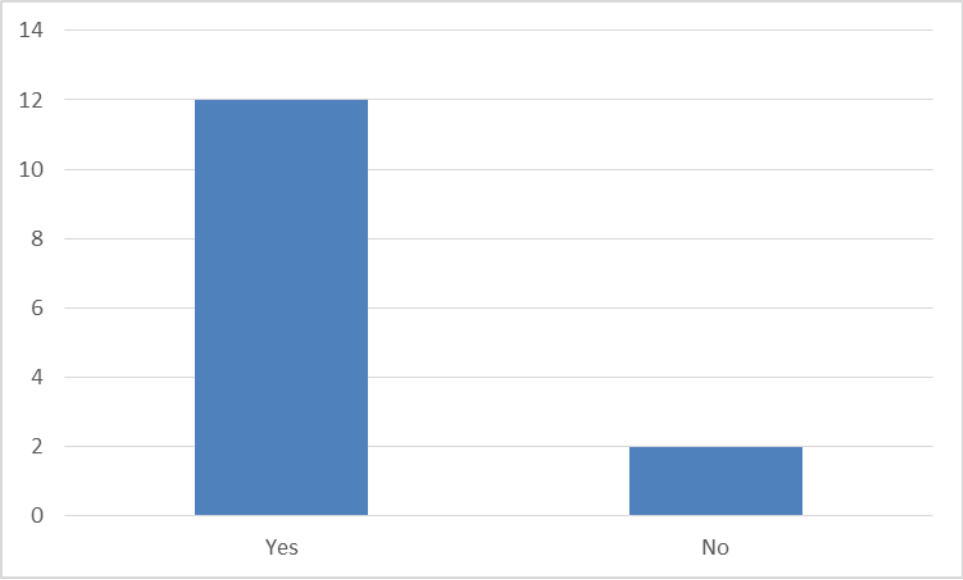
The respondents were asked whether the surplus funds were reinvested into the properties.The results are summarised in Table 6.9 below.

Table 6.9: Reinvestment of surplus funds

Reinvestment	Frequency	Percent
Yes	12	85,7
No	2	14,3
Total	**14**	**100,0**

Source: Results of empirical study

Table 6.9 is presented as a bar chart below.



Source: Table 6.9 converted to a bar chart

Figure 6.9: Reinvestment of surplus funds

As indicated in the analysis above, 85,7% of the respondents used the surplus income to improve the properties, while 14,3% retained the actual cash surplus on their balance sheets or used it for other purposes.

6.3.5.4 Frequency of loan payments

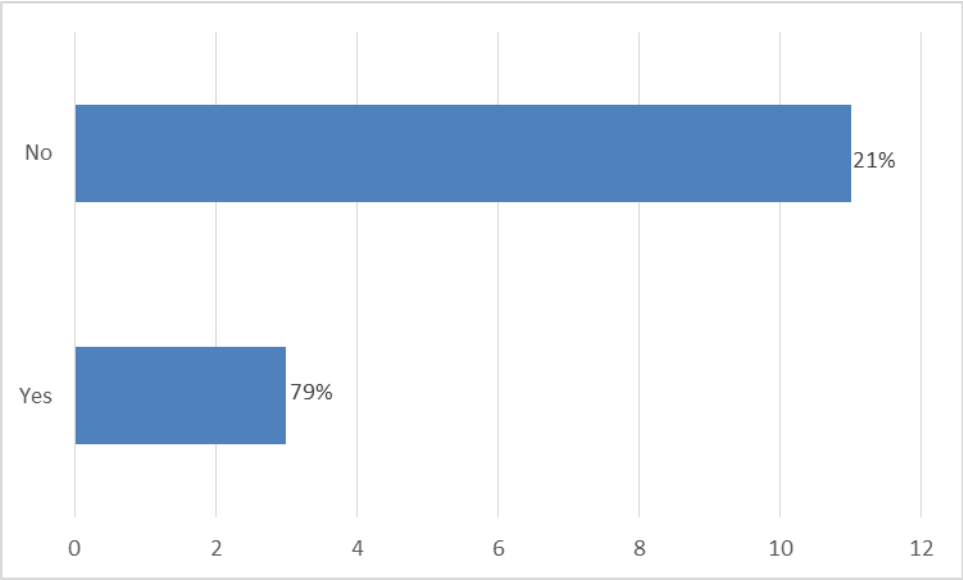
Respondents were asked whether a loan payment was ever missed. The results are summarised in the frequency table below.

Table 6.10: Loan payment missed

Loan payment missed	Frequency	Percent
Yes	3	21.4
No	11	78.6
Total	**14**	**100.0**

Source: Results of empirical study

Table 6.10 is presented as a pie chart below.



Source: Table 6.10 converted to a pie chart

Figure 6.10: Loan payment missed

Figure 6.10 and Table 6.10 above, indicate that 78,6% of the respondents had never skipped a loan payment, with only 21,4% having had skipped a loan payment. Of the 21,4% of the respondents who had skipped a loan payment, all of them indicated that this only happened once.

6.3.5.5 Rental Collection

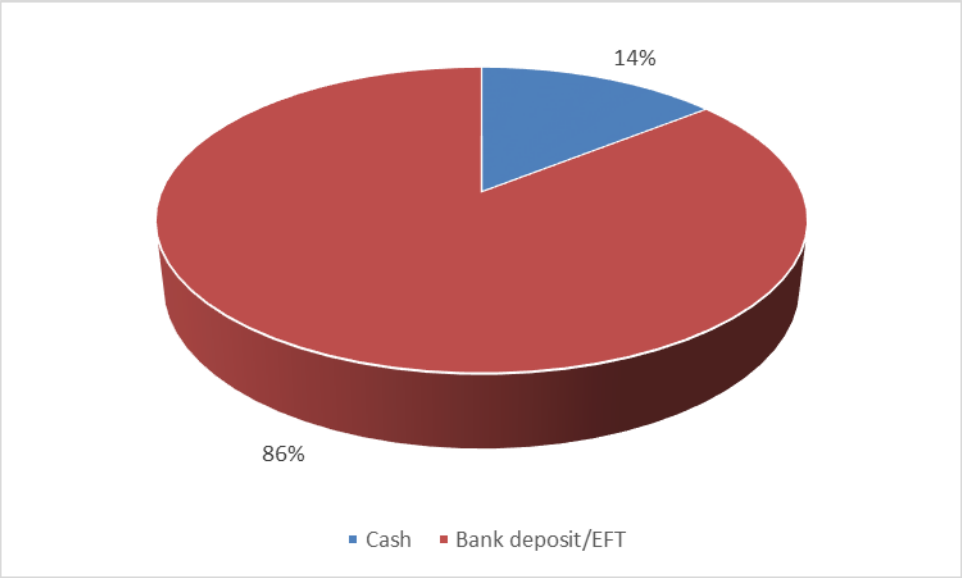
Respondents were asked how rentals are collected. The results are tabulated in Table 6.11 below.

Table 6.11: Rental Collection Method

Rental Collection Method	Frequency	Percent
Cash	2	14,3
Bank deposit/EFT	12	85,7
Total	**14**	**100,0**

Source: Results from the empirical study

The results are presented as a pie chart below.



Source: Table 6.11 converted to a pie chart

Figure 6.11: Rental Collection Method

Table 6.11 and Figure 6.11 above, indicate that the majority (86%) of the businesses collected rentals via bank transfers or electronic funds transfers (EFT), with only 14% of the businesses collecting cash rentals. Cash handling is risky for businesses due to the possibility of theft, which in turn impacts on business sustainability.

6.3.6 Property/Business Management

6.3.6.1 Property Management

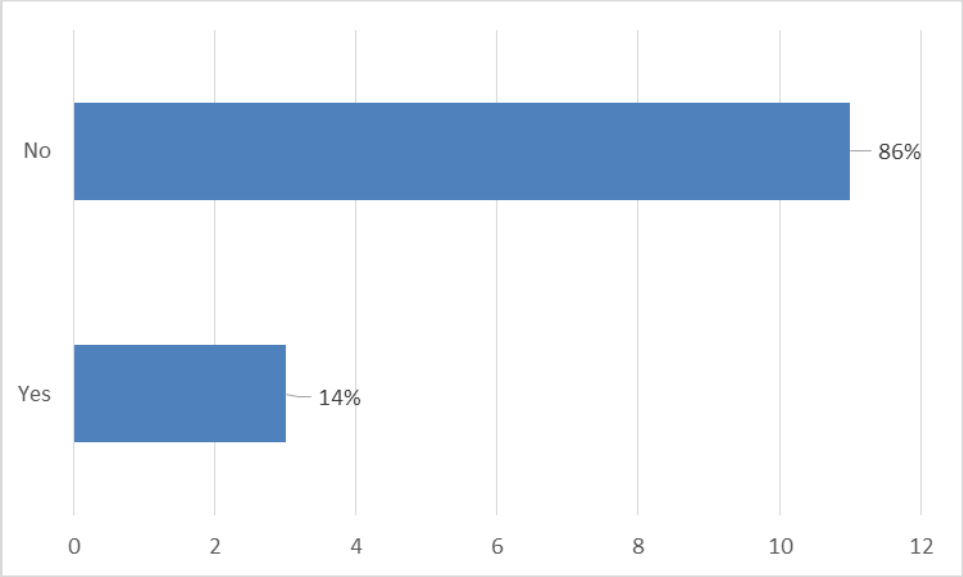
The respondents were asked whether they employed external property managers. The results are summarised in Table 6.12.

Table 6.12: Property Management

External Property Management	Frequency	Percent
Yes	2	14,3
No	12	85,7
Total	**14**	**100,0**

Source: Results of the empirical study

The results are presented in a bar chart below.



Source: Table 6.12 converted into a bar chart

Figure 6.12: Property Management

The results indicate that 85,7% of the respondents did not outsource the property management function and 14,3% did employ external property managers. External property managers is an additional expense and adds to the expense load of the entrpreneur. However, in certain instances, the cost of property management is outweighed by the benefit of having a fully let and well-functioning building.

6.3.6.2 Repairs and maintenance

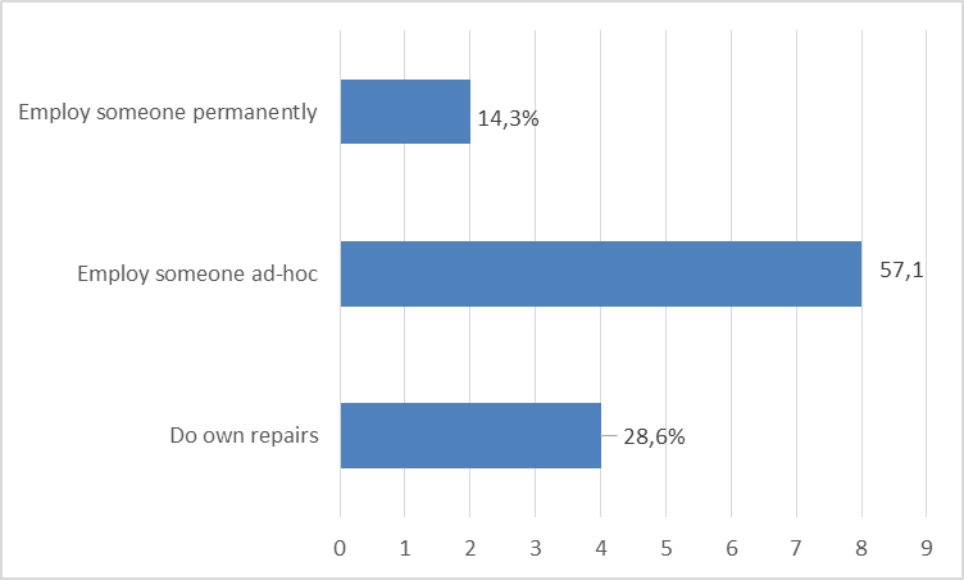
Respondents were asked how repairs and maintenance are dealt with. The results are reflected in Table 6.13.

Table 6.13: Repairs and maintenance

Property Management	Frequency	Percent
Do own repairs	4	28,6
Employ someone ad-hoc	8	57,1
Employ someone permanently	2	14,3
Total	**14**	**100,0**

Source: Results from the empirical study

Table 6.13 is presented below as a bar graph .



Source: Table 6.13 converted to a bar graph

Figure 6.13: Repairs and maintenance

Table 6.13 and Figure 6.13 indicate that 57,1% of the respondents outsourced the repairs and maintenance function, 28,6% of repsondents did their own repairs and 14,3% of respondents employed someone permanently to fulfil this function in the business. Again, as with property management, the benefit of outsourcing the function must be weighed up against the overall cost as tenant retention is important for the property entrepreneur. This enables the enterprise to meet its commitments and remain sustainable.

6.3.6.3 Frequency of repairs and maintenance

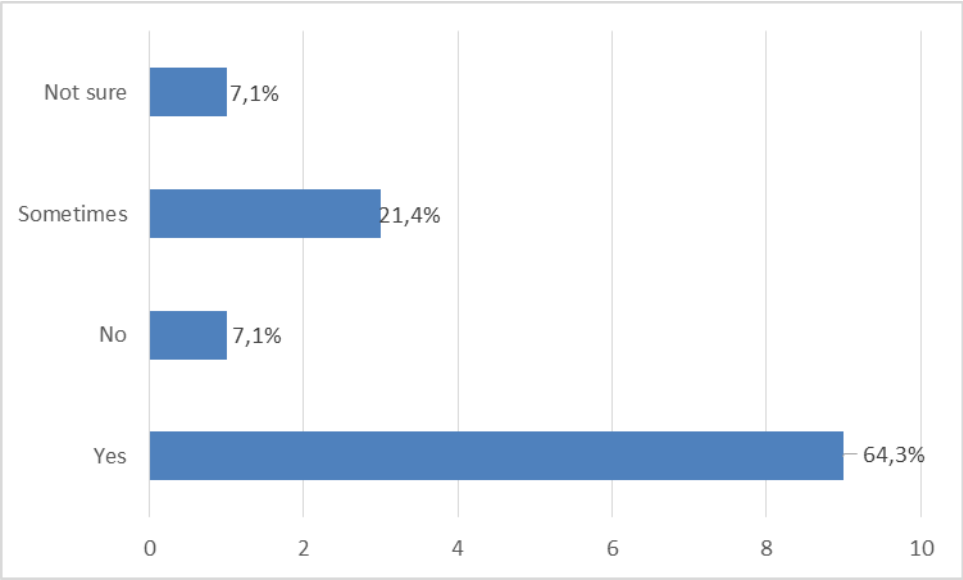
Respondents were asked whether regular repairs and maintenance was necessary. Table 6.14 presents the results in a frequency table format.

Table 6.14: Importance of repairs and maintenance

Importance of Repairs and Maintenance	Frequency	Percent
Yes	9	64,3
No	1	7,1
Sometimes	3	21,4
Not sure	1	7,1
Total	**14**	**100,0**

Source: Results of empirical study

Table 6.14 is presented as a bar graph below.



Source: Table 6.14 converted to a bar graph

Figure 6.14: Importance of repairs and maintenance

Table 6.14 and Figure 6.14, indicate that 64,3% of the respondents regarded regular repairs and maintenance as necessary, 21,4% were of the opinion that it was only necessary sometimes, 7,1% did not agree with the necessity of regular repairs and maintenance and 7,1% of the respondents were not sure.

6.3.6.4 Property vacancy

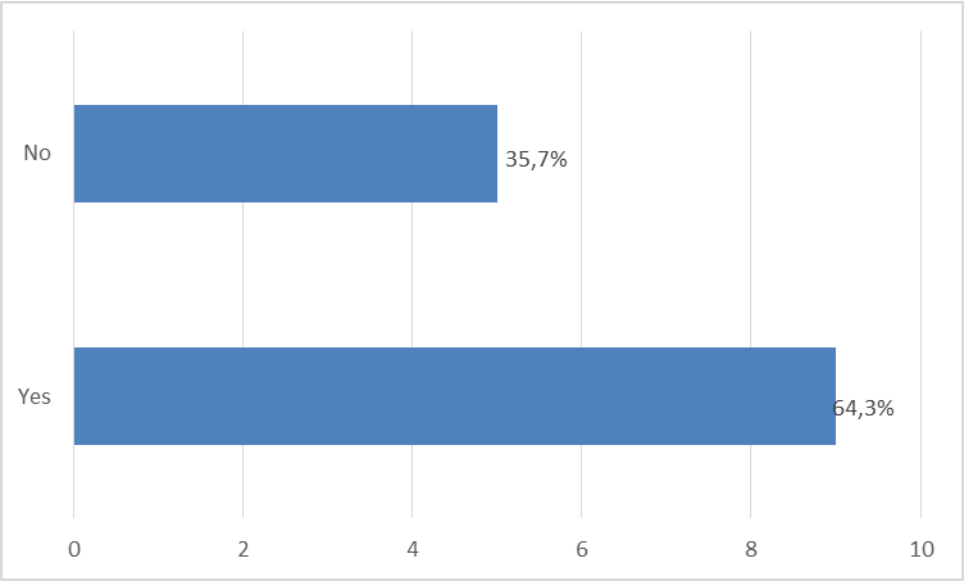
Repsondents were asked about the vacancies in their properties. Table 6.15 sets out the results in a frequency table.

Table 6.15: Property Vacancy

Vacancies	Frequency	Percent
Yes	9	64,3
No	5	35,7
Total	14	100,0

Source: Results of empirical study

Table 6.15 is presented as a bar chart below.



Source: Table 6.15 converted to a bar chart

Figure 6.15: Property Vacancy

As seen from the above table and figure, 64% of the respondents indicated that they had vacancies in their properties, while 36% indicated that they had no vacancies in their properties.Vacancies in properties indicate potential property management, repairs and maintenance or market problems. This serves as a early warning signal that sustainability of the enterprise might eb compromised if any of these are not resolved.

Of the 64% who had indicated that there were vacancies, 36% of respondents had vacancies of between 1% and 3%, 50% had vacancies of between 3,1% and 5%, and the remaining 14% had vacancies of 15,1% and more.

6.3.6.5 Vacancy turnaround

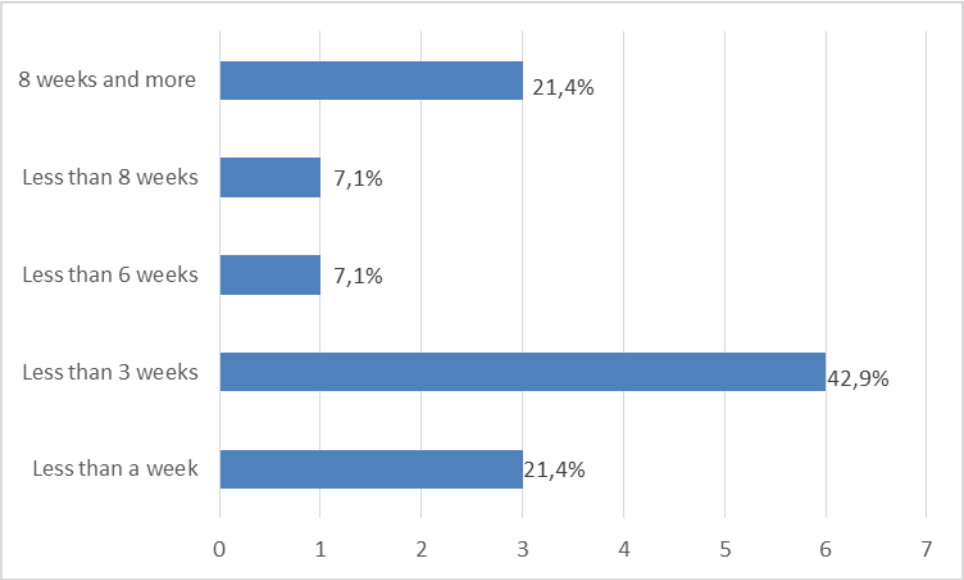
Respondents were asked about the length of time it took to fill vacancies. Table 6.16 sets out the results in a frequency table.

Table 6.16: Vacancy turnaround

Vacancy turnaround	Frequency	Percent
Less than a week	3	21,4
Less than 3 weeks	6	42,9
Less than 6 weeks	1	7,1
Less than 8 weeks	1	7,1
8 weeks and more	3	21,4
Total	**14**	**100,0**

Source: Results of empirical study

Table 6.16 is presented as a bar chart below.



Source: Table 6.16 converted to a bar chart

Figure 6.16: Vacancy turnaround

From the above, it can be seen that 21,4% of the respondents indicated that it took less than a week to fill a vacancy, 43% indicated that it took less than three weeks to

fill a vacancy, 7% indicated that it took less than six weeks to fill a vacancy, 7% indicated that it took less than eight weeks to fill a vacancy, while the remaining 21,4% of the respondents indicated that it took at least eight weeks to fill the vacancy. Continued vacancies impacts on cash flows with prolonged vacancies resulting in compromised cash flows.

6.3.6.6 Loan purpose

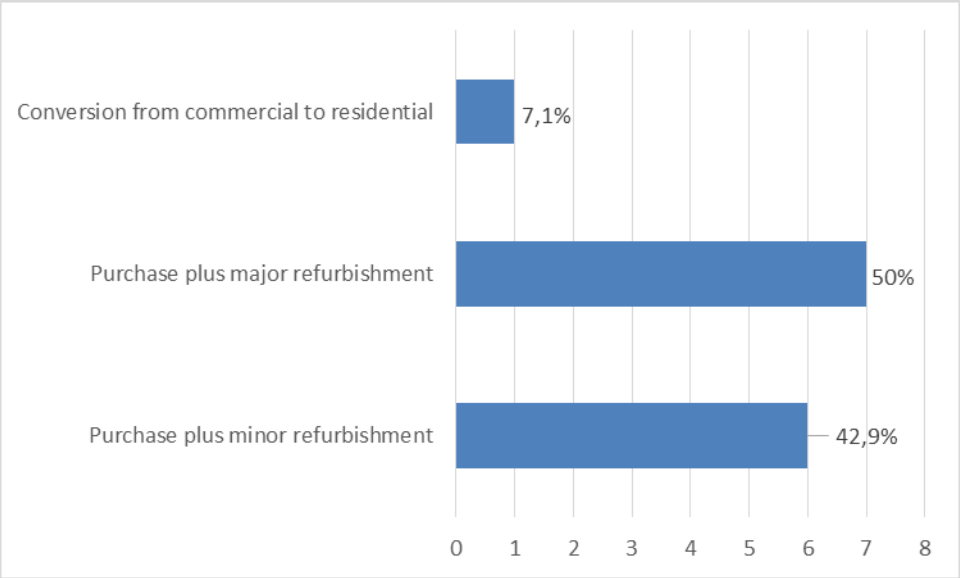
The respondents were asked about the initial purpose of their TUHF loan facility in order to get an indication of the complexity of the project from day one. Table 6.17 sets out the results in a frequency table.

Table 6.17: Loan Purpose

Loan Purpose	Frequency	Percent
Purchase plus minor refurbishment	6	42,9
Purchase plus major refurbishment	7	50,0
Conversion from commercial to residential	1	7,1
Total	14	100,0

Source: Results of empirical study

Table 6.17 is presented as a bar graph below.



Source: Table 6.17 converted to a bar graph

Figure 6.17: Loan Purpose

The respondents indicated that, in 50% of all instances, loan funds were utilised to fund a purchase plus major refurbishment, 43% of the repondents indicated that funds were utilised to fund a purchase and minor refurbishment and in 7% of all instances, loan funds were utilised to fund a major conversion from commercial to residential use.

6.3.6.7 Construction Strategy

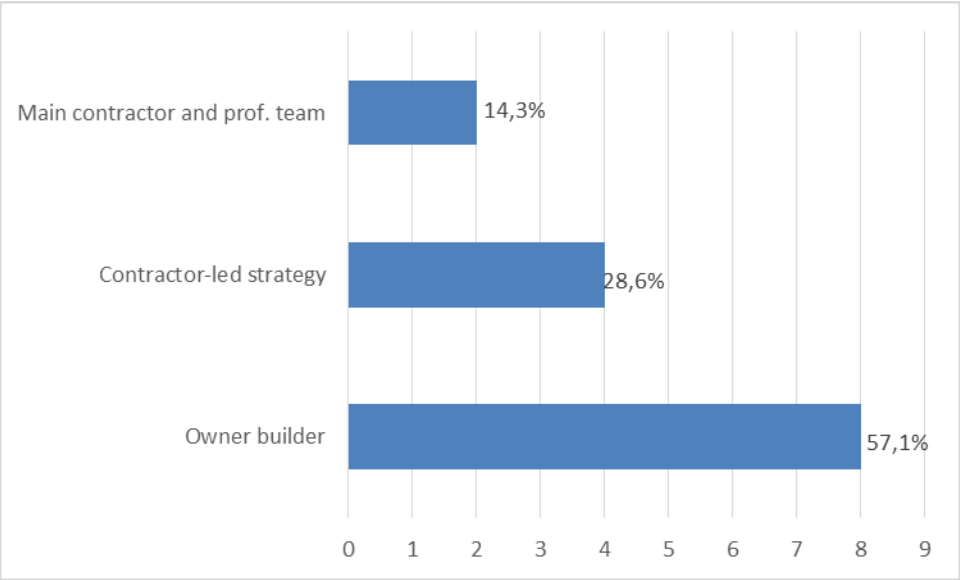
Respondents were asked about the various strategies employed during construction. Table 6.18 sets out the results in a frequency table.

Table 6.18: Construction strategy

Construction Strategy	Frequency	Percent
Owner builder	8	57.1
Contractor-led strategy	4	28.6
Main contractor and professional team	2	14.3
Total	**14**	**100.0**

Source: Results of empirical study

Table 6.18 is presented as a bar graph below.



Source: Table 6.18 converted to a bar graph

Figure 6.18: Construction Strategy

The respondents indicated that 57% were owner builders, 29% employed a contractor-led strategy and 14% of respondents employed a main contractor and professional team.

6.4 STATISTICAL SIGNIFICANCE BETWEEN SELECTED VARIABLES

To ensure an in-depth understanding of the impact of credit risk management practices on the sustainability of SMMEs, cross tabulations were done to investigate and test a possible statistical significance between the selected sustainability variables. This was achieved by making use of a Chi-Square test that tested for the existence of a relationship between two variables. The test is sensitive to sample sizes and could only be calculated for two of the variables, as some tables returned empty cells.

A stastistical significance was established for turnover growth and how long the business has been in operation based on the assumption that the longer the business is in operation, the higher its turnover and the more sustainable it becomes. The same approach was used to establish a statistical significance for whether surplus money is drawn out of the business and whether a loan payment has ever been skipped. Conclusions about the statistical test are made according to the p-value. All p-values less than 0.05 indicate a statistical significance between the means of the selected variables.

6.4.1 Relationship between turnover and the age of the business

A Chi-Square test was done to establish a statistical significance between the turnover and age of the businesses. Due to the small sample, both variables were recoded to only reflect two categories. The results are presented in Table 6.19.

Table 6.19: Relationship between turnover and the age of the business

Turnover * Age of Business					
			Age of Business		Total
			0-3 yrs	3+ years	
Turnover	0 - R750 000	Count	7	1	8
		% within Q1new	87.5%	12.5%	100.0%
	R750 001+	Count	2	4	6
		% within Q1new	33.3%	66.7%	100.0%
Total		Count	9	5	14
		% within Q1new	64.3%	35.7%	100.0%

Chi-Square Tests				
	Value	df	p-value	
Pearson Chi-Square	4.381[a]	1	,036	Statistically significant relationship (p<0.05)
N of Valid Cases	14			

Symmetric Measures				
		Value	p-value	
Nominal by Nominal	Phi	,559	,036	
	Cramer's V	,559	,036	Large practical significance
N of Valid Cases		14		

Source: Results obtained from the analysis of the emprical study

Table 6.19 above, shows that the *p-value* is more than 0.05 which is the level of significance. It therefore indicates that the businesses with a higher turnover had been in existence for longer than those businesses with a smaller turnover, effectively implying that businesses grow over time and that, as the business matures, turnover should increase thus leading to more sustainable businesses.

6.4.2 Surplus cash flow drawn from the business and skipped loan payments

A Chi-Square test was conducted to establish a statistical significance between whether surplus cash flows are drawn out of the business and whether a loan payment has been skipped. Businesses that shows strain, usually start skipping loan payments and cash flows are spent elsewhere thus impacting on sustainability. The results are presented in Table 6.20.

Table 6.20: Surplus cash flow drawn from the business and skipped loan payments

Ability to Generate Surplus Cash Flow * Skipped loan payments					
			Skipped loan payments		Total
			Yes	No	
Surplus Cash Flow	Yes	Count	2	9	11
		% within Q5	18.2%	81.8%	100.0%
	No	Count	1	2	3
		% within Q5	33.3%	66.7%	100.0%
Total		Count	3	11	14
		% within Q5	21.4%	78.6%	100.0%

Chi-Square Tests				
	Value	df	p-value	
Pearson Chi-Square	.321[a]	1	,571	No statistically significant relationship (p>0.05)
N of Valid Cases	14			

Source: results obtained from the analysis of the emprical study

Table 6.20 above, shows a *p-value* of of more than 0.05 which is the level of signficance. It therefore indicates that there is no statistical significance between whether surplus cash flows are drawn from the business and non-payment of debt instalments. This is in line with the results obtained from the study, where 78,6% of respondents indicated that they did draw surplus cash from the business but at the same time, indicated that they had never skipped a loan payment, hence no signficant relationship exists.

6.5 INSTANCES WHERE STATISTICAL SIGNIFICANCE BETWEEN VARIABLES COULD NOT BE CALCULATED

6.5.1 Ability to generate sufficient income to service debt vs complexity of construction

The size of the sample was a major constraint to some of the statistical calculations as the same responses were returned for respondents over various categories. This resulted in empty cells which made the statistical calculation invalid.

Table 6.21: Ability to generate sufficient income to service debt and complexity of construction

Ability to generate sufficient income to service debt * Complexity of construction						
			Complexity of construction			Total
			Purchase plus minor refurbishment	Purchase plus major refurbishment	Conversion from commercial to residential	
Ability to generate sufficient income to service debt	Yes	Count	6	6	1	13
		% within Q2	46,2%	46,2%	7,7%	100,0%
	No	Count	0	1	0	1
		% within Q2	0,0%	100,0%	0,0%	100,0%
Total		Count	6	7	1	14
		% within Q2	42,9%	50,0%	7,1%	100,0%

Source: Results obtained from the analysis of the emprical study

The analysis indicates that, of those respondents who generated sufficient income to service their debt (93%), 86% refurbished properties to secure rental income, while only one respondent did a major conversion. Only one respondent did not generate sufficient income to service debt. From this analysis, it can be concluded that there is no direct relationship between the compexity of the construction and the ability to generate sufficient income to service debt.

6.5.2 Surplus cash vs years in operation/age of the business

A comparison was drawn between the respondents who had surplus cash and how long their businesses had been operating. The results are tabulated below.

Table 6.22: Surplus cash in the business and no of years business has been operating

Surplus Cash* Age of Business					
			Age of Business		Total
			0-3 yrs	3+ years	
Surplus Cash	Yes	Count	8	5	13
		% within Q3	61.5%	38.5%	100.0%
	No	Count	1	0	1
		% within Q3	100.0%	0.0%	100.0%
Total		Count	9	5	14
		% within Q3	64.3%	35.7%	100.0%

Source: Results obtained from the analysis of the emprical study

The analysis indicated that, of those businesses who responded positively to the question, of whether they had surplus cash in the business, 61,5% were in operation for 0–3 years whilst 38,5% of the businesses that had surplus cash flow were in operation for longer than 3 years. Only one of the respondents indicated that there was no surplus cash flow and had been operating for less than 3 years.

6.5.3 External property management and level of property vacancies

A comparison was drawn between, whether businesses employ external property managers and how this impacts on vacancies in the properties.

Table 6.23: External property management and property vacancies

External Property Management * Vacancies					
			Vacancies		Total
			Yes	No	
External Property Management	Yes	Count	2	0	2
		% within Q7	100,0%	0,0%	100,0%
	No	Count	7	5	12
		% within Q7	58,3%	41,7%	100,0%
Total		Count	9	5	14
		% within Q7	64,3%	35,7%	100,0%

Source: Results obtained from the analysis of the emprical study

The analysis indicates that 100% of those respondents who employed external property managers had vacancies in their properties. Of the respondents who dis not

employ external property managers, 58% had vacancies whilst 42% had no vacancies.

6.5.4 Reinvestment in the property and surplus

A comparison was drawn between reinvestment and improving the properties with the level of surplus cash in the business.

Table 6.24: Reinvestment in the business and surplus cash

Reinvestment in the Business * Surplus Cash Levels						
			Surplus Cash Levels			Total
			Increasing	Decreasing	Remained same	
Reinvestment in the Business	Yes	Count	3	5	4	12
		% within Q6	25.0%	41.7%	33.3%	100.0%
	No	Count	0	1	1	2
		% within Q6	0.0%	50.0%	50.0%	100.0%
Total		Count	3	6	5	14
		% within Q6	21.4%	42.9%	35.7%	100.0%

Source: Results obtained from the analysis of the emprical study

The analysis indicated that, of the 86% of the respondents who reinvested in their properties, 25% experienced increased surplus cash, 41,7% experienced decreased surplus cash and 33.3% of the respondents' cash flow remained the same. The 14% of respondents who did not reinvest in their businesses, experienced either a decrease in surplus cash flow (50%) or the cash flow remained the same.

6.5.5 Surplus Cash and Construction Strategy

A comparison was made between the existence of surplus cash in a business and the construction strategy at the beginning of the project to determine whether project complexity impacts on surplus cash.

Table 6.25: Surplus Cash and construction strategy

Surplus Cash * Construction Strategy						
			Construction Strategy			Total
			Owner builder	Contractor-led strategy	Main contractor and professional team	
Surplus Cash	Yes	Count	8	4	1	13
		% within Q3	61.5%	30.8%	7.7%	100.0%
	No	Count	0	0	1	1
		% within Q3	0.0%	0.0%	100.0%	100.0%
Total		Count	8	4	2	14
		% within Q3	57.1%	28.6%	14.3%	100.0%

Source: Results obtained from the analysis of the emprical study

The analysis indicated that 93% of the respondents had surplus cash, and of these respondents, 61,5% were owner builders, 30,8% employed a main contractor and 7,7% employed a main contractor and professional team. No surplus cash existed for 7% of the respondents who had employed a main contractor and professional team.

6.5.6 Rental collection method and timing of rental payments

A further comparison was made between the method used to collect rentals from the tenants and late rental payments by tenants.

Table 6.26: Method of rental collection and timing of rental payments

Rental collection method * Late Payments					
			Late Payments		Total
			Yes	No	
Rental Collection Method	Cash	Count	0	2	2
		% within Q16	0,0%	100,0%	100,0%
	Bank deposit/EFT	Count	5	7	12
		% within Q16	41,7%	58,3%	100,0%
Total		Count	5	9	14
		% within Q16	35,7%	64,3%	100,0%

Source: Results obtained from the analysis of the emprical study

The analysis indicated that 14% of the respondents collected cash from their tenants and that payments were received timeously. Of the 86% that collected rentals by way of bank deposits or electronic payments, 58,30% received rentals timeously, while 41,70% received rentals after the due date.

6.6 STATISTICAL SIGNIFICANCE BETWEEN CATEGORIES OF VARIABLES

As a measure to further unpack the impact of credit risk management practices on the sutstainability of SMMEs, the measuring instrument provided for the categorisation of variables in the questionnaire under the following headings:

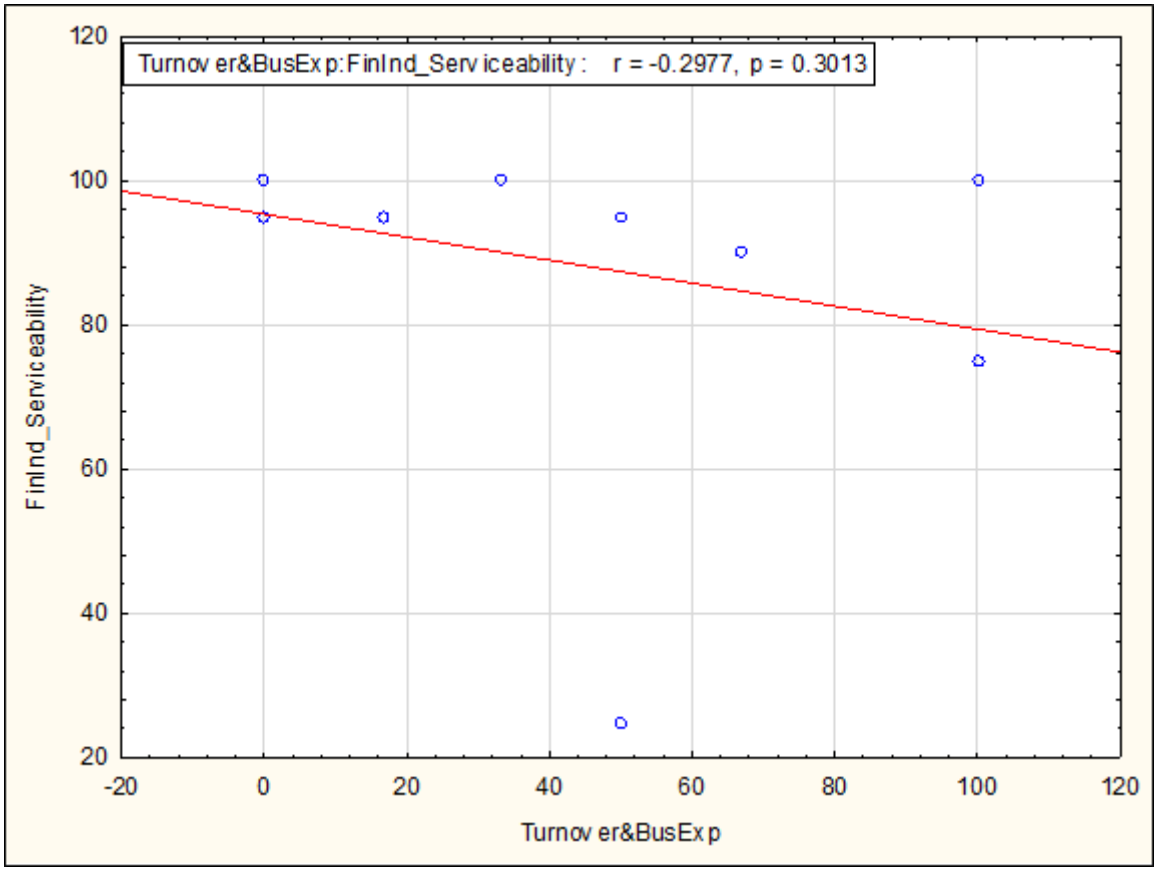
a) Turnover and business experience
b) Financial indicators of the business – serviceability of interest and capital
c) Financial and cash flow management
d) Property/business management.

These categories were tested to establish a statistical significance between the categories by using the Pearson correlation analysis. A weighting of between 0 and

100 was allocated to each scale per question, with ‘0’ being not ideal and ‘100’ being ideal. A numeric number was allocated to each respondent on the specific question. These were averaged out per indicator and plotted on a regression table where “r” assumed a value between’0’ and ‘1’, and where a value of <0.30 indicated a weak relationship. A value between 0.30 and 0.49 indicated a moderate relationship and a value of more than 0.50 reflected a strong relationship.

6.6.1 Relationship between the financial indicators of the business (debt serviceability variables) and turnover and business experience

The linear correlation between the two categories was tested to establish a statistical significance between the ability of the business to service capital and interest, and its turnover level and age. The results are presented in Figure 6.26 below.



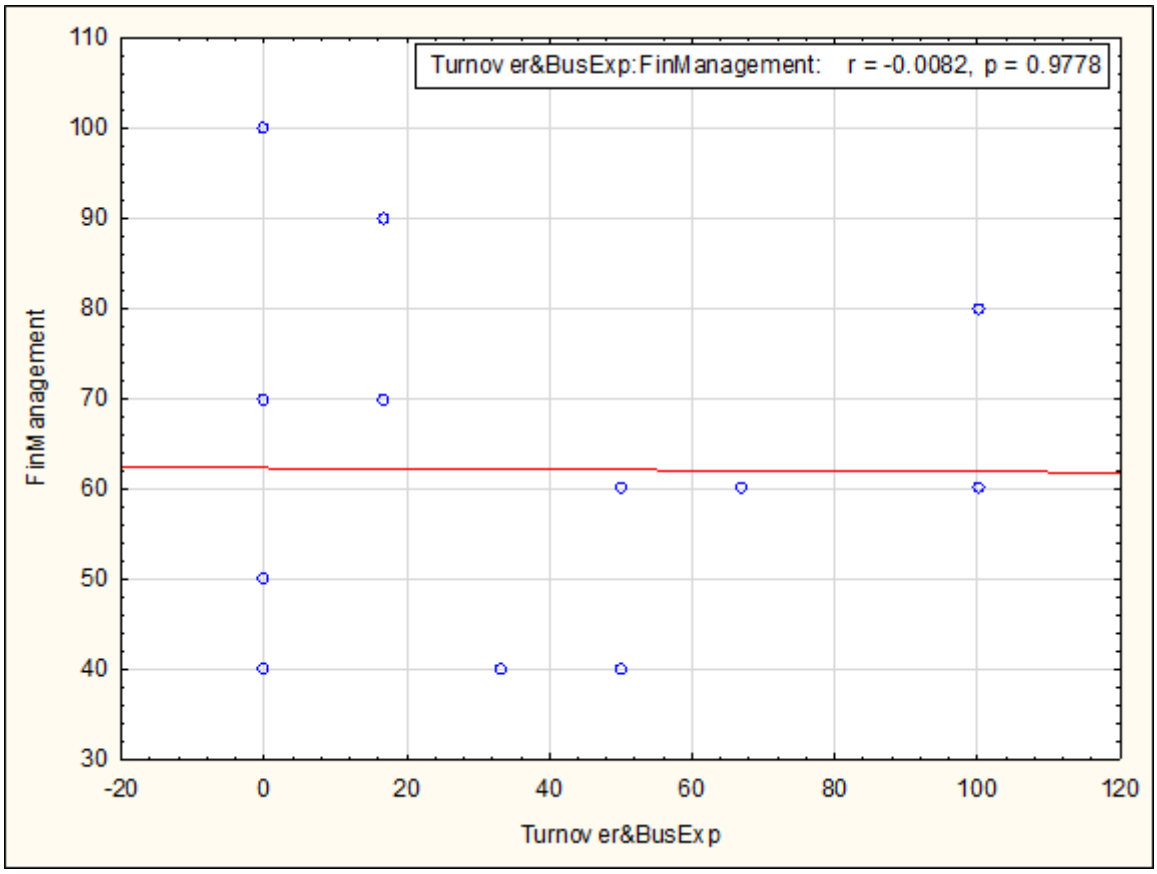
Source: Results obtained from the analysis of the empirical study

Figure 6.19: Relationship between financial indicators and turnover and business experience

Figure 6.26 above, indicates that there was a moderate negative relationship between financial indicators of serviceability and turnover and the age of the business (r=-0.30 rounded up from -0.2977). This result implied that serviceability did not necessarily increase with age or result in the turnover growth of a business.

6.6.2 Relationship between the financial management of the business and turnover and business experience

The linear correlation between the two categories was tested to establish a statistical significance between financial management capabilities and age and the turnover of the business. The results are presented in Figure 6.27 below.



Source: Results obtained from the analysis of the empirical study

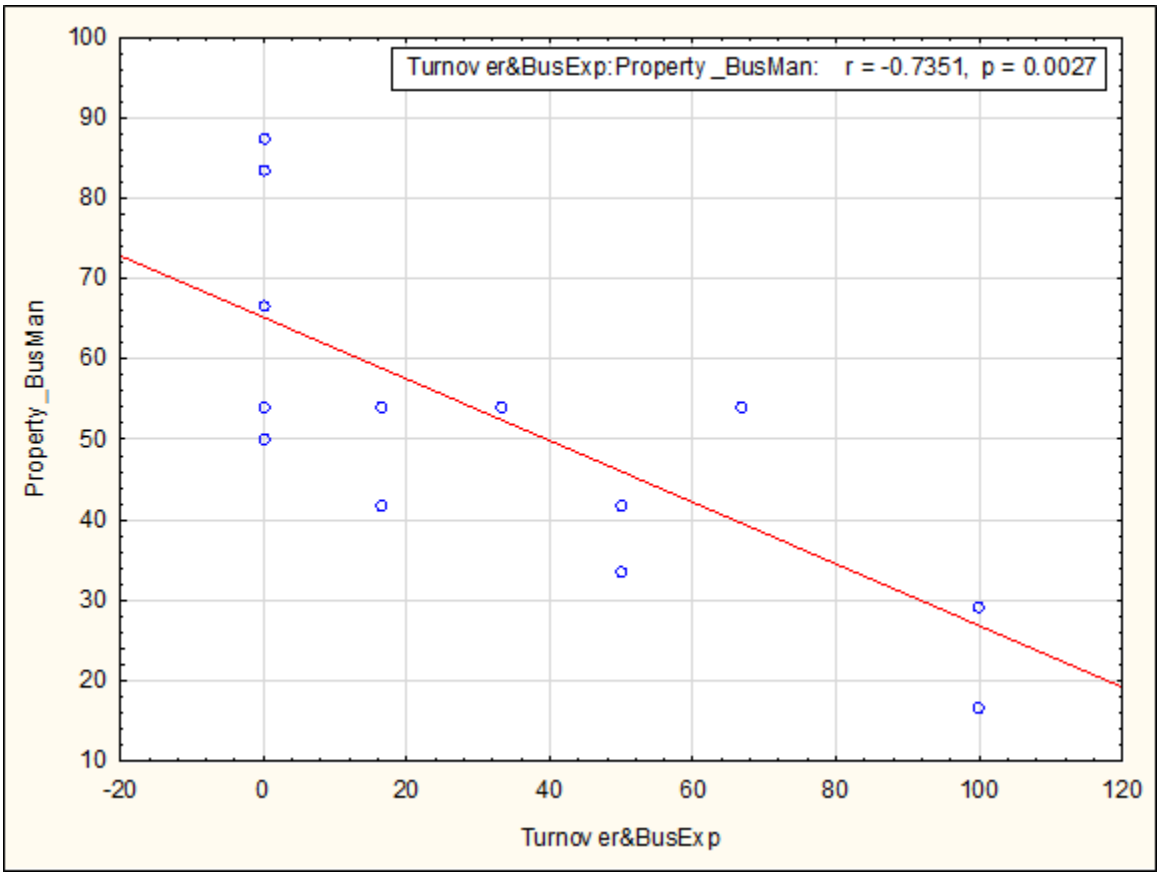
Figure 6.20: Relationship between financial management and turnover and business experience

Figure 6.27 above, indicates that there was a weak, or no relationship, between financial management and turnover and the age of the business (r= -0.01 rounded up

from -0.0082). This implied that the age and size of the business did not impact on the level of financial management of the SMMEs.

6.6.3 Relationship between property or business management of the business and turnover and business experience

The linear correlation between the two categories were tested to establish a statistical significance between property or business management capabilities and the age and turnover of the business. The results are presented in Figure 6.28 below.



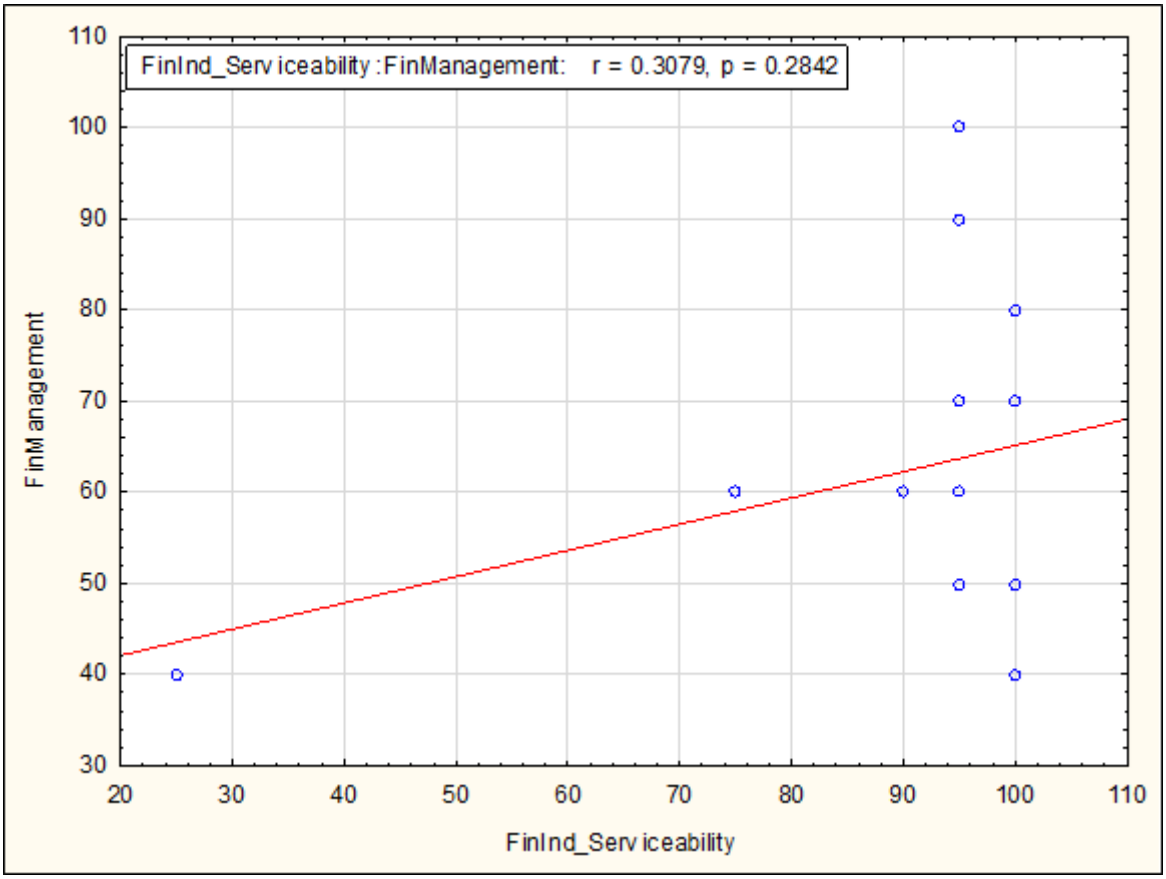
Source: Results obtained from the analysis of the empirical study

Figure 6.21: Relationship between property or busines management and turnover and business experience

Figure 6.28 above, indicated that there was a strong negative relationship between property or business management and the turnover and age of the business (r= -0.74 rounded up from -0.7351). Again, this implied that older and bigger businesses did not necessarily have improved or stronger property or business management fundamentals.

6.6.4 Relationship between financial indicators (serviceability variables) of the business and financial management

The linear correlation between the two categories was tested to establish a statistical significance between the financial indicators of the business and the financial management. The results are presented in Figure 6.29 below.



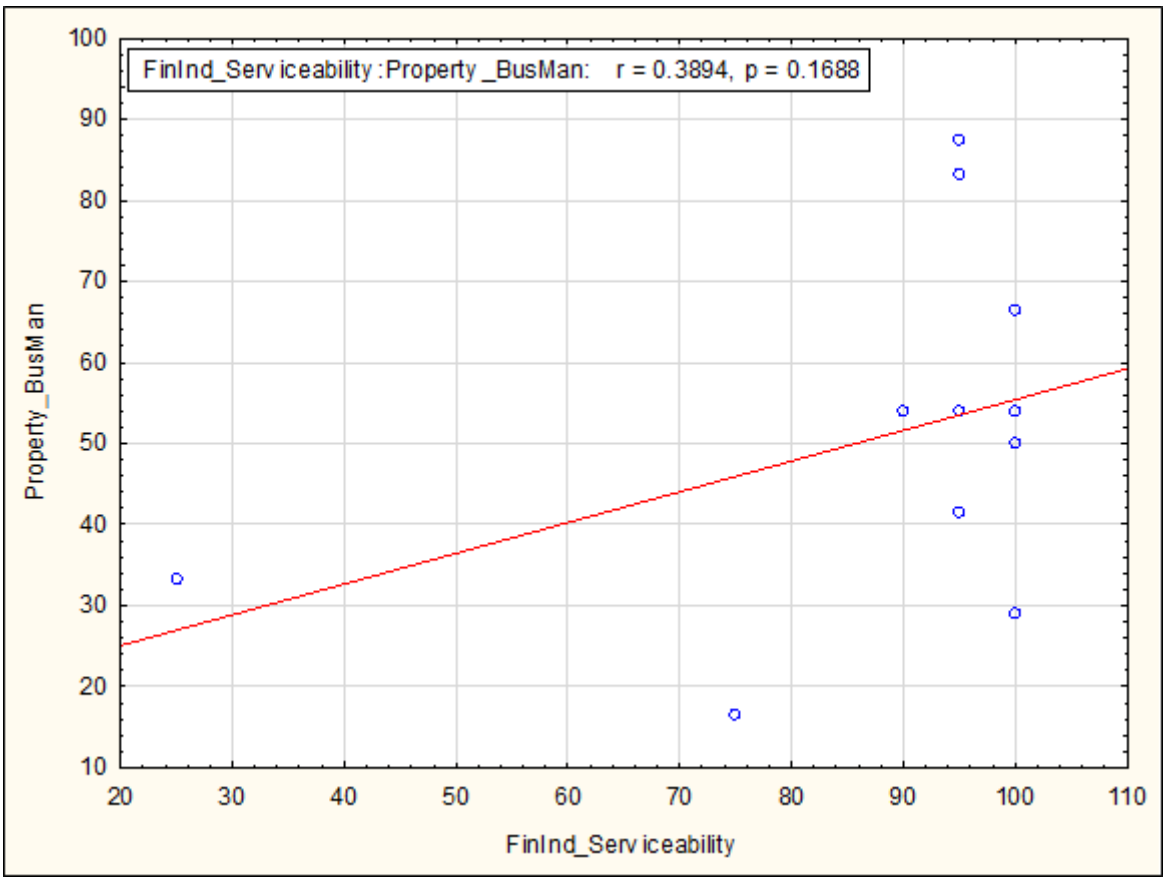
Source: Results obtained from the analysis of the empirical study

Figure 6.22: Relationship between financial indicators (serviceability variables) of the business and financial management

Figure 6.29 above, indicates that there was a moderate positive relationship between the financial indicators of serviceability and the financial management (r= 0.31 rounded up from 0.3079). This implied that, as financial management improved, so also did the overall loan serviceability.

6.6.5 Relationship between the financial indicators (serviceability variables) of the business and the property or business management

The linear correlation between the two categories was tested to establish a statistical significance between the financial indicators (serviceability variables) of the business and property or business management. The results are presented in Figure 6.30 below.



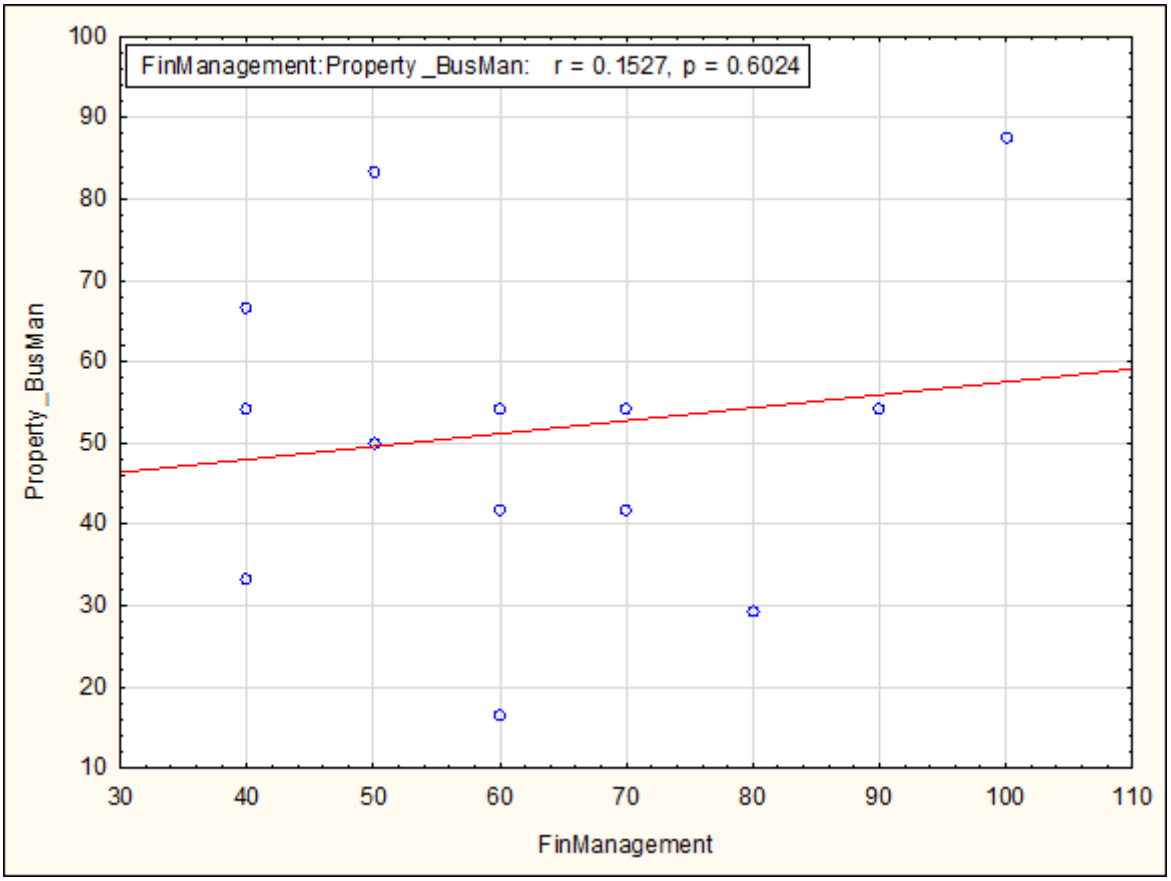
Source: Results obtained from the analysis of the empirical study

Figure 6.23: Relationship between the financial indicators (serviceability variables) of the business and property or business management

Figure 6.30 above indicates that there is a moderate positive relationship between the financial indicators of serviceability and property or business management (r= 0.39 rounded up from 0.3894). This implied that, as property management/business management improved, so too did the financial indicators of serviceability.

6.6.6 Relationship between financial management of the business and property or business management

The linear correlation between the two categories was tested to establish a statistical significance between the financial management and the property or business management. The results are presented in Figure 6.31 below.



Source: Results obtained from the analysis of the empirical study

Figure 6.24: Relationship between the financial management of the business and the property or business management

Figure 6.31 above indicates that there was a weak relationship between the financial management and the property or business management (r= 0.15 rounded down from 0.1527). This finding implied that there was almost no relationship between property management and financial management.

6.7 CHAPTER SUMMARY

This chapter presented the findings of the research survey. For this study, data was collected using a structured questionnaire for SMMEs and personal interviews with

TUHF staff members. The results of the survey were analysed using STATISTICA software. Frequencies, cross tabulations, chi-square tests and Pearson correlation coefficient tests were used to present these results.

In the next chapter, the findings of this research will be presented, the hypothesis will be tested and recommendations will be made to assist TUHF in ensuring the sustainability of the SMMEs that it funds.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

Chapter seven encompasses a summary of the study, the most important findings of the literature review and the results of the empirical study presented in the previous chapters. Several recommendations will be made, the limitations of the study will be discussed and areas for future research will be suggested.

7.2 SUMMARY OF THE STUDY

Chapter one presented the background of the research, followed by the statement of the research problem. The primary objective and the secondary objectives were stated and the hypothesis statement formulated.

Chapter two reviewed the literature on the importance of SMMEs and the concept of entrepreneurship. This was followed by a discussion on the critical success factors and some constraints faced by SMMEs. The chapter also provided an overview of DFIs and risk management.

Chapter three reviewed the TUHF workflow and credit risk management process from lead stage up until the post-investment monitoring stage and portfolio management.

Chapter four focussed on the theoretical framework that was adopted for this study.

Chapter five focused on the empirical research methodology. The study consisted of qualitative data that was collected by way of personal interviews with TUHF loan officers. The second part of the study consisted of primary data collected via an electronic questionnaire that collated the quantitative data.

Chapter six provided the results of the empirical study conducted on the impact of credit risk management practices by DFIs on the sustainability of SMMEs. To this end, sustainability indicators were developed and presented by using descriptive and inferential statistical analysis.

Chapter seven, which is the final phase of the research study, aims to apply the findings obtained from the literature and the empirical study as a background to make recommendations which address the importance of how credit risk management practices impact SMME sustainability.

7.2.1 Research Objectives

The primary objective of the study was to evaluate the credit risk management practices of the Trust for Urban Housing Finance (TUHF), which is a DFI and the funder of SMMEs in the Eastern Cape. The impact of its credit risk management practices on the sustainability of SMMEs was also evaluated. To supplement the primary objective of the study, the following secondary objectives were formulated:

- To get an in-depth understanding of the TUHF credit risk management process by conducting personal interviews with staff members
- To undertake an empirical and theoretical investigation into TUHF as a DFI and funder of SMMEs.
- To undertake an empirical and theoretical investigation into SMMEs and the factors that impact the sustainability of SMMEs.
- To assess whether TUHF's credit risk management practices had an impact on certain sustainability variables that were identified.
- To provide pertinent conclusions and recommendations based on the findings in order to assist TUHF to play an instrumental role in ensuring the sustainability of its client base and thereby ensuring the quality of its lending book.

7.2.2 Findings relating to the TUHF CRM process based on the theoretical model adopted in the study

The qualitative part of the study intended to gain an in-depth understanding of the TUHF CRM process and the factors that are considered when a client is assessed for funding. TUHF is a character-based lending organisation and the assessment is regarded as fairly subjective, based on the character traits and behaviour displayed by the entrepreneur at that point in time. Various quantitative measures are used to support and substantiate the overall character assessment and this assists with the decision-making. This approach, together with the projected cash flows of the project,

lays the foundation for pricing loan facilities according to a basket of variables instead of only certain quantitative measures. Binks, Ennew & Reed (1992), and Kabir, Jahan, Ishrat, Chisty & Hasin (2010), support this approach as more information leads to quality decision-making and pricing.

From an overall risk management perspective, financial risks are identified and managed on a group basis but the responsibility for risk management resides at all levels. Overall, risk management policies and risk appetite, are established and reviewed by senior management and where appropriate, approved by the board of directors (TUHF, 2015).

The credit risk that TUHF faces, arises mainly from commercial loans and advances. The group has specific policies, procedures and processes dedicated to controlling and monitoring risk from all such activities. While credit exposures principally arise in loans and advances, the group may be exposed to credit risk arising from other financial assets, and these exposures compromise loan commitments and contingent liabilities. The risks are managed in a similar way to those loans, in loans and advances, and are subject to the same or similar approval and governance processes. Credit granting is a major source of income to TUHF and is therefore one of the most significant risks. The group dedicates considerable resources to controlling it effectively (TUHF , 2015).

TUHF has a rather robust loan cycle management system (LCMS), which forms the foundation of their risk management system. Loans and related documentation are logged from lead stage, throughout approval and until the date of final repayment. They are also managed on a daily basis. The granting of credit is considered on a project-by-project basis. Various hurdle rates are considered in terms of the loan and credit policy, which is compliant with the National Credit Act (NCA). As security, TUHF registers a mortgage bond per property to the value of 120% of the loan facility amount. Further to this, an additional 30% of the amount is provided for legal and other incidental costs, thus effectively resulting in a mortgage bond cover of 150%. TUHF follows a balanced lending approach that is based on sound commercial and developmental objectives, whilst promoting urban regeneration and empowerment.

In order to facilitate the development and growth of the SMME sector, Development Finance Institutions should employ capable and qualified staff who are able to service the market and provide the necessary technical support, guidance and assistance to borrowers. At the same time, the DFI should have systems, policies, directives and mechanisms in place to ensure, not only its own sustainability from a liquidity and responsible lending perspective, but also the sustainability of the enterprises that it funds.

DFIs typically lend to borrowers with no established business history or to new entrepreneurs. The risk in lending to these borrowers is exceptionally high due to information asymmetry and uncertainty from the borrower as to what information should be provided. TUHF mitigates this risk by doing a comprehensive character assessment, based on the 5 Cs of credit risk management, which is substantiated by quantitative measures (credit bureau scores, repayment history). They use this information to assign a quantitative score to each borrower to determine the risk and to calculate a return. The quantitative score comprises of qualitative and quantitative elements, with the pre-set weighting per category reviewed annually. Broad categories of assessments include character, financials, product, property management and construction method. These broad categories of assessment can be linked back to the 5 Cs as follows:

Table 7.1: Alignment of TUHF metrics with the 5 Cs

TUHF Measurement	Link to the 5 Cs
Character	Character
Financials	Capacity to pay
	Capital
Product / construction method	Conditions – purpose of loan
Property and Asset Management	Collateral

7.2.3 Findings of the variables developed to measure SMME sustainability

Having a sound knowledge of how TUHF operates and the CRM principles being applied, various sustainability variables were developed to measure SMME sustainability within the framework of the 5 Cs, and ultimately linking this back to the TUHF measurement metrics to determine a statistical relationship.

Sustainability variable 1 – Turnover growth and age of business

The results of the study have shown that there was a statistically significant relationship between the age of the business and turnover levels. This implied that, as the business matured or grew, business experience improved and the turnover inevitably increased. Sustainable businesses are thus regarded as those that show an increasing trend in turnover over time. Similarly, the TUHF CRM process requires that audited financial statements be provided for a period of not less than two consecutive years for businesses older than two years, in order to assess sustainability of income.

Figures 6.26 and 6.28 also indicated that there was a moderate to strong negative relationship, between the level of turnover and the age of the business, in relation to financial indicators (serviceability) and property management. This implied that, as the turnover and the age of the business increased, serviceability decreased as surplus funds were applied elsewhere and that the property or business management deteriorated as owners felt that a hands-on approach was not required.

Sustainability variable 2 – Financial indicators of the business

The results of the study found that there was a moderate positive relationship between the ability of the business to service its debt and the overall financial management of cash flows and surpluses as per Figure 6.29. The study also found that a moderate positive relationship existed between the serviceability and property management as per Figure 6.30. This was in line with TUHF's CRM principles, where the ability to service capital and interest payments on loan facilities were closely linked to financial management. Financial management, in turn, implied the management of cash flows, utilities and the timeous submission of management accounts and annual financial statements to TUHF. Good property management protects and preserves the quality of the collateral that secures the TUHF loan facility and it also ensures that tenants will want to continue paying their rentals. Good property management further includes the collection of rentals, lease agreements with tenants, ensuring that insurance is in place and regular maintenance.

Sustainability variable 3 – Financial management

The study found that no relationship existed between the age and size of the business and the financial or cash flow management (Figure 6.27). Good financial management ability and skills are a necessity regardless of the age or size of the business. TUHF considers the borrower's repayment history and financial track record to determine their future payment performance. As per Figure 6.31, there was no relationship between the financial management and the property management, as a financial manager cannot be compared to a property manager. Property managers, as per TUHF, are concerned with leasing, vetting of leases, marketing of properties, maintenance of properties, management of vacancies and rental collection. Financial managers ensure good financial controls and recordkeeping. They also ensure that accounts are paid on time and that sufficient cash flows are available for contingencies.

Sustainability variable 4 – Property management

As per Figure 6.28, property management did not improve as the age and size of the business increased. The measurement of property management ability is thus independent of size and turnover. This is in line with TUHF's measurement of property management, as prospective borrowers needed to submit a separate property management plan to TUHF as part of their loan application. This plan is assessed independently and a weighting is assigned accordingly.

Figure 6.30 indicates that there was a moderate positive relationship between the financial indicators of serviceability and the property management, as vacancies in properties result in a lower or reduced ability to pay debt. This resulted in reduced interest and debt service cover ratios. Vacancies could also be attributed to a low demand for the product that has been brought to market. TUHF tries to mitigate vacancy risk at the time of the assessment by ensuring that there is a market demand for the product. Furthermore, vacancies could also possibly be attributed to a lack of maintenance (property management). However, regardless of the reason for the vacancy, it impacted serviceability. Good property management improved the financial indicators which lead to surplus cash flows and ultimately a sustainable rental enterprise.

7.2.4 Findings of the hypothesis test

The following hypothesis was formulated to assess whether TUHF's credit risk management practices had an impact on SMME sustainability:

H^0 - Credit risk management practices do not impact on the sustainability of SMMEs

H^1 - Credit risk management practices have an impact on the sustainability of SMMEs

Based on the findings above, the null hypothesis was rejected as the findings of the TUHF CRM process clearly supported the achievement of the various SMME sustainability variables that were identified:

- The TUHF detailed character assessment ensured that both qualitative and quantitative information was taken into account in the credit assessment. This ensured a balanced approach and did not negatively impact on new business entrepreneurs.
- The TUHF full financial assessment carefully matched the complexity of the project to the borrower to ultimately ensure that the loan will be repaid on the set terms and conditions.
- TUHF required an equity contribution and was willing to assist with partial equity where required for qualifying borrowers. However, the borrower still needed to contribute as a measure of personal financial risk in the project.
- TUHF ensured that the loan funds were applied in line with the conditions of the facility and ensured that the project matched the characteristics and capabilities of the borrower.
- TUHF ensured that the properties/assets were managed adequately and had adequate post-investment monitoring measures in place to ensure proper asset and default management.

7.3 CONCLUSION

SMMEs play an important role in the South African economy. To ensure their sustainability, the credit risk management practices that DFIs apply should ensure the sustainability of the SMMEs. The study has proven that TUHF did apply CRM principles that enable the entrepreneurs to take charge of their respective businesses, regardless of size and turnover. Recommendations have been presented in this study

to enhance the CRM process of TUHF. Particular attention should be paid to the recommendation relating to the split of the loan officer's function into a new business manager and a portfolio manager. This could potentially benefit both TUHF and the SMMEs.

7.4 RECOMMENDATIONS

The primary objective of the study was to assess the impact of the credit risk management practices of TUHF on the sustainability of the SMMEs that it funds. As highlighted in Chapter three of this study, TUHF had a unique value proposition and advanced money to emerging and established entrepreneurs to invest in the inner cities of major cities and towns. At present, there are no similar offerings on the market and due to the nature of the investments, TUHF has a rather hands-on approach, hence the strict loan monitoring criteria. The process of loan monitoring and control could become labour-intensive and resulted in either less loans being granted and slower asset book growth for TUHF or an increase in defaulting borrowers.

Thus, based on the findings of the study, the following recommendations can be made:

- TUHF should establish an in-house property management team that will assist in educating and teaching existing and new clients the principles of property management. TUHF clients had indicated that they prefer managing their own properties as external property management comes at a huge cost to the landlord.
- TUHF should separate the new business and portfolio management functions as separate focus is required for each role. New business managers should be focussed on credit quality upfront which will lead to more accurate character assessments and quality asset book growth. Portfolio managers can then also act in an advisory capacity and identify early warning signals of potential problems. This will also impact positively on the vacancy levels in the properties and positively impact on serviceability.
- From the assessment of TUHF, it is evident that TUHF had adequate risk management tools but that lagging implementation and execution resulted in frustration from both TUHF staff and the borrowers.

- As a measure of support, TUHF should expand mentor groups to include all of its clients and not only the new SMMEs, as the study has proven that the age and size of the business did not necessarily imply reduced vacancies and improved financial, business and property management. The mentorship sessions will assist with the retention and expansion of knowledge and facilitate the continuous transfer of skills.
- In the empirical evidence, SMMEs indicated that they had vacancies at various levels. TUHF can assist these entrepreneurs by making a list of available units to rent per region, and put this on its website.

7.5 LIMITATIONS OF THE STUDY

Although the present study aimed to make a significant contribution to the body of research relating to the sustainability of SMMEs, several limitations were encountered. When the study is interpreted and conclusions made, these limitations should be considered.

a) Availability of the literature

There has not been much research on the sustainability of SMMEs in South Africa.

b) The sampling method proved to be a limitation as TUHF had a small loan book in the Eastern Cape and the study was confined to 23 SMMEs who were identified by TUHF and who are servicing loans. Therefore, the findings of this study cannot be generalised beyond this population.

A larger representative sample would have been preferable as more statistical analyses could have been conducted to obtain more accurate findings.

c) Response Rate

Not all respondents felt comfortable completing the questionnaires and returning it to TUHF, and hence did not respond.

7.6 AREAS FOR FURTHER RESEARCH

The following areas have been identified for further research:

- To determine the impact on application turnaround times if borrowers attend an introductory course on TUHF. The course would cover the expectations, responsibilities and implications of borrowing before the actual loan application is started.
- To determine how established property managers can partner with TUHF clients in order to improve the quality of the property and asset management.
- To measure the impact that TUHF has on the creation of permanent and temporary jobs (during construction) and how sustainable these jobs are.

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Annexure A: Questionnaires for the sample groups

Questionnaire for SMME's

1. What is your annual turnover?

0-R250,000	R250,001 – R750,000	R750,001 – R1,5m	More than R1,5 million

2. Do you generate sufficient rental income to comfortably pay your TUHF loan?

Yes	No

3. Do you have surplus cash left monthly after paying all your debt (incl utilities)?

Yes	No

4. Has the surplus been increasing, decreasing or staying the same?

Increasing	Decreasing	Remained the same

5. Do you draw the surplus money out of the business?

Yes	No

6. Do you reinvest the money into your business by improving the property?

Yes	No

7. Do you employ external property managers to assist with property management?

Yes	No

8. How do you deal with repairs and maintenance?

Do own repairs	Employ someone ad-hoc	Employ someone permanently

9. Is regular repairs and maintenance necessary?

Yes	No	Sometimes	Not sure

10. How long has your business been operating?

Less than 1 year	1 year – 3 years	3 years – 5 years	More than 5 years

11. Have you ever skipped a loan payment?

Yes	No	Not Sure / Can't remember

12. If yes, how often have you skipped a payment?

Only once	More than once but less than 3 times	More than 3 times but less than 5 times	More than 5 times	More than 10 times

13. Do you have vacancies in your property?

Yes	No	Not Sure

14. If you have vacancies, how many do you have?

1%-3%	3,1%-5%	5.1%-10%	10%-15%	15,1% and more

15. How long on average does it take to fill vacancies?

Less than a week	Less than 3 weeks	Less than 6 weeks	Less than 8 weeks	8 weeks and more

16. How do you collect rentals?

Cash	Bank Deposit / EFT

17. Do you have tenants that pay late?

Yes	No

18. What is your bad debt percentage?

3%	5%	10%	More than 10%

19. What was your loan purpose?

1. Purchase Only	2. Purchase plus minor refurbishment	3. Purchase plus major refurbishment	4. Conversion from commercial (office) use to residential

20. What was the construction strategy?

1. Owner Builder	2. Contractor-led strategy	3. Main contractor and professional team (turnkey)

Interview Sheet for TUHF

Section 1

Participant General Information

Role in Organisation	
Male / Female	
Age (Optional)	
Highest Educational Qualification (Matric/Degree/Diploma/Post Graduate Degree)	

2. How long have you've been employed at TUHF?

Less than 1 year	1-3 years	More than 3 years

Section 2

Character

1. When doing a character assessment for credit facilities, do you assess the following:

Training and knowledge of the entrepreneur

1. Definitely	2. Mostly	3. Sometimes	4. Not really	5. Not at all

Experience of the entrepreneur

1. Definitely	2. Mostly	3. Sometimes	4. Not really	5. Not at all

Financial Competency of the entrepreneur

1. Definitely	2. Mostly	3. Sometimes	4. Not really	5. Not at all

Future plans of the entrepreneur

1. Definitely	2. Mostly	3. Sometimes	4. Not really	5. Not at all

2. If any of the statements in (1) above were ranked as either 1, 2 or 3, please indicate why.

3. Character assessments can be very subjective. How would you rank the following character traits in terms of relative importance to TUHF?

Commitment

1. Extremely important	2. Very Important	3. Somewhat important	4. Not really important	5. Not important at all

Motive

1. Extremely important	2. Very Important	3. Somewhat important	4. Not really important	5. Not important at all

Presentation

1. Extremely important	2. Very Important	3. Somewhat important	4. Not really important	5. Not important at all

Stability

1. Extremely important	2. Very Important	3. Somewhat important	4. Not really important	5. Not important at all

Integrity

1. Extremely important	2. Very Important	3. Somewhat important	4. Not really important	5. Not important at all

Section 3

Capacity

1. How does TUHF determine repayment ability?
2. What other factors are taken into account to determine whether an entrepreneur will be able to service its debt?

Section 4

Commitment

1. How does TUHF measure the entrepreneur's commitment to the loan?
2. If the entrepreneur does not have any / sufficient equity, what happens?

Section 5

Collateral

1. Does TUHF call for collateral from SMMEs in support of loan facilities?
2. What type of collateral is acceptable?
3. What does the level of collateral (if any) impact on?
4. Does collateral reduce the risk and eventually pricing of the loan facility?

Section 6

Conditions

1. What specific market conditions are considered when considering a loan facility?
2. Is it possible to decline a loan because of market conditions even if all other criteria are met?
3. Does TUHF price for risk?
4. How is the risk premium determined?

Section 7

Sustainability

1. The ideal is for TUHF to have a sustainable loan book but this is dependent on the borrowers' discipline and commitment to repaying the debt. Does TUHF have non-performing loans?

Yes	No

2. If yes, what percentage of the loan book is non-performing?

1. Less than 1%	2. Less than 5%	3. Less than 7%	4. Less than 10%	5. More than 10%

3. Post-investment monitoring is an essential function of the TUHF business

1. Definitely	2. Mostly	3. Indifferent	4. Not really	5. Not at all

4. What does your post-investment monitoring process entail?
5. In the overall TUHF loan cycle management process, do you think that all CRM aspects are covered adequately? If not, what else could be improved to ensure that the SMMEs are equipped to meet their obligations?
6. What is your understanding of a sustainable business?
7. If the aim is to create sustainable businesses – how do you ensure that the SMMEs that are funded remain sustainable?
8. Do you have any measures in place to ensure the survival of the entrepreneurs and their ability to continue operating?
9. Do you measure failure rates of the SMMEs – if yes, how is it measured.

Annexure B: Statement analysis of SMME questionnaire linked to variables of the study

Questionnaire for SMME's – link to variables of the study

Variable 1

Turnover and Business Experience

1. What is your annual turnover?

0-R250,000	R250,001 – R750,000	R750,001 – R1,5m	More than R1,5 million

10. How long has your business been operating?

Less than 1 year	1 year – 3 years	3 years – 5 years	More than 5 years

Variable 2

Financial Indicators of the Business / Serviceability

2. Do you generate sufficient rental income to comfortably pay your TUHF loan?

Yes	No

3. Do you have surplus cash left monthly after paying all your debt (incl utilities)?

Yes	No

17. Do you have tenants that pay late?

Yes	No

18. What is your bad debt percentage?

3%	5%	10%	More than 10%

Variable 3

Financial Management (Cash Flow Management)

4. Has the surplus been increasing, decreasing or staying the same?

Increasing	Decreasing	Remained the same

5. Do you draw the surplus money out of the business?

Yes	No

6. Do you reinvest the money into your business by improving the property?

Yes	No

11. Have you ever skipped a loan payment?

Yes	No	Not Sure / Can't remember

12. If yes, how often have you skipped a payment?

Only once	More than once but less than 3 times	More than 3 times but less than 5 times	More than 5 times	More than 10 times

16. How do you collect rentals?

Cash	Bank Deposit / EFT

Variable 4

Property / Business Management

7. Do you employ external property managers to assist with property management?

Yes	No

8. How do you deal with repairs and maintenance?

Do own repairs	Employ someone ad-hoc	Employ someone permanently

9. Is regular repairs and maintenance necessary?

Yes	No	Sometimes	Not sure

13. Do you have vacancies in your property?

Yes	No	Not Sure

14. If you have vacancies, how many do you have?

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19. What was your loan purpose?

Purchase Only	Purchase plus minor refurbishment	Purchase plus major refurbishment	Conversion from commercial (office) use to residential

20. What was the construction strategy?

Owner Builder	Contractor-led strategy	Main contractor and professional team (turnkey)

Annexure C: Cover letter for SMME questionnaire

Dear Participant,

I invite you to participate in a research study entitled: CREDIT RISK MANAGEMENT IN DEVELOPMENT FINANCE INSTITUTIONS AND SMME SUSTAINABILITY. I am currently enrolled in the Masters in Development Finance Program at Nelson Mandela Metropolitan University in Port Elizabeth and am in the process of writing my Master's Thesis. The purpose of the research is to determine the impact of credit risk management practices of Development Finance Institutions on the sustainability of SMME's.

The enclosed questionnaire has been designed to collect information on certain sustainability indicators as developed by the researcher. Your participation in this research project is completely voluntary. You may decline altogether, or leave blank any questions you don't wish to answer. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential and anonymous. Data from this research will be kept confidential and reported only as a collective combined total. No one other than the researcher will know your individual answers to this questionnaire.

If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately 5 minutes to complete. Please return the questionnaire as soon as possible to the Port Elizabeth TUHF office or scan and email to vderrocks@telkomsa.net. Alternatively, you are welcome to call or WhatsApp the researcher on 082 573 8336 to arrange for collection of the completed questionnaire.

If you have any questions about this project, feel free to contact Velda Derrocks at 0825738336 or email vderrocks@telkomsa.net.

Thank you for your assistance in this important endeavour.

Sincerely yours

VELDA DERROCKS

RESEARCHER