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**THE IMPACT OF GENDER ON THE CHARACTERISTICS AND AVAILABILITY OF
DEBT FINANCE TO SMALL AND MEDIUM ENTERPRISES IN SELECTED CITIES
IN THE EASTERN CAPE PROVINCE**



BY
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**A DISSERTATION SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR
THE MASTER'S OF COMMERCE DEGREE
IN BUSINESS MANAGEMENT**

**UNIVERSITY OF FORT HARE
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characteristics and application and availability of debt finance. The study suggested some recommendations to improve the availability of debt finance to SMEs.

The recommendations included the need to improve the investment readiness of female-owned SMEs. To access debt, SMEs must have collateral and adequate owners' equity. Training and communication can also help SME owners to get investment ready. In addition, owners of SMEs should network by attending seminars and trade fairs.



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DECLARATION

I, the undersigned, David Kudzaishe Garwe hereby declare that this dissertation is my own original work and that it has not been submitted, and will not be presented at any other University for a similar or any other degree award.



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Date

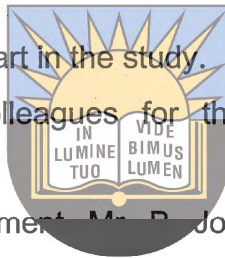
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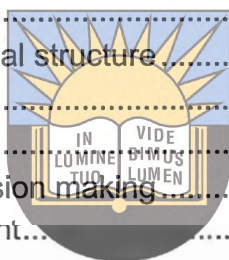
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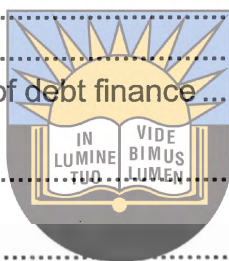
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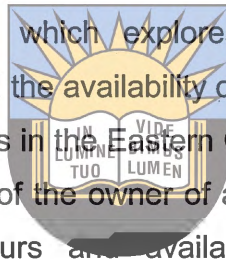
CHAPTER ONE

INTRODUCTION TO THE STUDY

“Although there is a growing body of literature addressing the financing of women-owned businesses, not enough is known about the attempts of such businesses to access bank loans and their success in securing those loans” (Treichel & Scott, 2006:52).

1.1 INTRODUCTION

This chapter introduces a study which explores the impact of gender on the characteristics of entrepreneurs and the availability of debt finance to small and medium enterprises (SMEs) in selected cities in the Eastern Cape Province. The main argument of the study being that the gender of the owner of an SME can significantly impact on the characteristics of entrepreneurs and availability of debt finance to SMEs. Understanding the causes of the unavailability of debt is important to improving the availability of debt to SMEs. This chapter presents a concise summative overview of the study. Specifically, the following areas will be highlighted; the background of the problem, the problem statement, the research objectives, the research hypotheses and the significance of the research. In addition, the chapter will highlight the research methodology, the limitations of the study and its layout.




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1.2 BACKGROUND OF THE STUDY

Entrepreneurship and SMEs have, in recent years, become a key focus of research (Herrington, Kew & Kew, 2009). Entrepreneurship is considered to be an important mechanism for economic development through job creation, innovation and its welfare effect, which has led to a burgeoning policy interest in national-level entrepreneurial activity. Entrepreneurship and SMEs is not just an economic event; it is a socio-economic phenomenon. SMEs are increasingly seen as playing an important role in the economies of many countries (Minniti, Arenius & Langowitz, 2005). Thus governments throughout the world focus on the development of the SME sector to promote economic growth (Dockel & Ligthelm, 2005:55).

National societies and their economies are to a large extent shaped by historical developments. The rapidly expanding body of entrepreneurship studies as well as ten years of the Global Entrepreneurship Monitor in South Africa (hereinafter GEM) research indicates that entrepreneurial activity rates may differ across countries for cultural, institutional, economic, and demographic reasons (Herrington *et al.* 2009). For example, motivations, regulations, and enforcement of regulations for setting up business can be vastly different across the globe.

The government of South Africa realised the importance of developing entrepreneurship and SMEs (O'Neill & Viljoen, 2001:38). The argument of the South African government is that SMEs offer an important vehicle to addressing the challenges of job creation, economic growth and equity in South Africa. The stimulation of SMEs is seen as part of an integrated strategy to take the South African economy onto a higher road; one in which the economy is diversified, productivity is enhanced, investment is stimulated and entrepreneurship flourishes.

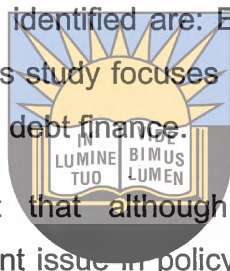


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In South Africa SMEs contribute over 65% of total employment and 55% of the gross domestic product (Small Enterprise Development Agency, 2008) (hereinafter SEDA). However, South Africa suffers from high unemployment with an official estimated unemployment rate of 25.2% (Statistics South Africa, 2010). One of the best ways to address unemployment is to leverage the employment creation potential of small businesses and to promote small business development (Finmark Trust, 2006). In this regard, SMEs are expected to be an important vehicle to address the challenges of job creation, sustainable economic growth, and equitable distribution of income and overall stimulation of economic development in South Africa (Maas & Herrington, 2006).

Despite the importance of SMEs, 75% of SMEs in South Africa fail within the first two years of operation (Von Broembsen, Wood & Herrington, 2005). The same authors further state that the probability of an SME surviving beyond 42 months and becoming an established firm is less likely in South Africa than in any other GEM country sampled

in 2005. Important to note is that women-owned firms represent an increasingly important segment of the SME sector (Robb & Coleman, 2001). In spite of this, women-owned enterprises have lagged behind men-owned enterprises in a number of performance measures. Although the failure rate of SMEs is reported to be high in South Africa, male owned/managed enterprises have a lower failure rate than those of their female counterparts. The female Total Entrepreneurial Activity (TEA) index shows that on average, participation rates for men tend to be 50% higher than those of women (Minniti *et al.*, 2005). Herrington *et al.* (2009) argue that there is considerable consensus among experts about the three most important factors constraining female entrepreneurial activity. The factors identified are: Education and training, government policies and access to finance. This study focuses on the effects of gender on access to finance with specific emphasis on debt finance.



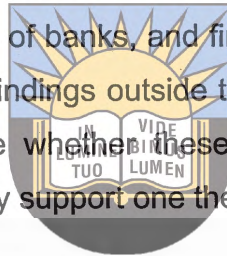
Irwin and Scott (2006) suggest that although finance constraints for female entrepreneurs have been a recurrent issue in policy debates, no consensus has been reached on the question of whether disadvantages exist for female entrepreneurs in accessing finance. In a survey of 600 firms, equally split by gender it is reported that there are: “quantifiable gender differences in certain areas of business financing, although intra-sectoral similarities demonstrate that gender is only one of a number of variables that affect the financing process”. This study seeks to further investigate the impact of gender on firm and entrepreneurial characteristics and availability of debt finance to SMEs in order to provide empirical evidence on the effects of gender and access to finance.

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Availability of finance is necessary for SMEs to start and grow. For all SMEs regardless of the owner’s gender, bank lending is considered the most important overall source of external funding (Burger and Udell, 2002:624). Women play a large and growing role as entrepreneurs in the modern day economic environment. Understanding why debt finance is not readily available to SMEs especially those owned by women, will lead to recommendations that will improve the availability of debt to SMEs. Attempts to investigate access to finance for women by Kim (2006:375), Dafna (2006:310), Treichel and Scott (2006:63) and Hassan (2007) were done in such countries as the USA,

Canada, Israel, Philadelphia and Malaysia respectively but no such study has been done in South Africa.

Almossawi (2001:115) however, argues that studies done in developed countries, alone, cannot be completely used to substantiate theories on corporate finance. Studies carried out in developing countries are also very important and may reach different conclusions from those carried out in developed countries. This is because the financial systems of developed countries are relatively more efficient than those of developing countries. Furthermore, different countries have different institutional arrangements with respect to tax, bankruptcy, the roles of banks, and financial markets. Therefore, without testing for the robustness of these findings outside the environment in which they were uncovered, it is hard to determine whether these empirical regularities are merely spurious correlations or whether they support one theory or the other.



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No South African study has empirically investigated the impact of gender on the characteristics and availability of debt to SMEs. This is the purpose of this study. As such, section 1.3 examines the research problem.

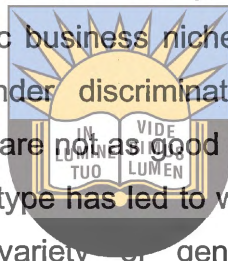
1.3 RESEARCH PROBLEM

Literature on SMEs from the studies alluded to above indicates that there is a positive relationship between non-availability of finance and their failure. To undertake capital investments, meet working capital and develop products, SMEs need finance. This can come in the form of equity, debt or a hybrid of debt and equity. This is known as the capital structure. Capital structure refers to the combination of debt and equity to finance a business's operations. Capital structure decisions are some of the greatest challenges and most difficult issues confronting SMEs, but are central to their viability.

The importance of capital structure decisions is evident from the role of inadequate capitalisation in the high failure rate among SMEs. Modigliani and Miller's (1958) theory of capital structure states that firms will select the mix of debt and equity that minimises their weighted average cost of capital. Because interest expense is tax deductible, debt is less costly than equity as a source of capital. Therefore, firms, in principle, act to

minimise the cost of capital and maximise the value of the firm by financing with debt. Other researchers have suggested alternatives to the Modigliani and Miller theory of capital structure. Myers (1984) alludes to a “pecking order” theory of finance stating that firms use internally generated funds in the form of retained earnings before turning to external sources. This theory can be applied to SMEs by assuming that they usually are not able to issue shares and owner-managers want to be in control of their business (Coleman & Cohn, 2007).

Theory on gender discrimination is revealed in studies that confirm gender differences in business outcomes for women and men entrepreneurs, both across representative samples of firms and within specific business niches (e.g., Du Rietz and Henrekson, 2001:8; McManus, 2001:77). Gender discrimination stems from the concept of traditional gender roles that women are not as good as male or women are subordinate to men (Zhuang, 2005). This stereotype has led to women's low social recognition, low evaluation and resulted in a variety of gender-based discrimination. Social discrimination against women is visible not only in the political, cultural, educational and other aspects, but also in their participation in the process of economic activities, for example, employment and entrepreneurial activity.



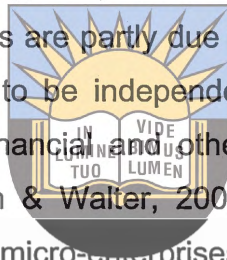
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Evidence from different countries in the West indicates that female business owners prefer to start their business in sectors where female employment is concentrated (Luber and Leicht, 2002:113; McManus, 2001:83). Most women-owned businesses are in wholesale and retail trade, hotel and restaurants, and services because of low barriers of entry. Those engaged in manufacturing activities, are often involved in sectors dominated by women, e.g., food processing or some branch of the clothing and textiles sector. In many instances, traditional crafts (e.g., gold embroidery, carpet weaving, and silk weaving in countries such as Uzbekistan) play an important role in women's business activities (Luber & Leicht, 2002:113).

Jappelli (1990) in his seminal work titled “who is credit constrained in the US economy?” argued that credit constraint can be separated into demand for credit and availability of credit. Consumers with high probability of loan denials may not apply because they perceive that if they do, they will be refused loans. Jappelli (1990:219-234) referred to

these consumers as discouraged borrowers. Kon and Storey (2001) in “a theory of discouraged borrowers” agree that there are good borrowers who do not apply for a bank loan because they feel that they will be rejected. This theory of discouraged borrowers highlights that potential borrowers may offer perfectly reasonable business proposals but do not apply for bank loans because they feel that they will be rejected.

The choice of sector is accounted for by a combination of resource constraints, environmental uncertainty and specific female aversion to risk-taking, which lead them to engage in activities with low entry thresholds and low financial risk. This pattern helps explain why female businesses are typically smaller in employment and sales than their male counterparts. The mechanisms are partly due to the start-up objectives (flexibility, personal social security, the wish to be independent, family income), partly sectoral features, and partly because of financial and other resource constraints (Anderson, Raihan, Rivera, Sulaiman, Tandon & Walter, 2007). The majority of women-owned enterprises around the world are micro-enterprises, employing less than 10 people, hence their generally relatively low impact in total employment (Anderson *et al.*, 2007).



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Therefore, female and male entrepreneurs may differ with respect to the capital structure of their business. This can be attributed to the type of businesses female and male entrepreneurs start, their type of management experience, their level of networking socio-cultural factors, their ability to take risks and the size of their business. In spite of the growing number of female entrepreneurs, their share in entrepreneurship is still lower when compared to their male counterparts (Coleman & Robb, 2008).

For SMEs, regardless of the owner's gender, bank lending is the most important overall source of external funding (Burger & Udell 2002:624). However, data from the Small Business Finance report of 1993 indicate that small enterprises rely equally on debt and equity financing. The report notes that among the equity sources, the largest category is insider funds or retained earnings constituting 31%, followed by contributions from friends and family at 13%. They content that outside equity is very difficult for SMEs to access accounting for about 5.5% of capital structure. Among debt sources, commercial banks are the largest source, contributing 19% of the total or 38% of all debt financing.

Women-owned SMEs are often self-financed since women are less likely to go into debt or to sell shares to the public to source capital (Coleman & Robb, 2008). They often launch businesses with less money than do men.

Securing funding, especially from banks, seems difficult for women-owned businesses and access to finance appears to be the greatest problem concerning women-owned businesses (Orser, Riding & Manley, & 2006:658). Coleman and Robb (2008) suggest that there are both supply side and demand side issues in the acquisition of loan finance. Supply side factors would include the preferences of investors for specific types of industries, firms or entrepreneurs. On the other hand, demand side issues would include the preferences of entrepreneurs for growth, profits, industry sector, risk and control.



In addition, previous studies on SMEs and access to finance in South Africa such as Hawkins (2002:519-542) and Pretorius and Shaw (2004:221-242) have completely ignored the impact of trade credit. Studies on the supply-side of SME financing in South Africa have focused mainly on improving the availability of bank credit. Wilson and Summers (2002:318) point out that studies of enterprise finance in Africa and elsewhere from the supply-side typically focus on bank credit, and more particularly on bank loans. However, banks are not the only principal source of external debt finance for SMEs. Berger and Udell (2006:2949) note that although trade credit is extremely important to SMEs, it has received much less interest than commercial bank lending which provides only slightly more credit to SMEs. Trade credit provides a cushion during credit crunches, monetary policy contractions or other shocks that leave financial institutions less willing or less able to provide small business finance. Since only a limited number of new SMEs have access to loans from financial institutions, trade credit may often be the best or only available source of external funding for working capital. SMEs may prefer trade credit financing during the early years when the risk of default is high. Also, trade credit is a substitute to bank credit for firms that are credit-rationed by banks. The question now is whether suppliers accept those requests. If they do, then trade credit could alleviate credit rationing for SMEs. This suggests that trade credit could be one of

the solutions to the credit constraints faced by SMEs in South Africa (Berger & Udell 2006:2949).

According to Coleman and Robb (2008), the fact that so few SMEs both male and female, use external sources of business debt or equity, suggests constraints on supply, possibly driven by the high risk and potential for failure among start-ups. However, the fact that women-owned firms start their businesses with less capital than men, suggests constraints on demand. Constantinidis, Cornet, and Asandei (2006:138) suggest that women may be more risk averse than men, or they may be more motivated to start smaller firms that will allow them to balance the demands of work and family. This study compares access to finance by gender from the demand side. Debt finance encompasses bank loans and trade credit. Alternatively, women may experience subtle forms of discrimination or difficulty in securing access to networks used by providers of external capital (Brush, Carter, Green, & Gatewood, 2002:317). This study is unique in that focus is on bank loans and trade credit. In order for an SME to grow, it is assumed that firm and entrepreneurial characteristics have a significant effect on the SME's ability to access debt finance. Firm characteristics are traits or features specific to the firm which can affect positively or negatively the performance of the firm. Firm characteristics considered are firm size and business sector. SMEs operate under rather severe internal constraints (Harvie, Narjoko & Oum, 2010). Emphasizing the role of firm characteristics has become an increasingly important consideration in carrying out empirical studies that examine performance of firms. Harvie, Narjoko and Oum (2010) observe that size seems to be an important characteristic associated with systematic differences in firm performance.

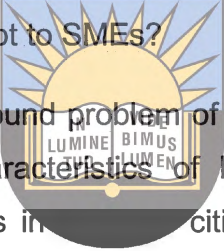
Entrepreneurial characteristics are those traits or attributes that are specific to the owner of the firm which can impact on the performance of the firm negatively or positively. This study will investigate the effect of gender on entrepreneurial characteristics affecting the performance of SMEs such as networking, managerial competencies, risk aversity and whether the owner carries business on a part-time basis. Although there have been a number of international studies in the SME sector, studies laying emphasis on women owned enterprises in developing countries such as

South Africa are nonexistent. (Reynolds, Bygrave & Autio, 2004; Coleman, 2002; Treichel & Scott, 2006:63). Thus very little specific micro level information is available on the performance and difficulties experienced by women in business, although along the broad lines the information is well known. The research problem is addressed by the following three questions:

- Are there gender differences in the demand and availability of debt to SMEs?
- Are there gender differences in the firm and entrepreneurial characteristics of SMEs?
- Is there any relationship between firm and entrepreneurial characteristics and the demand and availability of debt to SMEs?

These questions outline the background problem of the study which seeks to establish the impact of gender on the characteristics of both firm and entrepreneurs and availability of debt finance to SMEs in the cities in the Eastern Cape Province.

Hence the following are the objectives of the research.

The logo of the University of Fort Hare, featuring a sun rising over an open book with the motto 'LUMINE BIVMUS' and 'THE LIGHT OF KNOWLEDGE' written on the pages.

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1.3.1 Research Objectives

Primary Objectives:

The objectives of this study are to:

- Investigate empirically whether there is a significant gender difference in the demand for and availability of debt finance to SMEs.
- Investigate empirically whether there is a significant gender difference in the firm and entrepreneurial characteristics of SMEs.
- Investigate empirically if there is a significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance.

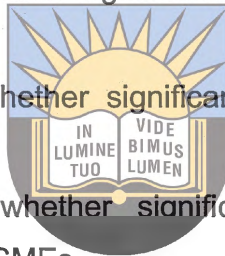
Secondary Objectives:

- To review the literature on SMEs and development.
- To review literature on the financing of SMEs.
- To review literature on firm and entrepreneurial characteristics.

- To develop the research methodology to carry out the empirical research.

The second primary objectives seek to investigate whether there are significant differences in the firm and entrepreneurial characteristics. The firm characteristics under review are firm size and business sector. The entrepreneurial characteristics under review are networking, managerial competencies, risk aversion and the part-time nature of entrepreneurship. In order to achieve these two primary objectives, the following secondary objectives are also formulated:

- To investigate empirically whether significant gender difference exists in the firm size of SMEs.
- To investigate empirically whether significant gender difference exists in the business sector of SMEs.
- To investigate empirically whether significant gender difference exists in networking by the owners of SMEs.
- To investigate empirically whether significant gender difference exists in the managerial competencies of the owners of SMEs.
- To investigate empirically whether significant gender difference exists in risk aversion by the owners of SMEs.
- To investigate empirically whether significant gender difference exists in the nature of entrepreneurship (i.e. whether female business owners are more part-time in nature than male business owners).



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1.3.2 Research hypotheses

Main hypotheses:

There are three main hypotheses which are:

Hypothesis 1

H0: There is no significant gender difference in the demand for and availability of debt finance to SMEs.

H1: There is a significant gender difference in the demand for and the availability of debt finance to SMEs.

Hypothesis 2

H0: There is no significant gender difference in the firm and entrepreneurial characteristics of SMEs.

H1: There is a significant gender difference in the firm and entrepreneurial characteristics of SMEs.

Hypothesis 3

H0: There is no significant relationship between firm and entrepreneurial characteristics and demand for and availability of debt finance.

H1: There is a significant positive relationship between firm and entrepreneurial characteristics and demand for and availability of debt finance.

To test the primary hypotheses, the following secondary hypotheses were developed:

Secondary hypotheses

H0: There is no significant gender difference in the firm size of SMEs.

H1: There is a significant gender difference in the firm size of SMEs.

H0: There is no significant gender difference in the business sector of SMEs.

H1: There is a significant gender difference in the business sector of SMEs.

H0: There is no significant gender difference in networking by the owners of SMEs.

H1: There is a significant gender difference in networking by the owners of SMEs.

H0: There is no significant gender difference in the managerial competencies of the owners of SMEs.

H1: There is a significant gender difference in the managerial competencies of the owners of SMEs.

H0: There is no significant gender difference in risk aversion by the owners of SMEs.

H1: There is a significant gender difference in risk aversion by the owners of SMEs.

H0: There is no significant gender difference in the nature of entrepreneurship. (female business owners do not carry out their business more on a part-time basis than male owners).

H1: There is a significant gender difference in the nature of entrepreneurship (female business owners carry out their business more on a part-time basis than male owners).

Section 1.4 will explain the significance of the study.

1.4 SIGNIFICANCE OF THE STUDY

The motivation for the study stems from the fact that generations of women from very different backgrounds contribute to their environments and are showing very encouraging signs of entrepreneurial spirit (Von Broembsen, Wood & Herrington, 2005). Female entrepreneurship is not only important because of the need for diversity but also for economic development and the improvement of the general living standards of the people (Minniti & Arenius, 2003). However, although some international research has been done on the effects of gender on access to finance by entrepreneurs as alluded to earlier on, no such research has been done in South Africa.

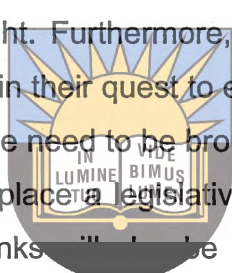
This study contributes to a number of different literatures, including that on entrepreneurship, relationship lending, and financial services. First it establishes a set of stylised facts about female participation in entrepreneurship over time; about how female-owned firms differ from male-owned firms, and about how female owners differ from male owners. Second, it documents how the availability of credit differs across female-owned and male-owned firms. Third, it identifies important gender differences in the relationships between firms and creditors.

Maas and Herrington (2006) reveal that a great number of women start new businesses but are not able to sustain them beyond three years. The significance of the study at hand is inter-alia to find ways to improve access to finance by female entrepreneurs and reduce their high failure rates. This is aimed at reducing unemployment, crime and poverty in South Africa. The research also seeks to: Establish how the gender differences between male and female entrepreneurs affect the way both sexes access debt finance for their businesses. Furthermore, it aims to bridge the gap between male and female entrepreneurs in their efforts to become owners/managers of SMEs. Most importantly, it reviews the literature on the effects which gender has on both firm and

entrepreneurial characteristics and the demand for and availability of debt finance to SMEs.

The findings of the research can also benefit policy makers. The starting point for any sound intervention is documentation of facts. Accordingly, the study identifies areas of entrepreneurship where women actively participate and then examine those areas where they are less active.

Recommendations from the study are intended to motivate women entrepreneurs to start their own businesses and ensure a paradigm shift from seeking for employment to become employers in their own right. Furthermore, the study aims at sensitising the government on the plight of women in their quest to economically empower themselves. The very challenges that women face need to be brought to the attention of government in order that the latter might put in place a legislative and policy framework to support women to access debt finance. Banks should be made aware of the same plight in order to help women access bank loans without the alleged unnecessary complications. Finally the motivation of the study is to improve access to debt finance by women entrepreneurs. The next paragraph explains the methodology employed by the study.



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1.5 RESEARCH METHODOLOGY

This study consists of two basic components as part of the research methodology. It consists of a literature review and an empirical study.

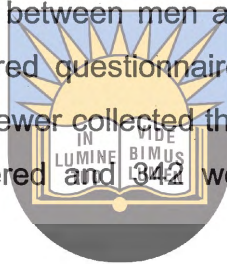
1.5.1 Literature Review

The literature review examined the link between SMEs and development. The contribution of SMEs to poverty reduction, income redistribution and employment was reviewed. In addition, the definitions of an SME as well as the failure rates of SMEs were examined. The review also examined theories of capital structure and determined whether there is sufficient debt funding for SMEs in South Africa. The financial challenges facing women entrepreneurs as well as the gender characteristics of entrepreneurs and firms also came under review. The literature review provided an

insight and understanding into the research problem as well as the necessary background which guides the empirical part.

1.5.2 Empirical study

The empirical study consisted of primary research and data collection through the conducting of a survey. A research design was made by way of defining the study population and the incorporation of suitable measuring instruments and reliable techniques for data analysis as stipulated in Cooper and Schindler (2003). The measuring instrument was designed to determine the relationship and magnitude of the various factors that come into play between men and women when considering debt financing for SMEs. Self-administered questionnaires were delivered to respondents who completed them and the interviewer collected them at an appointed time. A total of 450 questionnaires were administered and 342 were returned, representing a 76% return rate.



Research Type

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According to Zikmund (2003) there are two basic types of research designs: qualitative and quantitative and a hybrid of the two. The choice of research design centres on the nature of the research, the setting, the possible limitations and the underlying paradigm that informs the research project. The study used the quantitative research design which Ghauri and Gronhaug (2005:120) describe as “*studies whose findings are mainly the product of statistical summary and analysis.*” The main feature of quantitative research is the heavy reliance of the researcher on data analysis to arrive at findings or conclusions. Quantitative methods, statistics, tables and graphs, were used to present the results of the study.

- **Data collection method**

Gerber-Nel, Nel and Kotze (2005) identify three primary data collection methods namely, observation, experiment and survey. Observation is a process through which primary data is obtained by observers (humans or machines) about the behavioural pattern of people, objects or occurrences. With the experiment method of data

collection, the researcher manipulates an independent variable and then measures the effect. The experimental setting can be in a laboratory or in the field. In a laboratory, experiments are conducted in an artificial or laboratory setting. In survey research, the researcher selects a sample of respondents from a population and administers a standardised questionnaire to them. This study used the survey research. Surveys can be divided into four major types: personal interviews, telephone surveys, mail surveys, and self-administered surveys as pointed out by Gerber-Nel *et al.* (2005). Hence data for the research was gathered through self-administered questionnaires.

- **Study population**

The study focused on SMEs which are registered with SEDA, and those in the Telephone Directory in selected cities in the Eastern Cape. The cities selected are East London, Queenstown, and King Williamstown. East London also included Mdantsane. The population of SMEs both male and female was 736.



- **Data collection instruments**

The instrument used in this study is the questionnaire. The questionnaire comprised structured questions which made it easy for the respondents to indicate their views. The use of Likert scale questions enabled respondents to indicate their opinion on the impact of gender on the various factors which have effects on raising debt finance for SMEs. The questionnaire was designed in a way that ensured responses were reliable. Reliability and validity are undoubtedly the hallmarks of good measurements and the keys to assessing the trustworthiness of any research study.

First the questionnaire was pre-tested then reliability and validity tests performed to ensure that results are credible. Details on pre-testing, reliability and validity testing are provided in chapter 5.

- **Statistical analysis**

Data analysis was done through Pearson Chi-square, T-test and logistic regression. Further data analysis for this study included descriptive statistics involving tables, graphs and percentages.

Referencing style

The referencing style used for this study was the Harvard method.

1.6 LIMITATIONS

The financing of SMEs comes from so many different sources such as government and its associated agencies, non-governmental organisations, venture capital, angels, and the equity market. This study only focused on debt finance which is based on bank loans and trade credit and excluded all the other sources. Thus the study limits itself to examining the demand side of the factors that impact on access to debt finance taking into account gender effects.

1.7 LAYOUT OF THE STUDY

- **Chapter one: (introduction to the study)**

Chapter one is based on the background to the problem as well as the hypotheses, objectives and significance of the study. It provides an introductory perspective of the study. An overview of the role of SMEs in poverty alleviation, income equality and employment creation is provided. The creation rate of SMEs as well as their inevitable failure coupled with the causes of failure of new SMEs in South Africa is also discussed.

- **Chapter two: (literature review)**

This chapter focuses on SMEs. SMEs are analysed in terms of their challenges as well as female entrepreneurs' challenges in starting and sustaining new ventures. The focus is on the literature surrounding access to loans as it relates to gender differences. It covers financing of early-stage businesses by banks.

- **Chapter three: (literature review)**

This chapter examines the financing needs of SMEs. SMEs need funds to finance fixed asset acquisition, working capital, product development and initial losses. Capital structure theories such as the static trade-off theory and the pecking order theory and their implication on SMEs are discussed. The chapter, in addition, explores the causes of the equity and debt gap for SMEs and the credit evaluation process of banks.

- **Chapter four: (literature review)**

This chapter deals with detailing the gender characteristics of firms and entrepreneurs which impact on access to debt finance for SMEs. These include the issue of risk aversion, management experience, networking, part-time entrepreneurship and other socio- cultural factors the firm size and the type of the business.

- **Chapter five:**

This chapter concentrates on the methodology used in conducting the empirical research. It examines the research design, the type of research used, the population, the sample design as well as the data collection and analysis methods.

- **Chapter six:**

This chapter deals with the analysis and interpretation of the results. The chapter tabulates the results from the analysis and exploration of data and discusses the findings. The methods described are those used to accomplish the analysis and interpretation of data and these are the T-tests, Chi-Square tests and logistic regression. They have been used together with some relevant statistical approaches such as tabulation, graphs and percentages.

- **Chapter seven:**

This chapter revisits the research problems and the objectives of the research. The chapter also discusses the conclusions and recommendations of the research. In addition, the limitations of the research are highlighted and areas for further research suggested.

1.8 SUMMARY

This chapter highlighted the importance of SMEs to sustained economic growth, employment creation, poverty alleviation, and income inequality in South Africa. the creation rate of new SMEs in South Africa as measured by the TEA is one of the lowest in the world. The failure rate of SMEs created in South Africa is also very high. The lack of finance is a major inhibitor to the growth potential of SMEs in South Africa. Women entrepreneurs represent more than 50% of the South African population but own

approximately 33% of existing businesses. Their effort at establishing and sustaining SMEs is reportedly far lower than that of their male counterparts.

Female and male entrepreneurs are said to differ in the way they finance their businesses. This can be attributed to the type of businesses female and male entrepreneurs start, their type of management experience, their level of networking, socio-cultural factors and their ability to take risks. This chapter sets out the research problems. In addition, the chapter formulated the research objectives, the research hypotheses and discussed the significance of the research. Furthermore, the chapter highlighted the research methodology, the limitations of the study and the layout. The next chapter focuses on small enterprises. Small enterprises are analysed in terms of their contributions as well as female entrepreneurs' challenges in starting and sustaining SMEs.



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CHAPTER TWO

SMALL AND MEDIUM ENTERPRISES

“Give a man a fish and you feed him for a day; teach him to fish and you feed him forever” (The Bible). “It is clear that since 1994 a turning point in the policy shaping South African small business sector has seen the increased participation of the private sector and local communities. However, over the years the most significant development in the sector is the pivotal role allocated by both the government and the private sector to small and medium enterprises (SMEs)” (Agupusi, 2007).



2.1 INTRODUCTION

Chapter one introduces the premise that gender can impact on the characteristics of the firm and entrepreneurs and access to debt finance for SMEs. A case is made for these factors to be investigated and analysed. Two approaches were proposed; literature review and empirical study. This chapter examines small and medium enterprises. First, the concept of development and its link to SMEs is introduced and discussed. Development is a function of investment; therefore there is the need to establish new businesses in order to grow the economy. Thus the issue of SMEs as a vehicle for economic development is pursued. SMEs are defined; a profile of South African entrepreneurship given; and the challenges that face female entrepreneurs in accessing loan finance are discussed. Empirical evidence on what contribution and challenges facing SMEs is also reflected on.

2.2 DEVELOPMENT

Development is a “multidimensional process involving major changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty” (Todero & Smith, 2005:17). Economic growth is in turn measured by the Gross Domestic Product (GDP) as well as the per capita income of a nation. Per capita income refers to how much each individual receives, in monetary terms, of the yearly income generated in the

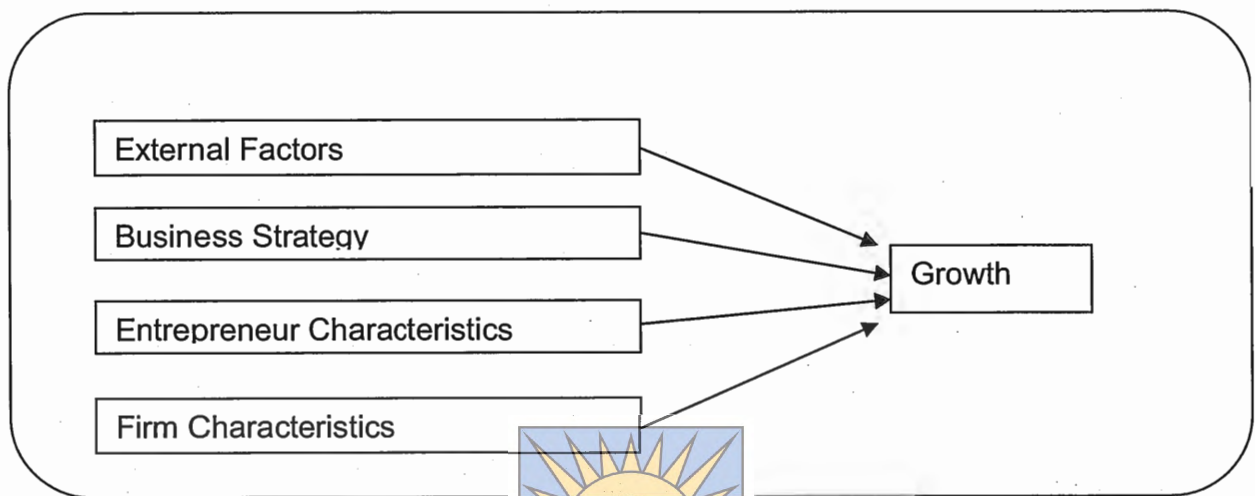
country. This is what each citizen is to receive if the yearly national income is divided equally among everyone. Per capita income is usually reported in units of currency per year.

Toderó and Smith (2005) further state that “development, in its essence, must represent the whole aspect of change by which the entire social system, tuned to the diverse basic needs and desires of individuals and social groups within that system, moves away from a condition of life widely perceived as unsatisfactory towards a situation or condition of life regarded as materially and spiritually better.” Economic development refers to growth accompanied by qualitative changes in the structure of production and employment, generally referred to as “structural change” (Szirmai 2009). Of particular importance for developing economies are increases in the share of the dynamic industrial sector in national output and employment and a decrease of the share of agriculture.



Tuan and Yoshi (2009) investigated the causes of growth in small manufacturing firms in the United Kingdom in 1996. They used regression techniques for analysing only direct effects of firm characteristics, entrepreneur characteristics, business strategy and constraints to growth in turnover. As a result, they concluded that it was possible to explain growth in small firms in terms of these four groups of variables. Tuan and Yoshi (2009) modified the conceptual framework of growth so that it was perceived in light of four groups of factors namely; entrepreneur characteristics, the firm characteristics, the business strategy and external factors (see Figure 2.1). It is noted that the external factors in this conceptual framework are not general factors such as the economic, political, or social conditions of one country. External factors are the ones that affect directly and specifically each firm, and distinguish performance among SMEs such as intense competition. The economic, political, and social conditions are assumed as generally similar for all SMEs, and they do not distinguish among SMEs.

Figure 2.1: Conceptual Framework



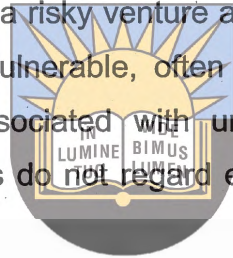
Adapted: Tuan & Yoshi (2009)

In these four groups, there are 13 factors of significance: motivation, education, management experience, firm age, size, industry sector, legal form, location, ownership, external equity, market positioning, technological sophistication, and introduction of new products. Tuan and Yoshi (2009) posit that:

- The business strategy of new product introduction is positively and significantly associated with the growth of the firm.
- Size of firm is negatively and significantly related to the growth of the firm.
- Educational background of owner/manager is positively and significantly related to the growth of the firm.
- Prior sector experience of owner/manager has positive and significant effect on the growth of the firm.
- External factors such as intense competition are negatively and significantly related to the growth of the firm.
- Age of firm is negatively and significantly related to the growth of the firm.

Despite the fact that the growth of SMEs can be considered in light of the above conceptual framework, South Africa faces some challenges regarding development. These manifest themselves through poverty and inequality, HIV and Aids, crime and

corruption in both the public and private sector. South Africa is one of the most unequal societies in the world. In some ways, this is hardly surprising since for most of the past century, national policy discriminated vigorously against the majority of the country's population. Among other inequalities, people were denied access to decent education, the right to own property and accumulate assets, the right to move freely, and the right of equal access to the labour market (Organisation for Economic Co-operation and Development 2010). Presently, in South Africa, entrepreneurial activity is hindered by poor skills base as well as severe environmental limitations including poverty, lack of active markets and poor access to resources (Herrington *et al.*, 2009). According to Cichello (2005), self-employment is a risky venture and the poor and unemployed, who are already financially extremely vulnerable, often find it impossible to contemplate taking on the additional risks associated with unemployment. It is therefore not surprising that many South Africans do not regard entrepreneurship as a positive and viable choice.



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For a nation's economy to grow there is need for the establishment of new businesses in order to create employment, redress inequality and increase the per capita income (Maas & Herrington, 2006). The development challenge therefore, is to improve the quality of people's lives. This can be achieved through entrepreneurship development. The availability of entrepreneurs may be considered the most important prerequisite for economic development in a country. Without entrepreneurs it becomes the task of the state to organise development (O'Neill & Viljoen, 2001:38). In this vein, SMEs are established based on deliberate policy framework to augment the existing large firms. They start from an informal nature graduating to registered legal formations. The government in South Africa realised the importance of developing entrepreneurship and SMEs. The government stated that SMEs offered an important vehicle to addressing the challenges of job creation, economic growth and equity in South Africa. The stimulation of small enterprises is seen as part of an integrated strategy to take the South African economy onto a higher road; one in which the economy is diversified, productivity is enhanced, investment is stimulated and entrepreneurship flourishes. The role of SMEs is further explored below.

In section 2.2 the concept of development and the link between development and SMEs were discussed. Section 2.3 will examine the definition of SME as well as the contribution and the challenges facing SMEs in South Africa.

2.3 DEFINITION AND CONTRIBUTION OF SMEs

2.3.1 Definition

Beck, Levine and Demirguc-Kunt (2005:200), point out that there is no universally agreed definition of the term small and medium enterprises (SMEs). Numerous factors related to a country's social-economic environment influence the definition of an SME. Most definitions currently follow quantitative and qualitative lines. Quantitative factors are primarily the number of employees, the annual turnover (sales) and the balance sheet total. The qualitative factors require that an SME have a relatively small share of its market, be run by its owners and not be a subsidiary of a large firm. Also, the definition of SMEs on the basis of a specific criterion is not uniform across countries. Some countries (e.g., the United States of America) define a SME as a firm with less than five hundred employees while some countries in the European Union define the cut-off for the definition of SMEs as two hundred and fifty employees.

The National Small Business Act of South Africa of 1996, as amended in 2003, describes an SME as *"a separate and distinct entity including cooperative enterprises and non-governmental organisations managed by one owner or more, including its branches or subsidiaries if any is predominantly carried out in any sector or sub-sector of the economy mentioned in the schedule of size standards, and can be classified as an SME by satisfying the criteria mentioned in the schedule of size standards"* (Government Gazette of the Republic of South Africa, 2003).

As pointed out in the definition above the National Small Business Act provides a schedule of size standards for the definition of SMEs in all the sectors of the South African economy as highlighted in table 2.1.

Table 2.1: Definition of SMEs

Size of enterprise	Number of employees	Annual turnover	Gross assets
Medium	Fewer than 200, depending on industry	R4m to R50m, Depending on industry	R4.5m to R18m, depending on industry
Small	Fewer than 50	R2m to R25m, depending on industry	R2m to R4.5m depending on industry
Very Small	Fewer than 20 depending on industry	R 200.000 to R500,000, depending on Industry	R150, 000 to R500,000, depending on Industry
Micro	Fewer than 5	Less than R150,000	Less than R150,00

Adapted: Parliament of the Republic of South Africa (2005).

The contribution of SMEs to the economy of South Africa will be established in section 2.3.2

2.3.2 Contribution of SMEs

SMEs as defined by the National Small Business Act (2003), contribute to national development through among other things, poverty alleviation and equitable distribution of income as well as reduction in unemployment. SMEs are increasingly seen as playing an important role in the economies of many countries. Thus, governments throughout the world focus on the development of the SME sector to promote economic growth.

- **Poverty alleviation**

Poverty occurs throughout the world. However, the level varies worldwide. Data indicate that poverty is significantly higher in developing countries than in developed countries.

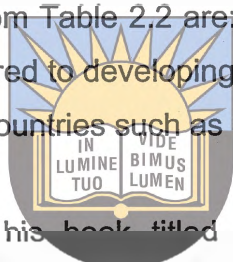
Table 2.2 depicts the poverty levels in South Africa and some selected African countries as well as some developed countries.

Table 2.2: Poverty levels in selected African and developed countries

African countries	Poverty level (%)	Developed countries	Poverty level (%)
South Africa	57	France	6
Cameroon	48	UK	14
Senegal	54	USA	12
Zambia	86	Australia	8

Source: World Bank (2008a).

The questions that come to mind from Table 2.2 are: Why is poverty significantly lower in developed countries when compared to developing countries and how can poverty be significantly reduced in developing countries such as South Africa?

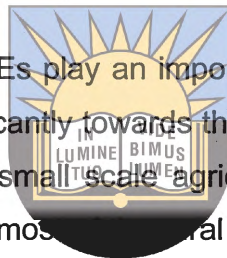


According to Sachs (2005:18) in his book titled "The End of Poverty: Economic Possibilities for Our Time" the elimination of poverty remains one of the key objectives of governments worldwide. Poverty can be ended before 2025. Sachs emphasizes that collective action, supplemented by effective government provision of health, education, infrastructure, as well as foreign assistance when needed, underpins economic success. Kawai and Urata (2002:42) suggest that one of the ways to reduce poverty is the development of the SME sector.

According to the Parliament of the Republic of South Africa (2005), the government of South Africa identifies SMEs as a key to poverty alleviation, income equality, employment and sustainable economic growth. "*The stimulation of SMEs must be seen as part of an integrated strategy to take this economy onto a higher road - one in which our economy is diversified, poverty is reduced, productivity is enhanced, investment is stimulated and entrepreneurship flourishes*".

The World Bank (2008a) and International Labour Organisation (2008) in addition, assert that a vibrant SME sector improves productivity, promotes economic growth and increases opportunities for the poor. SMEs are the most important driver of local

economic development. This is one of the reasons why all over the world, governments are stimulating and supporting a healthy small firm sector. The pro-SME policy of the World Bank is based on three core arguments. First, SMEs enhance competition and entrepreneurship and hence have external benefits on economy-wide efficiency, innovation, and aggregate productivity growth. Second, SMEs are more productive than large firms, but the financial market and other institutional failures impede SME development. Third, SME expansion boosts employment more than large firm growth because SMEs are more labour intensive. Therefore, SMEs can be used to alleviate poverty and unemployment.



Agbeibor (2006:36) agrees that SMEs play an important role in alleviating poverty and at the same time contributing significantly towards the growth of developing economies. The author argues that in Ghana, small scale agriculture employs about 60% of the work force and provides income for most rural people in Ghana. The employment and the incomes from agriculture have significantly reduced rural poverty in Ghana. Mnenwa and Maliti (2008) in a study on poverty alleviation in Tanzania, use a sample of 225 manufacturing small firms to investigate whether the profits, salaries and jobs created by small firms contribute to poverty alleviation. The statistical results show that the average incomes generated by small firms were above the basic and food poverty lines. This suggests that small firms contribute to poverty alleviation.

In contrast, a few empirical studies disagree that SMEs are a key driver of poverty reduction. Ayyagari, Beck and Demirguc-Kunt (2003:265) examine the impact of SME on poverty reduction and economic growth in a study entitled "Small and medium enterprises across the globe". The study also finds an insignificant relationship between the development of SMEs and poverty reduction, but a significant relationship between the development of SMEs and economic growth.

Berry, Von Blottnitz, Cassim, Kesper, Rajaratnam, and Van Seventer, (2002) argue that the SME sector in South Africa has achieved limited growth. Therefore, SMEs are unlikely to be a panacea for South Africa's economic and social problems. Many SMEs

do not report a profit or an increase in turnover. Their constraints include high levels of competition, high wages, low sales, high input costs (especially transport costs) and lack of access to finance.

Another stream of research suggests that SMEs may not directly reduce poverty. However, if SMEs promote economic growth as found by Ayyagari *et al.* (2003) and Beck *et al.* (2005), ultimately poverty will be reduced. This view is consistent with other empirical studies on growth and poverty such as Sadoulet and De Janvry (2000:203) and Ravallion and Chen (2001:363). Thus it can be concluded from the literature review that the stimulation of SMEs is very important to the reduction of the high level of poverty in South Africa.



- **Reduction of income inequality**

Income inequality between population groups in South Africa is still extremely high but continues a long-run decline in importance. In addition, income inequality as measured by the Gini-coefficient is much higher in developing countries compared to developed countries as shown by Table 2.3. The Gini coefficient is a measure of statistical dispersion most prominently used as a measure of income or wealth inequality. A Gini-coefficient of one indicates perfect income inequality, while a Gini coefficient of 0 indicates perfect equality (World Bank, 2008b). The figures indicate that income inequality is much higher in Africa compared to developed countries. The United States of America is a glaring exception in developed countries with income inequality of 0.41 which compares with that of Senegal.

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Table 2.3: Gini coefficient in some selected African and developed countries

African countries	Gini coefficient	Developed countries	Gini coefficient
South Africa	0.58	France	0.33
Cameroon	0.45	U.K	0.36
Senegal	0.41	USA	0.41
Zambia	0.49	Australia	0.25

Source: World Bank (2008b).

The World Bank (2008b) asserts that a vibrant SME sector can reduce income inequality. Mnenwa and Maliti (2008:15) study the role of SMEs in Tanzania and find that SMEs help to reduce income inequality. Nugent and Seung-Jae Yhee (2003:89) also argue that SMEs are more labour intensive than large firms and have narrower wage differentials across workers. Wages are also distributed more equally than profits, rent, and other components of national income. Hence, as the SME sector expands relative to the large firm sector of the economy, all things being equal, firstly the share of labour in national income should rise, secondly inequality among wage earners should decrease, and thirdly overall income inequality should decrease.

- **Employment**

According to Statistics South Africa (2009) unemployment is extremely high in South Africa and it is seen as one of the most pressing socio-political problem.

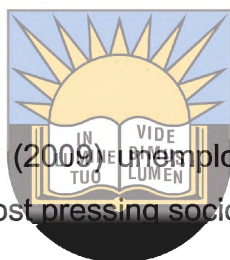


Table 2.4: Unemployment rates in selected African and developed countries

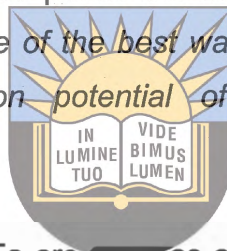
African countries	Unemployment rate (%)	Developed countries	Unemployment rate (%)
South Africa	23	France	8.8
Cameroon	30	UK	5.3
Senegal	48	USA	7.6
Zambia	50	Australia	5.1

Source: World Bank (2009).

Table 2.4 compares the unemployment rates in selected African countries (South Africa included) and selected developed countries. The table shows that unemployment is much higher in developing countries when compared to developed countries. According to the European Union (2009) SMEs account for a large proportion of Europe's economic and professional activity. Ninety nine percent of firms in the European Union are SMEs and they provide two-thirds of all private sector jobs. Therefore, SMEs are in fact the real giants of the European economy. SMEs are one of the primary reasons why unemployment is low in Europe. Large firms in Europe have been shedding jobs while employment in the SME sector has increased.

In South Africa, SMEs contribute 65% of total employment and 55% of the gross domestic product (SEDA, 2008). South Africa suffers from high unemployment with an official estimate of approximately 25.2% of the economically active population unemployed (Statistics South Africa, Quarterly Labour Force Survey, 2010). One of the best ways to address unemployment is to leverage the employment creation potential of small businesses and to promote SME development (FinMark Trust, 2006).

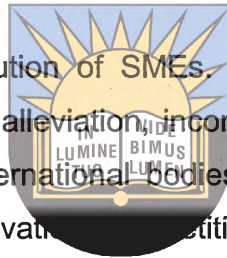
In South Africa, government expects SMEs to be the engine of employment creation. Manuel (2007) states that *"SMEs remain a vital ingredient for job creation in our economy"*. FinMark Trust (2006) also points out that unemployment remains a huge problem in South Africa today. *"One of the best ways to address unemployment is to leverage the employment creation potential of SMEs and to promote SME development"*.



Kesper (2001:172) agrees that SMEs are seen as a vehicle to address the problem of high unemployment levels in South Africa as they have a high labour-absorptive capacity. There is a mismatch between the reality and the model of the SME sector used by South African policy makers. Only a few dynamic SMEs show the potential to contribute to rapid employment creation. Whilst some SMEs have been able to increase their sales (and to a lesser extent profits), this turnover growth is not accompanied by employment growth. Nissanke (2001:345) in contrast find that in Sub-Saharan Africa, large firms were the dominant source of net job creation. While gross rates of job creation and destruction are higher in SMEs, there is no systematic relationship between net job creation and firm size. In terms of job quality, microeconomic evidence does not support the pro-SME view that small firms create better quality jobs than large firms.

Finlayson (2003:1) however argues that two decades of academic research has not settled the question of the extent to which SMEs are a source of job creation, poverty reduction and income equality. According to the author, despite a few studies challenging the notion that SMEs create more than a disproportionate share of new jobs, Birch's original study has had considerable staying power. Birch's research was

revolutionary and sparked controversy because it stood in sharp contrast to the traditional belief that large firms were the backbone of the American economy. Finlayson (2003) further adds that even if SMEs do not create the most new jobs, researchers should not be distracted or minimise the economic benefits that flow from them. SMEs are a critical part of the economy and provide millions of jobs. They are more flexible than large firms. They are also a source of innovative products, processes and business methods. Even if the assumption that large firms create more jobs is true, most of the large firms started as SMEs. Therefore, SMEs should be encouraged to evolve into large firms through improvement in tax and policy environments.



This section examined the contribution of SMEs. The literature largely agrees that SMEs are a key driver of poverty alleviation, income equality and employment. This view is supported by local and international bodies such as GEAR and NEPAD. In addition, SMEs are a source of innovation, competition and rural development. Section 2.3 examines the challenges facing SMEs. A number of challenges face SMEs in fulfilling their intended role of aiding economic development (i.e. poverty reduction, income equality and employment). These are discussed in the next section.

2.3.3 Challenges facing SMEs

Despite the noted contributions of SMEs, their failure rate in South Africa is one of the highest in the world. About 75% of SMEs in South Africa do not become established firms. According to Von Broembsen *et al.* (2005) the probability of an SMEs surviving beyond 42 months is less likely in South Africa than in any other of the 34 countries sampled by GEM. This is because SMEs face a number of challenges of which non-availability of finance is primary. This implies that SMEs will not be able to fulfill their developmental roles in South Africa. Women-owned firms represent an increasingly important segment of the SME sector (Robb & Coleman, 2009). In spite of this, women-owned enterprises are reported to have lagged behind men-owned enterprises in a number of performance measures. Although the failure rate of SMEs is reported to be high in South Africa, male owned/managed enterprises have a lower failure rate than those of their female counterparts.

The rate of failure of SMEs in developing countries seems to be much higher than in developed countries as depicted in Table 2.6.

Table 2.5: Failure rates of SMEs in some selected developing and developed countries

Developing countries	Failure rate of new small firms SMEs (%)	Developed countries	Failure rate of new SMEs (%)
South Africa	75	Australia	30
Mexico	68	New Zealand	28
Chile	66	UK	28
Venezuela	48	Japan	24

Sources: Adapted from Maas and Herrington (2006), OECD (2006).

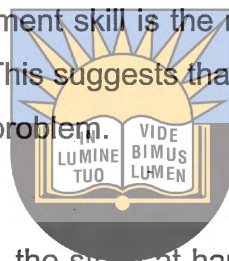
It can be inferred from Table 2.5 that the chances of a business surviving beyond three and a half years in a developing country is generally lower than in a developed country. South Africa has the highest failure rate of SMEs in all the countries sampled by GEM as reported by Maas and Herrington (2006). This implies that the prognosis of survival and therefore of establishing sustainable SMEs in South Africa is particularly poor. The probability of an SME surviving beyond 42 months is less likely in South Africa than in any other GEM country sampled in 2005. This suggests that the quality of early-stage entrepreneurship activity in South Africa is somewhat lower in comparison with other countries in the GEM sample. The empirical literature reviewed in this section subscribes to a host of factors why SMEs fail. Table 2.6 depicts the specific causes of the failure of new SMEs in South Africa.

Table 2.6: Causes of the failure of SMEs in South Africa

Reason	Frequency	Valid Percent
Too much competition	6	11.5
Lack of customers	6	11.5
Financial reasons	17	32.1
Found another job	2	4.3
Retirement	1	2.7
Personal reasons	12	23.1
Other reasons	8	14.7
Total	52	100

Source: Maas and Herrington (2006).

Financial constraints appear to be the primary exit reason for most entrepreneurs at 32.1%. This underscores the importance of improving the availability of finance to SMEs which is the primary objective of this study. It can therefore be concluded that despite the many reasons given for small business failure from both the entrepreneurs and the providers of funds, most failures occur because of bad management, the lack of capital and a weak external environment. It appears that the financial reason is one of the primary causes of the failure of SMEs. It must be pointed out however that there is a significant difference in the way the financial reason is perceived by entrepreneurs and credit providers. Entrepreneurs claim that finance is a first order problem, whereas credit providers argue that management skill is the major problem and could in fact be the cause of the financial problem. This suggests that finance may not be the real cause of failure but a consequence of the problem.



Although these obstacles are many, the study at hand focused on one commonly cited which is access to finance. The main challenge in this regard is the difficulty in obtaining debt finance by female entrepreneurs. The associated elements of this challenge are: lack of collateral, no credit record, discrimination against women, most assets being registered in the husband's name, inability to qualify for loans due to stringent criteria applied by banks, and lack of business and management experience among others (Robb & Coleman, 2009).

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- **Access to finance**

All businesses require financial resources in order to start trading and to fund growth. Lack of access or non-availability of finance can be a constraint on business growth (Cassar, 2004). Whether business owners can access adequate and appropriate finance to grow is a particular concern for policymakers. SMEs can be financed from founders' own wealth and/or by accessing external sources of finance, whether from 'informal' sources such as family and friends, or from 'formal', market-based sources such as banks, venture capitalists and private equity firms. Chapter three deals at length on these various sources of capital. Once businesses are trading, further development can be financed using retained profits.

According to Herrington *et al.* (2009) access to finance is a major problem for the South African entrepreneur. Lack of financial support is the second most reported contributor to low new firm creation and failure, after education and training in South Africa. FinMark Trust (2006) finds that only 2% of SMEs in South Africa are able to access bank loans. Foxcroft, Wood, Kew, Herrington, and Segal, (2002) find that 75% of applications for bank credit by SMEs in South Africa are rejected. Of this figure, the greater proportion is that of female entrepreneurs. This suggests that SMEs without finance may not be able to survive and grow.

Herrington *et al.* (2008) cite access to finance as one of the three key problems facing SMEs in both developed and developing countries. Inadequate funding to start a business has been indicated as a primary barrier to starting a new business for many potential entrepreneurs. Indications are that many entrepreneurs raise the start-up capital from their own or family savings rather than approaching formal institutions or agencies. Financial institutions generally require collateral and formal business records as criteria for considering a loan. As a result, business owners who lack collateral or who have not kept formal records from their businesses are less likely to be successful in approaching financial institutions for funding.



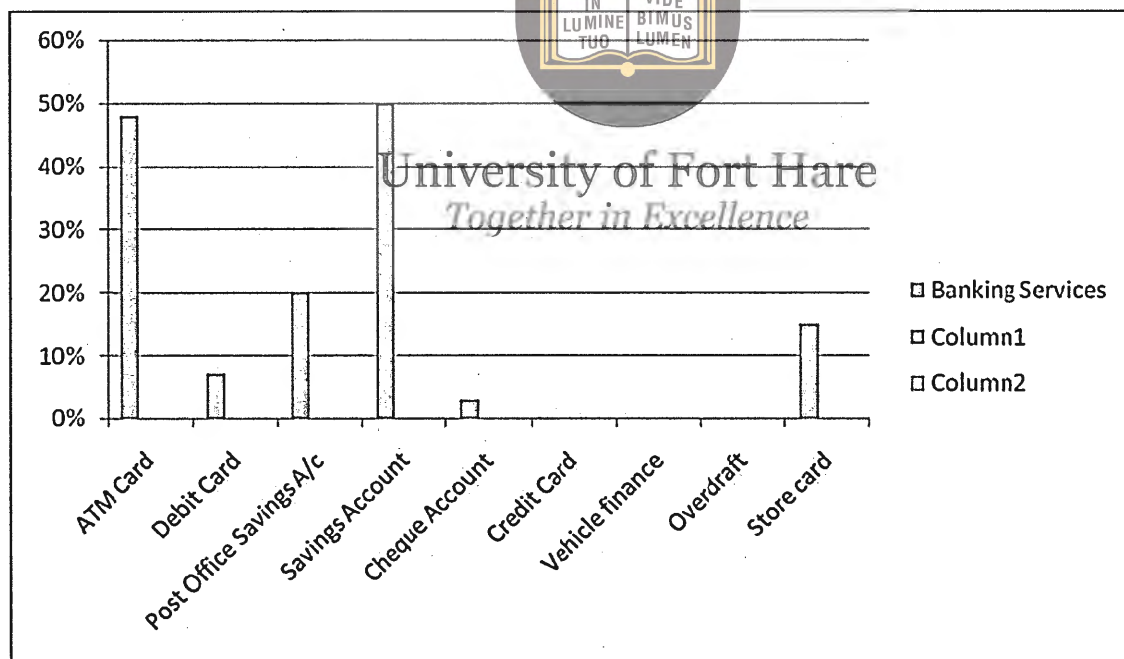
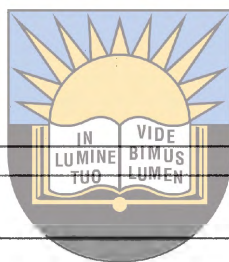
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According to Department of Trade and Industry (2005) entrepreneurship lies at the heart of job creation, black economic empowerment and bringing the “second” economy into the mainstream economy. Hence women entrepreneurs lie at the heart of this. But the situation of women shows that they have difficulty in securing bank loans and dealing with lenders. Coleman (2002) observed that women owned businesses are often self-financed. Women are less likely to go into debt or to sell shares to the public to secure capital and they launch businesses with less money than do men (Coleman, 2004). On the other hand Berger and Udell (2002), using data from the 1993 Survey of Small Business Finance, report that the average small business relies more on debt than equity financing.

Women generally are considered as lacking the necessary resources for starting and developing their own businesses. Resources critical for success are the assets that women bring with them to the entrepreneurial process in the form of human capital

(formal and occupational experiences) and the entrepreneur's ability to access resources in the environment such as capital, suppliers, customers (Department of Trade and Industry, 2005). In terms of financial challenges, 29% of black women still do not have bank accounts. Most have a basic ATM card and savings account. Very few have cheque accounts, credit cards, vehicle finance and so forth. Figure 2.2 illustrates this position of women with regard to banking services. Since women normally rely on personal income to provide the initial finance for their enterprises, the situation highlighted below suggests that it might be very difficult for women to raise start-up capital for new ventures.

Figure 2.2 Women in Banking



Adapted: Department of Trade and Industry (2005)

In the area of debt financing, women continue to report difficulty in securing bank loans and dealing with lenders. Most studies indicate that women are more likely to be turned down for loans than men (Coleman & Robb, 2009). Women are therefore more reluctant to apply and they are more likely to anticipate denial. There is also evidence that women apply for significantly smaller loans that may not be sufficient to fund the growth

of their firms. Although commercial banks are typically a major source of financing for small firms, only 27% of women-owned firms used them in 1998 (Coleman, 2002). These findings were echoed in a subsequent study by Treichel and Scott (2006:63) using data from three surveys conducted by the National Federation of Independent Business. Treichel and Scott (2006:63) also found that women were less likely to apply for bank loans although they were not less likely to be approved. Conversely, a study by Robb and Wolken (2002) found that women were more likely to borrow through the use of credit cards, thus avoiding the necessity of dealing with banks or lending officers. Credit card accounts offer the client access to a certain amount of money that they then pay back to the bank with interest. The interest and service fees on these cards are very high and they need to be carefully managed.



The Organisation of Exporting Co-operation and Development (2002) suggested that obtaining loan finance remained an important barrier to starting a business for many women. It is often assumed that women owners of small firms have difficulties to access bank financing, and hence rely on their personal savings, credit cards, or family and friends' loans to finance their start-up, using bank loans much less than men do. With regards bank loans in particular, Robb & Wolken (2002) argue that the proportion of female-owned businesses having a loan was smaller than the proportion of male-owned businesses, and most of the loan types were used less often by female-owned business than male-owned ones. Thus women are portrayed as being significantly less likely than men to have a loan, including a line of credit, which is considered to be the most flexible type of loan from the standpoint of a small business (Coleman, 2004).

On the demand side, Robb and Wolken (2002) suggest that women owners are significantly less likely to have applied for a loan within the previous three years than men, revealing lower application rates. Women are believed to be much more likely to avoid applying for a loan because they are deemed to assume that they would be denied, which could partly explain the differences found in the application rates between women and men entrepreneurs.

The Department of Trade and Industry (2005), suggests that women could be reluctant to apply for loans compared to men in spite of the fact that they are not likely to be turned down if they did. The department further suggests that women apply for significantly smaller loans that may not be sufficient to fund growth of their firms.

The size, age and business sector are other factors that are attributed to women's inability to access debt finance. These are dealt with in detail in chapter four.

After defining SMEs, and discussing the contribution of SMEs as well as financial challenges facing SMEs, the profile of South African entrepreneurs will be discussed in section 2.4. This will include gender participation in SMEs.

2.4 PROFILE OF SOUTH AFRICAN ENTREPRENEURS

The study at hand looks at the primary measure of entrepreneurship according to GEM perspective. This primary measure of entrepreneurship that GEM uses is the TEA index. The TEA index measures the percentage of individuals between the ages of 18 and 64 that are involved in starting a new business. Individuals may start the business on their own account. They may also start the business in collaboration with or on behalf of an existing business. They do need to own the business, either partly or wholly, and to manage it, either on their own or with others (Department of Trade and Industry, 2005).

SMEs are a function of entrepreneurship. This necessitates that the South African entrepreneurship profile be analysed closely. According to Herrington *et al.* (2009) men are 1.6 times more likely than women to engage in entrepreneurial activity. This is cause for concern particularly when South Africa is compared to developing countries in Latin America (Herrington *et al.* 2009). In many developing countries female Total Early-Stage Entrepreneurial Activity (TEA) rates are just below male TEA rates (Maas & Herrington 2006). Since GEM's inception, the TEA index has been the principal measure of entrepreneurial activity in participating countries. It provides a benchmark for cross-national comparisons as well as longitudinal comparisons within countries. Table 2.7 compares the TEA rates for South Africa to that of Argentina in the years 2003 and 2008 according to gender. The comparison of South Africa to Argentina is

based on the fact that both countries are developing and they are ranked at the top of the efficiency-driven countries in terms of overall entrepreneurial activity. Efficiency-driven economies are those that are also referred to as factor-driven and these fall into the middle to low income categories (Herrington *et al.*, 2009).

Table 2.7: Gender involvement in early-stage entrepreneurial activity in South Africa and Argentina

Country	Male TEA. 2003	Male TEA 2008	Female TEA 2003	Female TEA 2008
South Africa	9.1	9.6	5.0	5.9
Argentina	15.5	17.2	6.3	15.9

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Adapted: Herrington *et al.* (2009) *Together in Excellence*

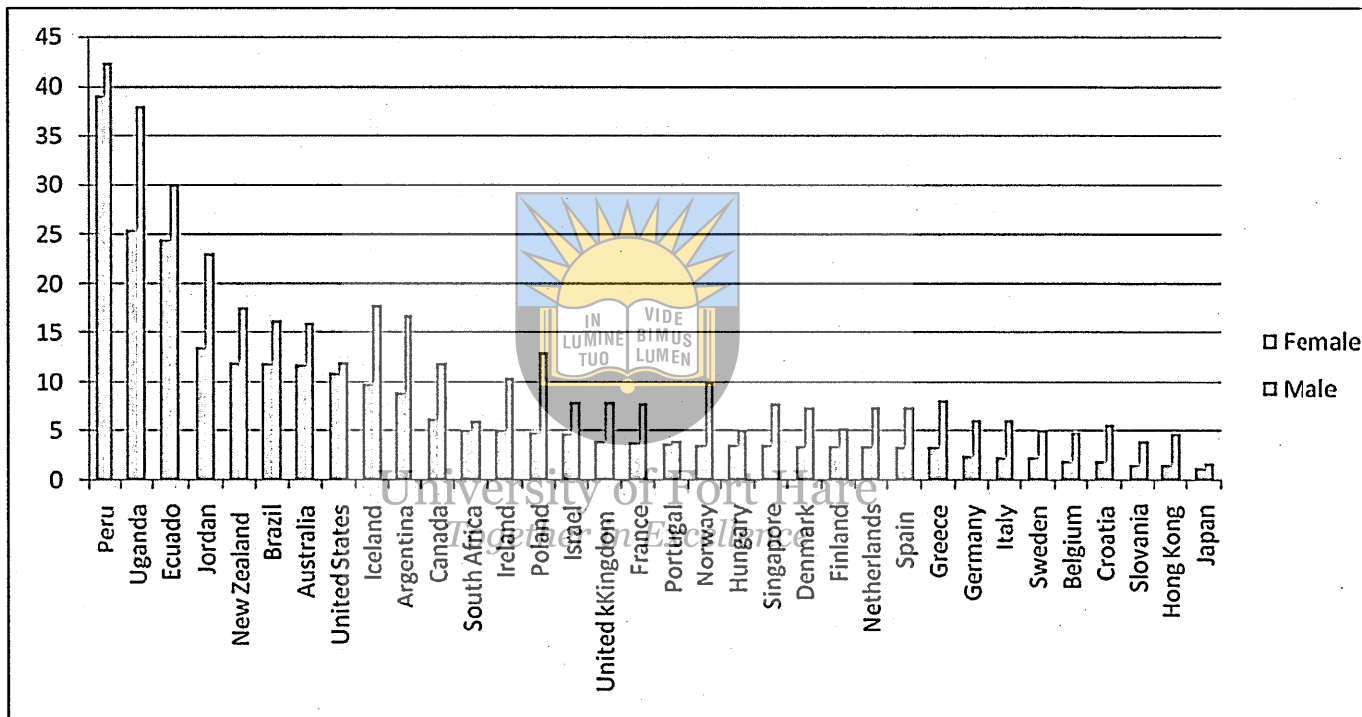
That in The following observations can be made from table 2.7:

- That in 2008, the female TEA rates in Argentina are approximately three times higher than the rates for South Africa,
- That the South African male TEA rates remain about double the South African female TEA rates
- That female TEA rates in Argentina have more than doubled whilst that of South Africa both countries, male TEA rates are higher than female TEA rates.

According to Maas and Herrington (2006), South Africa's TEA is not up to standard if it wants to sustain economic growth rates that will create wealth for everybody. When the factors that draw people into small business are present in a country, the conditions will be positive for entrepreneurship to do well there. A variety of economic and non-economic, social and personal conditions need to be present for entrepreneurship to grow – economic conditions include, for example, availability of capital, support from government, and financial infrastructure (Maas & Herrington, 2006). Figure 2.3 clearly

shows that the total early-stage entrepreneurial activity of women in South Africa is lower than that of their male counterparts indicating that there are gender differences that impact on SMEs. Figure 2.3 shows the participation of women entrepreneurs as revealed by Minniti *et al.* (2005) in their GEM 2004 report.

Figure 2.3: Total Entrepreneurial Activity 2004 by Gender and Country



Adapted: Minniti *et al.* 2005)

The participation of women in entrepreneurship varies significantly across the 34 GEM, 2004 countries, ranging from 39.1% in Peru, 25.5% in Uganda, and 24.4% in Ecuador, to 1.2% in Japan and 1.6% in Hong Kong and Slovenia. Figure 2.3 shows the comparative results for men and women in each of the 34 GEM countries considered as of 2004. There is no country where women are more active than men. There are also a few countries where the gender gap is not statistically significant. They are Ecuador, Finland, Hungary, Japan, South Africa, and the United States (Minniti *et al.*, 2005).

The existence of a stable ratio of female to male entrepreneurship across countries and over time confirms that entrepreneurial attitudes are influenced by some universal

factors and that, when making decisions with respect to starting a new business, women and men are influenced by many of the same variables (Minniti *et al.*, 2005). However, the fact that male entrepreneurship rates are systematically and significantly higher than female entrepreneurship rates also indicates that these factors do not influence both genders necessarily in the same way or with the same intensity. Herrington *et al.* (2009) suggest that self-employment is a risky venture and the poor and unemployed, who are already financially extremely vulnerable, often find it impossible to contemplate taking on the additional risks associated with unemployment. In South Africa, entrepreneurial activity is hindered by a poor skills base as well as severe environmental limitations including poverty, a lack of active markets and poor access to resources. It is therefore, perhaps, not surprising that many South Africans do not regard entrepreneurship as a positive and viable choice.

Studies comparing the performance of male and female owned firms show that businesses headed by women tend to be smaller than those headed by men (Minniti, *et al.* 2005). Normally, the smaller size is perceived as a problem and it is assumed that, if they could, women would want to expand their businesses as much as men. This perception has important consequences for female entrepreneurship, as women may have a harder time in obtaining external financing and, in general, credibility as business owners and managers. However, evidence is beginning to accumulate to the effect that man and women have different preferences with respect to start-up size which, in turn, depends on different managerial styles.

2.5 SUMMARY

This chapter reviewed the literature on the definition and the contribution SMEs to the economy of South Africa. In addition, the chapter explored the challenges (especially access to finance) by SMEs in South Africa. The review is premised on the argument that female-owned SMEs are more disadvantaged in accessing debt finance than their male counterparts. The concept of development was discussed and it is apparent that SMEs are an important vehicle for the economic development of a country and of South Africa in particular. The contribution of SMEs towards the development of South Africa was explored. It was clearly established that SMEs played a very pivotal role in the

South African economy in terms of employment creation, equitable distribution of income and poverty alleviation. Despite their important role in the development of the national economy, it was also established that SMEs face some serious challenges resulting in an estimated failure rate of 75%. This implies that SMEs will not be able to fulfill their developmental roles in South Africa. Most common reasons cited are: education and training, government policies and access to finance.

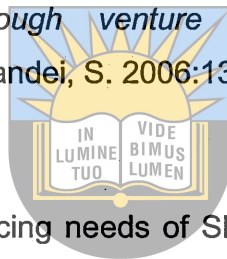
After defining the SMEs, a profile of the South African entrepreneur was discussed. The profile of South African entrepreneurs is that men are 1.6 times more likely than women to engage in entrepreneurial activity. This is cause for concern particularly when South Africa is compared to developing countries in Latin America. In many developing countries female Total Early-Stage Entrepreneurial Activity (TEA) rates are just below male TEA. The total early-stage entrepreneurial activity of women in South Africa is lower than that of their male counterparts suggesting that there can be gender differences that impact on the establishment and development of SMEs. One of the findings of this chapter is that lack of finance is one of the causes of failure for SMEs. This underscores the importance of the availability of finance to SMEs owned by men and women.

The next chapter will examine the importance of finance to the survival of SMEs. Issues such as the need for capital and the capital structure of SMEs will be discussed.

CHAPTER THREE

FINANCING SMEs

“Women-owned businesses have some particular financing patterns and encounter specific barriers in their access to financing. These can occur during the business start-up, and will be mainly related to the amount of initial capital invested by women entrepreneurs, as well as the financing sources used. Some other problems arise during the business development process, and are linked to the access to external financing, in particular debt-financing through bank loans, and equity financing through venture capital and business angels” (Constantinidis, Cornet, & Asandei, S. 2006:138).



3.1 INTRODUCTION

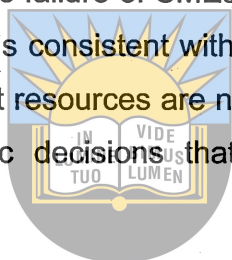
This chapter will examine the financing needs of SMEs. SMEs need funds to finance fixed asset acquisition, working capital, product development and initial losses. In addition, capital structure theories such as the static trade-off theory, the agency theory and the pecking order theory and how they affect the financing of SMEs will be discussed. Availability of equity and debt to SMEs will also be explored. Section 3.2 discusses the financial needs of SMES. SMEs need finance to undertake capital investments, meet working capital requirements and develop new products.

3.2 THE FINANCIAL NEEDS OF SMEs

Winton and Yerramilli (2008:52) point out that once the core of the market opportunity and the strategy for seizing it are well defined, an entrepreneurial organisation can then begin to examine the financial requirements in terms of (1) asset needs (facilities, equipment, research and development, and other one-time expenditures) and (2) operating needs (i.e. working capital for operations). Successful entrepreneurs anticipate the investment requirements of their firms so they can evaluate, select, negotiate and craft business relationships with potential funding sources appropriately. With this careful planning process, successful entrepreneurs are more likely to avoid

potential mismatches, and costly sidetracking for the wrong sources, and the disastrous marriage to these sources that might follow.

Empirical studies such as Zhou and Chen (2008) identify that SMEs need physical resources to take advantage of business opportunities. According to Bolingtoft, Ulhoi, Madsen and Neergaard (2003:538) to establish and sustain an SME, the entrepreneur needs to have access to different types of resources (i) human capital; (ii) physical capital; and (iii) financial capital, each playing different, but equally important roles during the life cycle of an SME. Bolingtoft *et al.* (2003:539) further point out that there are many explanations offered for the failure of SMEs. One of the most frequently cited reasons is "resource poverty". This is consistent with the view of Timmons and Spinelli (2007:341) that the decision on what resources are needed, when they are needed and how to acquire them are strategic decisions that fit with other driving forces of entrepreneurship.



3.2.1 Fixed assets

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Berger and Udell (2006:2949) state that fixed assets (capital investments) involve expenditure on buildings, machinery, fixtures, fittings and vehicles. These are long-term; tangible assets held for business use and not expected to be converted to cash in the current fiscal year of the firm. SMEs need capital investments to survive, innovate and grow. An SME can obtain from having fixed assets is that it can be used as collateral. Furthermore, the value of a fixed asset is relatively more stable compared to current assets such as inventories and accounts receivable, which can fluctuate greatly as they are being consumed in the normal operation of the firm. For this reason, lenders prefer fixed assets rather than current assets as collateral.

Falkena, Abedian, Von Blotnitz Coovadia, Davel, Madungandaba, Masilela, and Rees (2002) show that investment by SMEs in fixed assets in South Africa is low. The shares of SMEs and large firms in the national fixed capital formation are 25% and 75% respectively. This shows that SMEs have a rather low propensity to invest in fixed assets. The low level of investment in fixed assets by SMEs in South Africa is one of the

reasons for the lack of access to debt finance. It can be inferred from literature that SMEs need fixed assets to survive, grow and compete in the marketplace.

3.2.2 Working capital and cash flow

“The need for maintaining adequate working capital can hardly be questioned. Just as circulation of blood is very necessary in the human body to maintain life, the flow of funds is very necessary to maintain a business. If it becomes weak, the business can hardly prosper and survive” (Padachi, Narasimhan, Durbarry & Howorth, 2008:44).

According to Firer, Ross, Westerfield and Jordan (2004:5) working capital refers to a firm's short-term assets and liabilities. Short-term assets include cash, inventory, debtors and prepayments and short-term liabilities include overdrafts, accounts payable and accruals. Working capital is required for the day-to-day running of a business. It is the lifeblood of a business. Working capital is needed to pay wages, suppliers, and other expenses before sales revenues are received from customers. Positive working capital means that the company is able to pay off its short-term liabilities. Negative working capital means that a company currently is unable to meet its short-term liabilities with its current assets. Therefore, the failure to plan for increasing working capital needs can lead to serious cash flow problems.

Empirical studies find a positive relationship between a lack of working capital and the failure of SMEs. Garcial-Teruel and Martinez-Solano (2007:166) point out that non-availability of working capital is a major constraint to the survival and growth of SMEs. A large number of SME failures can be attributed to a lack of working capital. The success of a firm depends ultimately on its ability to generate cash receipts in excess of disbursements. The cash flow problems of many SMEs are exacerbated by poor financial management and in particular the lack of planning cash requirements.

This suggests that SMEs that depend on current assets such as debtors and inventories (asset-based lending) to secure lending find it more difficult to borrow from commercial banks.

3.2.3 Product development and initial losses

Barringer and Ireland (2006:231) state that SMEs often need to raise funds to pay for the upfront costs of lengthy product development cycles. Product development often takes years and requires adequate funding to bring it to fruition. However, not all SMEs develop new products. Mohamed (2005) defines product development as the process of acquiring knowledge to create a new product to serve the needs and wants of customers who are already buying a company's products. It also refers to improving an existing product. Thus product development has become a key determinant in gaining competitive advantage.

According to Todor and Alin (2008) new product development and technological innovation is the lifeblood of SMEs. These allow the SME to create a competitive advantage. An SME that enters the market with a new product has the advantage of the first mover and pioneer and can use this to gain competitive advantage and acceptance. Therefore, new products critically impact such firms' ability to garner resources for survival and growth. Kakati (2003:447) however points out that SMEs often start with an initial loss because of the cost of product development and other sunk costs before they start operation. Most SMEs start with a loss and achieve break even after one to two years. The initial losses affect the ability of SMEs to continue operation. Funds are therefore needed to finance these initial losses.

To undertake capital investments, meet working capital and develop products, SMEs need finance. This can come in the form of equity, debt or a hybrid of debt and equity. This is known as the capital structure. Section 3.3 will examine the definition of capital structure and also discuss capital structure theories and their impact on new SMEs.

3.3 CAPITAL STRUCTURE

Capital structure is described as the mix of debt and equity that a firm uses to finance its operations. The capital structure decision is one of the most complex decisions facing a firm. Effective capital structure decisions can lower the cost of capital and enhance shareholders' wealth. The cost of capital can be described as the rate of return that a company earns on its investments to ensure that the minimum requirements of all the

providers of capital are met. It is difficult to determine the optimal combination of debt and equity financing of a company (i.e. the optimal capital structure). However, corporate finance theory on profit maximisation stipulates that the value of a firm is maximised when its cost of capital is minimised. The optimal capital structure, therefore, is the combination of debt and equity at which the weighted average cost of capital of a firm is minimised and shareholders wealth maximised. The weighted cost of capital can be described as the average cost of debt and equity funding weighted by the proportion of the firm's capital structure that the two components constitute (Gitman, 2003:533).

3.3.1 Capital structure theories

The theoretical principles underlying capital structure can generally be described in terms of the static trade-off theory by Modigliani and Miller (1958:261-295) and Modigliani and Miller (1963:433-444) and the pecking order theory by Myers (1984:575-592).

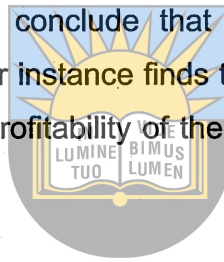
3.3.1.1 The static trade-off theory

Modigliani & Miller's theory of capital structure states that firms will select the mix of debt and equity that minimises their weighted average cost of capital (Coleman & Cohn, 2009). Because interest expense is tax deductible, debt is less costly than equity as a source of capital. Therefore, firms act to minimise the cost of capital and maximise the value of the firm by financing with debt.

According to Miller and Modigliani (1963:435) a firm should have 100% debt in its capital structure. This way the firm can take absolute advantage of the tax-shield. Scott (1972:45-60) and Kraus and Litzenberger (1973:911-922) point out that theoretically 100% tax shield does not exist in reality because of distress costs. The main argument of these researchers is that debt leads to a legal obligation to pay interests and principal. If a firm cannot meet its debt obligations it is forced into bankruptcy and incurs associated costs. The temptation of possible tax shields from debt financing may encourage firms to use debt in their capital structures. However the opposing force of the costs of bankruptcy may force the firm to avoid debt. Therefore, the optimization of capital structure involves a trade-off between the present value of the tax rebate

associated with a marginal increase in leverage and the present value of the costs of bankruptcy.

Empirical studies such as Ruland and Zhou (2005:279) and Robb and Robinson (2009) agree with Miller and Modigliani (1963:436) that the gains from leverage are significant, and that the use of debt increases the market value of a firm. Financial leverage has a positive effect on the firm's return on equity provided that the earning powers of the firm's assets (the ratio of earnings before interest and taxes to total assets) exceeds the average interest cost of debt to the firm. Other studies such as Negash (2001:115) and Phillips and Sipahioglu (2004:33) conclude that the tax benefits of leverage are insignificant. Negash (2001:118), for instance finds that the use of debt has been found to have a negative impact on the profitability of the firms quoted on the Johannesburg Stock Exchange.



The biggest contribution of this theory is, however, the fact that the optimal capital structure of businesses varies. It depends on the stability of sales, the operating leverage and the size and stability of profits (Brigham & Houston, 2003:51) A typical SME has low profits, unstable sales and often a high operating leverage, implying a low level of debt. Balkenhol and Evans-Klock (2002) for instance point out that SMEs, especially new ones in South Africa, are faced with many difficulties regarding their return on investment. Amongst these is the dual nature of the economy, where SMEs, often, have to compete with established multi-national firms in the same sector. In South Africa, most sectors are concentrated around a few large firms. Consequently, SMEs face the constraints of entering a highly competitive market, and this affects their ability to make profits from their investment.

Modigliani and Miller (1963) suggest that firms should use 100% debt in their capital structures because of the tax advantage of debt. Sogorb Mira (2002) finds that the fiscal advantage of debt cannot be applied to the SME context because SMEs are less likely to be profitable and therefore may not be able to use debt in order to get tax shields. Moreover, the main advantage of debt, the tax shield, can be especially complex to

assess in SMEs where business income is taxed as personal income. Abor (2004:62) also criticises the Modigliani & Miller theory because it assumes owners' goals are targeted only at maximising profits. Many SMEs do not have profit motives. Barbosa and Moraes (2004) in addition argue that the works of Modigliani and Miller (1958, 1963) assume that investors and managers have access to the same information in respect of a firm. This assumption, which may hold for large listed firms, may not hold for SMEs which are mainly unlisted. Information on the financial health of the SME is often incomplete, inaccurate or simply unavailable. This asymmetric and incomplete information between the owners and the lenders causes potential debt financing problems for SMEs. According to Andree and Kallberg (2008) the usability of the trade-off theory of capital structure is limited for SMEs.

In addition, Daniel, Masli, Rahman and Selvarajah (2006:210) point out that in the case of SMEs the expected costs of bankruptcy is quite high and the expected costs of financial distress may outweigh any potential benefits from the tax shield. Furthermore, the cost of insolvency is high because many SMEs do not have fixed assets that are easily marketable. Also, the advantage of the tax shield of debt is limited for SMEs. SMEs have limited revenues and the variability of their operating income can be quite volatile. SMEs rarely generate profit in the early stage of operations, and the potential benefit of tax shields of interest payments remains doubtful.

It can therefore be deduced that SMEs, because of their low profitability and high bankruptcy costs, should use debt sparingly which is inconsistent with Modigliani and Miller (1963). Firms with lower levels of profitability have less use for debt-tax. It must however be pointed out that SMEs in financial distress are more failure prone than established firms. The debt-tax shield is thus less valuable for SMEs. Because of the combination of these factors, it can be concluded that the static trade-off theory is not a first-order consideration for SMEs. This implies that SMEs, especially new ones, will have to rely only on internal equity which is often inadequate as a source of capital. The limitations of static trade-off theory suggest the reliance on internal equity by SMEs. Yet,

the reality for growing SMEs is a reliance on debt and external equity because of the inadequacy of internal equity (Frelinghaus, Mostert & Firer, 2005:9).

Berger and Udell (2006:2948) observe that almost fifty years have passed since the seminal works of Modigliani and Miller (1958 and 1963) on the importance of capital structure, yet the seemingly simple question of how firms should best finance their assets remains a contentious issue. The empirical evidence regarding a firm's optimal mixture of financing during this time period is both voluminous and mixed in aggregate. Although there is no consensus, two other competing theories have emerged. These are the agency theory and the pecking order theory.

3.3.1.2 The agency theory

Jensen and Meckling (1976:306) identify two types of agency conflicts. The first focuses on the conflict between shareholders and managers and the second on the conflict between equity holders and debt holders. Conflicts between shareholders and managers arise because managers do not hold total residual claim thus they cannot capture the entire gain from their value-maximising activities. According to Falkena *et al.* (2002) and Padachi, Narasimhan, Durbarry and Howorth (2008:45) the agency theory gives vital insights into the problems of ownership, management interrelationships and credit rationing. Issues around information asymmetry, moral hazard and adverse selection are likely to arise in contractual arrangements between firms and external providers of finance. For a large enterprise the evaluation of an application for finance may be limited to the assessment of an (audited) set of financial statements (information asymmetry) and supporting documentation provided by the applicant. For SMEs the assessment frequently has to go far beyond this, implying a substantially higher transaction cost.

According to Stiglitz and Weiss (1981:394) agency problems such as asymmetric information and moral hazards can impact on the availability of credit and hence the capital structure of SMEs, especially new ones. Stiglitz and Weiss termed this phenomenon credit rationing. In the Stiglitz & Weiss formulation, credit rationing is said

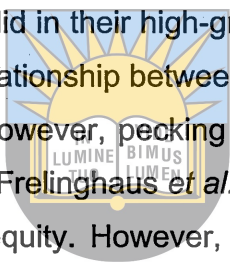
to occur if (1) among loan applicants who appear to be identical - some receive credit while others do not; or (2) there are identifiable groups in the population that are unable to obtain credit or can only obtain credit at much higher prices. The crux of the argument is that suppliers of finance may choose (due to asymmetric information, adverse credit selection and monitoring problems) to offer an array of interest rates that would leave a significant number of potential borrowers without access to credit. The Stiglitz and Weiss' theory therefore suggests that there are significant numbers of SMEs that could use funds productively if they were available, but cannot obtain finance from the formal financial system.

Conclusively, the agency cost theory argument suggests a pattern of relationship for the capital structure of SMEs. The pattern of the relationship is low-high-low. This implies low amount of debt at the beginning, high debt as the firm develops and low debt at prime when the firm would have accumulated some retained earnings. In terms of agency cost theory, SMEs are expected to have the least debt and thus depend on internal equity and that debt levels will gradually increase as the firm develops and becomes established. Frelinghaus *et al.* (2005:10) disagree with the pattern of relationship suggested by the agency theory. The authors argue that whilst it is true that firms in latter stages do, in fact, have more debt than firms in prime, agency theory cannot explain why firms in the early stages of development, with managers owning more of the firm, have more debt than firms in prime. The same authors suggest that internal equity is inadequate for SMEs, external equity is unavailable, hence the reliance of SMEs on debt finance.

3.3.1.3 The pecking order theory

According to Myers (1984:575) the pecking order theory (POT) suggests that there is no well-defined optimal capital structure; instead the debt ratio is the result of hierarchical financing over time. The pecking order theory of finance states that firms use internally generated funds in the form of retained earnings before turning to external sources. When retained earnings are exhausted, firms will first seek out sources of debt and will use more costly external equity only as a last resort (Coleman & Cohn, 2009).

Empirical evidence such as Lopez-Gracia and Aybar-Arias (2000:58), Sogorb Mira (2002) and Ou and Haynes (2006:160) support the applicability of the POT in explaining the financing of SMEs. These studies emphasize that small firms rely on internal sources of finance and external borrowing to finance operations and growth, and only a very small number of firms use external equity. The most important sources of funding for start-up and nascent firms are the personal funds of the firm owner, and debt funding. According to the pecking order theory, firms in infancy with little retained earnings should seek the maximum available debt funding before resorting to external equity. Prime and stable firms, in contrast, generate substantial retained earnings and therefore need less debt than they did in their high-growth phase. Pecking order theory, therefore, also suggests a strong relationship between life stage and capital structure. In contrast to static trade-off theory, however, pecking order theory suggests a high-low-high pattern of debt ratio over time (Frelinghaus *et al.*, 2005:13). This suggests that new SMEs should depend on internal equity. However, most SMEs do not have retained earnings and so have to depend on debt which is the next source of funds in the pecking order hierarchy.



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Fama and French (2002:5) believe that POT may provide an appropriate description of SMEs financing practices and that the order in which capital is raised may be affected by many factors, such as preference, cost, need for capital, and availability of information. Zoppa and McMahon (2002) argue that initially POT sought mainly to explain the observed financing practices of large publicly traded corporations. However, it was soon recognized that the theory may also apply to the financing practices of non-publicly traded SMEs that might not have the additional financing alternative of issuing external equity finance.

The pecking order theory argues that firms should use internal finance first before moving into external finance. Furthermore, when using external finance debt should be used before new equity. Contemporary finance researchers such as Crnogoj and Mramor (2008) however find that SMEs, especially in developed countries, use internal equity together with debt at start-up. This is termed the modified pecking order theory.

According to Statistics Canada (2007) 45% of SMEs are able to access commercial loans, 44% commercial lines of credit, and 42% trade credit. It seems however that the modified pecking order hypothesis is limited to developed countries. In developing countries such as South Africa, most SMEs still find it very difficult to access debt finance. FinMark Trust (2006) finds that less than 1% of new small firms in South Africa are able to access debt finance.

In general, the static-trade off theory and the pecking order theory all suggest the use of internal equity as the first source of finance by SMEs. However, as pointed out by Frelinghaus *et al.* (2005:13) the two theories also realise the inadequacy of owners' contribution and the lack of retained earnings because of the newness of the SMEs. In addition, external equity is expensive and not usually available to SMEs, hence their reliance on debt finance. For many privately-held small businesses, the decision to finance with debt rather than equity may be driven at least as much by necessity as by choice, because small firms do not have the same access to capital that larger public firms do. They are unable to issue publicly-held debt or equity because of their small size and the high cost of issuing securities. As a result, small firms tend to be heavily reliant on debt in the form of bank financing and trade credit (Coleman & Cohn, 2009). This suggests that the underlying theories for SME financing are the trade-off theory and the pecking order theory.

As pointed out by the various capital structure theories, the sources of finance for SMEs are equity and debt. Equity can be divided primarily into two types; internal and external. Section 3.3.2 will examine the various sources of equity and section 3.3.3 will examine debt available to SMEs.

3.3.2 Equity

Forsyth and McMahon (2002) point out that the finance theory is equivocal in its description of the use of equity finance by SMEs. The pecking order theory suggests a preference for internal equity and an aversion to external equity, but provides not a priori prescription for the overall capital structure. The firm life-cycle theory also

suggests that SMEs should start operations with internal equity before moving to other sources of finance. Equity can be described as any financing vehicle that has a residual claim on the firm, and does not create a tax advantage from its payments; has an infinite life; does not have priority in bankruptcy, and provides management control to the owner. Equity implies the owners' financial contribution to the firm on which dividends are paid. Equity holders are the real owners of a firm. Equity holders are also called residual owners, because they receive what is left after all the claims on the firm's assets and incomes, such as debenture interests and preference share dividends, have been satisfied. They are, therefore, compensated with capital gains and dividends. Equity can be broadly divided into internal equity and external equity.

3.3.2.1 Internal equity

According to Ou and Haynes (2006:157), internal equity which can be described primarily as owners' contributions, contributions from family and friends and retained earnings, is used more widely by SMEs. The owners of an SME contribute what is known as 'sweat equity' to the firm. It is important for the firm owner to have some personal assets in the business, and this typically comes from personal savings. Also a banker or any credit provider may not grant credit to an SME if the owner does not have his or her own money at risk. In addition, contribution from friends and family is another important source of finance for especially new SMEs. This form of contribution is often called "love money" which can consist of outright gifts, loans or investments. This kind of contribution often comes in the form of delayed compensation or reduced or free rent. Ou and Haynes (2006:158) add that a firm's demand for capital arises when the expected cash inflow falls short of the expected cash outflow. The capital needs can be fulfilled by either debt capital or by equity capital. Internal equity capital provides long-term funding with minimal cash flow drains typically associated with debt financing. Internal equity enhances the creditability of an SME when sourcing for external finance. According to the life cycle theory as explained in Bhaird and Lucy (2006) and Bhaird and Lucy (2008:312) SMEs tend to draw initial capital from internal sources. The life cycle theory suggests that internal equity is the most important source of finance at start-up. Debt finance is used later but retained earnings (also internal equity) are the

most important source of finance when SMEs become established. This implies that the only initial source of funding of a new small firm is internal equity and is contrary to the modified Pecking Order Theory, which finds that most SMEs use both external debt and equity when starting a business.

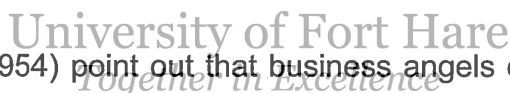
Bollingtoft *et al.* (2003:536) postulate that internal equity has several advantages over debt for an SME. Internal equity can help an SME in maintaining control of the firm. Management of a small firm would prefer to finance the firm's needs from generated funds rather than external creditors or even new stockholders because they would like to have control of strategic decisions. SMEs also avoid venture capital because they fear losing control of the firm. Debt restricts managerial flexibility in decision making as creditors will stipulate terms of a debt agreement. This is even more pronounced in new and developing small business ventures. Their credit lines will not be as strong as those of larger firms. Lenders, therefore, will demand stricter control of the terms of a credit agreement. In addition, investors' perceived risk of an SME can be influenced by the contribution of owners as shown in the financial plan. Potential investors may be more likely to invest in a project if the entrepreneur is investing his own capital. This will improve the credibility of the project. Aronson (2006) finds that there is a significant positive relationship between the availability of equity and venture capital funding for SMEs.

Carpenter and Peterson (2002:300) state that an SME often needs to source external funds to finance growth as internal equity is often limited and inadequate. Therefore, there is the need for SMEs to source external equity or debt finance. Furthermore, most SMEs have little or no retained earnings because of their newness in the market.

3.3.2.2 External equity

External equity implies equity contribution from external sources such as business angels, venture capitalists and the stock exchange. According to Berger and Udell (2006:2953) venture capitalists are firms who make equity investments in firms with an opportunity for growth. Venture capitalists are formal business entities that maintain

strong oversight over the firms they invest in, and that have clearly defined exit strategies. The ultimate intention of a venture capitalist is to sell the SME or to nurture it to the extent that it can become a publicly listed firm. This allows a venture capitalist to realize his or her investment in the small firm. Venture capitalists look for a management team with a substantial track record and an ability to take the company to the next level of growth. The business opportunity must be substantial and profitable, and the product innovative. The potential for growth, feasible exit options and a feasible business plan will also be taken into consideration. The venture capital market is intermediated. Venture capitalists perform the typical functions of financial intermediaries, taking funds from a group of investors and deploying those funds by investment in SMEs. In addition to screening, contracting and monitoring, venture capitalists also determine the time and form of investment exit. In performing these functions, the venture capitalist is the consummate active investor, often participating in strategic planning and even occasionally operational decision-making.



Berger and Udell (2006:2954) point out that business angels on the other hand, are a diverse group of high net worth individuals who invest part of their assets in high-risk/high-return entrepreneurial ventures. They are usually wealthy investors who are willing to invest in promising early stage firms in exchange for a portion of the firm's equity. As equity partners, business angels can bring specific skills into a business. They may also be prepared to be involved in the development of the business, and be prepared to take higher risks than most investors. Potentially, they enjoy the highest returns if the business does well, but should equally be prepared to lose their entire investment if the business fails. Angel finance differs markedly from most other categories of external finance in that the angel market is not intermediated. Instead, it is an informal market for direct finance where individuals invest directly in small companies through equity contracts, typically common stock.

SMEs can also source for equity investments through the stock exchange. In South Africa, the Alt X was launched in October 2003 as a parallel market to the Main board of the Johannesburg Stock Exchange (JSE). The Alt X is specifically aimed at attracting

SMEs to list on the JSE. The intention is to contribute to the sustainable growth of the South African economy by providing growth opportunities for SMEs. The Alt X is a partnership between the JSE limited and the Department of Trade and Industry. It gives SMEs the opportunity to issue new shares, raise capital, widen investor base and have their shares traded in a regulated market (Johannesburg Stock Exchange, 2009).

Despite the many sources of external equity for new SMEs, access to external equity remains a major constraint for new SMEs. This phenomenon is termed the equity gap.

3.3.2.3: The equity gap

According to Harding and Cowlings (2006:116) the equity gap is described as the situation where there is a shortage of equity investments during the initial stages of a firm's life-cycle. Discussions on the equity gap for SMEs have been ongoing since the MacMillan Committee Report in the United Kingdom in 1931, generally known as the MacMillan Gap. The report highlighted a perceived structural failure within the capital market to meet the long-term investment needs of SMEs. Other reports such as the Bolton Committee (1971) and the Wilson Committee (1979) confirm the existence of an equity gap for SMEs.

Forsaitth and McMahon (2002) point out that an additional factor impacting on the financial structure of SMEs is the limited availability of certain sources of funding to SMEs. External equity finance in the form of venture capital is generally unavailable to SMEs without strong growth prospects. This includes both venture capital funds and wealthy individual investors known as business angels. Widespread access to external equity through public listing on the stock exchange is unavailable until the firm is relatively large and is able to meet the minimum size requirements for listing. For most SMEs, the only feasible source of equity funding apart from owners contribution is contribution from relatives and friends, thus internal equity.

According to Shane and Cable (2002:365) access to venture capital is very limited for SMEs in both developed and developing countries. Less than 1% of SMEs in the United

Kingdom had financial input from venture capitalists. In the United States, venture capitalists provide only 1.85% of funding requirements of SMEs. In fact, the odds that an SME in the United States will get venture capital money are about 1 in 4,000. Venture capital funds also provide a small proportion of equity funding for SMEs in South Africa. Table 3.1 depicts venture capital as a proportion of the gross domestic product (GDP) in South Africa and some selected developed countries. South Africa has venture capital as percentage of GDP of 1.5%, which is higher than what is available in some developed countries such as the Netherlands (0.9%), Australia (0.4%) and Sweden (0.7%), but lower than Israel (5.9%), USA (4.1%) and U.K (3.2%).

Table 3.1: Venture capital as % of GDP in selected countries

Country	Private equity & venture capital as a % of GDP
South Africa	1.5%
Israel	5.9%
USA	4.1%
UK	3.2%
Netherlands	0.9%
Australia	0.4%
Sweden	0.7%

Source: South African Venture Capital Association (2008).

According to the South African Venture Capital Association (2008) there are at least 65 venture capital funds in South Africa controlling a total of R29 billion with an average investment size of R15.4 million. However, investments with an SME focus are approximately R1.1 billion which is only 3.8% of the funds.

Venture capitalists argue that it costs them virtually as much to perform due diligence analysis on a small investment opportunity as it does on a large one. Therefore, they find it more cost efficient to concentrate on the larger opportunities. SMEs that intend to grow should thus look for other sources of finance (Falkena *et al.*, 2002). In addition, Equinox Management Consultants (2001) find that the major reason why venture capital funds are not investing in SMEs is that they (SMEs) are not investment ready. The number of proposals received by venture capital firms frequently outweighs their

capability to manage them relative to their staff size. Most proposals go through an initial screening phase to determine if they meet the criteria for investment by venture capitalists.

Apart from the low access to venture capital by SMEs, access to other forms of external equity such as the stock exchange or the public equity markets is also very limited. Balkenhol and Evans-Klock (2002) note that instruments listed on the Johannesburg Securities Exchange (JSE) may not be appropriate for SME financing. The control of the JSE is quite strict. The JSE is the biggest stock market in Africa and any perceived increase of risk by role-players may taint its reputation. The fact that even established SMEs find it difficult to list on the Alt X suggests that the exchange will not improve the availability of external equity to SMEs. Berry *et al.* (2002) agree that in South Africa, SMEs do not have the option of issuing shares in the capital market. Owing to their inability to access the public equity markets, SMEs tend to be heavily reliant on debt finance as their only source of external financing.

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Due to their inability to access the public equity markets (equity gap), SMEs tend to be heavily reliant on debt finance as their only source of external financing. Section 3.3.3 will discuss and how commercial banks handle the whole debt issue.

3.3.3 Debt

Gitman (2003:410) describes debt as any financing vehicle that is a contractual claim on the firm, creating a tax deductible interest payment, has a fixed life and has priority claims on cash flows in both the operating and bankruptcy periods. Bankruptcy occurs when the total liabilities of a firm exceed its total assets. The priority claim of debt implies that debt has to be serviced (principal and interests paid) irrespective of whether the firm makes a profit or not. The duration of debt is determined at inception, and if a firm becomes insolvent and its assets are sold, the debt holder will be paid before the equity owners are paid. The principal sources of private sector debt for SMEs are commercial banks and trade creditors.

- **Commercial banks**

According to Coleman and Cohn (2000:85) commercial banks are a principal source of debt finance for SMEs. Commercial banks offer SMEs a wide range of services in their own right or through wholly or partially owned subsidiaries. These services cover every aspect of the financial market such as overdraft facilities, term loans, trade bill financing, factoring, leasing, export and import finance, and even government loan guarantee schemes. Commercial banks are in a better position to gather information on SMEs through established relationships, which they and their staff have with SMEs and their owners. In addition, commercial banks have extensive branch networks that can be accessed by SMEs even in remote locations. Furthermore, the financial conditions of small firms are usually rather opaque to investors, and the costs of issuing securities directly to the public are prohibitive for most SMEs. Thus, without financial intermediaries like banks it would simply be too costly for most investors to learn the information needed to provide the credit, and too costly for the small firm to issue the credit itself. Banks, performing the classic functions of financial intermediaries, solve these problems by producing information about borrowers and monitoring them over time, by setting loan contract terms to improve borrower incentives, by renegotiating the terms if and when the borrower is in financial difficulty.

Feakins (2005:56) points out that overdrafts and term loans are the two major products offered by commercial banks to SMEs. Overdrafts are the most common type of short-term finance whereby a small firm is allowed by a bank to run a current account into deficit up to an agreed limit. Overdrafts are flexible in that the borrower uses the facility only when the need arises and, as a result, does not borrow redundant funds. Deposits can create a positive balance, again. The overdraft is useful to a firm in meeting temporary financial needs. It is, normally granted to finance transactions that will generate cash flows in the near future. Interest is calculated only on the overdrawn daily balances, and not on the debt limit. The facility is, normally, repaid as cash flows back into the firm. Overdrafts are technically repayable on demand and, therefore, must be matched with short-term working capital needs and not long term fixed asset investment in plant and machinery.

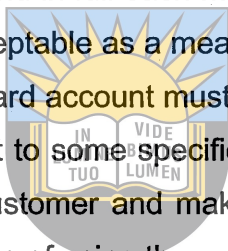
Similarly, Hogan, Avram, Brown, Ralston, Skully, Hempel and Simonson (2001:315) and Nieman (2002:241) state that the products offered by commercial banks to SMEs include leasing, hire purchase and credit cards. Leasing enables a firm to obtain the use of certain fixed assets, for which it must make a series of contractual, periodic, tax-deductible payments. The lessee is the receiver of the assets under contract, and the lessor is the owner of the assets. A lease can be described as a contractual arrangement in which the lessor of an asset (usually a bank) becomes the owner of an asset by paying the supplier the total cost of the asset. The lessee has complete use of the asset but does not own it, and does not need to find funds to purchase it. The most important principle of leasing is that the asset must be used for productive activity.

Viney (2007:45) points out that leasing can be classified into two categories, namely an operating lease and a financial lease. An operating lease is a contractual arrangement whereby a lessee agrees to make periodic payments to the lessor for a period of five years or less to obtain an asset's services. Such leases are cancellable at the option of the lessee who may be required to pay a penalty for cancellation. Assets, which are leased under an operating lease agreement, have a usable life longer than the lease period, and could become technologically obsolete and less efficient if leased for a longer period. The lessor usually assumes the responsibility for the maintenance and insurance of the assets. A financial lease is a long-term lease that is non-cancellable and obligates the lessee to make payments for the use of the assets over a predetermined period of time. With financial leases the total payments over the lease period are greater than the lessor's initial cost of the leased assets. The lease agreement, which falls under the financial leasing category, usually allows the lessee the option of buying the asset at the termination of the lease. Maintenance and insurance of the asset are usually the responsibility of the lessee (Hogan, Avram, Brown, Ralston, Skully, Hempel & Simonson, 2001:316)

Gitman (2003:65) notes that another product offered to SMEs by commercial banks is factoring. In factoring, a bank, also known as a factor, buys selected accounts receivable from its borrowing customers at a percentage of their face value. Factoring is not a form of collateralised lending, but rather an outright purchase of the customer's

assets. Small firms that have limited assets to offer as security on a term loan are increasingly using factoring. Factoring costs to a small firm include commissions charged by a bank, interest levied on advances by a bank, and cost savings made by the firm.

Furthermore, as pointed out by Feakins (2005:58) and Bertocco (2007:102) SMEs may turn to alternative sources of bank debt financing if they find themselves unable to obtain traditional forms of bank credit. Credit cards are a form of non-traditional bank credit. Credit cards can serve as a convenient alternative to paying expenses in cash if a business pays balances on time and in full each month. Credit cards do not constitute money, despite being generally acceptable as a means of payment. They are quick and easy loan transactions. The credit card account must be settled by the cardholder at the end of a particular month or at least to some specified minimum amount. In addition, a credit card serves to identify the customer and makes pertinent information about the customer available when the privilege of using the card is exercised.



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- **Credit evaluation by commercial banks**

Berger and Udell (2002:2129) postulate that commercial banks handle lending to SMEs by using five main technologies. The first technology is financial statement lending. Financial statement lending involves underwriting loans based on the strength of a borrower's financial statement. There are two requirements for this technology. First, the borrower must have informative financial statements (e.g. audited statements prepared by reputable accounting firms according to widely accepted accounting standards such as GAAP). Second, the borrower must have a strong financial condition as reflected in the financial ratios calculated from these statements. The loan contract that arises out of the analysis of these financial statements may reflect a variety of different contracting elements including collateral, personal guarantees and/or covenants. However, under financial statement lending, the lender will view the expected future cash flow of the company as the primary source of repayment.

Financial statement lending, unlike all of the other lending technologies, is reserved for relatively informational transparent firms. For these firms, financial statement lending

provides a distinct advantage; the informativeness of the financial statements addresses the information problem in a very low cost manner and financial statement lending underwriting and monitoring is based on hard information. Importantly, however, the efficacy of financial statement lending depends crucially on the lending infrastructure. Specifically, it depends on the existence of a strong information environment, particularly with respect to accounting standards and credible auditors. Thus, it seems likely that it is not feasible for financial institutions in many developing economies to offer a substantial amount of financial statement lending (Berger & Udell, 2002:2128).

Small business credit scoring is a transactions lending technology based on hard information about the SME and its owner. The information on the owner is primarily personal consumer data (e.g. personal income, debt, financial assets, and home ownership) obtained from consumer credit bureaus. This is combined with data on the SME collected by the financial institution and in some cases from commercial credit bureaux. The data are entered into a loan performance prediction model, which yields a score, or summary statistic for the loan. The key motivation for using this technology may often be its low cost as external providers typically charge a modest fee for each score (Berger & Udell, 2002:2128).

Under asset-based lending, the financial intermediary looks to the underlying assets of the firm (which are taken as collateral) as the primary source of repayment. For working capital financing, banks use short-term assets, such as accounts receivable and inventory. For long-term financing, they use equipment. Under asset-based lending the extension of credit is primarily based on the value of specific borrower assets rather than the overall creditworthiness of the borrower. Under asset-based lending, the amount of credit extended is linked to the value of the collateral on a formula basis to a dynamically managed estimation of the liquidation value of the underlying assets that are used as collateral (i.e., the accounts receivable, inventory and equipment). Thus, asset-based lending is a transactions-based technology based on hard information generated nearly continuously about the value of the assets (Berger & Udell, 2002:2130)

Degryse and Cayseele (2000:95) postulate that relationship lending is designed to address information problems that are not feasible or cost-effective. The primary information used by lenders is based on "soft" information about the relationship between the lender and the borrower. Its emphasis on soft information distinguishes it from all of the other technologies. Under relationship lending, the lender acquires proprietary information about the borrower and the business over time with respect to the provision of loans. Relationship lenders collect information beyond that which is available on the firm's financial statements and information that is readily available to the public. This includes information on the entrepreneur's local community/business environment and the entrepreneur and the SME's interaction with that environment. The labour-intensive nature of relationship lending likely makes it quite costly. These costs may be passed on to the borrower in the form of higher fees and a higher interest rate.

For SMEs in information rich environments, small business credit scoring may be feasible. In very strong lending environments, asset-based lending may be feasible for those borrowers with good quality accounts receivables, inventory and/or equipment. Factoring is feasible even in weak lending environments, but it depends on the existence of high quality receivables. Thus, for opaque SMEs for whom small business credit scoring, asset-based lending or factoring are not feasible or cost-effective, relation lending may be the best alternative (Berger & Udell, 2002:2135).

According to Hawkins (2002:525) banks have some credit criteria that they follow in evaluating loan applications of clients. Bbenkele (2007:14) agrees that SMEs are expected to meet certain criteria for the banks to be able to assist them with their financial needs. For these roles to be fulfilled, it is important that expectations from both parties are well understood by both the SMEs and the commercial banks.

Arthur (2009) asserts that one of the most common questions among small business owners seeking financing is: "What will the bank be looking for from me and my business?" Banks follow certain principles in evaluating credit applications and making credit decisions. The purpose of any credit assessment or analysis is the measurement of credit risk. Borrowers' credit assessment is done using the five Cs of lending; character, capacity, capital, conditions and collateral. The principle of the 5 Cs of credit

is to establish the creditworthiness of a borrower. The concept if correctly applied seeks to evaluate the key criteria of repayment ability, by analysing the stream of cash flows, the character of financial discipline, and the financial health of the borrower and other qualitative factors. Willacy (2009) states that the 5Cs of credit include:

- **Character**

The character of the borrower indicates two things; the ability to pay versus the willingness to pay. The ability to pay refers to the borrower's financial credibility to pay. A good character is one that has the ability and a willingness to pay. Measures of character include managerial experience and track record of integrity and repayment.

- **Capacity**

Capacity refers to the sources of repayment, i.e. the cash flow. The borrower must be able to meet all his financial obligations on the due dates. Capacity is the ability to repay the loan together with interest as per the pre-determined schedule. A borrower's capacity depends on two factors; first, the borrower's financial position should be sound, and second, the borrower must be able to generate sufficient net income to service the loan repayment. In the case of businesses, lenders usually ask for audited financial statements and projected cash flows to determine the financial soundness or creditworthiness of the business borrower.

- **Capital**

Capital refers to the capital contribution that the borrower proposes to make in the total investment. An investment is usually financed partly by bank loan and partly by the capital contribution of the owner. The owner's contribution is called the owner's margin. The greater the owner's contribution to a project the greater is the lenders' confidence in the venture.

- **Collateral**

Collateral is the lender's second line of defence. If the payback is derived from cash flows, then the collateral will not be liquidated for repayment. Collateral is also known as a secondary source of repayment. When a loan cannot be paid out of primary sources,

lenders usually take possession of collateral and dispose of it and use the proceeds to offset the outstanding loan amount.

- **Conditions**

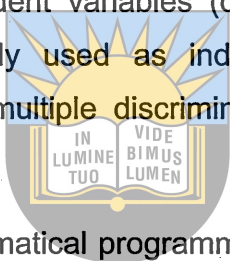
Condition refers to the external environment of a business. The external environment is systemic and largely uncontrollable by SMEs. Factors in the external environment include the economic environment, the legal environment, government regulations, ethical perception, crime and corruption.

Pretorius and Shaw (2004:230) further categorise the 5C's of credit evaluation into objective and subjective criteria. Criteria that could be measured (ratios and values) are rated as objective and those where opinion or judgment was the main contribution to the decision is rated as subjective. Objective measures include capital and collateral as measured by owners' cash contribution, collateral, business plan, marketing and growth potential of the business. Subjective variables include the usefulness of the business plan and whether the owner understands the content of the plan, competent management structure, crime as well as the failure rate of businesses in the area in which the business is located, the feasibility of the business in terms of competition, viability, demographics, location, access, transport and security as well as the economic environment.

According to Willacy (2009a) credit evaluation is now a combination of the traditional method (the five C's) and the modern approach to credit risk management. The measurement and management of credit risk have undergone a revolution in recent years. The advances in technology have enabled financial engineers to try new methods of model building and analysis for credit risk measurement. Several factors have contributed to this recent surge in technology based analysis methods. Increased competition in the loan market necessitated the development of methods that are quicker, more accurate and more cost effective. Consumer expectations have increased and most consumers now expect efficient loan approval from financial institutions. Where lending institutions have been found to be a little tardy, consumers have shifted to other institutions. Loyalty is less and less evident among consumers. Banks now

need methods of credit assessment that cater to the changed customer needs. Also in recent years, bankruptcies and global competition have increased, so accurate credit analysis has become more important. In addition, banks want to reduce the cost of lending. Modern approaches help to achieve this aim. The more commonly used modern approaches to credit analysis include the following as pointed out by Willacy (2009a).

- Econometric techniques (credit scoring) involved in the modelling of the probability of default. This probability is used as a dependent variable (effect) whose variance is explained by a set of independent variables (cause). Financial ratios and other external variables are generally used as independent variables. Econometric techniques include linear and multiple discriminant analysis, multiple regression, logit analysis and probit analysis.
- Optimisation models use mathematical programming techniques to minimise lender error and thus maximise profits.
- Neural networks try to emulate the human decision-making process using data as used in econometric techniques.



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Willacy (2009a) concludes that most banks use a combination of the traditional and modern credit evaluation techniques when making decisions about credit applications.

3.3.4 Trade credit

According to Selima (2007:17) trade credit theories can be broadly classified into four main groups. These are asymmetric information, transaction costs, price discrimination and finance. The asymmetric information theory occurs when sellers face uncertainty about their customers' creditworthiness and financial health. Because of asymmetric information sellers cannot reliably make the best selling decisions. Likewise, when buyers face uncertainty about their suppliers' products/services they cannot confidently make the best purchasing decisions. In such circumstances, trade credit is used to deal with this asymmetric information problem. Buyers will have a sufficient period of time to investigate and assess the quality of the product and its value for money and to pay when they are satisfied. On the other hand, sellers will gather valuable information

about customers' financial health through their payment patterns and their abilities to take advantage of discounts for early payment when offered, and they will use credit periods as a signal to the market of high and consistent product quality or of long-term presence.

In articulating the transaction cost theory, Frank and Maksimovic (2004) argue that the combination of the supply of both goods and finance from one source can lead to cost advantages and to a reduction in transaction costs. Furthermore, when the transactions take place on credit, the timing of the payment is less uncertain which enables firms to improve their cash-flow forecasts and simplify cash management. In addition, if all bills are accumulated and paid for together, transaction costs are kept to a minimum. The unpredictability, which may be found in cash-based businesses and which may be due to fluctuations in daily sales (that result in unpredictable patterns of cash receipt) can be reduced through companies offering trade credit. According to the terms offered, suppliers have a better idea about when customers are likely to settle their bills. Better knowledge of customer behaviour gained from experience leads to better forecasts that reduce the need to carry large amounts of cash, and subsequently decrease the cost of holding precautionary cash balances.

Presenting the price discrimination theory, Selima (2007:18) contends that as demand for a product can vary, sellers can manipulate the product price through the variation of the credit terms offered to each separate customer. So varying the trade credit terms gives the seller a more flexible approach to pricing and to discriminate among customers, as it is much easier to adjust credit terms (based on the payment period) than product price in order to respond to fluctuating demand. Furthermore, there is a difference between offering credit terms and enforcing them. Suppliers may allow a customer to pay after the agreed date without a penalty; or they may vary their two-part-terms (discount for early payment) and offer higher discount rates to selected customers or even allow them to take an unearned discount. Thus, giving longer credit than that agreed or increasing the discount rate offered, is effectively the same as reducing the price of the product/service.

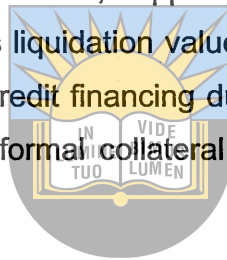
Providing explanation for the financing theory, Frank and Maksimovic (2004) state that when non-financial institutions offer credit, they play an intermediary role by obviating the need for buyers to obtain finance from their banks to pay for their purchases. Furthermore, customers that are rationed by financial institutions tend to turn to trade credit, considering it a cheap way of getting short-term funds. So suppliers that are financially sound and can relatively easily get access to external funds tend to play this intermediary role by financing their customers' stock through trade credit. Therefore, trade credit becomes an attractive way of obtaining required finance. Trade credit works as a facilitator, in that firms that are able to borrow do so and pass on the benefit to those that do not have access to funds in the same way.

What is trade credit? Huyghebaert, Van de Gucht and Van de Hulle (2007:436) point out that trade credit arises when a firm purchases goods and services for which payment is delayed. SMEs can make use of trade credit as a form of credit or as a convenient alternative to paying cash each time a purchase is made. It is a spontaneous source of financing, as it arises from ordinary business transactions. However, it is evident that a supplier who offers extended credit is likely to build the cost of such credit into the pricing structure of the goods or services. Trade credit is usually extended for an intermediate period of thirty to sixty days at which point payment is due. If payment is not made on the date, financing charges are applied and trade credit becomes an alternative method of financing business expenses. Frequently, suppliers will offer cash discounts typically one percent to two percent of the purchase price for early payment not more than fifteen days after delivery.

According to Huyghebaert *et al.* (2007:437) recent evidence from developing countries suggests that trade credit provides a signal to the availability of more bank loans to SMEs. Trade credit in economic environments with weak informational infrastructure and less developed banking systems can play an even more important role in SME financing because of its strength in addressing the information problem. SMEs face high failure rates in the early years of their life. This high failure rate limits their access to bank loans and they therefore tend to rely on their suppliers for financing. In addition, suppliers are more lenient than banks towards financially distressed firms. Banks tend

to follow a strict liquidation policy when debtors encounter financial distress; if upon default a borrower's liquidation value exceeds its going concern value, banks will liquidate the firm.

Suppliers, on the other hand, earn positive rents from selling goods to their customers. These rents arise from the profits suppliers can earn on future sales of their product to the client firm. If a customer is liquidated upon default, such supplier rents are lost. Suppliers therefore have an implicit equity stake in their customers and therefore are more willing than banks to renegotiate their claims or grant additional debt when debtors get into financial problems. In other words, suppliers may be willing to reorganise the defaulted debt even when the firm's liquidation value exceeds its going concern value. Therefore SMEs may prefer trade credit financing during the early years when the risk of default is high. In addition, any formal collateral does not usually guarantee trade credit.



Wilson and Summers (2002:330) note that trade credit, however, is considered to be an expensive financing source if payments are not made within the stipulated credit window. The credit term most frequently adopted by suppliers is "2/10 net 30". This term represents a 2% discount for payment within the 10-day discount period; the net period ends on day 30. Furthermore, the cost of the credit is usually imputed into the cost of goods sold on credit. This may indirectly make trade credit an expensive source of finance.

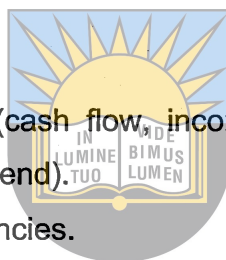
Berger and Udell (2006:2950) add that despite some of the disadvantages associated with trade credit; it is an extremely important source of finance for SMEs. Trade credit may also provide a cushion during credit crunches, monetary policy contractions or other shocks that leave financial institutions less willing or less able to provide small business finance. During these times, large firms may temporarily raise funds in public markets such as commercial papers and lend these additional funds to SMEs through trade credit. Since only a limited number of SMEs have access to loans from financial institutions, trade credit may often be the best or only available source of external funding for working capital.

- **Credit evaluation by trade creditors**

Willacy (2009b:156) notes that many of the procedures and processes associated with the other lending technologies appear to be utilised in underwriting trade credit. Credit scoring and similar quantitative techniques have long been a part of the underwriting process used by credit managers. For larger accounts, financial statements are analysed as part of the underwriting process. No doubt, soft information and mutual trust play a role in some trade credit underwriting similar to relationship lending.

According to Willacy (2009b:158) the criteria for lending by trade creditors are similar to those by banks and include:

- Acceptable financial conditions.
- Projected financial statements (cash flow, income statement and balance sheet, working capital and profitability trend).
- Any report from credit rating agencies.
- Acceptable bank and trade references.
- A statement of the legal composition of the customer (limited liability, close corporation).
- Management of the firm.
- Statement that customer is not operating under bankruptcy law or creditor protection.
- Verification that no significant collection lawsuits or judgments are outstanding which would seriously impact upon the customer's ability to remain solvent.
- If the customer fails to meet the above credit criteria, the trade creditor will require the customer to provide security.



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Despite the importance of both commercial banks and trade credit as sources of finance, their availability to SMEs is severely limited in South Africa as well as many developing countries leading to the debt gap.

3.3.4.1 The debt gap

According to Poutziouris, Wang and Chan (2002:385) the debt gap represents the problematic flow of debt from financial agents to SMEs. Debt finance is viewed as a

critical element for the development of SMEs. Lighthelm, Brink and Cant (2003) highlight the limited access to debt finance for SMEs in South Africa compared to established large firms. FinMark Trust (2006) points out that the incidence of loans and borrowing from the formal financial sector by SMEs in South Africa is extremely low. The main source of financial borrowing for SMEs is from family and friends.

In addition OECD (2006) argues that the debt gap is more pervasive for SMEs in developing countries compared to those in developed countries. SMEs in developed countries are able to obtain sufficient credit from banks and other credit institutions. In developing countries, by contrast, SMEs report widespread shortage of debt finance. Despite the fact that SMEs in general account for a large share of enterprises and employment in developing countries, they receive a very low share of credit from the formal financial markets. Foxcroft *et al.* (2002) in the Global Entrepreneurship Monitor South African Report point out that 75% of credit applications by SMEs to banks are rejected. In addition, the use of trade credit by SMEs in South Africa is virtually non-existent. The non-availability of trade credit, which could act as a substitute for bank debt has a further compounding effect on the debt gap (FinMark Trust, 2006). The situation is however markedly different in developed countries. The differences in the sources of finance for SMEs in developing countries (e.g. South Africa and Ghana) are graphically depicted in Table 3.2

Table 3.2: Sources of finance for SMEs in South Africa and Ghana

Sources of finance	South Africa (%)	Ghana (%)
Internal equity	78	82
Banks	5	6
Trade credit	1	4
Government	1	1
Other sources	17	7

Source: FinMark Trust (2006)

One noticeable finding from the table and figure is that internal equity, especially owners' contribution, is the major source of finance for SMEs as suggested by the static trade-off theory and the pecking order theory of capital structure. Empirical literature confirms however that SMEs which depend only on internal equity find it difficult to survive and grow. In addition, as suggested by the capital structure theories, the use of venture capital and other sources of external equity by SMEs is extremely limited in both developed and developing countries. Debt finance is relatively more available in developed countries than in developing countries. This reinforces the fact that external equity, especially from private investors or the stock market is not an available source of finance for SMEs. Therefore, improving the availability of debt finance is important to the survival of men and women owned SMEs.



3.4 SUMMARY

This chapter has examined the financing of SMEs in part general and in South Africa specifically. Small firms need capital to finance capital investments, working capital, product development and initial losses. The empirical literature revealed that investment in fixed assets by SMEs in South Africa is low compared to working capital. This may affect the ability of SMEs to give collateral for loans. In addition, capital structure theories such as the static trade-off theory and the pecking order theory and the agency theory were explored. The theories suggest internal equity is the cheapest and best source of finance for SMEs. However, internal equity is limited for most growing SMEs. In addition, external equity is not available and also very expensive. This suggests that debt finance is one of the financing options that SMEs (both male and female owned) can utilise. Determining the amount of debt SMEs should use is a huge debate. Debt should be used to finance working capital and that fixed assets are financed with equity.

The sources of finance for SMEs were divided into equity and debt. Sources of equity such as owners' contribution, contribution from family and friends and retained earnings (internal equity) were explored. Non-availability of external equity suggests that SMEs will often need to use debt, especially debt finance from commercial banks and trade creditors. The literature revealed that SMEs also find it difficult to access debt finance leading to a debt gap. For SMEs in South Africa debt and external equity are

unavailable. This implies a dependence on internal equity and hence the high failure rate of SMEs. The sources of the equity and debt gaps were also investigated. It is therefore suggested that debt finance is the best option for SMEs as they (SMEs) cannot rely entirely on internal equity and have no access to external equity.

This study has three primary objectives: To investigate whether there is a significant gender difference in the demand for and availability of debt finance to SMEs; To investigate whether there is significant gender difference in the firm and entrepreneurial characteristics of SMEs and to investigate if there is a significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance.

Chapter three examined the financing needs of SMEs. The next chapter will examine the firm and entrepreneurial characteristics of entrepreneurs and firms and how these characteristics can impact on the demand and the availability of debt finance to SMEs.



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CHAPTER FOUR

FIRM AND ENTREPRENEURIAL CHARACTERISTICS

“If women face different conditions and institutional constraints than men; these factors can spill over into their performance in entrepreneurship. A relatively new strand of entrepreneurship research raises the question “Does gender matter?” (Sabarwal & Terrell, 2008).

4.1 INTRODUCTION

The previous chapter considered the financing options of SMEs, based on the capital structure theories. It extensively discussed debt and equity as the sources of funding for businesses but concluded that the best option of the two is debt finance because of non-availability of external equity to SMEs. In order to access debt finance, owners of SMEs as well as their businesses need to have certain characteristics. These characteristics are assumed to be significantly influenced by gender. It is therefore imperative to review the literature about gender's effect on these characteristics. The characteristics are categorised as firm and entrepreneurial in nature. In section 4.2, the characteristics of firms and entrepreneurs and the gender effect on these characteristics with regard to access to debt finance will be discussed.

4.2 FIRM CHARACTERISTICS

Firm characteristics are traits or features specific to the firm which can affect positively or negatively the performance of the firm. Firm characteristics considered are firm size and business sector. Emphasizing the role of firm characteristics has become an increasingly important consideration in the empirical studies examining performance of firms. Firm size and business sector size seem to be important characteristics associated with systematic differences in firm performance. Based on this observation, it can be argued that understanding and identifying the source of firm heterogeneities is a key to making some progress in explaining differences in their performance. According to Harvie *et al.* (2010) the differences observed in firms' performance can be explained by some specific factors attached to the firms. There is no clear definition,

however, about which resources constitute the firm specific resources. Nevertheless, these resources can be defined to include all assets, capabilities, organisational processes, firm attributes, information, knowledge, etc that are controlled by firms. The most important element of these resources is that they are not available in the market but must be developed by firms. If firm heterogeneity matters in determining participation and performance of SMEs in production networks, the question is, what are the characteristics of firms that represent the sources of this heterogeneity? The firm size and business sector are the characteristics considered by this study.

4.2.1 Firm size

Research suggests that women-owned businesses are typically smaller than those owned by men (Triechel & Scott, 2006:54). Robb and Wolken (2002) found that women-owned businesses were significantly smaller than men-owned businesses in terms of employment, assets, and sales. Smaller businesses are considered to have greater difficulty in securing bank loans and they pay higher interest than larger businesses (Brau, 2002:277) argued that although gender is not a determinant of credit terms, it is highly correlated with the size of the business. Women-owned businesses are characterised as smaller, having less capacity, less capital, a narrower range of collateral, and an unproven track record/character relative to businesses owned by men. The suggestion is that women entrepreneurs start their businesses with little capital from their own savings as well as contributions from friends and family members and take up entrepreneurship as a necessity and not an opportunity. This may have an adverse effect on the perceived capacity of women to service or to repay their loans, and so they may face greater difficulty in obtaining credit. Smaller firms are less cost-efficient and possibly more risky, and so banks incur greater costs to evaluate and monitor small businesses. Treichel and Scott (2006:55) further note that for small loans, the profit margin is not justified by the costs, and so banks may decline loans to small businesses or make the terms more stringent.

Size has been argued to influence the approval and terms of loans to women-owned businesses (Coleman, 2002). The same author suggested that women-owned businesses may face a size disadvantage. Coleman (2002) state that women-owned

businesses are considered as being smaller than those of their male counterparts and lenders discriminate based on size, and so women-owned businesses obtain credit under less favourable terms than do businesses owned by men. Treichel and Scott (2006:56) noted that although they did not find a statistical difference in the number of employees of women and men-owned firms that secured loans, they found that the women-owned businesses had lower levels of liabilities and sales than businesses owned by men. However, no South African study has investigated whether gender differences exist in the size of SMEs.

4.2.3 Sector

Women-owned businesses are more likely to operate in retail and services than businesses owned by men (Robb & Wolken, 2002). This may influence the need for and type of credit used. Service based-businesses require little if any financing and retail businesses allow for the use of trade credit. Treichel and Scott, (2006:58) note that there is no significant gender difference in the industry in which the businesses operated among firms that secured loans. Watson and Robinson (2003) note that male and female entrepreneurs work in different sectors. Female entrepreneurs are overrepresented in the retail and service sectors particularly in personal services. Male entrepreneurs are overrepresented in manufacturing, wholesale trade and financial services. Female entrepreneurs are often found in supporting jobs or occupations. The business of female entrepreneurs can therefore be characterised as "supporting services," like secretarial, translation and processing activities, (Watson, 2003). This study will investigate empirically if gender difference exists in the business sectors of SMEs in South Africa.

Having discussed the firm characteristics in section 4.2, section 4.3 will examine entrepreneurial characteristics. The entrepreneurial characteristics focused on by this study are networking, managerial competencies, risk aversion and socio-cultural factors.

4.3 ENTREPRENEURIAL CHARACTERISTICS

Entrepreneurial characteristics are those traits or attributes that are specific to the owner of the firm which can impact on the performance of the firm negatively or positively. This study will investigate the effect of gender on entrepreneurial characteristics affecting the performance of SMEs such as networking, managerial competencies, risk aversity and the part-time entrepreneurship.

4.3.1 Networking

Networking by owner-managers of SMEs is deemed to enhance business performance. Networking, with its emphasis on informality and opportunism would seem to be an ideal mechanism for effectiveness in variable economic conditions (Ngoc Le & Nguyen, 2006:192). Networking is the process of making personal and business contacts for the purpose of building mutually beneficial relationships. It refers to the action by which an owner-manager develops and maintains contacts for trading and business development purposes. Chell and Baines (2002) note that any owner-manager of an SME can be conceived of as an intermediary in a trading relationship. They content that such is basic economic behaviour and in this sense normal business practice involves networking.

Networks are considered as the mechanism through which, resources (information and capital) are introduced by specific agents into a particular social field, and they move between individual agents located within a social field. Furthermore networks are the mechanisms through which individuals become connected to and positioned within that social field (Schirato & Webb, 2003). In this regard, networks play an active role in the ongoing development of individual and group identities. Because networks are always about social interaction and the positioning of individuals relative to each other, they are also about gender (Hanson & Blake, 2008). Men and women are embedded in different social networks and it is suggested that these differences lead to divergent economic consequences. Renzulli, Aldrich and Moody, (2002:530) used the Research Triangle Entrepreneurial Development Study to examine these social differences and found that women business owners included more kin in their business discussion networks than

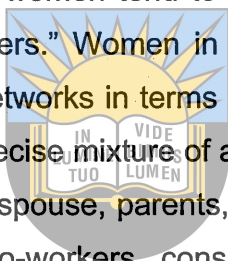
men did. By contrast, men owners included more coworkers in their networks than women. In fact, networking comprises social processes over and above the normal economic trading relationships. Gender continues to be an organising factor in social life. It is based in, as well as shapes patterns of social interaction as to whom one interacts with and the situations and processes of interaction. Hence gender differences in network compositions pose a disadvantage for women in the business world. Women who include greater proportions of kin in their discussion networks may secure greater social support than men, but at the cost of sacrificing the necessary instrumental support needed for economic development (Renzulli *et al.* 2002:540).

Gender is a system of social practices within societies that constitutes people as different in socially significant ways and organises relations of inequality on the basis of the difference (Fletcher, 2004). A considerable body of empirical research supports the contention that women's and men's network configurations differ significantly in a number of ways (Mcpherson, Smith-Lovin & Cook, 2001) Numerous studies have documented, for example, the lower levels of mobility and the greater spatial constraints in women's daily activity patterns compared with those of men (Mcpherson, *et al.* 2001) There is general agreement, however, that the ideal network will effectively link the individual to local as well as to extra-local people and organisations (Burt, 2004). Networks are important to entrepreneurship because they facilitate the efficient movement of resources (knowledge and financial capital) to entrepreneurs and of information about entrepreneurs to a wider community.

The diversity and composition of nascent entrepreneurs' social networks provides access to information and resources that change the likelihood of starting a business (Renzulli, *et al.* 2002:540). Nascent entrepreneurs are persons who are seriously attempting a business, a category that includes persons who are not currently business owners as well as existing owners. In this study, focus is on business start-ups. Research has shown that men tend to have more diverse networks than do women, which may provide subtle advantages to men. Renzulli *et al.*, (2002:544) cite Marsden (1987) that high diversity implies integration into several spheres of society, which is often advantageous for instrumental action. Networks that are diverse help people

reach other social realms and avoid redundant information. A redundant relation is one in which the same information or resource could be obtained from other relations.

In considering networking, this study concentrates on heterogeneity and kin composition and other social factors because the main thesis is that quality of ties facilitates business start-up. Heterogeneity is the most direct indicator of diversity of an individual's interpersonal environment (Renzulli, *et al.* 2002:533). Researchers have found out that men and women are embedded in different social networks and have suggested that differences lead to divergent economic consequences (Popielarz, 2001). The same studies have shown that women tend to nominate more kin as people with whom they “discuss important matters.” Women in the same social situation as men tend to have more homogeneous networks in terms of kin composition. The concept of network composition refers to the precise mixture of alters in a social network (Marsden, 2001). The category of kin includes spouse, parents, siblings, and in-laws. That of non-kin includes friends, neighbours, co-workers, consultants, and group or association members.



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Male investors are better networked than women in the sense of knowing more business angels and other sources of finance (Harrison & Mason, 2007). Empirical evidence indicates that 58% of males know more than 10 other angels compared with 48% of women (Harrison & Mason, 2007). The same research on networking shows that 39% of women and 32% of men did not know any women business angels and none of the women know more than five other women angels. Even the woman investor, who knew over 100 angels, knew fewer than five other women angels. Male investors actually knew slightly more women angels – four (21%) knew between 5 and 10 and one knew between 11 and 24. This certainly reflects that men are more extensively networked within the angel investment community than women (Harrison & Mason, 2007).

Verheul and Thulik (2001) state that women are less likely to have had prior experience or a high level of managerial experience in a corporate setting and hence less likely to participate in networks with high worth individuals. As a result, finding and engaging angel investor is a challenge which has presented women entrepreneurs with particular

difficulty (Brush, Carter, Gatewood, Greene & Hart, 2004). Women appear to be more likely to invest in close ties (family and close friends) than men are (Bygrave, Hay, Ng, & Reynolds, 2003).

Empirical evidence has established that networks spanning multiple domains of social life apparently provide nascent entrepreneurs with greater access to multiple sources of information than do more homogeneous networks and thus enable them to make transition from idea to action (Renzulli, *et al.* 2002:534). Thus, entrepreneurs with networks that draw information from multiple sources, that is, those with high heterogeneity and low percentage kin, are much more likely to start and grow a new business than those with more homogeneous networks. The same evidence found that women tended to have more homogeneous networks than men with respect to kin.

Having contact with other entrepreneurs can lead to the exchange of useful information. Female entrepreneurs spend less time networking than their male counterparts, which may deprive them of important information concerning the acquisition of finance. Networking activities are assumed to improve the entrepreneur's view on his or her goals and future activities and hence his or her capital requirements. Networking activities are assumed to lower barriers when acquiring bank loans. (Verheul & Thulik, 2001). Hence women are less disposed to access loans from banks and venture capitalists such as angels than men. One of the objectives of this study is to investigate empirically if gender differences exist in networking by SMEs.

4.3.2 Managerial competencies

Managerial competencies are sets of knowledge, skills behaviours and attitudes that contribute to personal effectiveness (Hellgriegel *et al.* 2008). Managerial competencies are very important to the survival and growth of SMEs. Martin and Staines (2008) found that lack of managerial experience and skills are one of the main reasons why SMEs fail. In South Africa, Herrington and Wood (2003) point out that lack of education and training has reduced management capacity in SMEs. This is one of the reasons for the low level of entrepreneurial creation and the high failure rate of SMEs.

Management experience plays a vital role in ensuring the success of businesses as lenders of finance would want assurance that they will get a good return on their investment. Managerial experience in this regard refers to managing people and budgets including supervisory or professional experience with management-level responsibilities. Management experience further manifests itself in customer experience, product development, marketing, operations, IT and people management. The management characteristics are considered in terms of:

- The owner-manager's managerial style,
- The nature of the organizational structure,
- The degree of delegation within the organization,
- The manner in which strategic objectives are set,
- The importance of personal objectives in the decision-making process.
- Human resources management and
- Financial management

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An owner-manager is different from the manager of an SME in that he/she owns as well as manages the business. It is in this context that the management experiences are being analysed.

- **Managerial Style**

Mukhtar (2002) cites McKinley-Floyd (1998) that managerial values can play a critical role in how decisions are made and how a business is managed including how it is financed. In terms of gender, evidence suggests that no significant differences exist in managerial values among men and women. However, the way managers respond to employees may depend on their gender. There is a perception that there is a distinct difference between men's and women's management styles and how these influence work output and hence financing decisions (Mukhtar, 2002). The length of time an owner-manager has been in business has an impact on his/her managerial practices as firms begin to diversify their product lines in a given market and market segmentation becomes more prevalent.

In light of this, managerial expertise might be expected to grow over time as accumulated knowledge is acquired through learning by doing (Mukhtar, 2002). This kind of expertise is often lacking in SMEs. Coupled with this is the fact that female entrepreneurs, who are mainly driven by necessity to own and run businesses, will be lacking specialised skills required within a business (Minniti *et al* 2005). Providers of loan finance are therefore skeptical to provide loans to female entrepreneurs as they will be lacking in specialised skills such as financial management skills in order to warrant a good return on investment.

- **The nature of the organizational structure**

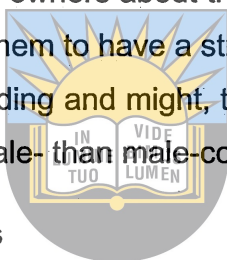
Schein (2007) asserts that: “Barriers to women in management exist globally and the higher the organisational level, the more glaring the gender gap”. The number of levels of authority within small firms is not related to gender of owner-manager (Riding & Swift, 2002). However, while men tend to have formal organisational structures with documented procedures at each level of authority, women have a much more informal approach to managing their day to day business (Hisrich & Brush, 2003). Female owner-managers tend to rely more on their instincts with “everything in my head” attitude. When lenders of loan finance look at such an approach to organisational structure, they feel reluctant to oblige with financial assistance in loan form. Therefore, women have made little impact on masculine organisational cultures and structures and compete in a hostile environment (Bagilhole & White, 2004). Male dominance of particular disciplines has a negative impact on women’s success in establishing and running small businesses. Thus women are disadvantaged in accessing loan finance because of their casual attitude to structuring their small businesses.

- **Delegation of responsibility**

The majority of SME owner-managers exercise very little or no delegation of authority irrespective of the business sector within which they operate. However, while women maintain this non-delegative stance, their male counterparts do delegate. Interestingly, compared to men, women are not prepared to delegate responsibility because of the way they view their roles (Schein, 2007). Women strongly believe that the ultimate responsibility for all business operations lies with the owner-manager. Considering that

women's entrepreneurial motivation is predominantly necessity driven, and the fact that they also have family responsibilities, lack of delegation tends to disadvantage them in loan considerations by financiers (Husu, 2004). In other words, while men are willing to delegate responsibility to others, women feel they need to take personal responsibility for each and every task. Thus female owner-managers appear to hold themselves personally accountable for the success or otherwise of their business.

Also, Mukhtar (2002) found that women had a significantly greater need (compared to men) to be in control of all aspects of their business. If female SME owners are (on average) more concerned than male owners about the prospect of losing control of their businesses, this should also cause them to have a stronger preference for using internal (rather than external) sources of funding and might, therefore, also cause pecking order theory to apply more strongly in female- than male-controlled small enterprises.



- **Setting Strategic Objectives**

A particular adopted managerial stance is reflected in the manner in which business strategies and objectives are set (Mukhtar, 2002). The author further reveals that strategy and objectives setting are central to all businesses and represent an important aspect of any managerial decision making. Goals could be set either formally or informally. Given that an informal approach is based less on status and more on open relationships, communication and interaction, it is more likely to be adopted by women as it is consistent with their management style and flatter organisational set up (Mukhtar, 2002). Further findings in the quoted study reveal that female owner-managers are more informal and thus more flexible with little or no documented procedures. Thus they rely on intuition for key decisions within their businesses and in the manner in which the structure of the business is organised. This characteristic of female owner-managers seems not to board well with lenders of debt finance.

- **Personal Objectives and decision making**

How the owner-mangers' personal objectives impact on their decision making, is significantly impacted by their gender (Mukhtar, 2002). It appears personal objectives play a greater role in decision making for women than for men irrespective of business size and sector. Even when their business operations are large, women's personal

criteria drive their business agenda. Business needs dictate the agenda for male-owned businesses even when the business size is small. Not only are women likely to choose entrepreneurship as a necessity, but their experience of business ownership also differs substantially from that of men (Bird & Brush, 2002; Marlow, 2002). Most female entrepreneurship is confined to traditionally female occupational sectors such as retailing and low-order services, much is undertaken in part-time capacity, and more women than men use their home as a business base (Small Business Service, 2003). Thus women's personal objectives and decisions are influenced to a greater extent by the circumstances in which they operate.

Domestic responsibilities borne by Africans limit the time and scope of their business strategies (Rogerson 2001). Women entrepreneurs often have different goals and different business strategies from those of their male counterparts. The goal of women, more so than male entrepreneurs, is to feed, clothe, and educate their children (Downing, 2000). To achieve these goals, women seek means to secure their income in diverse ways, whereas men pursue individual strategies, taking business risks in pursuit of profits. Accordingly, for many women entrepreneurs who are fitting business activities around household and child-rearing responsibilities, graduation to larger business outside the home may not suit their business plan (Rogerson, 2001). This in turn has its effects on the ability of women entrepreneurs to consider, or let alone access debt finance.

- **Human Resource management**

Management is as much an art as it is a science, and as such, it cannot be learned without a hands-on approach (Tocher & Rutherford, 2009). This learning simply takes time and the curve can be steep, as the entrepreneur encounters and conquers management problems, and becomes more adept at handling them in the future. Empirical research has established that owners and managers with previous experience were more successful than their counterparts (Tocher & Rutherford, 2009). Likewise, the same study of small manufacturing firms, found that successful entrepreneurs had prior experience in their related industries. Owner-managers become more experienced within their firms and industries, and they are more likely to accumulate higher levels of

social competence. One of the many theorised benefits of a high level of social competence is better ability to attract and select employees (Baron & Markman, 2000, 2003). Thus previous experience in a related business appears to help entrepreneurs and this is expected to extend to ability to access debt finance.

- **Financial management**

Female entrepreneurs are more likely to have less experience with financial management than male entrepreneurs because women usually have less opportunity to accumulate management experience due to the vertical segregation of the labour market. Men have had on average, higher occupational status, a higher rate of self-employment, and higher incomes than women (Renzulli, *et al.* 2002:534). The same authors suggest that female dominated occupations have been devalued, in part, because Americans consider work done by women less valuable, less important, and less difficult. Prospective entrepreneurs with little experience of financial management maybe assumed to be unaware of the way in which they can acquire financial capital and of whom they can contact for help and advice. Entrepreneurs with financial management experience are assumed to be able to use their earlier experience to convince credit managers of banks to invest in their venture. This might also be valid when attempting to convince business angels and venture capitalists trade creditors (Verheul & Thurik, 2001).

Moreover, tax shields can be an incentive to use bank loans for financing the business. Entrepreneurs with financial experience may be better informed about such tax incentives. Financial management experience may also involve knowledge about the importance of free cash flows for entrepreneurs. Constraints on financial resources may hinder a flexible response on market fluctuations. Interest payments on bank loans corrode free cash flows. In that case entrepreneurs will be inclined to use personal resources for financing their business. Finally, financial management might be associated with a sufficient amount of personal savings based upon success in earlier jobs and investments capitalists (Robb & Wolken 2002). Watson and Robinson (2003) find that women are considered to perform their managerial role differently from men, and hence this leads to differences in the development and success of their respective

businesses. This study will investigate empirically if gender differences exist in the managerial competency of SME owners in South Africa.

4.3.3 Risk Aversion

Risk taking involves the selection of options that might result in negative outcomes (Olsen & Cox, 2001:32). Thus risk taking involves decisions about a wide range of activities such as smoking, driving above the speed limit, getting a suntan, changing jobs as well as investing in a business option. Modern finance theories such as the Subjective Expected Utility Model (SEU) postulate that risk aversion arises from diminishing marginal utility of wealth. However, it does not deal with risk as a perceived feeling or emotion and usually assumes away ambiguity and the effect of differing degrees of confidence in forecasts on investment decisions. The influence of risk aversion on the decision to become self-employed is very important to an entrepreneur.

A large number of empirical studies now document the importance of loss (risk) aversion, ambiguity and personal reference points in perceptions of and responses to risky or uncertain gambles. There is extensive evidence that when faced with social and technological hazards, women are more risk averse than men (Olsen & Cox, 2001:32). This appears to be so even when decision makers of both genders have the same level of experience and expertise. The same study found that women investors weigh risk attributes such as possibility of loss and ambiguity, more heavily than their male colleagues. In addition, women tend to emphasise risk reduction more than men in portfolio construction.

Olsen and Cox (2001:34) cite Brown and Harlow (1990) that higher levels of enzyme monoamine oxidase exist in women investors suggesting a biological reason for greater risk aversion. On the other hand, other studies by Powell and Ansic (1997) and O'Dean (1998) suggest a social answer based on a perceived lower level of confidence due to masculine nature of the investment domain. The combination of the two factors above renders women more risk averse than men implying a reliance on internal equity instead of loans. Verheul and Thurik (2001) state that risk aversion of entrepreneurs leads to dependency on personal equity as a source of finance and also Carland *et al.* (1989)

who claim that a higher risk taking propensity and a better understanding of risks inherent in investments leads to the use of more debt finance. Debt financing increases the financial risk of the firm because interest payments on debt are to be paid when due, irrespective of the firm's profitability or liquidity levels. Debt financing involves the risks of fluctuating interest rates, redemption and liability (Verheul & Thurik, 2001).

Women investors tend to appear to be more conservative and more risk averse than their male counterparts after controlling for factors such as age, education, wealth, race and so forth (Olsen & Cox, 2007:36). The same authors found that women tended to prefer lower risk assets than men. Consistent with these aforementioned results, is the assertion that women preferred lower risk bets when asked to make choices in an experimental market environment involving auctions and lotteries (Olsen & Cox, 2007:36). Explanations for the more conservative investment behaviour of women investors have developed along the same biological/evolutionary, social/cultural lines as alluded to earlier on. A large number of empirical studies now document the importance of loss aversion, ambiguity and personal reference points in perceptions of and responses to risky or uncertain gambles (Olsen & Cox, 2007:36).

According to empirical evidence presented thus far, women investors are more heavily influenced by the chance of loss and the uncertainty surrounding such possibilities than men. This may resemble what Lopes (1987) in Olsen & Cox (2007:36) called security prone decision-makers. This is based on her theory of risky decision-making wherein decision makers are seen to take off security potential against aspiration. Women are more likely to establish a moderate maximum business size objective and then adopt policies to reduce risk and assure steady slow growth. Men however, focus on high initial growth rates, risking increased chance of failure (Olsen & Cox, 2007:36). In Bernasek and Shwiff (2001) it is established that the magnitude of decrease in risk aversion due to an increase in household wealth is smaller for women than for men. Results of the study showed that 63% of single women were not willing to take any financial risk with their investments against 43% of single men. The study, which drew its respondents from predominantly single men and women, revealed that single women are relatively more risk averse than single men.

Women start new ventures in traditional, low-growth industries (mainly service and retail), with low-growth profile and higher risk, making them less appealing than men-owned firms to potential financiers (Orhan, 2001; Heidrick & Nicol, 2002). In many cases, the issue of an undeveloped credit history and absence of collateral were reported by women as important barriers to finding debt financing for their businesses (Reid, 2000). The study of Robb and Wolken (2002) also showed that firms owned by women were considered to be higher risk than firms owned by men as measured by Dun and Bradstreet's credit score, and it is well known that a firm's credit history, as well as the owner's credit history in the case of small businesses, are important determinants of whether a firm can obtain credit. A study by Constantinidis *et al.* (2006:140) revealed women's strong risk-aversion disposition and lack of trust toward bankers which leads them to apply for bank loans only if they have no other choice. Constantinidis *et al.* (2006:142) further found a high level of risk aversion in women entrepreneurs they interviewed and concluded that women may choose lifestyle types of business demands to avoid dependence on external sources of capital. This study will investigate empirically whether gender differences exist with respect to risk aversion by the owners of SMEs in South Africa.

4.3.4 Part-time entrepreneurship

The part-time entrepreneurship exists in the context of some socio-cultural factors which are internal to and specific to entrepreneurs, especially female entrepreneurs. The deal to access loan finance is negotiated within a social context where certain factors can facilitate the relationship or become barriers to relationships (Brush *et al.* 2002:323). Structural barriers in the form of norms may hinder access to finance. Brush *et al.* (2002:323) note that women entrepreneurs face barriers in the venture capital industry as it is concentrated and operates traditional male practices. Thus women seeking equity might be perceived as having different values, goals or behaviours than their male counterparts, creating a view that they are riskier investments. In this world-view, males are seen as the archetype of entrepreneurs whereas females, at best, are restricted to what Bowen and Hisrich (1984) termed as 'entrepreneurial ghettos'. Female participation in entrepreneurship is reasoned to be the antithesis of entrepreneurial

norms as a result of gender qualities: male achievement versus female subjugation; male dominance versus female submissiveness; male control versus female appreciation; male autonomy versus female support; male aggression versus female co-operation; male independence versus female dependence; male idiosyncrasy versus female conformity (Brush *et al.* 2002:322).

There are suggestions that women are significantly less likely than men to become active investors as a reflection of their accumulated human capital characteristics and lesser involvement in wealth accumulation process (Cowling & Murray, 2003). Human capital in this instance refers to education, health, skills and working or professional experience as well as age. This perspective is consistent with social feminist theory which attributes inherent differences between men and women to differences in early and ongoing socialisation (Greene, Hart Gatewood, Brush & Carter, 2003). This suggests that women are inferior to men but have developed different but equally effective traits that may not be readily captured by analytical categories appropriate for men. This further suggests that levels of entrepreneurial self-efficacy are higher in males than in females (Harrison & Mason, 2007).

However, some commentators such as Ahl (2006:599); Wrigley-Asant (2008) and Awumbila (2004) suggest that this reflects the fact that men are socialised into entrepreneurship to a higher degree than women. These men-women differences may be reflected in women's lower stock of resources (both human and financial capital, as a result of occupational segregation in the labour market), women's lower levels of meaningful business experience, family background and social roles. Women are often socialised into caring/nurturing roles and they also have different intentions in establishing business in response to labour market and domestic subordination for work-family balance or as a feminist move (Ahl, 2006:599). Men are more disposed to access, own, and control resources and services than women as a result of the traditional patriarchal system creating "feminisation of poverty" especially in Ghana (Government of Ghana, 2003; Awumbila, 2004). When considering human capital, statistics in Africa show that women have less access to education and health.

In the area of education, adult literacy rates show that women lag behind men, although enormous efforts have been made over the years to improve women's access to education (Wrigley-Asante, 2008). In terms of physical and financial capital, most women do not own land and in most cases their land rights are reduced (Duncan & Brants, 2004). Women also tend to have little access to equipment and have less access to credit. Further studies show that women lack economic opportunities and autonomy, lack access to credit and support services and have minimal participation in decision making process (MOWAC, 2004).

Entrepreneurship in South Africa is affected by a number of factors including race, gender and location (Organisation for Economic Development and Co-operation, 2003). The statistics on gender in the economy reveal large differences between black and white women. Because of the limited opportunities in the formal employment sector, many women, and especially black women, are forced to work in the poorly paid and largely unregulated informal sector. Access and control over resources is still based on race, gender and class. Consequently, South Africa remains characterised by extreme poverty, social disintegration, mass unemployment and the exclusion of the majority of people from socio-economic development and growth (Organisation for Economic Co-operation and Development, 2003).

- **Poverty**

A number of factors contribute towards the poverty of women in South Africa. The gendered division of labour in the household, and the low value accorded to women in low-paid jobs contributes to female poverty (Department of Trade and Industry, 2005). Although the position of some people from previously disadvantaged groups has improved, this improvement merely seems to indicate that the specific character of inequality is changing from being race-based to being class-based. However, the racial dimension of poverty in South Africa is still profound, with income patterns highly skewed against Africans (Department Trade and Industry, 2005). The plight of the poor is exacerbated by a lack of basic services, poor housing and inadequate infrastructure. These conditions render access to loans by black women very problematic.

- **Land**

Historical factors and unequal gender relations continue to hinder women's access to land and control over resources in a number of ways. Women's rights are still limited and insecure (Department of Trade and Industry, 2005).

- **Family responsibilities**

Pressure to run a home, look after children and care for the husband and family limit women. Negative economic development impacts negatively on women as they have to cope with taking care of children, often as single parents (Paper, 2002). Women entrepreneurs have to cope with the demands of their business and family responsibilities, and that "double burden" can have an impact both on their ability and on their willingness to go to debt. Indeed the double responsibility increases women's risk-aversion and leads them to ask for smaller amounts than men do, and can also cause mistrust of creditors (Danmanville & Huret, 2001; St-Cyr, 2002). Male entrepreneurs work more often on a full-time basis when compared to their female counterparts. More than half of the enterprising women are carrying out other activities besides running their business, like being employed or taking care of their family

- **HIV/AIDS**

HIV/AIDS has a direct effect on women's entrepreneurship in South Africa. It is imperative that all community as well as family business networks be engaged in the process of building the social and cultural capital required to address the problems of HIV/AIDS (Gilbert & Walker, 2002).

- **Education and training**

Women entrepreneurs are ill-equipped educationally and financially. Training requires preparation of targets, budgets and knowledge of business performance. Male and female entrepreneurs differ with respect to experience and education (Triechel & Scott, 2006:55). The level of education of female and male entrepreneurs is roughly identical, whereas the type of education differs. Male entrepreneurs are more likely to have completed a technical schooling, while the education of female entrepreneurs usually is more economical, administrative or commercial in nature. Moreover, female entrepreneurs usually are more specialised in personal services. The length and type of

experience of women and men in the labour market vary considerably. Men are more likely to have been employed prior to the start-up of their business and have more working experience education (Triechel & Scott, 2006:56).

Differences in type of experience are related to differences in type of education. Female entrepreneurs are more likely to be experienced in fields like teaching, sales, administration and personal services as opposed to management, sciences and technology. Men are also more likely to have earlier entrepreneurial experience. Additionally, they have more industry experience and experience with human resource management, financial management and the application of modern technologies (Coleman & Robb, 2008). Worldwide, employment rates are much higher, and the gender gap lower, among women with a tertiary qualification (some college) than among less educated women. Higher education is likely to give women access to more interesting and better-paid occupations.



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By contrast, in low-income countries, although the gender gap in primary and secondary schooling is closing, women still lag behind men in some countries especially in Africa and Southern Asia (Minniti, *et al.* 2004). Two thirds of the world's 876 million illiterates are women, and the number of illiterates is not expected to decrease significantly in the next twenty years. In almost all economies for which information on illiteracy is available, women are more likely than men to be illiterate. Entrepreneurial activity is highest in countries where more of the female population cannot read and write. Previous assessments, however, make clear that it is not the illiterate that are starting the businesses in these countries, but those with the education and skills to exploit profit opportunities. In low-income countries, the majority of entrepreneurially active women (54%) have not completed a secondary degree. For example, in both Peru and Uganda more than 80% of the entrepreneurially active women have only some secondary education (Minniti *et al.* 2004).

- **Age**

Minniti *et al.* (2004) reveal that patterns in entrepreneurial attitudes do not vary from country to country and across gender with respect to age. While it is true that women's

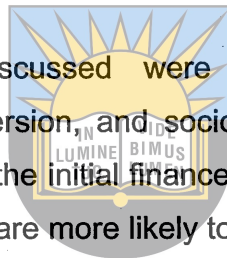
prevalence rates are systematically lower than those of men, overall, the distribution of women's entrepreneurial involvement across age brackets follows that of men. Some differences emerge when different groups of countries are considered. In low and middle income countries, the peak years to become involved in entrepreneurial activities for women are ages 25-34. In high-income countries, on the other hand, the peak years to become involved in entrepreneurial activities for women are ages 35 - 44. The picture clearly shows that as countries with higher per capita income are considered, the average age at which women become involved in starting a new business increases also.

- Thus, although women 25-44 are still the ones most likely to start new businesses, there seems to be a tendency for older women to also get involved. This trend may reflect the fact that in richer countries women spend more time on their education, together with the fact that in richer countries the percentage of women starting new businesses to pursue an opportunity is significantly larger than that of women that do so out of necessity (Minniti *et al.*, 2005). Opportunity start-ups are more likely to require more education, experience, and better networking. Also, the percentage of women entrepreneurs aged 18-24 is about the same in middle and high-income countries (10.6% and 10% respectively), whereas their rate of involvement jumps to about 22% in low income countries. These percentages are likely to reflect the involvement of women in necessity entrepreneurship in low-income countries. Thus women's age also has an effect on access to finance as reflected by the literature. This study will investigate whether significant gender difference exists in the nature of entrepreneurship (i.e. whether female business owners are more part-time in nature than male business owners).

4.3 SUMMARY

This chapter focused on the characteristics of entrepreneurs and firms that gender is deemed to have a significant impact on and consequently affect access to debt finance. Firm characteristics considered were firm size and business sector. Women firms are said to be smaller than those of their male counterparts and this suggests that they are

less likely to attract debt finance. Women run businesses are different from the ones run by men in that female run businesses are much more likely to self-finance their business. Furthermore, female businesses are said to operate mainly in the retail and services sector whilst those of their male counterparts are spread in most sectors of the economy with a strong inclination on manufacturing. Women entrepreneurs have less access to or make less use of financial capital than do men entrepreneurs. Rather than go into debt or sell shares, women are more likely to use personal savings, earnings from the business, home equity loans, credit cards, and family loans to finance their business.



Entrepreneurial characteristics discussed were attributes such as managerial competencies, networking, risk aversion, and socio-cultural issues. Women normally rely on personal income to provide the initial finance for their enterprises. The literature revealed that female entrepreneurs are more likely to work part-time, more likely to work in the service sector, they are more averse to risk, have less financial management experience and spend less time networking than male entrepreneurs. The literature further reveals that women relied heavily on personal rather than external sources of financing. The conclusion that women raised significantly less capital also attests to a higher level of risk aversion on the part of women, a desire for smaller business that allows for work/family balance, and a desire to maintain control. The fact that women use smaller amounts of start-up capital and rely on personal rather than external sources has implications for their ability to develop new products and services, grow their firms, hire employees, and survive periods of adversity.

Although there have been a number of international studies on gender and SME finance, studies focusing on women owned enterprises in developing countries such as South Africa have not been done. Thus very little specific micro level information is available on gender and SME finance in South Africa. In addition, previous empirical studies on gender and finance have focused only on bank debt. This study is novel in that it focused on both bank debt and trade credit from a developing country

perspective. The next chapter will detail the methodology used to carry out the empirical study.



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CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 INTRODUCTION

A thorough review of the literature from the previous three chapters shows that the availability of debt finance is one of the major obstacles faced by SMEs in South Africa. As pointed out by Maas and Herrington (2006) in the Global Entrepreneurship Monitor South Africa Report, the availability of finance is a critical problem causing the failure and limiting the growth of SMEs in South Africa. Gender differences have been alluded to as playing a significant role in the failure of SMEs. This chapter empirically examines the effects of gender on the characteristics and availability of debt to SMEs.

The research was designed in such a way that the methodology comprised two components: secondary research by way of extensive literature review and primary (empirical) research by way of a quantitative survey to gather primary data. The aim of this chapter is to explain the research methodology followed in the empirical part of the study. According to Cooper and Schindler (2003:38) research methodology refers to the way in which data are gathered for a research project. It is the blueprint of the collection, measurement, and analysis of data in order to achieve the objectives of the research project. The research methodology used for this study follows a research process. The research process is divided into seven steps. Step one of the research process focuses on the problem statement, the research hypotheses and the research objectives. Step two presents the various types of research designs such as quantitative, qualitative, exploratory, descriptive and casual research. The motivation for the type of research chosen for this study will be given. Step three explains the primary data collection methods such as observation, experiment and survey. The motivation for the primary data collection method used for this study will be given. This is followed by step four. In step four, the sampling method used for the study is presented. Step five presents how data was gathered for the study. Step six presents the data analysis methods that can be used for research as well as the motivation for the data analysis method used for this study. Finally, step seven gives an idea of how the research results will be presented.

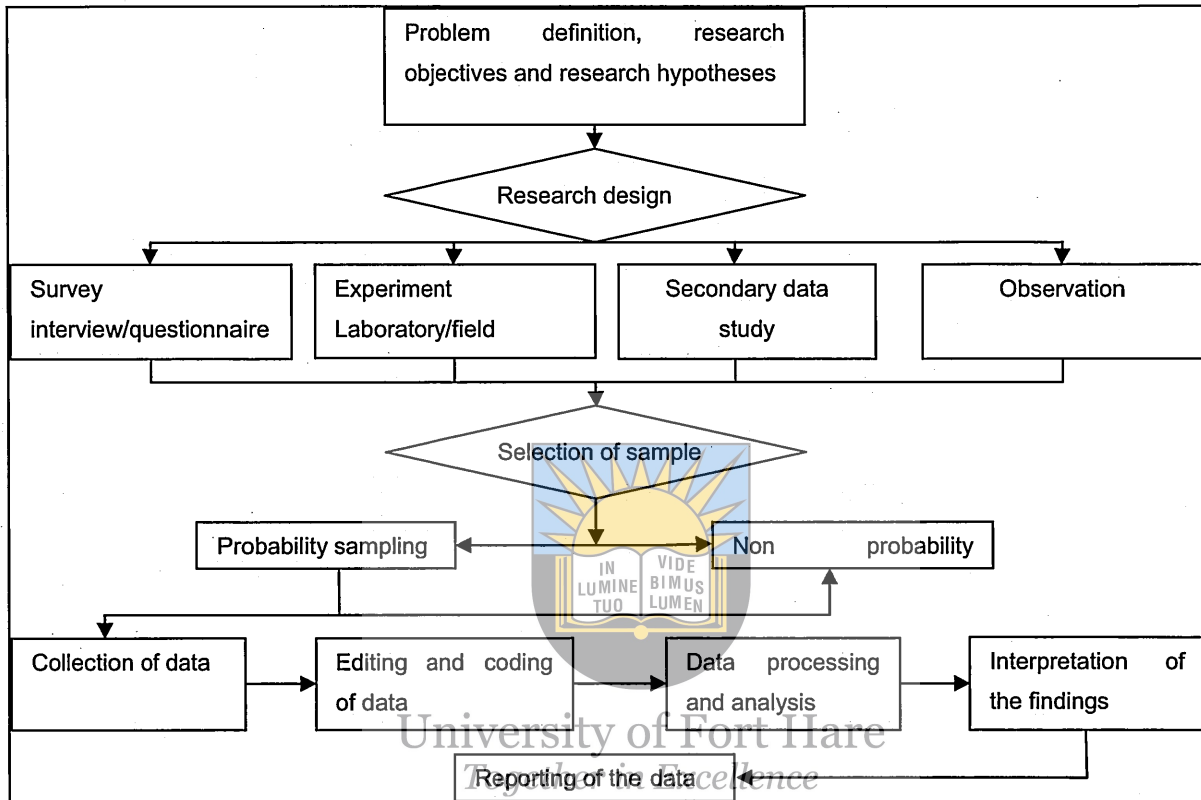
5.2 RESEARCH DEFINED

The broad definition of research is searching for any data, information and facts for the advancement of knowledge (Gerber-Nel *et al.* 2005). Research can further be defined as a systematic and objective process of design, collection, analysis and reporting of data relevant to a specific topic (Cant, Geber-Nel, Nel & Kotze, & 2005:3). Because this study focused on SMEs, which are businesses, the term business research will be used. Business research involves finding the answers to any questions that are of interest to business. These tend to be about companies, industries, general management, finance and economics. According to Gerber-Nel *et al.* (2005) business research is the systematic and objective process of planning, gathering, analysing and reporting data about companies, general management, industries, finance and economics, in order to solve a specific problem or to advance knowledge. This is often done in steps that define the tasks of the business research which is referred to as the business research process. This process provides a systematic and planned approach to the research study which ensures that all aspects of the process are consistent (Cooper & Schindler, 2003:38). The next paragraph section (section 5.3) looks at the research process.

5.3 THE BUSINESS RESEARCH PROCESS

The business research process is a sequence of steps in the systematic collection and analysis of data (Bryman & Bell, 2003:96). It offers a description of how business research is designed, and implemented, which helps researchers in their execution of a research study. Cooper and Schindler (2003:38) describe the business research process as the ordered set of activities focused on the systematic collection of information using accepted methods of analysis as a basis for drawing conclusions. According to Cooper and Schindler (2003:40) the section of a study describing the methodology is an important one. Figure 5.1 depicts the phases of the business research process which was followed by the study.

Figure 5.1: Steps in the business research process



Source: Adapted from Zikmund (2003:61).

5.3.1 Step 1: Problem statement

The adage “a problem well defined is a problem half solved” is worth remembering. This adage emphasises that an orderly definition of the research problem gives a sense of direction to the investigation. Careful attention to problem definition allows a researcher to set the proper research objectives. If the purpose of the research is clear, the chances of collecting the necessary and relevant information will be much greater (Vogel, 2006).

According to Cooper and Schindler (2003:40), the problem statement includes the need for the research project. The problem definition is essential before conducting a research project, especially quantitative research. Quantitative research should not begin until the problem has been clearly defined. The problem is usually represented by a question and is followed by a more detailed set of objectives.

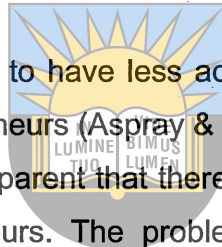
Chapter one indicated that the development of women entrepreneurs is essential since women represent more than 50% of the South African population but own approximately 33% of existing businesses. If women entrepreneurs increase, the SMEs in South Africa will in turn increase and hence boost employment creation, economic growth and social stability, thus alleviating poverty. According to Maas and Herrington (2006) SMEs are seen as a significant component of the solution to South Africa's development issues. Women-owned firms represent an increasingly important segment of the small business sector (Robb & Coleman, 2009).

However, women-owned enterprises are reported to have lagged behind men-owned enterprises in a number of performance measures such as profitability, employment creation and innovation. Although the failure rate of small enterprises is reported to be high in South Africa, male-owned/managed enterprises have a lower failure rate than those of their female counterparts (Robb & Coleman, 2009). The general failure rate of small enterprises has been reported to be approximately 75% and of these, women businesses are the major casualties. Prior research has revealed that the higher failure rate of women-owned small enterprises is attributed to a number of factors chief among them being inadequate finance at inception stage. According to Coleman and Robb (2008), women-owned businesses face serious challenges in securing bank loans and dealing with lenders at their initial stages. Access to debt finance is cited as one of the major challenges of SMEs. The literature review in chapter four suggested that the major factors that impact the access to debt finance by women entrepreneurs are attributed to managerial competencies, networking, nature of entrepreneurship (i.e. part-time or full time), risk aversion firm size and business sector. These have been observed through the following:

- Female-owned ventures appear to be over-represented in the retail and services sector than in manufacturing and high technology sectors (Watson & Robinson 2003).
- Women seem to start their businesses with significantly lower levels of financial capital than men (Coleman & Robb, 2008). Many women tend to be in small

enterprises sector, mainly in the informal sector (Department of Trade and Industry, 2005).

- Men are 1.6 times more likely than women to engage in entrepreneurial activity (Herrington *et al.* 2008).
- Female Total Early-Stage Entrepreneurial Activity (TEA) rates are just below male TEA rates (Herrington *et al.*, 2009).
- Businesses headed by women tend to be smaller than those headed by men (Minniti *et al.*, 2005).
- Women are driven into entrepreneurship more by necessity than by the desire to exploit an opportunity.
- Female entrepreneurs appear to have less access to or make less use of loan finance than do male entrepreneurs (Aspray & Cohoon, 2007).



Given these indicators, it became apparent that there is a problem regarding access to debt finance by women entrepreneurs. The problem is expressed in the following questions:

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- Are there gender differences in the demand and availability of debt to SMEs?
- Are there gender differences in the firm and entrepreneurial characteristics of SMEs?
- Is there any relationship between firm and entrepreneurial characteristics and the demand and availability of debt to SMEs?

Faced with this problem, it therefore became necessary to undertake this study.

5.3.2 Objectives

In order to delineate the type of information that should be collected and provide a framework for the scope of the study, there is a need to specify what it is that is to be researched. This comes in the form of objectives. Bryman and Bell (2003:196) state that a research objective is the researcher's version of a business problem. Objectives explain the purpose of the research in measurable terms and define standards of what the research should accomplish. The best expression of a research objective is a well-

formulated, testable research hypothesis (Zikmund, 2003). The primary objectives of this study were:

- To investigate empirically whether there is a significant gender difference in the demand for and availability of debt finance to SMEs.
- To investigate empirically whether there is a significant gender difference in the firm and entrepreneurial characteristics of SMEs.
- To investigate empirically if there is a significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance.

Secondary Objectives:

- To review the literature on SMEs and development.
- To review literature on the financing of SMEs.
- To review literature on firm and entrepreneurial characteristics.
- To develop the research methodology to carry out the empirical research.



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The second and third primary objectives seek to investigate whether there are significant differences in the firm and entrepreneurial characteristics as well as establish whether there is a significant relationship between the firm and entrepreneurial characteristics and the application and availability of debt. The firm characteristics under review are firm size and business sector. The entrepreneurial characteristics under review are networking, managerial competencies, risk aversion and the part-time nature of entrepreneurship. In order to achieve these two primary objectives, the following secondary objectives are also formulated:

- To investigate empirically whether significant gender difference exists in the firm size of SMEs.
- To investigate empirically whether significant gender difference exists in the business sector of SMEs.
- To investigate empirically whether significant gender difference exists in networking by the owners of SMEs.

- To investigate empirically whether significant gender difference exists in the managerial competencies of the owners of SMEs.
- To investigate empirically whether significant gender difference exists in risk aversion by the owners of SMEs.
- To investigate empirically whether significant gender difference exists in the nature of entrepreneurship (i.e. whether female business owners are more part-time in nature than male business owners).

5.3.3 Research hypotheses

Cooper and Schindler (2003:38) refer to the hypotheses as possible answers to stated research questions. A hypothesis can be defined as an unproven statement or proposition about a factor or phenomenon that is of interest to the researcher. A hypothesis is a proposition that is empirically testable. Hypotheses are educated guesses about a problem's solution or expectations about groups in a population expressed in empirically testable form. In order to address research objectives, guesses about a problem's solution or expectations are made in the form of hypotheses which can then be empirically tested. In order to achieve research objectives, they must first be translated into hypotheses. Tredoux and Durrheim (2002:55) point out that in order to answer research questions, the questions must first be translated into hypotheses (null and alternative). The null hypothesis which is represented by H_0 is a statement that falsifies the relationship between measured variables. On the other hand is the alternative hypothesis (null hypothesis) represented by H_1 which establishes a relationship between measured variables. Therefore, the alternative hypothesis makes a conjecture that is diametrically opposed to the null hypothesis. The alternative hypothesis can be directional or non-directional. Directional alternative hypothesis specifies the direction of the relationship (i.e. positive or negative relationship). Non-directional alternative hypothesis does not specify the direction of the relationship (i.e. there is a relationship). The following primary hypotheses will be tested in this study:

H_0 : There is no significant gender difference in the demand for and availability of debt finance to SMEs.

H1: There is a significant gender difference in the demand for and the availability of debt finance to SMEs.

H0: There is no significant gender difference in the firm and entrepreneurial characteristics of SMEs.

H1: There is a significant gender difference in the firm and entrepreneurial characteristics of SMEs.

H0: There is no significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance.

H1: There is a significant positive relationship between firm and entrepreneurial characteristics and demand and availability of debt finance.

5.3.3.1 Gender and demand for debt finance

Although SMEs are very critical to the economic growth and social stability of the country, the failure rate of SMEs is high. Although the failure rate of SMEs is reported to be high in South Africa, male-owned/managed enterprises have a lower failure rate than those of their female counterparts (Robb & Coleman, 2009). Herrington *et al.* (2008) cite access to finance as one of the three key problems facing SMEs in both developed and developing countries. When women entrepreneurs do secure debt funding, it is most often from savings and loans as well as from family members or banks (Coleman, 2004). They are significantly less likely to use bank loans than men to finance their business. Some have argued that securing debt funding, especially from banks, is difficult for women-owned businesses (Orser, Hogarth-Scott, & Riding, 2002:52). In the area of debt financing, women continue to report difficulty in securing bank loans and dealing with lenders. Most studies indicate that women are more likely to be turned down for loans than men (Coleman & Robb, 2009). Women are therefore more reluctant to apply and they are more likely to anticipate denial. It can therefore be hypothesised that:

H0: There is no significant gender difference in the demand for debt finance to SMEs.

H1: There is a significant gender difference in the demand for debt finance to SMEs.

5.3.3.2 Gender and availability of debt finance

Inadequate funding to start a business has been indicated as a primary barrier to starting a new business for many potential entrepreneurs. Indications are that many entrepreneurs raise the start-up capital from their own or family savings rather than approaching formal institutions or agencies. Financial institutions generally require collateral and formal business records as criteria for considering a loan. Foxcroft *et al.* (2002) found that 75% of applications for bank credit by SMEs in South Africa are rejected. Of this figure, the greater proportion is that of female entrepreneurs. This suggests that SMEs without finance may not be able to survive and grow. Therefore it can be hypothesised that:

H0: There is no significant gender difference in the availability of debt finance to SMEs.

H1: There is a significant gender difference in the availability of debt finance to SMEs.

5.3.3.3 Firm size

Robb and Wolken (2002) found that women-owned businesses were significantly smaller than men-owned businesses in terms of employment, assets, and sales. Smaller businesses typically have greater difficulty in securing bank loans and they pay higher interest than larger businesses (Brau, 2002:285). Size has been argued to influence the approval and terms of debt finance to women-owned businesses (Coleman, 2002). Coleman (2002) concluded that women-owned businesses may face a size disadvantage. Thus women are less disposed to access debt finance due to the size of their businesses. As a result, it can be hypothesised that:

H0: There is no significant gender difference in firm size of SMEs.

H1: There is a significant gender difference in firm size of SMEs.

5.3.3.4 Business sector

Women-owned businesses are more likely to operate in retail and services than businesses owned by men (Robb & Wolken, 2002). This may influence the need for and type of credit used. Thus the types of businesses that women are mostly found in impact on their ability to access debt finance. Hence it can be hypothesised that:

H0: There is no significant gender difference in business sector of SMEs.

H1: There is a significant gender difference in business sector of SMEs.

5.3.3.5 Networking

According to Shane and Cable (2002:380), networking can be used to reduce information asymmetry in creditor/debtor relationships. Networks also help a firm learn appropriate behaviour and therefore obtain needed support from key stakeholders and the general public. Empirical evidence has established that networks spanning multiple domains of social life apparently provide nascent entrepreneurs with greater access to multiple sources of information than do more homogeneous networks and thus enable them to make transition from idea to action (Renzulli, Aldrich & Moody, and 2002:544). Thus, entrepreneurs with networks that draw information from multiple sources, that is, those with high heterogeneity and low percentage kin, are much more likely to start and grow a new business than those with more homogeneous networks.

The same evidence found that women tended to have more homogeneous networks than men with respect to kin. Networking activities are assumed to lower barriers when acquiring debt finance (Verheul & Thulik, 2001). Hence women are less disposed to access loans from banks and trade credit than men. As a result, it has been hypothesised that:

H0: There is no significant gender difference on networking by the owners of SMEs.

H1: There is a significant gender difference on networking by the owners of SMEs.

5.3.3.6 Managerial competencies

Nguyen and Ramachandran (2006:195) point out that managerial competency can help to reduce information asymmetry before a loan is granted and potential moral hazard after the loan is granted. Thus managerial competencies have positive impact on the performance of SMEs. This further suggests that managerial competencies can significantly impact on the availability of debt finance. Hence it is hypothesised that:

H0: There is no significant gender difference in the managerial competencies of the owners of SMEs.

H1: There is a significant gender difference in the managerial competencies of the owners of SMEs.

5.3.3.7 Risk Aversion

Risk taking involves the selection of options that might result in negative outcomes (Olsen & Cox, 2007:36). Modern finance theories such as the Subjective Expected Utility Model (SEU) postulate that risk aversion arises from diminishing marginal utility of wealth (Olsen & Cox, 2007:36). The influence of risk aversion on the decision to become self-employed is very important to an entrepreneur. Conventional wisdom asserts that being an entrepreneur means making risky decisions. Hence more risk-averse individuals are less likely to become entrepreneurs.

There is extensive evidence that when faced with social and technological hazards, women are more risk averse than men (Olsen & Cox, 2007:34). This appears to be so even when decision makers of both genders have the same level of experience and expertise. The same study found that women investors weigh risk attributes such as possibility of loss and ambiguity more heavily than their male colleagues. In addition, women tend to emphasise risk reduction more than men in portfolio construction.

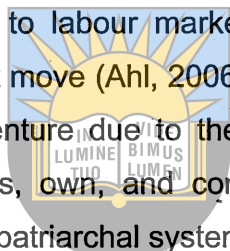
Verheul and Thurik (2001) suggest that risk aversion of entrepreneurs leads to dependency on personal equity as a source of finance and also Carland *et al*, (1989) who claim that a higher risk taking propensity and a better understanding of risks inherent in investments leads to the use of more debt finance. Debt financing increases the financial risk of the firm because interest payments on debt are to be paid when due, irrespective of the firm's profitability or liquidity levels. Debt financing involves the risks of fluctuating interest rates, redemption and liability (Verheul & Thurik, 2001). Women investors tend to appear to be more conservative and more risk averse than their male counterparts after controlling for factors such as age, education, wealth, race and so forth (Olsen & Cox, 2007:34). The same authors found that women tended to prefer lower risk assets than men. Hence it has been hypothesised that:

H0: There is no significant gender difference on risk aversion by the owners of SMEs.

H1: There is a significant gender difference on risk aversion by the owners of SMEs.

5.3.3.8 Part-time nature of entrepreneurs

The deal to access loan finance is negotiated within a social context where certain factors can facilitate the relationship or become barriers to relationships (Brush *et al*, 2002:312). Structural barriers in the form of norms may hinder access to finance. Brush *et al*. (2002:312) suggest that women entrepreneurs face barriers in the venture capital industry as it is concentrated and operates traditional male practices. Thus women seeking equity might be perceived as having different values, goals or behaviours than their male counterparts, creating a view that they are riskier investments. Women are often socialised into caring/nurturing roles and they also have different intentions in establishing business in response to labour market and domestic subordination for work-family balance or as a feminist move (Ahl, 2006:598). Hence women often take up entrepreneurship as a part-time venture due to their family responsibilities. Men are therefore more disposed to access, own, and control resources and services than women as a result of the traditional patriarchal system creating “feminisation of poverty.” Hence it has been hypothesised that:



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H0: There is no significant gender difference in the nature of entrepreneurship. (Female business owners do not carry out their business more on a part-time basis than male owners).

H1: There is a significant gender difference in the nature of entrepreneurship (female business owners carry out their business more on a part-time basis than male owners).

5.3.4 Step 2: Research design

Cooper and Schindler (2003:34) point out that a research design provides the glue that holds a research project together. The research design involves plans that promote the systematic management of data collection. Therefore, the research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and control variances. The research design includes an outline of what the researcher does from writing the hypotheses and their operational implications to the final analysis of the data. It is used to structure the research, to show how all of the major parts of the research project such as sampling, data collection and data analysis will try to address the central research questions. The research design provides

answers to questions such as: What techniques will be used to gather data? What sampling techniques will be used? How will time and cost constraints be dealt with?

Having dealt with the literature review in chapters two and three and four, attention is now drawn to data gathering using primary research. Primary research involves collecting data for a specific problem or opportunity at hand (Cooper & Schindler 2006:34). It is preferred to use primary research because it provides current information which is pertinent to the research problem at hand.

5.3.4.1 Types of research designs

There are three basic types of research designs that are used in conducting primary research namely; qualitative, quantitative and a combination of the two. Zikmund (2003) notes that the choice to research design centres on the nature of the research, the setting, the possible limitations and the underlying paradigm that informs the research project. The nature of the data provided differs according to the research method followed.

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- **Qualitative research**

Chisari (2005:18) explains that qualitative research aims to gather an in-depth understanding of human behaviour and the reasons that govern such behaviour. This can be best achieved at the hand of unstructured interviews in which respondents express their opinions freely without too much leading from the interviewer e.g. in-depth interviews, focus group interviews and projective techniques (Cant *et al.*, 2005:121). Qualitative research produces data that is not subjected to quantification or quantitative analysis. In other words, it refers to understanding concepts.

Hair, Wolfinbarger, Ortinau and Bush (2008:45), note that qualitative research provides a richness of data due to the unstructured approach of qualitative techniques. It enables researchers to collect in-depth data about respondents' attitudes, beliefs, emotions and perceptions. In this way data can be collected relatively quickly and cheaply. It further provides preliminary insights into building models and scale measurements about how variables are related and how to measure them.

- **Quantitative research**

Quantitative research involves the systematic and scientific collection of primary data to investigate quantitative properties and phenomena and their relationship with the intention of projecting the results to a wider population (Cooper & Schindler, 2003:45). The aim is to generalise about a specific population based on the results of a representative sample of that population. Quantitative research employs mathematical analysis to provide the fundamental connection between empirical observation and mathematical expression of quantitative relationships (Cooper & Schindler, 2003:45).

Quantitative research places a heavy emphasis on the use of structured questionnaires (Hair *et al.*, 2008:78). Quantitative research methods deal with problems that are specific and well defined and the decision maker and researcher have agreed on the precise information needs. This study used the quantitative research design which Ghauri and Gronhaug (2005:120) describe as studies whose findings are mainly the product of statistical summary and analysis. The main feature of quantitative research is the heavy reliance of the researcher on data analysis to arrive at findings or conclusions. Numbers are assigned to the properties in the phenomena to represent their qualities.

There are three types of approaches that can be used in quantitative or qualitative research or both, depending on the information required by the research problem. The three approaches are exploratory, descriptive and causal.

- **Exploratory research**

Gerber-Nel *et al.* (2005) describe exploratory research as initial research conducted to clarify and define the nature of the research problem or opportunity by giving ideas or insights as to how the research problem can be addressed. The information required is only loosely defined at this stage, as the process ahead is still flexible and relatively unstructured. Exploratory research can thus be defined as research that is used to gather preliminary information to help clarify the research problem. Exploratory research collects information in an unstructured, informal manner. The purpose of this type of research is to progressively narrow the scope of the research topic and consequently

paraphrase the problem or opportunity clearly. Exploratory research was used in this study through the review of the literature to discover the gaps. This helped to refine the research questions and to develop the hypotheses.

- **Descriptive research**

Descriptive research is used to describe the research problem in detail. Gerber-Nel *et al.* (2005) note that descriptive research answers questions: who, what, when, where and how? Implicit in descriptive research is the realisation that the researcher already knows or understands the underlying relationships of the research problem. The researcher may have a general understanding of the research problem but conclusive evidence that provides answers to the question should still be collected to determine a course of action. Descriptive research can be conducted in two ways, namely longitudinal or cross-sectional.

According to Cooper and Schindler (2003:45) longitudinal studies are investigations involving a fixed sample of elements (panel) that is measured repeatedly. There two types of longitudinal studies: True panels which are fixed samples of respondents whose variables are measured repeatedly and omnibus panels which are fixed samples of respondents who are measured repeatedly and whose variables change from measurement to measurement.

Cross-sectional studies on the other hand, are a type of research that involves the collection of information from any given sample population elements only once. Cross-sectional studies are usually performed by means of sample surveys. In sample surveys, a sample is selected as representative of the target population and the emphasis is on the generation of summary statistics, such as averages and percentages (Gerber-Nel *et al.*, 2005). This study used the cross-sectional approach where data was collected from the respondents only once through the survey method.

Causal research

Cooper and Schindler (2003:45) point out that causal research examines whether one variable causes or determines the value of another variable. A variable is a symbol or

concept that can assume any one of a set of values. Causal research reveals a cause-and-effect relationship between dependent and independent variables. A dependent variable is a symbol or concept that is expected to be caused by an independent variable. An independent variable is a symbol or concept over which the researcher has some control. It is hypothesised that the independent variable causes or influences the dependent variable. Researchers can also use causal research to test hypothesis. This study used the causal research through Pearson's correlation to test for relationship between variables.

5.3.5 Step 3: Selecting the primary data collection method

The next step in the research process is data collection. This section discusses the various methods of data gathering as well as the questionnaire design.

5.3.5.1 Basic primary data collection methods

Gerber-Nel *et al.* (2005) identify three primary data collection methods namely observation, experiment and survey.

- **Observation**

Cant *et al.* (2005:101) describe observation as a process through which primary data is obtained by observers (humans or machines) about the behavioural pattern of people, objects and occurrences. Observation is an alternative to direct questioning and is done by strategically placed humans or machines. The use of the observation method was not applicable in this study as the researcher wanted to gather specific information from the respondents.

- **Experimental research.**

Cant *et al.* (2005:109) point out that experimental research is based on the idea that a variable is treated in a certain way that may have a certain effect or influence on another variable. This is called the independent variable. The effect on this other variable (the dependent variable) is observed. The researcher manipulates an independent variable and then measures the effect. If all the other factors are held constant or controlled, it can be assumed that the independent variable has a causal on

the dependent variable. The experiment setting can be in a laboratory or in the field. This study used the survey as the research method because other methods of data collection such as observation and experiment were not appropriate to collecting data to investigate the research problems.

- **Survey**

Cant *et al.* (2005:89) point out that surveys are used to collect primary data from respondents via mail, telephone or in person. Surveys can be used to identify the characteristics of the target population. The advantages of using surveys are that surveys offer quick, inexpensive, efficient and accurate ways of gathering information (Cant *et al.*, 2005:89). The other advantage of the survey method is that surveys are useful in describing the characteristics of a large population. No other method of data collection can provide this general capability. The researcher used the survey method by way of self-administered questionnaires. The self-administered questionnaires are research questionnaires personally delivered to the respondent by the interviewer but completed by the respondent with no interviewer involvement (Cooper & Schindler, 2003:48). The decision to use self-administered questionnaires was because:

- Self-administered questionnaires ensure anonymity and privacy of the respondents thereby encouraging more candid and honest responses.
- Self-administered questionnaires have proved to have a higher response rate than other data gathering techniques such as mail surveys.
- Self-administered questionnaires are less expensive than other data gathering methods such as personal interviews where the researcher must be present with respondents at all times (Cooper & Schindler, 2003:48).

5.3.5.2 Questionnaire design and content

- **Questionnaire**

The instrument used in this study is the questionnaire. Wheather and Cook (2000) define a questionnaire as a formalised set of questions for obtaining information from respondents. A questionnaire can further be described as a booklet of structured standardised procedure, pre-coded and containing open-ended questions at times that

are used to collect information from the respondents who record their own answers. It can also be regarded as a data-collection instrument that sets out the questions to be asked in a formal way in order to produce the desired information. A questionnaire is advantageous because of the range of information that can be collected, the low costs of administering it, and the effort required to collect the data. Good questionnaires enable researchers to collect reliable and valid information. The reason to use the questionnaires was that:

- Questionnaires help to ensure that information from different respondents is comparable.
- Questionnaires increase the speed and accuracy of recording.
- Questionnaires facilitate data processing.
- Questionnaires are economic in terms of money and time.
- Questionnaires enable the respondents to remain anonymous and thus be honest in their responses.

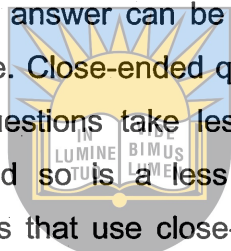
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However, the questionnaire also has the disadvantage that respondents might ignore it and not complete it at all and in certain cases there will be missing values. Thus the response rate to the questionnaire is estimated at between 70% and 80% (Cant *et al.* 2005:178).

- **Survey questions**

Gerber-Nel *et al.* (2005) point out that there are two types of survey questions from which to choose: open-ended and closed-ended. For open-ended question format, respondents use their own words to respond to certain questions and statements. No response options are given to respondents. This implies that the respondents are not influenced by a predetermined set of alternative responses. Open-ended questions are ideal when the researcher is doing exploratory research and does not know the possible responses to questions or statements. Gerber-Nel *et al.* (2005) further note that the use of open-ended questions should be limited for self-administered questionnaires because respondents will often give very elaborate answers. The researcher did not use open-ended questions because they are difficult to code and analyse.

Whether and Cook (2000:126) point out that close-ended (structured) questions specify the permitted responses and make information available to respondents. For self-administered questionnaires, respondent cooperation is improved if the majority of the questions are structured. Close-ended response format questions offer a respondent a selection of possible responses. The questionnaire used by the researcher comprised structured questions which made it easy for the respondents to indicate their views. The use of closed, dichotomous and likert scale questions enabled respondents to indicate their opinion on the impact of gender on managerial competencies, networking, risk aversion and the socio-cultural factors and determine gender differences. Cooper and Schindler (2003:45) note that every answer can be given a number or value so that statistical interpretation can be made. Close-ended questions are also better suited for computer analysis. Close-ended questions take less time from the interviewer, the participant and the researcher, and so is a less expensive survey method. The response rate is higher with surveys that use close-ended questions than with those that use open-ended questions. This study used mainly close ended questions.



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Gerber-Nel *et al.* (2005) stipulate that close-ended questions include dichotomous questions and multiple choice questions such as ordinal questions and likert scale questions. Dichotomous questions only have two response alternatives such as yes or no or male or female. Ordinal questions were used by the researcher to rank the importance attached to variables relating to gender and firm as well as entrepreneurial characteristics. Ordinal, also referred to as rank order scales, require the respondents to rank objects that are presented to them simultaneously according to some kind of criteria. In ordinal questions, the number assigned to the answer category has meaning. The answer categories are ranked from highest to lowest (or lowest to highest).

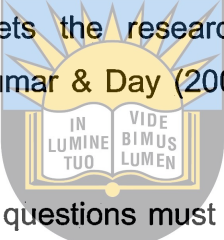
The questionnaire was divided into four sections (A-D): The first part of the questionnaire (Section A) focused on demand and availability of debt finance. The second part of the questionnaire (Section B) asked questions on firm characteristics. The third part of the questionnaire (Section C) focused on entrepreneurial characteristics. The fourth part of the questionnaire (Section D) asks questions about

demographic variables. The questionnaire was designed in a way that ensured that responses were reliable as explained in the following sections.

Reliability and validity are undoubtedly the hallmarks of good measurements and the keys to assessing the trustworthiness of any research study. In order to ensure that the results of the study were credible, the questionnaire was pre-tested:

- **Pre-testing the questionnaire**

Pre-testing refers to testing the questionnaire on a small number of the sample of respondents to identify and eliminate potential harmful questions. The purpose is to ensure that the questionnaire meets the researcher's expectations in terms of information that it obtains. Aaker, Kumar & Day (2003:119) content that the following concerns must be pre-tested:

- 
- The flow of the questionnaire: questions must appear in a logical sequence and be part of a coherent flow.
 - Skip patterns: skip patterns must be clear and well laid out for easy answering of the questionnaire.
 - Length: each section of the questionnaire must be timed to ensure that none of them is too long.
 - Respondent interest and attention: capturing and maintaining the interest of a respondent throughout the entire questionnaire is major design challenge.

Pre-testing the research instrument during the survey development stage was done through a pilot study covering 40 respondents. The results of the pre-test led to the test-retest reliability. This reliability measure used the same measurement scale a second time under nearly the same conditions. The correlation between the answers to the first and second tests were then examined and found acceptable. The results of the pre-test led to some corrections to the questionnaire.

5.3.6 Step 4: Sample design

According to Cooper and Schindler (2003:52) the basic idea of sampling is that by selecting some of the elements in a population, it is possible to draw conclusions about

the entire population. On the other hand, a sample represents the elements of the target population. Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population. The purpose of sampling is to make generalisations about the whole population which are valid and which allow prediction. It allows the researcher to draw conclusions about the entire population as it is possible to observe all relevant events in the population because of time and cost. Compelling reasons for sampling in this study are: lower cost, greater accuracy of results, greater speed of data collection, and availability of population elements. Issues covered under sampling design relate to the population, the sampling methods and the sample size.

5.3.6.1 Types of sampling design

Bryman and Bell (2003:199) note that there are two major types of sampling design. These are probability and non-probability sampling. This study used the probability method.

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- **Probability and non-probability sampling**

Bryman and Bell (2003:199) define probability sampling as a controlled procedure that assures that each population element is given a known non-zero chance of selection. In contrast, non-probability sampling, is arbitrary (non-random) and subjective. Each element of the population does not have a known non-zero chance of being included in the study. Probability sampling was used in this study because as pointed out by Bryman and Bell (2003:199) probability sampling allows the researcher to make inferences from information about a random sample to the population from which it is selected. This implies that findings derived from a sample can be generalised to the population. With probability sampling, there is substantial confidence that the sample is representative of the population from which it is drawn. Furthermore, if the non-probability sampling method is used, there is the possibility that human judgment would affect the selection process, making some elements of the population more likely to be selected than others. This kind of bias was eliminated through the use of probability sampling.

Cooper and Schindler (2003:52) identify four major types of probability sampling. These are systematic sampling, stratified sampling, cluster sampling and simple random sampling. Under systematic sampling, every k^{th} element in the population is sampled, beginning with a random start of elements in the range of 1 to k . Systematic sampling selects an element of the population at the beginning with a random start and following the sample fraction selects every k^{th} element. The main advantage of systematic sampling is that it is simple to design and it is also easy to determine sampling distribution of mean or population. The disadvantage is that periodicity within the population may skew the sample results. Most populations can be segregated into several mutually exclusive sub-populations or strata. The process by which a sample is construed to include elements from each of the segments is called stratified sampling. The main advantage of stratified sampling is that it provides data to represent and analyse sub groups. The main disadvantage of stratified sampling is that increased error will result if subgroups are selected at different rates. It is also time consuming.

According to Cooper and Schindler (2003:52) cluster sampling involves the division of the population into mutually exclusive clusters or sub-groups after which certain clusters are selected in the sample. The advantage of cluster sampling is that it is easy and cost effective. However, cluster sampling is often imprecise and results are difficult to compute and interpret. With simple random sampling, each member of the population has an equal probability of inclusion in the sample. This study used the simple random sampling method. Simple random sampling is simple to apply, in that a random sample is chosen from a population without any order. Furthermore, data analysis is reasonably easy and has a sound mathematical basis. The sample is obtained from all elements of the population.

- **Population**

Population refers to the total group of people or all elements about which information is needed (Cant, *et al* 2005:162). The study focused on SMEs which are registered with SEDA, and those in the Telephone Directory in selected cities in the Eastern Cape. The cities selected are East London, Queenstown, and King Williamstown. East London also included Mdantsane. The population of SMEs both male and female was 736.

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It is in light of the above considerations that Raosoft provided a minimum recommended sample size of 450. Gender composition was taken into account as the rule of thumb provides for 1 female entrepreneur to 2 males. This is also supported by Department of Trade and Industry (2005) which states that women represent more than 50% of the South African population but own approximately 33% of existing businesses.

5.3.7 Step 5: Data collection

This section describes the actual gathering of data and the treatment of missing values as well as coding. Data collection was done by two trained field workers who delivered the questionnaires to respondents and obtained names and telephone numbers of respondents to follow-up on the completion of the questionnaires. The researcher and field workers made several repeated calls to respondents to ensure completion of the questionnaires. A total of 450 questionnaires of which 150 were for women and 300 for male entrepreneurs, were sent out to respondents. Returned questionnaires from the female entrepreneurs were 117, representing a 78% return rate and those from their male counterparts were 225 representing a 75% return rate. Of the 342 returned questionnaires, 26 had missing values. According to Allison (2001:133), a missing value may represent or is the product of an unknown value.

Proper handling of missing values is important in all analyses and is critical in some, such as time series analysis. Improper handling of missing values will distort analysis because, until proven otherwise, the researcher must assume that missing cases differ in analytically important ways from cases where values are present. That is, the problem with missing values is not so much reduced sample size as it is the possibility that the remaining data set is biased (Allison, 2001:133).

The imputation of values where data are missing is an area of statistics which has developed much since the 1980s. Several imputation algorithms are now supported by the Statistical Package for Social Sciences (SPSS)'s Missing Values option (Allison, 2001:134). SPSS is statistical software for data imputation. According to Coakes (2005:65) SPSS is software for performing statistical procedures in the social sciences

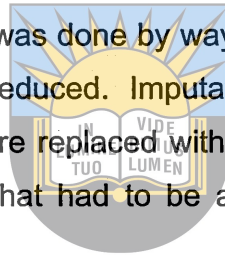
field. SPSS has almost all statistical features available and is widely used by researchers to perform quantitative analysis.

It is typical of surveys that respondents might not answer certain questions. These unanswered questions need to be dealt with carefully as they may result in the researcher drawing on the wrong inferences from the responses. Cant *et al.* (2005) note that there are three options of dealing with missing values:

- The first option is to use the **casewise deletion** approach which excludes subjects that have missing values on the variable under analysis. Analysis is only on the available data. Analysts are required to discard any cases (respondents) with any missing responses for any of the variables measured in the study. This is an extreme option, which may result in a very small sample size (Cant *et al.*, 2005:203). According to Cant *et al.* (2005:203), deleting large amounts of data is undesirable because data collection is costly and time-consuming. Furthermore, respondents with missing responses could differ systematically from respondents with complete responses. If so, casewise deletion could introduce bias (Cant *et al.*, 2005:203).
- The second option is to use **pairwise deletion** which requires data analysts to use all the cases with complete responses for a specific calculation. This is a less drastic option (Cant *et al.*, 2005:203). Pairwise deletion only removes the specific missing values from the analysis. A respondent may for example, not have answered an income question, but may have provided complete answers to all other questions in the survey. This respondent's data would then be included in all calculations except those involving the income variable (Cant *et al.*, 2005:203). Thus different calculations are based on different sample sizes. Pairwise deletion is ideal when the overall sample size is large, there are relatively few missing responses, the variables are not highly related, and there is no reason to believe the missing responses follow a systematic pattern across certain questions (Cant *et al.*, 2005:203).

- The third option is to use the **rule of thumb** to determine the rejection of individual questionnaires with a large proportion of missing responses (Cant *et al.* 2005:203). Research firms which often use rules of thumb are often uncomfortable using pairwise deletion. They argue that a high proportion of missing responses may point to sloppy field work, a respondent who did not understand key questions, or a hurried respondent who did not adequately consider his or her responses (Cant *et al.* 2005:203). One South African firm, for example, rejects all questionnaires where less than 75% of the key questions have been answered (Cant *et al.* 2005:203).

In the case of this study imputation was done by way of replacing missing values. This ensured that the sample is not reduced. Imputation was done by way of mean substitution. The missing values were replaced with the mean of the variable. Missing values presented a big challenge that had to be addressed before evaluation could proceed.



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- **Coding**

Coding involves assigning numbers or other symbols to answers so that responses can be grouped into a limited number of classes or categories. The classifying of data into limited categories sacrifices some data but is necessary for efficient analysis. Instead of requesting the word male or female in response to a question that asks for the identification of one's gender, the codes "M" or "F" can be used (Cooper & Schindler, 2003). The purpose of coding is to transform respondents' answers to survey questions into codes or symbols that can easily be entered into and read by a statistical analysis software package. In preparing for the transformation of answers into a computer-friendly format, it is necessary to first think about the structure of the required result (Cant, *et al.*, 2005:191).

In this study, two approaches to coding were done. The first was pre-coding which refers to assigning codes to response options before field work begins and hence printing the relevant codes on the questionnaire. Pre-coding was done to dichotomous questions by assigning numbers; 1 for Yes and 0 for No as reflected in table 5.1 below.

Table 5.1 Pre-coding of dichotomous questions

Yes	1	
No	0	

Secondly, final coding was done during data preparation to establish a **codebook** describing each variable in the dataset.

5.3.7 Step 6: Data analysis

This section deals with data analysis procedures. Data analysis usually involves reducing accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques. It also includes the interpretation of research findings in the light of the research questions, and determines if the results are consistent with the research hypotheses and theories. Data analysis is a process of gathering, modeling and transforming data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social domains (Cooper & Schindler, 2003).

Geber-Nel *et al.* (2005) point out that the purpose of analytic methods is to convert data into information needed to make decisions. The choice of the methods of statistical analysis depends on (1) the type of question to be answered, (2) the number of variables, and, (3) the scale of measurement. The type of question the researcher is attempting to answer is a consideration in the choice of the statistical technique. Based on this factor, the researcher may be concerned about the central tendency of a variable or distribution of that variable. The number of variables is also considered to determine whether the statistical techniques applied should be the univariate data analysis, bivariate data analysis or multivariate data analysis. The scale of measurement on which the data are based or type of measurement reflected in the data determines the permissible statistical technique and whether the appropriate empirical

operation may be performed. Data analysis for this study included descriptive statistics and Pearson Chi-square test, Independent samples T-test and logistic regression.

Since the question and scale of measurement require that the significance of gender differences on characteristics and availability of debt finance be established, the appropriate method to use to analyse the data was the Chi-square test and the T-test in conjunction with descriptive statistics and logistic regression.

5.3.7.1 The Chi-square test

Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis. The chi-square (χ^2) test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories (Maben, Statistics for Social Sciences). The chi-square test is always testing what scientists call the **null hypothesis**. The *null hypothesis* states that there is no significant difference between the expected and observed frequencies. The *alternative hypothesis* states they are different. The level of significance (the point at which you can say with 95% confidence that the difference is NOT due to chance alone) is set at 0.05 (the standard for most science experiments.)

5.3.7.2 The T-test

There are three types of *t*-test:

One-sample *t*-test

1. Used to compare a sample mean with a known population mean or some other meaningful, fixed value.

Independent samples *t*-test

2. Used to compare two means from independent groups.

Paired samples *t*-test

3. Used to compare two means that are repeated measures for the same participants - scores might be repeated across different measures or across time.

This study used the independent samples T-test which compared the two means from female and male respondents. This is probably the most widely used statistical test of all time, and certainly the most widely known. It is simple, straightforward, easy to use, and adaptable to a broad range of situations. Its utility is occasioned by the fact that scientific research very often examines the phenomena of nature of two variables at a time, with an eye toward answering the basic question: Are these two variables related? If there is alteration of the level of one, will this alter the level of the other? Or alternatively: By examining two different levels of one variable, it is expected that the associated level of the other will be found.

The t-test assesses whether the means of two groups are *statistically* different from each other. This analysis is appropriate whenever you want to compare the means of two groups (Trochim, 2006). To test the significance, there is need to set a risk level (called the alpha level). In most social research, the "rule of thumb" is to set the alpha level at .05. This means that five times out of a hundred there is a statistically significant difference between the means even if there was none (i.e., by "chance"). There is also need to determine the degrees of freedom (df) for the test. In the t-test, the degrees of freedom are the sum of the persons in both groups minus 2. Given the alpha level, the df, and the t-value, the t-value can be obtained in a standard table of significance to determine whether the t-value is large enough to be significant. If it is, then it can be concluded that the difference between the means for the two groups is different (even given the variability). Fortunately, statistical computer programs routinely print the significance test results and save the researchers the trouble of looking them up in a table.

5.3.7.3 Logistic regression

Logistic regression is a part of a category of statistical models called generalised linear models. Logistic regression allows one to predict a discrete outcome from a set of variables that may be continuous, discrete, dichotomous, or a mix of any of these (Senol & Ulutagay, 2006). Generally, the dependent or response variable is dichotomous. Logistic regression answers the same questions as discriminant function

analysis, the logit form of multiway frequency analysis with a discrete dependent variable, and multiple regression analysis with a dichotomous dependent variable.

However, logistic regression is more flexible than the other techniques. Unlike discriminant function analysis, logistic regression has no assumptions about the distributions of the predictor variables. In logistic regression, the predictors do not have to be normally distributed, linearly related, or of equal variance within each group (Senol & Ulutagay, 2006). Unlike multiple-regression analysis, which also has distributional requirements for predictors, logistic regression cannot produce negative predicted probabilities. Logistic regression analysis is especially useful when the distribution of responses on the dependent variable is expected to be nonlinear with one or more of the independent variables. In logistic regression, there is a binary or dichotomous response of interest, and the predictor variables are used to model the probability of the response.

The mathematical concept that underlies logistic regression is the logit – the natural logarithm of an odds ratio. A test of independence using chi-square could be applied. Generally, logistic regression is well suited for describing and testing hypotheses about relationships between a categorical outcome variable and one or more categorical or continuous predictor variables. In this study logistic regression was used to test the relationship between the gender differences and access to debt finance.

5.3.7.4 Descriptive statistics

Gerber-Nel *et al.* (2005) note that descriptive statistics are used to describe the basic features of the data in a study. Descriptive statistics are used to describe the main features of a collection of data in quantitative terms. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. Descriptive statistics help to simplify large amounts of data in a sensible way. Each descriptive statistic reduces a lot of data into a simpler summary. In this study, the following statistical techniques were used (Gerber-Nel *et al.*, 2005).

- **The Distribution:** This is a summary of the frequency of individual values or ranges of values for a variable. This study used tables and a graph.
- **Central Tendency:** The central tendency of a distribution is an estimate of the “centre” of a distribution of values. The mean and standard deviation are used. The mean or average is probably the most commonly used method of describing central tendency. The median is the score found at the exact middle of the set of values. The standard deviation is a more accurate and detailed estimate of dispersion. The standard deviation shows the relation that a set of scores has to the mean of the sample.

5.3.7.5 Statistical Package for Social Sciences (SPSS)

This study used SPSS as the statistical software for data analysis. According to Coakes (2005:65) SPSS is software for performing statistical procedures in the social sciences field. SPSS is among the most widely used programmes for statistical analysis in social sciences. SPSS is a complete statistical package that is based on a point and click interface. SPSS has almost all statistical features available and widely used by researchers to perform quantitative analysis.

5.3.7.6 Validity, reliability and errors

- **Reliability test**

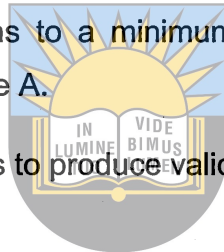
Reliability is concerned with consistency of measures. The level of an instrument's reliability is dependent on its ability to produce the same result when used repeatedly (Cant, *et al.*, 2005:188). There are a number of procedures used to assess the reliability of measurement scales used in surveys (Cant, *et al.*, 2005:188). This study used Cronbach's alpha as a measure of reliability. Cronbach's alpha is a test for survey's internal consistency. It is also called scale reliability test. It is a measure of how well each individual items in a scale correlates with the remaining items. Reliability measurements of a test remain consistent over repeated tests on the same subject. Alpha coefficient ranges in value from 0 to 1. The higher the score, the more reliable is the generated scale. Eighty percent of the questions passed the alpha test at design

stage and 20% failed. This led to a redesigning and re-testing of the questionnaire which then led to the passing of those that had initially failed.

Reliability was further enhanced by:

- Using a panel of experts to review the questionnaire for question phrasing and sequencing. This was done during a training seminar on Theses and Dissertations run by The Govern Mbeki Research and Development Centre (GMRDC). A panel of 8 comprising PhD students and supervisors was engaged to review the questionnaires and the necessary recommendations were effected.
- Keeping open-ended questions to a minimum. This is clearly reflected in the questionnaire sample annexure A.

For an instrument to be reliable, it has to produce valid results. Thus validity needs to be ensured.



- **Validity**

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Validity refers to whether an instrument actually measures what it is supposed to measure given the context in which it is applied. Validity can be defined as the extent to which differences in observed scale scores reflect true differences between objects on the characteristics being measured, rather than systematic or random errors (Cant, *et al.*, 2005:235). The following types of validity were considered when designing and evaluating this research study:

- Face validity which refers to the fact that the concept being measured is done so appropriately;
- Criterion-related validity which is associated with establishing measures that help predict future outcomes in relation to specific criteria;
- Content validity which refers to the use of measures that incorporate all of the meanings associated with a specific concept;
- Construct validity which is associated with a measure encapsulating indicators that are theoretically sound;

- Internal validity which refers to whether the cause, as contained in the hypothesis, produces the given effect in the research;
- External validity which refers to the extent to which the results of the research can be generalised.

- **Steps taken to ensure validity**

- Using a statistician and a panel of experts to evaluate the research instrument. A statistician was engaged to carry out statistical tests on the validity of the instrument and the results were positive.
- Pre-testing the research instrument. This has already been explained above.
- The use of a big sample greater than 40 and a margin of error not more than 5% and a confidence interval of 95%. This has also been covered already in the paragraph that describes the determination of the sample size.
- Comprehensive review of literature, which was done in chapters two and three and four.

- **Errors**



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According to Cooper and Schindler (2003:48) errors especially the response and non-response errors can also pose a serious threat to the reliability of data and must be minimised by the researcher. Response errors are the estimated inaccuracies that can be introduced by the researcher, the interviewer or the respondents. The researcher may make the error in the design of the instrument or may not properly define the problem and the related information required. Response errors can also occur when the respondent deliberately or mistakenly provides incorrect answers to the survey questions (Cant *et al.* 2005:183). Errors were dealt with according to Babbie and Monton (2002:97) as follows;

- Using self-administered questionnaires, whereby the field workers and the respondents had direct contact.
- Repeated phone calls and visits to the respondents by the field workers and researcher.
- Carefully constructing and pre-testing the questionnaires.

- Thorough training of field workers to eliminate administrative errors.
- Removing sensitive questions from the questionnaire.
- Carefully constructing and pre-testing the questionnaire.

5.3.8 Step 7: Reporting the results

The final stage in the business research process as depicted by figure 5.1 is the interpretation of the results and the drawing of conclusions relevant to managerial decision-making. During this step, the researcher reports the research findings, conclusions and makes recommendations Gerber-Nel *et al.* (2005). The research results will be presented in the next chapter.



5.4 SUMMARY

This chapter examined aspects of the research methodology for this study. Research was defined and then the business research described. Steps in the business research process were identified and followed by the researcher. As pointed out in the research process, the problem statement, the research hypotheses and the research objectives were identified. The formulation of the research problem is of utmost importance in the research. The two major types of research design, namely qualitative and quantitative research, were explained. The motivation for using quantitative research for this study was discussed. In addition, the three types of research that can be used in quantitative research or qualitative research were discussed. The three types of research are exploratory, descriptive and causal. The study used descriptive research. Three primary data collection methods namely observation, experiment and survey were identified. The motivation for using the survey was given.

The chapter also discussed the four major survey approaches namely, personal interviews, telephone surveys, mail surveys and self-administered surveys. The motivation for using the self-administered survey was discussed. A questionnaire was used as the data collection instrument and eight hypotheses were tested in this study. Before the hypotheses could be tested, reliability and validity tests were done to ensure accurate results. The instrument (questionnaire) was put through rigorous testing first by pre-testing it and also applying the Cronbach's alpha test. A panel of experts and

statisticians were also used to ensure validity of results. The issue of missing values, which tends to distort analysis and causes the researcher to assume that missing cases differ in analytically important ways from cases where values are present, was dealt with through imputation by way of mean substitution. Concerted effort to minimise response and non-response errors was also made to ensure reliability in the data collected.

After the reliability of measure was tested, data analysis was done. First descriptive statistical analysis was done through frequency distributions, graphs and measures of central tendencies (mean). Secondly, the chi-square test, the T-test and logistic regression tests to determine the gender differences on characteristics of variables such as managerial competencies, networking, socio-cultural factors and risk aversion firm size and business sector was done.



The results of the data analysis will be discussed in the next chapter.

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CHAPTER SIX

DATA ANALYSIS AND INTERPRETATION

6.1 INTRODUCTION

Chapter five dealt with the research methodology including the research design, the sampling method as well as the data collection and data analysis methods that were used for this study. The purpose of this chapter is to present and interpret the empirical findings of this research. In interpretation, the immediate results will be translated into integrated and meaningful statistics and findings. The findings should be related to the objectives of the research. If both the data analysis and interpretation are not carried out properly, the success of the study cannot be assured (Proctor, 2000:273). The objectives of this chapter are (1) to systematically present the findings of the research study, and (2) to interpret the findings.

This chapter presents empirical findings. The section on empirical findings is structured into sub-sections. Sub-section 6.2.1 covers the response rate. Sub-section 6.2.2 covers the normality of data. Sub-section 6.2.3 presents demographics. Sub-section 6.2.4 presents results on demand for and availability of debt finance. Sub-section 6.2.5 presents firm characteristics. Sub-section 6.2.6 presents entrepreneurial characteristics. Sub-section 6.2.7 presents the relationship between firm and entrepreneurial characteristics and access to debt finance. Sub-section 6.2.8 summarises the chapter. Because of the huge volume of data analysis, only the summary results are presented in this chapter.

6.2 EMPIRICAL FINDINGS

6.2.1 Response rate

Table 6.1 depicts the response rate on the study. The response rate for female entrepreneurs was 78% and that of male respondents was 75%. The mean response rate was 76%. Repeated visits and telephone calls to the respondents ensured a high response rate.

Table 6.1 Response rate

Respondents	No. sent out	No. Returned	Response rate
Females	150	117	78%
Males	300	225	75%
Total	450	342	76%

Response rate (also known as *completion rate* or *return rate*) in survey research refers to the number of people who answered the survey divided by the number of people in the sample. It is usually expressed in the form of a percentage.

6.2.2 The normality of the data



According to Coakes (2005:35) the normality of the data can be determined by using the Kolmogorov-Smirnov test (if the sample size is above 100) and the Shapiro-Wilks test (if the sample size is below 100). If the significance level is greater than 0.05 using either of the two tests, then normality is assumed. This study used the Kolmogorov-Smirnov test to determine the normality of the data because the sample sizes were more than 100. The significance of the Kolmogorov-Smirnov test was greater than 0.05 in all the tests. This implies that the normality of the data can be assumed.

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6.2.3 Demographics

Demographic data collected was on the age and gender of owner/mangers (refer section D of the questionnaire). These are presented below together with visual illustrations in the form of table 6.2 and figure 6.1.

6.2.3.1 Age of respondents

Table 6.2 shows the age distribution of the respondents. The results show that 63% of respondents are in the age 36 – 40 age bracket, followed by 18% being those in the 41 – 50 age bracket. The age bracket of 50 years and above had 10%, the 22 – 35 (youth) age bracket had 9 %, whilst the 18 – 21 age bracket had zero.

Table 6.2: Age of respondents

Age bracket	Frequency		Percentage	
	Male	Female	Male	Female
18 – 21 years	0	0	0	0
22 – 35 years	22	9	6%	3%
36 – 40 years	137	78	41%	22%
41 – 50 years	42	20	12%	6%
Above 50 years	24	10	7%	3%
Total	225	117	66%	34%

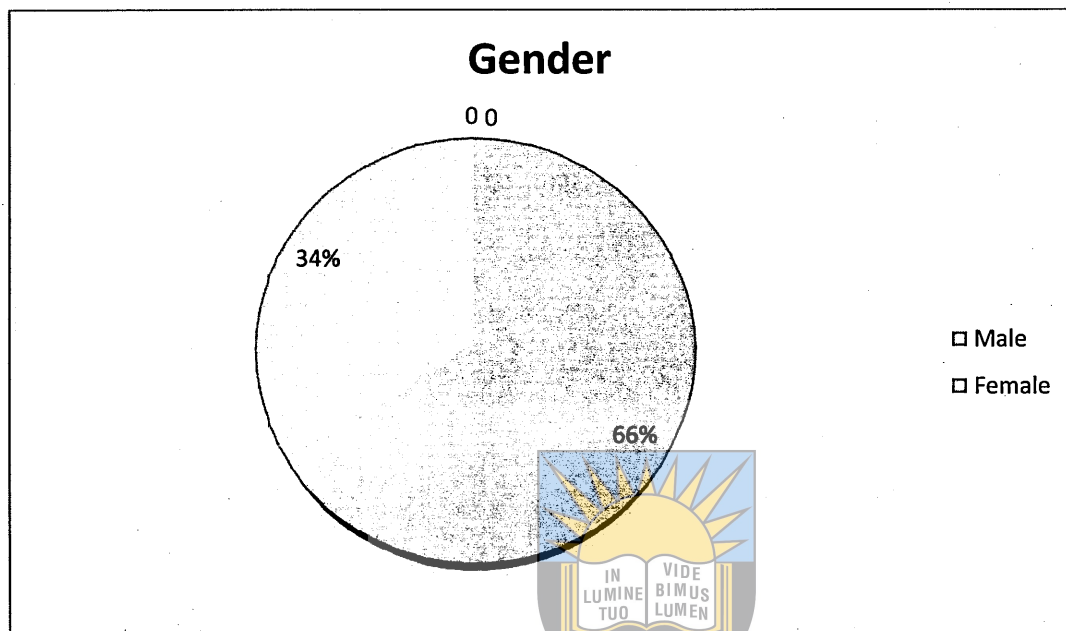


The results show that on the average respondents were between the age of 36-40 and this can be related to the general age of business ownership.

6.2.3.2 Gender of respondents

Figure 6.2 depicts the gender of the respondents. The results show that female entrepreneurs represent 34%, whilst their male counterparts represent 66%.

Figure 6.1: Gender



The gender factor is fundamental in this study because the objective of the study is to evaluate the impact of gender on access to debt finance by SMEs. As such, the gender component has been factored into every response category to examine its effect on the variables under study. The gender factor is then tested to determine its impact on access to debt by SMEs.

6.2.4 Demand for and availability of debt finance

Section A of the questionnaire bears the questions on demand for and availability of debt finance to SMEs. This is in line with the first primary objective of the research which seeks to examine the application rate (demand) of SME owners for debt finance as well as the success rate (availability) of those who applied.

Table 6.3 provides the frequency distribution statistics on the demand for and availability of debt finance. Table 6.4 provides descriptive statistics on mean and standard error and table 6.5 provides the T-test and Chi-square tests significance results. Differences between women and men-owned SMEs were examined for statistical significance using the t-test. The test established the significance of gender on the demand for both bank loan and trade credit at 0.01. The test also revealed that

differences between men and women were not significant at 0.05 with regards to the availability of both bank loan and trade credit. A combination of the t-tests and chi-square tests was used to examine the differential extent to which women-owned SMEs use debt finance in their capital structure.

Table 6.3: Descriptive statistics: Frequency distribution

Variable	Male	%	Female	%
Application for bank loan	180	80	36	31
Application for trade credit	176	78	24	21
Success of application for bank loan	135	75	26	73
Success of application for trade credit	123	70	17	72

Table 6.4: Descriptive statistics: Mean and Standard Error

Variable	All Firms		Male-owned		Female-owned	
	Mean	Std Err	Mean	Std Err	Mean	Std Err
Application for bank loan	.632	.005	.800	.007	.308	.002
Success of application	.585	.004	.722	.011	.205	.023
Application for trade credit	.745	.012	.750	.033	.722	.014
Success of application	.700	.006	.698	.006	.708	.006

Table 6.5: T-test and Chi-square test

Variable	T-test		Chi-square test	
	t-stat	Sig	Df	P-value
Application for bank loan	3.514	.002	1	.000
Success of application	1.473	.057	1	.907
Application for trade credit	-1.49	.001	1	.000
Success of application	0.898	.053	1	.903

Sig. at 0.05 levels

The chi-square results for demand for both bank loan and trade credit had a P-value of 0.000 showing that gender has a significant impact on demand for debt finance. Thus the chi-square results reinforce those of the t-test in establishing that the differences that exist between women and men-owned SMEs have a significant impact on the demand for debt finance.

The chi-square results on the availability of both bank and trade credit gave a P-Value of 0.0903 and 0.907 respectively indicating that gender differences do not have any significant impact in the availability of debt finance. **Hence with regards to the demand for debt finance, the null hypothesis that there is no significant gender difference on the demand for debt finance to SMEs is rejected and the alternative accepted. Regarding the availability of debt finance, the null hypothesis which states that there is no significant gender difference on the availability of debt finance to SMEs is accepted.**

Conclusion

The results on the effects of gender on demand for and availability of debt finance are consistent with such studies as Robb & Wolken (2002) who found that the proportion of female-owned businesses having a loan was smaller than the proportion of male-owned businesses, and most of the loan types were used less often by female-owned

businesses than male-owned ones. Thus women are shown to be significantly less likely than men to have a loan, including a line of credit, which is considered to be the most flexible type of loan from the standpoint of a small business (Cole & Mehran, 2010). Treichel and Scott (2006:54) however found out that women were less likely to apply for bank loans although they were not less likely to be approved. The assertion here is that women are just hesitant to apply for debt finance because they fear that they will be turned down. But the results of this study and Treichel and Scott (2006:54)'s findings refute this fact.

6.2.5 Firm characteristics

Firm characteristics considered were the firm size and business sector (refer section B of the questionnaire).



6.2.5.1 Firm size

Table 6.6 provides t-test results on descriptive statistics on the mean, standard error, t-stat and significance levels of the variables used to measure firm size. Differences between women and men-owned SMEs were examined for statistical significance using the t-test. Firm size was considered in light of the number of employees, gross assets and turnover.

Table 6.6: Descriptive statistics: Mean, Standard Error, t-stat and significance level

Variable	All Firms		Male-owned		Female-owned		t-stat	Sig
	Mean	Std Err	Mean	Std Err	Mean	Std Err		
Sales	2,413,271	22.042	3,840,000	25.792	986,542	27.385	11.23	.01
Assets	2,500,327	13.418	4,245,786	15.469	754,868	16.123	9.94	.01
Employment	21.895	.342	35.146	.349	8.643	.241	5.74	.01

The t-test results establish the significance of gender on firm size at 0.01.

From the t-test results it can be concluded that women's businesses are typically smaller than those of their male counterparts and that gender has a significant impact

on firm size. This suggests that women-owned businesses experience greater difficulties in accessing debt finance due to the size of their firms. **Hence the null hypothesis that there is no significant gender difference on firm size of SMEs is rejected and the alternative accepted.**

Conclusion

The chi-square test established the P-value of the impact of gender on firm size as 0.000 indicating that gender has a significant impact on firm size. From table 6.3, it can be observed that a greater percentage of women's businesses have less than 10 employees whilst male-owned firms have employees in the range of 10 to 50. This suggests that the majority of female-owned SMEs, according to the South African definition fall in the very small category. This confirms literature which finds that smaller businesses typically have greater difficulty in securing bank loans and they pay higher interest than larger businesses (Brau, 2002). Treichel and Scott (2006:54) cite Fabowale *et al.* (1995) who argued that although gender is not a determinant of credit terms, it is highly correlated with the size of the business. Women-owned businesses are typically smaller, have less capacity, less capital, a narrower range of collateral, and an unproven track record/character relative to businesses owned by men.

6.2.5.2 Business sector

Table 6.7 provides the frequency distribution statistics of business sector in relation to gender. Table 6.8 provides descriptive statistics on mean and standard error and table 6.9 provides the T-test and Chi-square tests significance results. Differences between women and men-owned SMEs were examined for statistical significance using the t-test. The results were further reinforced by a chi-square test to determine the impact of the differences. Gender differences by industry sector are significant at 0.001 in manufacturing, services, catering and accommodation and transport. Gender differences in finance and retail are significant at 0.05. What can be observed from the results is that men are more into manufacturing, wholesale, accommodation as well as transport sectors than their female counterparts. On the other hand, women are more into services and the retail sector than men. **Hence the null hypothesis that there is**

no significant gender difference on business sector of SMEs is rejected and the alternative accepted.

Table 6.7: Descriptive statistics: Frequency distribution business sector

Variable	Male	%	Female	%
Agriculture	0	0	0	0
Mining & Quarrying	0	0	0	0
Manufacturing	109	32	12	4
Electricity, Gas & Water	0	0	0	0
Construction	0	0	0	0
Retail	18	5	26	8
Services	32	9	64	19
Catering	10	3	33	10
Transport	30	9	0	0
Finance	3	1	5	1
Community, Social & Personal Services	0	0	0	0
Wholesale	10	3	3	1
Accommodation	15	4	6	2

Table 6.8: Descriptive statistics: Mean and Standard Error

Variable	All Firms		Male-owned		Female-owned	
	Mean	Std Err	Mean	Std Err	Mean	Std Err
Manufacturing	.354	.004	.484	.004	.103	.008
Retail	.129	.007	.080	.008	.222	.016
Services	.281	.004	.142	.005	.547	.007
Catering	.126	.008	.044	.008	.282	.017
Transport	.088	.003	.133	.004	0	0
Finance	.023	.004	.013	.005	.043	.009
Wholesale	.038	.002	.044	.004	.026	.005
Accommodation	.061	.008	.067	.005	.051	.002

Table 6.9: T-test and Chi-square test

Variable	T-test		Chi-square test	
	t-stat	Sig	Df	P-value
Manufacturing	3.157	.000	3	.000
Retail	-3.399	.031	1	.021
Services	4.393	.000	4	.001
Catering	-3.840	.001	6	.000
Transport	0.210	.000	2	.000
Finance	1.094	.042	1	.034
Wholesale	0.312	.001	1	.001
Accommodation	0.432	.011	1	.002

Sig. at 0.05 levels

The results are consistent with literature which finds that women-owned businesses are more likely to operate in retail and services than businesses owned by men (Robb & Wolken, 2002). This may influence the need for and type of credit used. Service based businesses require little if any financing and retail businesses allow for the use of trade credit (Robb & Wolken, 2002).

6.2.6 Entrepreneur characteristics

Entrepreneurial characteristics considered by the study were networking, managerial competencies, risk aversion and the influence of socio-cultural factors which all fall under section C of the Questionnaire.

6.2.6.1 Networking

Table 6.10 provides the frequency distribution statistics networking in relation to gender. Table 6.11 provides descriptive statistics on mean and standard error and table 6.12 provides the T-test and Chi-square tests significance results. Differences between women and men-owned SMEs were examined for statistical significance using the t-test. The results were further reinforced by a chi-square test to determine the impact of the differences.

Table 6.10: Descriptive statistics: Frequency distribution on networking

Variable	Male	%	Female	%
Membership of professional association	94	27	19	6
Seminars and trade fairs	87	25	14	4
Contacts with other entrepreneurs	143	42	38	11

Table 6.11: Descriptive statistics: Mean and Standard Error

Variable	All Firms		Male-owned		Female-owned	
	Mean	Std Err	Mean	Std Err	Mean	Std Err
Membership of professional association	.330	.005	.418	.002	.162	.003
Seminars & Trade Fairs	.295	.002	.387	.011	.120	.021
Contacts with other entrepreneurs	.529	.004	.636	.005	.325	.002

Table 6.12: T-test and Chi-square test

Variable	T-test		Chi-square test	
	t-stat	Sig	Df	P-value
Membership of professional association	.82	.001	3	.001
Seminars & Trade Fairs	1.44	.002	7	.001
Contacts with other entrepreneurs	1.24	.001	1	.001

Sig. at 0.05 levels

Gender differences were significant at 0.01 for the following variables of networking; membership of professional association, contacts through seminars and trade fairs, and contacts with other entrepreneurs. Interesting to note is that the differential extent is greater in favour of males in that males have a wider network base such as being members of professional associations, networks with business associates and contacts with other entrepreneurs as well as attending trade fairs and seminars. Women are shown to be leaning strongly to the narrower network band of friends and family mainly. However the results make it clear that the differential extent is quite small where networking concerns friends, and family members as both men and women have strong networks among friends and family members. **Hence the null hypothesis that there is**

no significant gender difference on networking by entrepreneurs is rejected and the alternative accepted.

Chi-square test shows a P-value of 0.001 when testing for the impact of gender and networking. Thus men have a wider network compared to women. This is consistent with literature which reveals that men tend to have more diverse networks than do women, which may provide subtle advantages to men (Schirato & Webb, 2003). Literature further notes that networks that are diverse help people reach other social realms and avoid redundant information. Thus, entrepreneurs with networks that draw information from multiple sources, that is, those with high heterogeneity and low percentage kin, are much more likely to start and grow a new business than those with more homogeneous networks (Renzulli *et al.*, 2002:544).

6.2.6.2 Managerial competencies

Table 6.15 provides the frequency distribution statistics on managerial competencies in relation to gender. Table 6.16 provides descriptive statistics on mean and standard error and table 6.17 provides the T-test and Chi-square tests significance results. Differences between women and men-owned SMEs were examined for statistical significance using the t-test. Managerial competencies were measured according to the level of higher education, management training and related experience. The results were further reinforced by a chi-square test to determine the impact of the differences.

Table 6.13: Descriptive statistics: Frequency distribution managerial competencies

Variable	Male	%	Female	%
No formal education	0	0	5	4
Matric	93	27	58	17
Diploma	108	32	35	10
Degree	74	22	9	3

Related experience	97	28	28	8
Management experience	155	45	37	11
Business management training	124	36	33	10

Table 6.14: Descriptive statistics: Mean and Standard Error

Variable	All Firms		Male-owned		Female-owned	
	Mean	Std Err	Mean	Std Err	Mean	Std Err
No formal education	.015	.012	.413	.003	.042	.003
Matric	.442	.003	.307	.002	.496	.222
Diploma	.418	.007	.480	.002	.299	.017
Degree	.243	.006	.329	.007	.077	.013
Related experience	.365	.170	.431	.191	.239	.345
Management experience	.561	.177	.669	.007	.316	.013
Business management training	.459	.003	.551	.004	.282	.006

Table 6.15: T-test and Chi-square test

Variable	T-test		Chi-square test	
	t-stat	Sig	Df	P-value
No formal education	-0.86	.003	2	.000
Matric	-1.01	.001	1	.001
Diploma	-1.40	.005	2	.002
Degree	4.07	.004	6	.014
Related experience	4.07	.003	3	.001

Management experience	3.21	.000	1	.000
Business management training	2.37	.003	1	.001

Sig. at 0.05 levels

Gender differences with regards to managerial competencies were significant at 0.001 in the following variables: level of education, management training, and management experience. **Hence the null hypothesis that there is no significant gender difference in the managerial competencies of entrepreneurs is rejected and the alternative accepted.**

The results show that male entrepreneurs have better educational levels as well as management training and experience than their female counterparts. The Chi-square test showed a P-value which is significant at 0.05 which shows beyond doubt that the differential extent of gender is significant. The results are consistent with previous research which has established that owners and managers with previous experience were more successful than their counterparts (Tocher & Rutherford, 2009). Owner-managers become more experienced within their firms and industries, and they are more likely to accumulate higher levels of social competencies. Watson and Robinson (2003) find that women are considered to perform their managerial role differently from men, and hence this leads to differences in the development and success of their respective businesses.

6.2.6.3 Risk aversion

Table 6.16 provides the frequency distribution statistics on risk aversion in relation to gender. Table 6.17 provides descriptive statistics on mean and standard error and table 6.18 provides the T-test and Chi-square tests significance results. Differences between women and men-owned SMEs were examined for statistical significance using the t-test. The results were further reinforced by a chi-square test to determine the impact of the differences.

Table 6.16: Descriptive statistics: Frequency distribution on risk aversion

Variable	Male	%	Female	%
Risk adversity	51	15	226	66
Uncertainty about success	72	21	192	56

Table 6.17: Descriptive statistics: Mean and Standard Error

Variable	All Firms		Male-owned		Female-owned	
	Mean	Std Err	Mean	Std Err	Mean	Std Err
Risk aversion	.810	.007	.149	1.23	.661	.004
Uncertainty about success	.772	.005	.211	.014	.561	.002

Table 6.18: T-test and Chi-square test

Variable	T-test		Chi-square test	
	t-stat	Sig	Df	P-value
Risk aversion	.69	.001	2	.000
Uncertainty about success	1.10	.002	3	.000

Sig. at 0.05 levels

Gender differences on risk aversion were significant at 0.001. This shows that women entrepreneurs are more risk averse than their male counterparts. The t-test results were further strengthened by the Chi-square relationship test which produced a P-value of 0.000. **Hence the null hypothesis that there is no significant gender difference on risk aversion by entrepreneurs is rejected and the alternative accepted.**

The results are consistent with earlier research by Olsen and Cox (2007:34) that higher levels of enzyme monoamine oxidase exist in women investors suggesting a biological reason for greater risk aversion. On the other hand, other studies suggest a social

answer based on a perceived lower level of confidence due to masculine nature of the investment domain (Olsen & Cox, 2007:32). The combination of the two factors above renders women more risk averse than men, implying a reliance on internal equity instead of loans.

A study by Constantinidis *et al.* (2006:138) revealed that women's strong risk-aversion disposition and lack of trust toward bankers leads them to apply for bank loans only if they have no other choice. Constantinidis *et al.* (2006:138) further found a high level of risk aversion in women entrepreneurs they interviewed and concluded that women may choose lifestyle types of business demands to avoid dependence on external sources of capital.



6.2.2.4 Part-time entrepreneurship

Table 6.19 provides the frequency distribution statistics on part-time entrepreneurship in relation to gender. Table 6.20 provides descriptive statistics on mean and standard error and table 6.21 provides the T-test and Chi-square tests significance results. Differences between women-and men-owned SMEs were examined for statistical significance using the t-test. The results were further reinforced by a chi-square test to determine the impact of the differences.

Table 6.19: Descriptive statistics: Frequency distribution on socio-cultural factors

Variable	Male	%	Female	%
Part-time entrepreneurship	52	15	90	77
Social capital	140	41	34	10
Family responsibilities	29	8	92	27

Table 6.20: Descriptive statistics: Mean and Standard Error

Variable	All Firms		Male-owned		Female-owned	
	Mean	Std Err	Mean	Std Err	Mean	Std Err
Part-time entrepreneurship	.415	.047	.231	.229	.769	.002
Social capital	.509	.073	.622	.641	.291	.090
Family responsibilities	.354	.280	.129	.001	.786	.341

Table 6.21: T-test and Chi-square test

Variable	T-test		Chi-square test	
	t-stat	Sig	Df	P-value
Part-time entrepreneurship	.66	.000	1	.000
Social capital	.77	.001	3	.000
Family responsibilities	.95	.000	2	.000

Sig. at 0.05 levels

Gender differences on part-time entrepreneurship are significant at 0.001 for all the variables considered. This was further reinforced by a Chi-square test which produced a P-value of 0.000 indicating that part-time entrepreneurship has a significant impact on gender. **Hence the null hypothesis that there is no significant gender difference on part-time entrepreneurship is rejected and the alternative accepted.**

The results of this study confirm the findings of previous empirical studies that women entrepreneurs have to cope with the demands of their business and family responsibilities, as well as other socio-cultural matters and that this “double burden” can have an impact on both their ability and their willingness to go to debt (Brush *et al.*, 2002:315). This suggests that women entrepreneurs are affected by a variety of socio-cultural factors that impact on their ability to effectively access debt finance.

Cowling & Murray (2003) suggest that women are significantly less likely than men to become active investors as a reflection of their accumulated human capital characteristics and lesser involvement in wealth accumulation process. This perspective is consistent with social feminist theory which attributes inherent differences between men and women to differences in early and ongoing socialisation (Greene, Hart, Gatewood, Brush & Carter, 2003).

6.2.7 Firm and entrepreneurial characteristics in relation to demand for and availability of debt finance.

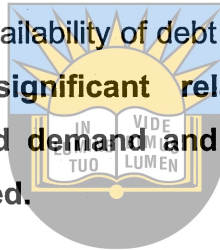
Regression analysis was used to determine the impact of gender on the demand for and availability of debt finance. The results are presented in table 6.22. A distinction is made between taking into account all explanatory variables, the intermediary variables or just the gender dummy variable. β 's refer to the coefficients of the explanatory variables. From the intermediary variables the conclusion is that the availability of debt finance is lower if firms are operating in the service sector, if entrepreneurs are risk averse, if they operate on a part-time basis, if they do not indulge in networking and if they have no earlier experience with business management. All these effects are significant at the 5% level.

Table 6.22: Logistic regression analyses on gender and demand for and availability of debt finance.

	All variables		Intermediary variables		Gender	
	β - value	t-value	β - value	t-value	β - value	t-value
Business sector	-18.35	-3.32	-20.34	-3.73	0	0
Firm size	-13.67	-2.54	-15.42	-2.85	0	0
Networking	7.89	3.09	8.53	3.29	0	0
Managerial competences	10.26	5.20	11.13	5.60	0	0
Risk aversion	3.09	1.67	3.76	1.91	0	0
Part-time	-38.12	-8.41	-36.14	-8.64	0	0

Gender	-16.84	-3.34	0	0	-27.11	-5.69
P (significance value)	0.09		0.01757		0.017	
N	1757		85		1913	

The following interpretation can be given. Female entrepreneurs may have a lack of confidence in their entrepreneurial capabilities compared to male entrepreneurs. Moreover, women may have less equity than men or they fear that they will meet with discrimination when they apply for debt finance. Thus it can be concluded from the results that there is a significant relationship between firm and entrepreneurial characteristics and application and availability of debt finance to SMEs. **Hence the null hypothesis that there is no significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance is rejected and the alternative accepted.**



6.3 SUMMARY

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This chapter presented the empirical findings of the study. The response rate and the normality of data were considered first. The response rate was 76% and the normality of the data was assumed following the Kolmogorov-Smirnov test which was greater than 0.05 in all the tests.

Three tests were used to analyse the data collected. To test the gender differences with regard to the characteristics and availability of debt finance, the t-test was used. Then the chi-square test was used to determine the differential extent of the variables. Logistic regression was done to determine the impact of gender on the demand for and availability of debt finance.

The empirical results were presented in accordance with the two primary hypotheses. The first one considered gender differences on the demand for and availability of debt finance. This looked at the gender differences in the demand for and availability of bank loans as well as trade credit. Gender differences were established with regards to the demand for both bank loans and trade credit. However, the results showed no gender

differences in respect of the availability of both bank loans and trade credit. The second primary hypothesis considered the gender differences in light of both firm and entrepreneur characteristics. Two firm characteristics were considered namely firm size and business sector. The results showed that there were significant gender differences in the firm characteristics.

Four entrepreneurial characteristics were considered namely; networking, managerial competencies, risk aversion and socio-cultural factors. In all the four characteristics gender differences were significant at either 0.01 or 0.05. It was therefore concluded that there are gender differences that impact on the demand for and availability of debt finance by SMEs. It was also concluded that gender differences exist in both firm and entrepreneur characteristics. Finally an attempt was made to determine whether there was a relationship between the differences established and the demand for and availability of debt finance. A regression test was done and it showed that the availability of debt finance is lower if firms are operating in the service sector, if entrepreneurs are risk averse, if they operate on a part-time basis, if they do not indulge in networking and if they have no earlier experience with business management. Hence there is a significant relationship between firm and entrepreneurial characteristics and application and availability of debt finance.

The next chapter will examine the conclusions and recommendations of the study. In addition, the achievement of the objectives of the study will be presented. Also, the limitations of the study and areas for further study will be discussed. Eight subsections; namely demographic, gender and availability of debt finance, gender and networking, gender and firm size, gender and business sector, gender and managerial competencies, gender and risk aversion and gender and socio-cultural factors. For demographic results, a graph and tables were used to explain the gender composition. The respondents' gender composition was 34% female and 66% male confirming the literature which puts it at approximately 33%.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

This chapter is the conclusion of a study done to determine the impact of gender on firm and entrepreneurial characteristics and availability of debt to SMEs in selected cities of the Eastern Cape Province of South Africa. Literature posits that gender has a significant impact on firm and entrepreneurial characteristics as well as on availability of debt to SMEs. Because of gender differences, it is argued that the availability of debt to SMEs tends to favour male entrepreneurs more than their female counterparts. In order to ascertain this argument and also improve availability of debt to SMEs, the gender differences had to be investigated. The research findings, recommendations, limitations and areas of further study will be discussed. The chapter is presented as follows: section 7.2 presents a brief summary of each chapter including the findings; section 7.3 highlights the recommendations; section 7.4 discusses the achievement of objectives; section 7.5 examines the limitations of the study and section 7.6 highlights the areas for further study. Section 7.7 will conclude the study.

7.2 SUMMARY

This study comprises seven chapters. This final chapter of the study summarises each chapter from section 7.2.1 to 7.2.6.

7.2.1 Introduction to the study (Chapter One)

The study's major focus was to determine the gender differences on firm and entrepreneurial characteristics and availability of debt finance to SMEs. The study's focus was three-dimensional: First was the investigation of gender differences on the availability of bank loans as well as trade credit to SMEs. Secondly was the investigation of gender differences on firm and entrepreneurial characteristics. Thirdly was to determine whether there is a relationship between firm and entrepreneurial characteristics and application and availability of debt finance to SMEs.

According to O'Neill and Viljoen (2001:38) the government of South Africa realised the importance of developing entrepreneurship and SMEs in order to arrest unemployment, stimulate economic growth and achieve social stability. However, despite the importance of SMEs, 75% of SMEs in South Africa fail within the first two years of operation. Von Broembsen, Wood and Herrington (2005) state that the probability of an SME surviving beyond 42 months and becoming an established firm is less likely in South Africa than in any other GEM country sampled in 2005. Important to note is that women-owned firms represent an increasingly important segment of the SME sector (Robb & Coleman, 2009). In spite of this, women-owned enterprises have lagged behind men-owned enterprises in a number of performance measures.

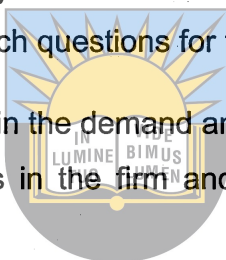
Although the failure rate of SMEs is reported to be high in South Africa, male-owned/managed enterprises have a lower failure rate than those of their female counterparts (Robb & Coleman, 2009). The female Total Entrepreneurial Activity (TEA) index shows that on average, participation rates for men tend to be 50% higher than those of women (Minniti *et al.* 2004). Herrington *et al.* (2008) report that there is considerable consensus among experts about the three most important factors constraining female entrepreneurial activity. The factors identified are: education and training, government policies and access to finance. This study focused on gender differences with regards to access to debt finance.

Attempts to investigate access to finance for women by Kim (2006), Dafna (2006:310) and Treichel and Scott (2006:63) and Hassan (2007) were done in such countries as the USA, Canada, Israel and Philadelphia and Malaysia respectively but no such study has been done in South Africa. Irwin and Scott (2006) note that although finance constraints for female entrepreneurs have been a recurrent issue in policy debates, no consensus has been reached on the question of whether disadvantages exist for female entrepreneurs accessing finance. In a survey of 600 firms, equally split by gender, they found that there are: "quantifiable gender differences in certain areas of business financing, although intra-sectoral similarities demonstrate that gender is only one of a number of variables that affect the financing process" (Irwin & Scott, 2006). This study therefore investigated the gender differences on firm and entrepreneurial characteristics

and availability of debt finance to SMEs in South Africa in order to provide empirical evidence on the effects of gender and access to finance. SMEs need to access debt finance, especially from commercial banks and trade creditors. These sources of finance, which are readily available to SMEs in developed countries, are often not available to SMEs in developing countries such as South Africa.

Two firm characteristics namely firm size and business sector were examined for gender differences. Four entrepreneurial characteristics namely networking, managerial competencies, risk aversion and socio-cultural factors were also investigated. . Based on the introduction and the background of the study, the research questions and hypotheses were stated. The research questions for the study were:

- Are there gender differences in the demand and availability of debt to SMEs?
- Are there gender differences in the firm and entrepreneurial characteristics of SMEs?
- Is there any relationship between firm and entrepreneurial characteristics and the demand and availability of debt to SMEs?



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In order to provide solutions to these problems, it was necessary to first perform a review of the literature and develop hypotheses. The primary research hypotheses for the empirical study were:

Hypothesis 1

H0: There is no significant gender difference in the demand for and availability of debt finance to SMEs.

H1: There is a significant gender difference in the demand for and the availability of debt finance to SMEs.

Hypothesis 2

H0: There is no significant gender difference in the firm and entrepreneurial characteristics of SMEs.

H1: There is a significant gender difference in the firm and entrepreneurial characteristics of SMEs.

Hypothesis 3

H0: There is no significant relationship between firm and entrepreneurial characteristics and demand for and availability of debt finance.

H1: There is a significant positive relationship between firm and entrepreneurial characteristics and demand for and availability of debt finance.

The primary hypotheses were established through the following secondary hypotheses, which included the demand for and availability of debt finance to SMEs as well as firm and entrepreneurial characteristics.

- **Demand for debt finance**

H0: There is no significant gender difference in the demand for debt finance to SMEs.

H1: There is a significant gender difference in the demand for debt finance to SMEs.

- **Availability of debt finance**

H0: There is no significant gender difference in the availability of debt finance to SMEs.

H1: There is a significant gender difference in the availability of debt finance to SMEs

- **Firm Characteristics**

- **Firm size**

H0: There is no significant gender difference in the firm size of SMEs.

H1: There is a significant gender difference in the firm size of SMEs

- **Business sector**

H0: There is no significant gender difference in the business sector of SMEs.

H1: There is a significant gender difference in the business sector of SMEs

- **Entrepreneurial characteristics**

- **Networking**

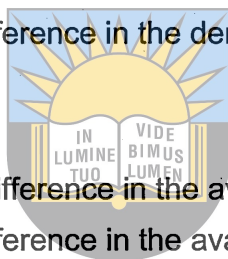
H0: There is no significant gender difference in networking by the owners of SMEs.

H1: There is a significant gender difference in networking by the owners of SMEs

- **Managerial competencies**

H0: There is no significant gender difference in the managerial competencies of the owners of SMEs.

H1: There is a significant gender difference in the managerial competencies of the owners of SMEs.



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➤ **Risk aversion**

H0: There is no significant gender difference in risk aversion by the owners of SMEs.

H1: There is a significant gender difference in risk aversion by the owners of SMEs.

➤ **Part-time entrepreneurship**

H0: There is no significant gender difference in the nature of entrepreneurship (female business owners do not carry out their business more on a part-time basis than male owners).

H1: There is a significant gender difference in the nature of entrepreneurship (female business owners carry out their business more on a part-time basis than male owners).

7.2.2 Small and medium enterprises (Chapter two)

Chapter two focused on Small and Medium Enterprises (SMEs). The definition of SMEs according to the National Small Business Act of South Africa was provided and important to note is the age and size of the Small and Medium firms by numbers of employees and assets size. These were the considerations taken into account when determining the population of the study. According to Herrington *et al.* (2008), the profile of South African entrepreneurs is that men are 1.6 times more likely than women to engage in entrepreneurial activity. This is cause for concern particularly when South Africa is compared to developing countries in Latin America (Herrington *et al.*, 2008).

In many developing countries female Total Early-Stage Entrepreneurial Activity (TEA) rates are just below male TEA rates (Herrington *et al.*, 2008). Maas and Herrington (2006) point out that the total early-stage entrepreneurial activity of women in South Africa is lower than that of their male counterparts indicating that there are gender differences that impact on the establishment and development of SMEs. The conclusion of this chapter as pointed out by Maas and Herrington (2006) is that "*without appropriate financing, SMEs simply cannot grow, compete and create jobs. The issue of finance must be addressed if an environment promoting entrepreneurship and SME development is to be encouraged in South Africa*".

7.2.3 Financing SMEs (Chapter Three)

Chapter three of this study explored the financing of SMEs. The chapter started by examining the needs for capital and sources of capital for SMEs. The needs for capital for SMEs include working capital, fixed asset purchases, product development and initial losses and other reasons such as human capital development and training. The sources of capital were explained through the capital structure. Capital structure theories such as the static trade-off theory and the pecking order theory were explored. Conventional capital structure theory concludes that there must be a balance between the use of equity and debt in any business. The static trade-off theory suggests that SMEs should use debt because of the tax advantages, the disciplining effect of debt and ability of the owner of the firm to maintain control. However, debt also has the disadvantages of bankruptcy, agency problems and moral hazards suggesting that SMEs should use equity. Finding the balance between the tax benefits of debt versus the bankruptcy cost, agency problems and moral hazards of the excessive use of debt is at the heart of the capital structure debate. However, internal equity is limited for most growing SMEs. In addition, external equity is not available and also very expensive as pointed out by Timmons & Spinelli (2007:410). This suggests that debt finance is one of the financing options that SMEs can utilise.

7.2.4 Firm and entrepreneurial characteristics (Chapter Four)

Chapter four examined the literature in respect of gender differences in respect of firm and entrepreneurial characteristics. The main argument of this chapter is that gender has a significant impact on firm and entrepreneurial characteristics such as firm size, business sector, networking, managerial competencies, risk aversion and socio-cultural factors. The conclusion of the chapter is that women entrepreneurs have less access to or make less use of financial capital than do men entrepreneurs. Women-run businesses are different from men-run ones in that female-run businesses are much more likely to self-finance their business (Treichel & Scott, 2006:63). Rather than go into debt or sell shares, women are more likely to use personal savings, earnings from the business, home equity loans, credit cards, and family loans to finance their business.

The literature also revealed that female entrepreneurs are more likely to work part-time, more likely to work in the service sector, they are more averse to risk, have less financial management experience and spend less time networking than male entrepreneurs. The literature further revealed that women relied heavily on personal rather than external sources of financing. The conclusion that women raised significantly less capital also attests to a higher level of risk aversion on the part of women, a desire for smaller business that allows for work/family balance, and a desire to maintain control (Coleman & Robb, 2008). The fact that women use smaller amounts of start-up capital and rely on personal rather than external sources has implications for their ability to develop new products and services, grow their firms, hire employees, and survive periods of adversity (Coleman & Robb, 2008).

7.2.5 Research methodology (Chapter Five)

Chapter five of this study dealt with the research methodology. This chapter examined aspects of the study, including research designs, variable definitions and measurements, data collection methods, and data analysis. This study was based on descriptive and causal research in which the simple random sampling technique was used to draw a sample. Data was collected through the use of self-administered questionnaires. Data collected was transformed into more suitable format for analysis by utilising Excel software. After data processing, the Statistic Package for Social Science (SPSS) was utilised for data analysis. Statistical techniques used in this study included descriptive statistics, T-tests, Chi-square tests and logistic regression.

7.2.6 Research findings (Chapter Six)

The research findings were explained according to the format of the questionnaire.

- **Response rate**

The response rate for female entrepreneurs was 78% and that of male respondents was 75%. The mean response rate was 76%. Female entrepreneurs responded a bit better than their male counterparts.

- **Demographics**

Female respondents comprised 34%, whereas male respondents were 66%. The majority of respondents (63%) were in the age bracket 36 – 40 years.

- **Demand for and availability of debt finance**

The effects of gender on the demand for and availability of both bank loans and trade credit was crucial to determine. The results indicated that gender has a significant impact on the demand for both bank loan and trade credit. However, results also showed that gender has no impact on the availability of both bank loans and trade credit. The t-test results for the demand for debt finance were significant at 0.01 whereas the one for the availability was not significant at 0.05. This was further supported by Chi-square tests with a P-value of 0.000 for the demand for debt finance and 0.06 for the availability of debt finance. Thus there are gender differences on the demand for bank loans and trade credit but no differences on the availability of both bank loans and trade credit. **The null hypothesis that there is no significant gender difference in the demand for debt finance to SMEs is rejected and the alternative accepted. However, regarding the availability of debt finance, the null hypothesis which states that there is no significant gender difference in the demand for debt finance to SMEs is accepted.**

- **Firm size**

The t-test results showed that gender differences on firm size were significant at 0.01. The chi-square tests established the P-value of the impact of gender on firm size as 0.000 indicating that gender has a significant impact on firm size. The results showed that a greater percentage of women's businesses have less than 10 employees whilst male firms have employees in the range of 10 to 50. **The null hypothesis that there is no significant gender difference in the firm size of SMEs is rejected and the alternative accepted.**

It can be concluded that the majority of female-owned SMEs fall in the very small firm size category, according to the South African definition of SMEs.

- **Business sector**

From the t-test results gender differences by industry sector were significant at 0.01 in manufacturing, services, catering and accommodation and transport. Gender differences in finance and retail were significant at 0.05. The chi-square tests gave a P-value of 0.00 indicating that there are gender differences by industry sector. **The null hypothesis that there is no significant gender difference in business sector of SMEs is rejected and the alternative accepted.**

It can be concluded that women-owned businesses are more likely to operate in retail and services than businesses owned by men (Robb & Wolken, 2002).

- **Networking**

Gender differences were significant at 0.01 on membership of professional association; having family members and friends as the source of business information; business associations; contacts through seminars and trade fairs; and contacts with other entrepreneurs. Interesting to note is that the differential extent is greater in favour of males in that males have a wider network base such as being members of professional associations, networks with business associates and contacts with other entrepreneurs as well as attending trade fairs and seminars. Differences were significant at 0.05 in areas such as networking through friends, family members, and family members & business associates with women topping this category.

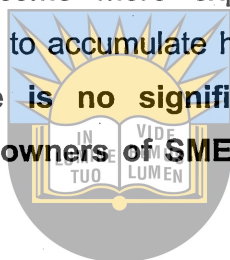
Chi-square tests showed a P-value of 0.01 when testing for the impact of gender and networking. **The null hypothesis that there is no significant gender difference in networking by the owners of SMEs is rejected and the alternative accepted.** The conclusion is that men have a wider network compared to that of women.

- **Managerial competences**

Gender differences with regards to managerial competences were significant at 0.01 in the following variables: level of education, management training, management experience, record keeping and accounting. Under level of education the areas of significance were on those who have matric and those who do not have any formal

education. When asked whether they kept business records, results show that responses such as always, seldom and occasionally recorded significant differences at 0.01. When asked who is in charge of the business's books of accounts, results show responses like book-keeper, accountant and owner-manager recording significant differences at 0.01.

The Chi-square test gave a P-value of 0.008 which shows that the differential extent of gender is significant. The conclusion which can be drawn from the results is that owners and managers with previous experience are more successful than their counterparts. Furthermore, owner-managers become more experienced within their firms and industries, and they are more likely to accumulate higher levels of social competence. **The null hypothesis that there is no significant gender difference in the managerial competencies of the owners of SMEs is rejected and the alternative accepted.**



- **Risk aversion**

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Gender differences on risk aversity were significant at 0.01. The t-test results were further strengthened by the Chi-square relationship test which produced a P-value of 0.000. The conclusion is that women entrepreneurs are more risk averse than their male counterparts. **The null hypothesis that there is no significant gender difference in risk aversion by the owners of SMEs is rejected and the alternative accepted.**

- **Part-time entrepreneurship**

Gender differences on part-time entrepreneurship were significant at 0.01 for all the variables considered. This was further reinforced by Chi-square tests which produced a P-value of 0.00 indicating that entrepreneurship has a significant impact on gender. The conclusion is that women entrepreneurs are affected by a variety of socio-cultural factors in their quest to become effective entrepreneurs. **The null hypothesis that there is no significant gender difference in the nature of entrepreneurship (female business owners do not carry out their business more on a part-time basis than male owners) is rejected and the alternative accepted.**

- **Firm and entrepreneurial characteristics versus demand for and availability of debt finance.**

Regression analysis was used to determine the impact of gender on the demand for and availability of debt finance. A distinction was made between taking into account all explanatory variables, the intermediate variables or just the gender dummy variable. All these effects were significant at the 5% level. The conclusion is that the availability of debt finance is lower if firms are operating in the service sector, if entrepreneurs are risk averse, if they operate on a part-time basis, if they do not indulge in networking and if they have no earlier experience with business management. Thus there is a significant relationship between firm and entrepreneurial characteristics and application and availability of debt finance. **The null hypothesis that there is no significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance is rejected and the alternative accepted.**

7.3 RECOMMENDATIONS

Three questions defined the statement of the problem namely:

- Are there gender differences in the demand and availability of debt to SMEs?
- Are there gender differences in the firm and entrepreneurial characteristics of SMEs?
- Is there any relationship between firm and entrepreneurial characteristics and the demand and availability of debt to SMEs?

The questions considered the issue of differences that exist between female and male entrepreneurs in accessing debt finance for their small and medium-sized businesses. According to the gender discrimination theory, men are more preferred than women in the allocation of resources especially finance to start and grow their businesses. However, the results of this study revealed that there is no systemic rejection of credit applications of women by commercial banks implying that there is no significant difference in credit approval for male and female entrepreneurs. However, there is an indirect constraint in that very few women actually demand for credit. Furthermore, the capital structure theory on the financing of SMEs reveals that equity is not readily

available to SMEs therefore they have to depend on debt. Various factors are alluded to the differences between men and women entrepreneurs' access to debt finance. The factors considered in this study were firm specific as well as entrepreneur specific. The empirical findings of the study were that gender differences do indeed exist in the demand for debt finance but there are no differences in the availability of debt. The differences that exist in the demand for debt are as a result of the fact that women's firms are small and often concentrated in the service and informal sector whereas those of their male counterparts are in the manufacturing and mainly formal sectors.

Linked to this, is the fact that female businesses are small in size as measured by the number of employees, turn over and gross assets compared to those of their male counterparts. These firm characteristics which tend to favour male entrepreneurs are closely linked to the owners' characteristics. Female entrepreneurs have less business networks, are more risk averse, are into business on a part-time basis and have lower managerial competencies than their male counterparts. Because of the above factors and not gender discrimination, women entrepreneurs find it difficult to access debt finance. It is therefore recommended that in order to improve the availability of debt, women entrepreneurs should:

- Plan and save to have some reasonable amount of equity contribution. There is also a need for female entrepreneurs to have personal assets to be used as collateral. Without equity, it is virtually impossible to get the required funding from commercial banks. If female entrepreneurs have equity, this will enable them to increase the size of their businesses as well as venture into the male dominated sectors of manufacturing. Training and communication on the requirements of banks and trade creditors can help to make female SME owners to get investment ready and thus improve the availability of debt. Commercial banks can create awareness of their funding requirements especially the importance of collateral through advertisements and communication with trade associations. It is therefore incumbent on government and other stakeholders to ensure that schemes, such as the Small Firm Loan Guarantee, are well publicised and

available to owners of SMEs. Therefore, it is important for women entrepreneurs to be investment ready if they want to access credit.

- O'Neil and Viljoen (2001:39) suggest that government should recognise the role females play in the economy. Government assistance was cited as an important contributor to the business success of female entrepreneurs in Singapore. O'Neil and Viljoen (2001:39) suggested that governments in the Southern African Development Community (SADC) and especially in South Africa should target females as beneficiaries of government programmes for entrepreneurial development. In South Africa, the Department of Trade and Industry (DTI) was entrusted with coordinating the implementation of the government's strategy to support the SMEs. Through its Centre for Small-Business Promotion it should vigorously perform this role of providing a platform for all levels i.e. national, provincial and local level to align policies and support measures for SMEs. Government interventionist policies should be strengthened through other small-business development initiatives (e.g. Business Partners, Triple Trust and initiatives by NGOs and banks).
- To improve networking, women entrepreneurs should always ensure that they maintain good relationships with commercial banks and trade creditors and also attend seminars and trade fairs. Networking is particularly important to trade creditors. Shane and Cable (2002:366) find that networking can be used to reduce information asymmetry and moral hazard in creditor/debtor relationships. The banks can also encourage networking activities. Bank officers need to be trained in more conventional risk management techniques. Besides financial analysis, business planning, and credit scoring, bankers need to be competent in developing interpersonal networks that can help to gather information about SMEs. This will go along way in widening women's network base and enable them to get access to funding for their businesses.
- To improve on their managerial competencies, female entrepreneurs need training in such areas as financial management, record keeping and general management practices. Furthermore, women entrepreneurs should take up

management posts in all spheres of business in order to gain experience before venturing into businesses on their own. Therefore, to improve the availability of debt to women entrepreneurs, there is the need for personal development by the female owners of SMEs, especially in the area of business and financial management skills through training. Owners of SMEs have to take greater responsibility for their own learning. Therefore, they need to create a positive attitude towards entrepreneurship and training. The personal involvement of the entrepreneur in gathering the relevant information to learn about the industry is critical.

- Women entrepreneurs lack human capital in the form of education and training. Educational institutions should introduce and strengthen entrepreneurial education. When learners are oriented into entrepreneurship from an early age, it becomes easier to develop successful ventures. Presently, entrepreneurship is predominantly being presented to students in management, business and economic related courses and not to students in all the Faculties in the Universities in South Africa. This needs to be changed so that women, who constitute the greater proportion of the student population at universities these days, can be exposed to business orientation in whatever discipline they will be studying. This will prepare and empower women to exploit the statutory provisions of the women empowerment laws of the country such as the Black Economic Empowerment laws (BEE) which tend to favour women empowerment. If women are trained and fully empowered, they will not consider going into business as being risky. They will consider going into business as an opportunity.
- Women entrepreneurs often get into business on a part-time basis as they have family responsibilities to attend to. It is therefore important that women take up entrepreneurship as an opportunity rather than a necessity. There is therefore a need for the government to advocate for changing roles in families, emphasising that it is acceptable for women to become entrepreneurs. This can be done by building self-confidence through motivational linkages, eradicating obstacles in the regulatory environment that discriminate against women and concentrating

on capacity building and support access to finance, information, training, advice and consulting services. All in all, government should pay special attention to the plight of female entrepreneurs in rural areas (in terms of training, finance, infrastructure and land ownership).

- Whilst it is strategically important for the government to target 'women's entrepreneurship' in South Africa for policy attention, it is critically important to address the limitations and exclusions of issues affecting women entrepreneurs and the ways in which these are interred within policy and state regulatory practices. Government policy and the availability of inputs determine the success of women's business enterprises. According to the Department of Trade and Industry (2005) there is an urgent need for more government involvement in women's entrepreneurial development and greater emphasis should be placed on funding women entrepreneurship in South Africa. Adequate government funding is crucial to the development of women's entrepreneurship. In this regard the Department of Trade and Industry (2005) draws attention to an important point, that while there is institutional support from within government for the "Women's Budget" it is the responsibility of parliamentarians and civil society to ensure that it continues to produce gender disaggregated data and analysis of its activities and expenditure. Support institutions that facilitate women's entrepreneurial ventures and make its operations efficient and effective are important in enterprise development.

7.4 ACHIEVEMENT OF OBJECTIVES

This section measures the success of the study against the research objectives formulated in section 1.3.1

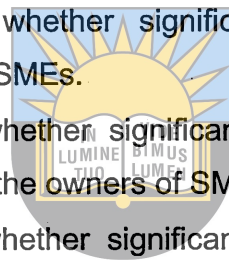
The primary objectives of this study were:

- To investigate empirically whether there is a significant gender difference in the demand for and availability of debt finance to SMEs.
- To investigate empirically whether there is a significant gender difference in the firm and entrepreneurial characteristics of SMEs.

- To investigate empirically if there is a significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance.

The attainment of the second primary objective was dependent upon realising the secondary objectives listed below.

- To investigate empirically whether significant gender difference exists in the firm size of SMEs.
- To investigate empirically whether significant gender difference exists in the business sector of SMEs.
- To investigate empirically whether significant gender difference exists in networking by the owners of SMEs.
- To investigate empirically whether significant gender difference exists in the managerial competencies of the owners of SMEs.
- To investigate empirically whether significant gender difference exists in risk aversion by the owners of SMEs.
- To investigate empirically whether significant gender difference exists in the nature of entrepreneurship (i.e. whether female business owners are more part-time in nature than male business owners).



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The first primary objective was to investigate whether there are gender differences with regards to the demand for and availability of bank loans and trade credit for SMEs. Two approaches were employed. One was through the review of literature and the other through empirical evidence. The first approach was achieved through literature review in chapter two. Chapter two examined the role of SMEs in development, gave the definition of SMEs, the involvement of women in entrepreneurship and the financial challenges facing women entrepreneurs. Maas and Herrington (2006) point out that the total early-stage entrepreneurial activity of women in South Africa is lower than that of their male counterparts indicating that there are gender differences that impact on the establishment and development of SMEs.

Empirical evidence was obtained through chapters five and six. Chapter five focused on the research methodology and chapter six gave the analysis of the results which

showed that there are gender differences with regard to demand for debt finance but the differences were not significant with regards to the availability of debt finance. This was achieved through the use of self-administered questionnaires and the data was analysed using SPSS and included descriptive statistics, regression T-tests, and Chi-square tests. The statistical analysis of data, results and discussions were presented in chapter six.

The first secondary objective was to investigate the gender differences in firm size. The second secondary objective was to investigate the gender differences in the type of business. The third secondary objective was to investigate the gender differences in networking. The fourth secondary objective was to investigate the gender differences in managerial competencies. The fifth secondary objective was to investigate the gender differences in risk aversion. The sixth secondary objective was to investigate the gender differences in the nature of entrepreneurship such as part-time entrepreneurship. The six secondary objectives were achieved through the review of the literature in chapter four, the research methodology in chapter five and the presentation of the empirical findings in chapter six.

The third primary objective was to investigate empirically if there is a significant relationship between firm and entrepreneurial characteristics and demand and availability of debt finance. This was also achieved in chapters five (research methodology) and six (research results)

Based on the achievement of all the primary and secondary objectives, it is concluded that the objectives of this study were achieved.

7.5 LIMITATIONS OF THE STUDY

The financing of SMEs comes from so many different sources such as government and its associated agencies, non-governmental organisations, venture capital, angels, and the equity market. This study only focused on debt finance which is based on bank loans and trade credit and excluded all the other sources. Thus the study limits itself to examining the demand side of the factors which impact on access to debt finance taking into account the gender effects.

7.6 AREAS FOR FURTHER STUDY

Further studies could focus on the impact of gender on other sources of finance such as angels, venture capital, government and its associated agencies, non-governmental organisations, and the equity market. Another study can examine the effect of gender on firm and entrepreneurial characteristics from the supply side.

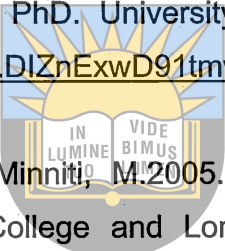
7.7 SUMMARY

This chapter examined the conclusions, recommendations, achievement of objectives, limitations and areas for further study in respect of a study titled the impact of gender on characteristics and availability of debt finance to SMEs in selected cities of the Eastern Cape Province of South Africa. South Africa suffers from high unemployment with an official estimate of approximately 25.2% of the economically active population unemployed. One of the best ways to address unemployment is to leverage the employment creation potential of small businesses and to promote SME development.

Thus emphasis on the development of female entrepreneurs is understandable if we know that women represent more than 50% of the South African population but own approximately 33% of existing businesses. In fact, male-owned businesses outnumber female-owned businesses by more than two to one.

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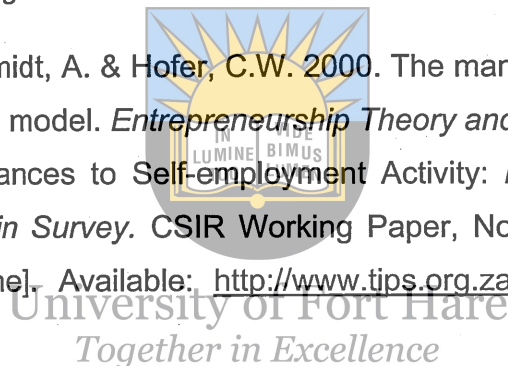
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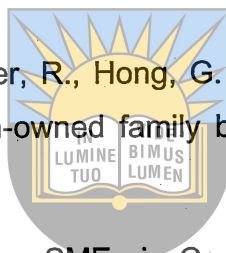
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ANNEXURE A



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QUESTIONNAIRE

A Master's student in the Department of Business Management at the University of Fort Hare is conducting a research on 'The impact of gender on characteristics and availability of debt finance to small and medium enterprises (SMEs) in selected cities of the Eastern Cape Province of South Africa.' Your enterprise has been selected as a sample unit for the research purposes. Please kindly complete the following questionnaire. The questionnaire is meant for owner/managers of SMEs. You are kindly asked to give your honest opinion on the issues raised in the questionnaire. The information provided will be treated confidentially and will be used solely for the purposes of this research. The questionnaire should take about 20 minutes to complete. Completion of the questionnaire is voluntary. If you would like to obtain a summary of the results of this research, I would be happy to send you a copy.

Please feel free to contact me on 0793109641 or dvdgarwe@yahoo.com with regards to any queries you may have, or my supervisor, Dr O. O. Fatoki on 0820737350 or funsofatoki@yahoo.com.

Thank you!

Section A: Demand and availability of debt finance.

Question 1: Have you ever applied for a bank loan during the past three years?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

Question 2: Was your application successful?

Yes		No	
-----	--	----	--

Question 3: Have you ever applied for trade credit during the past three years?

Yes		No	
-----	--	----	--

Question 4: Was your application successful?

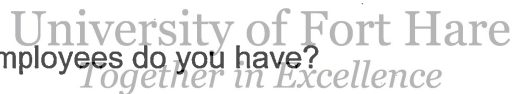
Yes		No	
-----	--	----	--



Section B: Firm Characteristics

Firm size

Question 5: How many employees do you have?



.....

Question 6: Indicate your business's turnover the past year

Question 7: How much are your gross (total) assets worth?

.....

Business sector

Question 8: Indicate the sector that your business falls in.

Manufacturing	
Retail	
Services	
Entertainment	
Financial	

Agriculture	
Mining & Quarrying	
Electricity, Gas & Water	
Construction	
Catering & accommodation	
Transport	
Community, social & personal services	



Section C: Entrepreneur Characteristics

Networking

Question 9: Are you a member of any trade or professional association?

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Yes		No	
-----	--	----	--

Question 10: Have you ever attended any seminars and trade fairs?

Yes		No	
-----	--	----	--

Question 11: Do you have any contacts with other entrepreneurs?

Yes		No	
-----	--	----	--

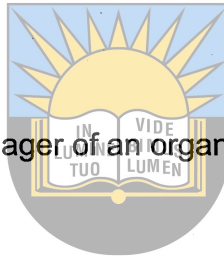
Managerial Competencies

Question 12: Indicate your highest level of education.

No formal education	Matric	Diploma	Degree

Question 13: Do you any experience related to your business?

Yes		No	
-----	--	----	--



Question 14: Have you been a manager of an organisation before?

Yes		No	
-----	--	----	--

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Question 15: Have you received any training in related management field?

Yes		No	
-----	--	----	--

Risk Aversion

Question 16: Indicate which gender category you consider to be averse to risk.

Male		Female	
------	--	--------	--

Question 17: Are you certain about the success of your business?

Yes		No	
-----	--	----	--

Part-time entrepreneurship

Question 18: Are you involved in this business on a full-time basis?

Yes		No	
-----	--	----	--

Question 19: Women are significantly less likely than men to become active investors because of their education, health, skills and working or professional experience as well as age.

Strongly agree	
Agree	
Not sure	
Disagree	
Strongly disagree	



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Question 20: Women entrepreneurs have to cope with the demands of their business and family responsibilities than men do.

Strongly agree	
Agree	
Not sure	
Disagree	
Strongly disagree	

Section D: Demographic information

Question 21: Please indicate your gender.

M		F	
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Question 22: Please indicate your age.

18 – 21years	
22 – 35 years	
36 – 40 years	
41 – 50 years	
More than 50 years	

THANK YOU VERY MUCH!



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