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# Development finance institutions' opportunity evaluation process in South Africa

**Likotsi, Nthabeleng**

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# Development Finance Institutions' Opportunity Evaluation Process in South Africa

**Nthabeleng Likotsi**

**A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management: Entrepreneurship and New Venture Creation.**

**Johannesburg, 2013/2014**

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# ABSTRACT

South Africa is a member of the BRICS and also a member of the G20, which includes a number of countries who make up what is known as the emerging markets. By their name, emerging markets are considered high potential economies which can grow at a faster pace. Within the context of entrepreneurship, emerging markets are interested in new and growth-oriented enterprises, which are able to generate sustainable economic development.

The South African Government through the Department of Trade and Industry (the dti) established the Development Finance Institutions as a response to the challenges faced by SMMEs for the purposes of facilitating development programmes for SMME to accelerate growth and assist to bridge the financial gap faced by SMMEs.

This has implications for a country like South Africa, which needs to ramp up its level of total entrepreneurial activity from the current 14%, against a comparable benchmark of 27% for other efficiency-driven economies (GEM, 2012). How Development Finance Institutions appraise loan funding applications has potential implications for how the gap between potential entrepreneurs and intentional entrepreneurs can be narrowed, thereby minimising the fear of failure associated with actual start-ups.

A lot of assumptions have been done regarding the nature of the opportunity, sustainability and their end-means relationship. Opportunities have been assumed to have minimal impact on the growth of an existing organization, because the results are believed to be an act of collective and difficult information processing.

The issue of access to funding by under-privileged entrepreneurs, such as youth and women in South Africa, has been interrogated (Ashton, 2010); with allegations of prejudice being levelled against banks. An empirical understanding of the decision-making process in DFIs is critical at this time, when the government is promoting entrepreneurship and SMMEs as key drivers of job creation, economic growth and social transformation.

Therefore, this study focused on understanding the area of the decision-making process of opportunity evaluation by the DFI's in South Africa, zooming in on how they decide to fund or not fund an entrepreneur seeking their funds.

# DECLARATION

I, Nthabeleng Likotsi, declare that this research report is my own work, except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this, or any other university.

---------- Nthabeleng Likotsi

Signed at ……

On the …….. day of …… 2014

# DEDICATION

I would like to appreciate and thank my family, friends and mentors for always lending an ear each time I wanted to scream and complain about how difficult it is to put this research together. Your support has helped me to be where I am today and for submitting this research on time.

My parents Mr. Mofihli Likotsi and Mrs. Mathato Likotsi, you have always believed in me. The courage and the confidence I have were instilled in me from birth, you have never said to me "it can't be done" , you've shared my craziest ideas and encouraged me to do what I felt I could make right. God did one thing PERFECTLY and that was to put all of us together with my sisters and brothers.

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Lesego Mogoatlhe, when Wits asked me for a motivational letter when I applied, you wrote the honest truth. You were asked if you thought I would finish the course, and without hesitation you wrote YES! So here I am Chomi..... I have done it.

My mentors and friends, thank you for listening and encouraging me each step of the way, your support means a lot to me and for that I say THANK YOU.

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# CHAPTER 1: INTRODUCTION

## 1.1 Introduction

South Africa has regarded entrepreneurship as one of the driving forces for job creation and poverty alleviation amongst others. With a large number of SMME's closing down within the first 1000 days of operation we ask ourselves about the role of Development Finance Institutions (DFI) in combating this challenge. There seems to be a mismatch between what the entrepreneur thinks the DFI requires for their businesses to be funded and what the DFI actually requires from the SMME in order to fulfil the financial request by the SMME. Opportunity evaluation process is very key for DFI but the question is how do the fund managers or decision makers evaluate these opportunities, what process do they go through, do they look at the personal factors of the applicant or is more emphasis on the business factors or the business outcomes? Most importantly, in a country like South Africa with a history of social and economic inequality, to what extent does the Broad Based Black Economic Empowerment legislation play a role?

## 1.2 Purpose of the study

The purpose of this research was to describe methods and processes by which financiers in Development Finance Institutions (DFI) identify and evaluate opportunities presented by entrepreneurs.

## 1.3 Context of the study

The role played by the state owned development finance institutions (DFI's) has been under the spotlight in the last couple of years, as highlighted by the New Growth Path policy. These roles include, but not limited to, job creation, raising shared economic growth and enabling pro-poor expansion on infrastructure. Their contribution has been questioned but more so under the recent global financial crisis and the subsequent small economic growth, job losses and factory closures. South Africa is currently grappling with 25 per cent unemployment, especially amongst its youthful population (StatsSA, 2012). Entrepreneurship, through the expansion of business firms and creation of new ventures, is critical to job creation and economic growth. This is contingent on entrepreneurial capacity and environment of the economy (Van Zyl, 2011).

Literature on the entrepreneurship process has looked at the key success factors in entrepreneurship. Nieman, Visser, and Van Wyk, 2008; and Venter, Urban, and Rwigema, 2012, have identified the policy framework and financing as important key success factors or external environmental issues in entrepreneurship success. There are several sources of financing for SMMEs and entrepreneurs within the SMME policy framework of South Africa (Berry, Magali von Blottinitz, Cassim, Kesper, Rajaratman & Ernest van Seventer, 2002), including Development Finance Institutions (DFIs), such as the National Empowerment Fund (NEF). The department of Trade and Industry created DFI's such as National Empowerment Fund (NEF) and Small Enterprise Development Agency (SEDA) for the purpose of developing and creating new ventures and to rejuvenate key businesses in their respective sectors (DTI, 2013). Various authors have extensively documented the responsibility of DFIs in entrepreneurial growth, especially in emerging economies like the BRICS (George and Prabhu, 2000; George and Prabhu, 2003; Gantsho and Karani, 2007; Hassan and Olaniran, 2011). Also well understood is the role of Venture Capitalists in the entrepreneurship development discourse (Shepherd, 1999).

Opportunity recognition has been recognised as the foundation of entrepreneurial progression, from which all is drawn from and everything else follows. It is with this reason that opportunity recognition has been the subject of much consideration in the scope of entrepreneurship (Baron, 2006).

The issue of admittance to funding by under-privileged entrepreneurs such as youth and women in South Africa has been cross-examined (Ashton, 2010), with allegations of prejudice being levelled against banks and DFIs as cited below.

An observed appreciation of the decision-making process in DFIs is essential at this time, when the government is upholding entrepreneurship and SMMEs as key drivers of job creation, economic growth and social transformation.

This research investigates the decision-making process in DFIs in opportunity evaluation to understand entrepreneurship development in South Africa. It is a departure from similar studies which have used entrepreneurs and venture capitalists (Shepherd, 1999) for the unit of analysis. Describing and subsequently understanding the decision making process is important in improving entrepreneurial capacity and process in South Africa; at a critical juncture in its economic and social transformation discourse, espoused under the Broad-Based Black Economic Empowerment programme.

## 1.4 Problem statements

### 1.4.1 Main problem

To investigate whether the DFIs' assessment policies of opportunity are consistent with those raised in the entrepreneurship strategy literature, predominantly from an entrepreneurship process model perspective.

### 1.4.2 Sub-problems

The **first sub-problem** was to describe the DFIs' assessment of opportunity in terms of the criteria of personal factors: (a) family status, (b) professional training, (c) academic background, (d) gender, (e) race, (f) previous work experience, and (g) the age of the applicant.

The **second sub-problem** was to describe the DFIs' assessment of opportunity in terms of the criteria of business factors (a) capital intensity, (b) labour intensity,(c) business sector,(d) market potential,(e) technological maturity, and (f) return on investment potential when assessing entrepreneurial business opportunity.

The **third sub-problem** was to describe the DFIs' assessment of opportunity in terms of the degree of importance of personal factors, business factors and potential business outcomes.

## 1.5 Significance of the study

The study fills a gap, in the sense that it is the first study, to the researcher's knowledge, which is attempting to explain phenomena of Developmental Finance Institutions' decision making, under opportunity evaluation in South Africa. While the research on decision making of entrepreneurs and investors using conjoint analysis has been done in the Western world (Lumme, Mason and Suomi, 1998; Shepherd, 1999), it is important for further research to investigate such phenomena using different theoretical perspectives, multi-level approaches, and different research design. This could provide important feedback to existing theories, suggesting the need for new theories and/or theory modifications. In the past, research on the

decision-making of entrepreneurs and investors (venture capitalists), has focused on their "in-use" decision policies to describe how they evaluate entrepreneurial opportunities, while excluding risk and return perceptions (Shepherd, 1999).

The study will provide guidance to DFIs to better understand their own opportunity evaluation policies, which provide the basis for enhanced evaluation efficiency. Such an understanding could help entrepreneurs to better address their requests for funding those criteria considered most important by DFIs. This point is important, in view of the allegations of discrimination being levelled against banks and DFIs and limited access to funding by under-privileged entrepreneurs reported in South Africa (Ashton, 2010). This research study leads to other opportunities for future research on decision making, which encompasses alternative approaches and theoretical perspectives within the local context.

## 1.6 Delimitations of the study

The study recognized that the DFIs are not a homogenous group and differ in terms of the services that they offer; their search for managerial and entrepreneurial talents; preparation of feasibility studies; geographic identification of project ideas; technical, managerial, and financial assistance for project implementation; critical evaluation of projects from the national point of view; and project supervision (George and Praphu, 2000).

The study population consisted of DFIs which on-lend directly to entrepreneurs. The study primarily focused on Small Enterprise Finance Agency (SEFA), SEFA's mandate is to foster the establishment, survival and growth of SMME's and with the goal of reducing unemployment and promoting social cohesion. SEFA has a regional footprint of 9 offices around the country.

It also assumes the role of helping black individuals, communities and businesses achieve each element of the code of Good Practice. The choice of this institution is deliberate, in that they have a national reach and are open to under-privileged entrepreneurs (youth, black entrepreneurs, women) who have been cited as having access to funding problems but are critical in the discourse of job creation, B-BBEE, and SMMEs' development in South Africa, under the Department of Trade and Industry (DTI)'s Integrated Strategy for the Promotion of Small Businesses and Enterprise (DTI, 2013).

The study was delimited in terms of the Model of Entrepreneurship Process (Venter *et al* 2012) by focusing on the Pre-Establishment Phase, which covers (1) preparation and business planning (2) selection and new venture form (3) South Africa Policy Framework for start-ups, and (4) financing new ventures. The pre-establishment phase is critical in the Entrepreneurship Process, since it lays the foundation for entrepreneurial capacity and environment.

## 1.7 Definitions of terms

### *1.7.1 Entrepreneurship*

Entrepreneurship is defined by Shane and Venkataraman, 2000 as a scholarly examination of how, by whom, and with what effects, opportunities to create future goods and services are discovered, evaluated and exploited.

### *1.7.2 Entrepreneurs*

Entrepreneurs distinguish patterns in their specific fields and make immediate decisions to take action (Eisenhardt, 1989; Stevenson, Grousbeck, Roberts, &Bhide, 1999).

### *1.7.3 Developmental Finance Institution (DFI)*

Developmental Financial Institutions are quasi-governmental institutions formed with the purpose of accelerating entrepreneurship by developing and/or rejuvenating SMMEs. Their birth can be attributed to specific government mandates or directives in which the government seeks to promote certain objectives. A key aspect of DFIs is that although the government is the dominant stakeholder, they tend to behave as large institutional investors with independent managerial control (Shepherd, 1999).

### *1.7.4 Small Micro Medium Enterprises*

As described by the National Small Business Act (NSBA, 1996:2), such an enterprise is described based on the number of employees, annual turnover and asset value.

### *1.7.5 Opportunity Evaluation*

Opportunity evaluation refers to both feasibility analysis and the due diligence that an entrepreneurial opportunity undergoes at specific stages of development. Such scrutiny is based on set criteria. Opportunity evaluation allows for the actual exploitation of high potential opportunities through new venture creation and lays the foundation for new venture survival (Adapted from Venter, Urban, and Rwigema, 2012: 139-140)

### *1.7.6 New Venture*

For the purposes of this research, a new venture is described an early- stage or seed firm which must secure capital, allocate scarce resources (human, intellectual, and financial) to highly uncertain projects and evolve contracts to obtain the financial resources needed to improve their businesses (Munari, 2004)

## 1.8 Assumptions

The following are some of the key assumptions made by the research:

This research made the assumption that the quantitative research method approach adopted is appropriate in addressing the phenomena of decision-making in DFIs and hence in addressing the research questions.

The research study also assumed that the theoretical underpinning was sound in comprehending the phenomena.

The research made a further assumption that the study sample was truthful and unbiased in its participation and that it was representative of the population.

# CHAPTER 2: LITERATURE REVIEW

## 2.1 Introduction

The purpose of this research was to investigate and understand methods and processes by which the financiers of Development Finance Institutions (DFIS) identify and evaluate opportunities presented by entrepreneurs.

Although there seems to be an established body of literature on supply side arguments for entrepreneurship developments, most of these studies are located in Western discourses. While an argument has been made that there is a need for demand-side arguments on entrepreneurial arguments (Matshekga, 2012), this researcher contends that there is still tremendous scope for further research on the supply-side arguments, especially as they relate to an interrogation of the decision-making process of Development Finance Institutions in granting access to finance by entrepreneurs. A review of extant literature shows a dearth of literature on this matter from an emerging markets' perspective generally, and South Africa specifically.

Current news on the downgrading of the competitiveness of emerging markets such as the BRICS, of which South Africa is a member, coupled with the South African government's own policy commitments towards scaling-up entrepreneurship to tackle the triple challenges of poverty, inequality and unemployment (NDP, 2012), make this topic and angle even more appealing and relevant. Not much is known about how DFIs in South Africa evaluate opportunities as presented to them by entrepreneurs, yet such knowledge is critical to address the problem of access to finance in the G20, as cited by the Global Entrepreneurship Barometer of 2013 Ernst & Young (2013).

However, (Berry, Von Blottnitz, Cassim, Kesper, Rajaratnam and Ernst van Seventer, 2002) reviewed the purpose of the Development Institutions for facilitation of SMME growth in South Africa as a response to the challenges faced by SMMEs as set out in the White Paper. A couple of Development structures were set out to coerce the National Small Business Strategy such as the Centre for Small Business Promotion (CSBP) of the DTI, Ntsika

Enterprise Promotion Agency (Ntsika), National Small Business Council (NSBC) and the Khula Enteprise Finance.

This research seeks to contribute to existing knowledge on supply-side arguments and help fill the knowledge gap on opportunity evaluation by DFIs, within the context of an emerging market economy like South Africa.

In approaching this research, a conceptual framework anchored on decision-making theory and opportunity evaluation was developed to define the hypothesised links of the study. This Chapter reviews pertinent literature for the study and is organised as follows:

An overview of relevant literature on entrepreneurship with a bias towards the role of Development Finance Institutions in the access to funding by entrepreneurs. The rationale for including literature from emerging markets is informed by the reality that South Africa is considered an emerging market economy and its experiences are influenced by those happening in other emerging markets, more than in the Organisation of Economic Cooperation Development, or even the Southern African Development Community. It is important to understand the factors influencing entrepreneurship in these markets as they also affect how South Africa crafts and manages its policies on entrepreneurship development. In this instance, literature produced by the EY Entrepreneurship Barometer was reviewed, since it is specific to emerging markets.

This Chapter also reviews specific literature on the state of entrepreneurship in South Africa with bias towards how its financial markets are geared towards supporting entrepreneurial development. There is a huge corpus of credible knowledge on the state of entrepreneurship, largely fuelled by its membership to the prestigious Global Entrepreneurship Research Association (GERA) Consortium, which produces authoritative National Reports as part of the Global Entrepreneurship Monitor. This literature is also complemented by sustained academic output from several institutions, including the Wits Business School.

The role of Development Finance Institutions in the supply-side discourse was reviewed within the context of South Africa to situate the unit of analysis for the research. This was done to expose the current knowledge gap relating to this unit of analysis, within the context of South Africa. There are huge expectations on the DFIs to support government's entrepreneurship development policies, yet not much is known about how they well they do this job.

The literature review also posited a conceptual framework for the research which is anchored on the theories of opportunity evaluation and decision-making. This framework shows the hypothesised links between decision criteria and opportunity evaluation.

## 2.2 Entrepreneurship in emerging markets

South Africa is a member of the BRICS and also a member of the G20, which includes a number of countries who make up what is known as the emerging markets. By their name, emerging markets are considered high potential economies which can grow at a faster pace. Within the context of entrepreneurship, emerging markets are interested in new and growth-oriented enterprises, which are able to generate sustainable economic development. This is important for a country like South Africa, which is grappling with the triple challenge of poverty, inequalities and rising unemployment. There exists a large body of knowledge on entrepreneurship in emerging markets, with the seminal work having been done by Liedholm and Mead, 1998, who identified three archetypes of entrepreneurs in emerging markets. These are: the newly established, but not growing; established but growing slowly and the larger size. Therefore, the process by which new entrepreneurs are established and graduated across the definition of SMME in South Africa is a subject of academic interest in emerging markets.

Several studies (GEM, 2012; EY Barometer 2013) have all confirmed the prominence of access to capital in the entrepreneurship eco-system. For example, the EY Barometer (2013) notes that access to funding is a top priority for global action, with entrepreneurs themselves citing it as the single area where improvements are mostly urgently needed. The same report suggests that greater efforts should be made to unlock bank lending for start-ups that lack collateral and this requires banks to develop a different lending model for entrepreneurial businesses. It is, therefore, imperative that the process by which traditional banks and Development Finance Institutions evaluate opportunities, when it comes to appraising loan funding applications from start-ups, is critically interrogated. In fact, the EY Barometer advocates greater emphasis on new sources of funding. For most emerging economies this may imply a more visible role by DFIs. Certainly, this is the case with South Africa, where the department of Trade and Industry (DTI) has set up a number of dedicated development

funds targeting entrepreneurial development across key sectors and population groups (DTI, 2013).

## 2.3 Entrepreneurship in South Africa

There is a credible body of knowledge on the state of entrepreneurship in South Africa. The GEM produces an annual report on the topic, in South Africa, while several authors (Urban, Dhliwayo, Ladzani, Van Vuuren, and Herrington) have produced substantial evidence on various aspects of entrepreneurship. Yet an analysis of this literature finds a knowledge gap on the role of DFIs in enhancing entrepreneurial activity and growth in South Africa, on the basis of enhancing access to finance by entrepreneurs and start-ups. This is anomalous, in view of the substantial financial resources handled by these DFIs, with the express purpose of on-lending to entrepreneurs. In fact, there is evidence of low uptake of these financial resources by entrepreneurs, due to the stringent and often misunderstood funding criteria by the DFIs. A review of metrics released by both the GEM (2010, 2011, 2012) and the EY Barometer (2013) confirms that access to funding by entrepreneurs is perceived to be of critical importance by entrepreneurs. South Africa is also rated highly in access to capital in the EY Barometer (2013) where it ranks number 6 out of 20 countries ahead of BRICS peers India, Brazil, and Russia (see Table 2.1) and only below China.

**Table 2.1 Access to Funding amongst BRICS nations**

| Ranking | Access to Funding | Score |
|---|---|---|
| **3** | **China** | **6.75** |
| **6** | **South Africa** | **5.95** |
| **9** | **Brazil** | **5.67** |
| **11** | **India** | **5.48** |
| **15** | **Russia** | **5.04** |

**Source:** Adapted from the Power of Three- EY Entrepreneurship Barometer, 2013, p7

## 2.4 South Africa's Entrepreneurial culture

Beginning with the seminal work by Hofstede (1980) on culture's consequences on international differences in work-related values, the inclusion of the cultural and normative

values in entrepreneurship research is now an established tradition. Both the GEM and EY Entrepreneurship Barometer devote sufficient attention to the examination of culture in their annual reports. The 2012 GEM National Report for South Africa reaches the interesting conclusion that cultural and social norms play a negative role where the gap between potential and intentional entrepreneurs is concerned. The report notes that South Africa has a huge gap, by emerging economies standards, between potential and intentional entrepreneurs; suggesting that fear of failure could be a barrier to entrepreneurial activity. It can be surmised that one of the areas that potential entrepreneurs fear to fail in, is in the access to funding and the concomitant ramifications of business failure on the back of debt gearing by the owner. The 2013 EY Entrepreneurship Barometer confirms this, as it reveals that of the G20 countries surveyed in the Barometer, South Africa's entrepreneurial culture (4.33) was only better than that of China (3.88), but lower than that of its BRICS, counterparts such as Russia, ranked overall 10$^{th}$ position with a score of 5.05, India ranked 11$^{th}$ (4.95) and Brazil ranked 12$^{th,}$ with a score of 4.88 (see Table 2.2).

**Table 2.2 Entrepreneurship Culture Ranking for South Africa in BRICS**

| Ranking | Entrepreneurship Culture | Score |
|---|---|---|
| **10** | **Russia** | **5.05** |
| **11** | **India** | **4.95** |
| **12** | **Brazil** | **4.88** |
| **14** | **South Africa** | **4.33** |
| **18** | **China** | **3.88** |

**Source:** Adapted from the Power of Three- EY Entrepreneurship Barometer, 2013, p7

The United States of America was ranked highest overall in the EY Entrepreneurship Barometer, underscoring its unmatched entrepreneurial culture, which does not punish business failure and celebrates its role models in entrepreneurship. This has implications for a country like South Africa, which needs to ramp up its level of total entrepreneurial activity from the current 14%, against a comparable benchmark of 27% for other efficiency-driven economies (GEM, 2012). It can be surmised that how Development Finance Institutions appraise loan funding applications has potential implications for how the gap between potential entrepreneurs and intentional entrepreneurs can be narrowed, thereby minimising the fear of failure associated with actual start-ups.

## 2.5 Description of South Africa's Development SMME Support

The DTI has introduced a number of SMME development support but despite these efforts there is still a lack of distrust from external agencies by SMMEs and due to that, the policy measures suffer from sub-optimal implementation and thereby are unable to fully maximize their mandate and raise sufficient awareness about their offering to the public (Berry at al. 2002)

Below are some of these Development Institutions:

### *2.5.1 Ntsika Enterprise Promotion Agency (Ntsika)*

Ntsika was established by the DTI as structure to implement the SMME strategy its mandate was to provide non-financial support to SMME's through a vast series of programmes. However its focus was on retail services providers and therefore has networks in the retail industry that will assist SMME's to have access to training, mentoring and the market. These programmes were:

- **Local Business Service Centre (LBSCs):** This was assisting in general enquiries and business administration, currently there are 106 LBSCs accredited and supported by Ntsika
- **Tender Advice Centres (TACs):** This is to assist SMMEs with contract and tendering processes and serves as a go to centre for new tender alerts
- **Manufacturing Advice Centres (MACs):** This is to assist and provide SMME's with focus on the industry assessment and possible links to high level specialised service providers.

### *2.5.2 The DTI Black Business Supplier Development Programme (BBSDP) Incentives*

There are various incentives created to support SMME by the Department of Trade and Industry under the auspices of SMME Development. With the lack of financial resources by the SMME, most of these incentives are grant schemes so as to lessen the burden of

financial distress on SMME's. The BBSDP is mostly a cost sharing grant designed for black owned small businesses with the aim to accelerate their competitive edge in their market and for their businesses to be sustainable in order to partake in the mainstream economy and make a meaningful contribution to poverty alleviation and job creation. Below are a number of these schemes:

- **Co-operative Incentive Scheme (CIS**): The DTI gives a 100% grant to legally registered primary co-operatives (a minimum of five – 5 - members). The purpose of this grant is to enable SMMEs to be competitive and enhance their viability in the market by decreasing the set up costs of doing business.
- **Incubation Support Programme (ISP):** The purpose of this was to enlarge the amount of SMMEs, particularly in the communities and townships within South Africa, through a process of being incubated; which will in turn revitalise and strengthen local and national economies. This programme further seeks to ensure that these SMMEs will contribute meaningfully to the decreasing poverty in townships and to increasing jobs in townships.
- **Seda Technology Programme (STP):** This falls under the auspices of Small Enterprise Development Agency (SEDA) which aims at increasing participation in the technology sector through their technology business incubation.
- **Support Programme for Industrial Innovation (SPII):** This was intended to promote technology progress in the South African Technology industry, particularly for the enhancement of innovative products**.**
- **Technology and Human Resources for Industry Programme (THRIP):** This is a partnership between the National Research Foundation (NRF) and the Department of Trade and Industry (the DTI) with the purpose of supporting technology based products, engineering and science; focusing on the needs of businesses taking part in research and development.

### *2.5.3 Khula Enterprise Finance Ltd*

Although Khula Enterprise Finance Ltd has now been dissolved, the researcher discusses it in depth in this report, under SEFA. It was formed to lend finance to SMMEs through Retail Finance Intermediaries (RFIs), which are departments for SMMEs in the commercial banks or the legally accredited NGOs by the Department of Trade and Industry.

The RFIs were mandated to set their own lending criteria and therefore they bore the risks of lending to SMMEs. Their heir criteria were as follows:

- **Business Loan Scheme**: They will offer loans from R1 million to R100 million to SMMEs.

- **Guarantee Schemes**: Khula would issue guarantees to SMMEs to reduce the risk of lending to commercial banks without sufficient collateral on the side of SMMEs.

- **Equity Funds**: The Johannesburg Stock Exchange(JSE) has an internet-based Emerging Enterprises Zone (EEZ), whereby SMMEs were expected to obtain access to equity funding (up to R250 000, constituting less than 45% of total equity and to be re-capitalised within five years). Khula served as a partner together with private investors brought by the SMMEs.

### *2.5.4 Provincial SMME Desks*

Over and above the National Development Institutions, the Provincial desks were formed to ensure a larger representation in nine different provinces in the country. This was also to ensure that the national strategy of small businesses and SMME interest were well spread out by linking the national programmes to the provincial sectoral programmes, with local and or regional strategic structures to create a more comprehensive SMME database on which national policies could be implemented.

## 2.6 Development Finance Institutions

A major setback in South Africa has been the soaring failure rate of SMMEs, with practical studies demonstrating that most SMMEs do not continue to exist beyond the first 1000 days (Ladzani and Netswera, 2005). Various studies have acknowledged key success factors on entrepreneurship and SMMEs: however finance has been identified in studies by Ladzani and Van Vuuren, 2002, and Kirsten and Rogerson, 2002, as one of the obstacles. There are quite a few sources of finance available to entrepreneurs in South Africa. The focal sources of funding can be grouped into three broad categories: self-financing, debt financing and equity financing.

**Self-financing** is when the business owner uses his/her own money to start up a new venture. Although it has been highly recommended, since it assures the entrepreneur of total control of the business, research shows that it is least viable in South Africa, seeing that "most South

Africans do not have their own money to invest in businesses owing to high levels of deficiency and unemployment" (Venter *et al*, 2012:362).

The most familiar form of **debt financing** is bank loans, but its effectiveness in South Africa is limited by the fact that most entrepreneurs are excluded from the formal banking sector and those that are not are likely to have collateral. Another setback linked with this form of funding is the soaring cost of borrowing money, due to high interest rates. It is because of the limits of debt financing that the government has created Developmental Finance Institutions (DFIs) to improve the entrée of previously disadvantaged entrepreneurs (youth, women, black entrepreneurs) to funding. The Industrial Development Corporation operates the R10 Billion Grow-E Fund, while the National Youth Development Agency managed the National Youth Fund, and these two funds fit perfectly within the compass of DFIs. However, the South African Government has since taken a decision to merge the 3 pre-existing DFI's (Khula Enterprises, the development funds previously managed by the Industrial Development Corporation (IDC) and SA Microfinance Apex Fund) into the Small Enterprise Finance Agency (SEFA) (GEM, 2012).

**Equity funding** is subdivided into two this is according to (Amorós, Atienza and Romaní 2008). (1) informal equity funding which we have described above agreeing to the definition stated by Venter *et al (*self funding) and (2) formal equity funding generally refers to strangers and what termed business angel funders (wealthy individuals who seek to invest their own funds in addition with wealth of experience in the field of business or sector and their time with the hope of receiving a positive return on their investment.

Looking at the demand side, the categories of investments are equally multi-faceted as:

- Different companies have different capital needs to run their business
- They have various resources that they can invest in
- Have various access to external finance requirements

Berry et al advises that first we must understand the company's need for capital is for in quality or quantity, which sector it falls under, the age of the company, potential company/market/return growth of the company and opportunities available to that company. For instance, a company that is in the manufacturing industry would require more large long-

term capital investment as opposed to a company in the retail business, which will likely need more short term revolving credit, as its inventory is short term (Berry et al, 2002).

In their research they found that young, fast-growing enterprises seek working capital whereas the well established slow-growth businesses seek a little as they would have generated sufficient cash flows to run their business. However, as much as the new, young upcoming businesses require seed capital, they cannot afford too much debt financing, so they have found that start ups would rather seek equity funding, as opposed to debt financing, while the more established companies would rather seek debt financing as opposed to equity dilution (Berry et al, 2002).

They further argue that not only do we need to look at the different segments of each company's need for capital, the fund managers should also question each company's credit worthiness, when considering whether to fund an entrepreneur. For example, the fund managers should look at the expressed needs for the distribution of wealth between the "qualified" and "unqualified" demand, because inequalities exist in each firm, with regard to personal resources, depending on the size of the firm (Berry et al, 2002). Evans, Rodrik and Sen agreed with this and they further expand the arguments by saying that each country must look at not imposing a "one best way". Based on experience of the now newly-developed countries, they advise that each country should be looking at unique ways that are only applicable to that country, to encourage development institutions to assist citizens in making make better choices. This is extremely important according because at most times the initial capital investment amount of the entrepreneur will be:

(1) The only and first investment amount for the start-up resources
(2) Will serve as an indicator to the fund managers when they evaluate an investment risk before making a final decision to provide funding.
(3) For post funding, personal/own funding will still be regarded as the cheapest form of funding an enterprise.

That said, in the South African context we should not forget the history of the country, the inequalities that existed prior to 1994, The fundamental inequalities play a major role between White people and the Black people (previously disadvantaged) in entrepreneurship funding. Suppliers will more likely provide funding for a certain type of people and a certain type of business. In most cases access to funding is easier for older firms than young ones,

Micro-, Macro- enterprises and differences between traditional White-owned businesses and those of the previously disadvantaged Blacks (Berry et al, 2002).

In reviewing these three different types of funding, we should take into account the amounts and various Development Finance Institutions providing diverse kinds of finance for diverse kinds of investment (Berry et al, 2002). Some institutions provide short-term capital, others long-term capital, some provide equity whereas others provide debt. Zooming in on South Africa, the market is more segregated between the formal and informal sectors, which operate under different precedence and difficulties with very little links between each other.

This was in response to challenges that were faced by these three DFIs, as cited by Creamer (2011); principally, the uneven approach of disbursement of funds to small enterprises that resulted in exorbitant operational costs, partial reach of entrepreneurs and lack of impact. With the newly-formed DFI (SEFA), the mandate is to bridge the gap between self-funding and loan (banks) funding and play a role in closing this gap. This study looked at the role of the SEFA

There is a growing body of knowledge on the responsibility of DFIs in enhancing Entrepreneurship and Innovation in emerging economies.

Shepherd (1999) notes that DFIs are important in such economies, because there is generally a small amount of capital, which limits the role of venture capitalists. DFIs tend to transect with long-term funding goals and this makes them more appealing than venture capitalists. George and Prabhu (2000) contended that privatization efforts in many emerging economies left room for DFIs to further entrepreneurship and subsequently they (George and Prabhu, 2003) saw opportunities for DFIs in emerging economies to promote a technological orientation amongst new ventures.

However, institutional development has progressed over the years from a single minded focus on capital accumulation towards a more multifaceted comprehension of the institution that uplifts the role and responsibility of development. However, despite the expanding and progression of the institution strategies, the results of the institutions have proven to be unfavourable (Evans, 2004). Economics has also identified development as a process of organizational change, as opposed to being primarily presented as a process of capital

accumulation, (Hoff and Stiglitz, 2001). Government institutions, technology and ideas generating have succeeded capital fundamentalism, which specifically focuses on the increment of capital stock (Evans, 2004). Other economists, including DaniRodrik and Amartya Sen, have cautioned that imposing a "one best way". Based on experience of the now newly developed countries, they advise that each country should be looking at unique ways that are only applicable to that country, to encourage development institutions to assist citizens in making make better choices (Evans, 2004).

The Government institutions were designed to bridge the financial gap that exists within the entrepreneurship sector. As entrepreneurship is seen as one of the driving forces of economic growth and job creation, entrepreneurs need to be productive. However, in order to be productive they need better tools (Physical, tangible and intangible) to enable them to maximize their potential. The earlier description of growth theory translated more easily into policy strategies that include, amongst others, "capital fundamentalism" (Evans, 2004).

## 2.7 Decision Making Process by DFIs

The role of DFIs in entrepreneurial development, especially in emerging economies like the BRICS, is well documented by various authors (George and Prabhu, 2000; George and Prabhu, 2003; Gantsho and Karani, 2007; Hassan and Olaniran, 2011). Also well understood is the role of venture capitalists in the entrepreneurship development discourse (Shepherd, 1999).

The issue of access to funding by under-privileged entrepreneurs, such as youth and women in South Africa, has been interrogated (Ashton, 2010); with allegations of prejudice being levelled against banks and DFIs as cited below.

An empirical understanding of the decision-making process in DFIs is critical at this time, when the government is promoting entrepreneurship and SMMEs as key drivers of job creation, economic growth and social transformation.

Behavioural finance is a discipline which has been applied to understand how seed-funding decisions are made. While several studies have looked at how such decisions are made from both the perspective of the entrepreneur and the lender, this study is largely interested in the

seed-funding decisions made by the lender, who in the case of the research, is the DFIs. This is justified by the fact that it is these decisions by the DFIs which are critical in unlocking heightened total entrepreneurial activity in South Africa; which is currently lagging behind its peers in both the G20 and the BRICS. A key question in executing this objective is: What are the decision processes for these DFIs in investing in new ventures and what are the decision criteria informing that?

This research investigated the decision-making process in DFIs in opportunity evaluation, to understand entrepreneurship development in South Africa. It is a departure from similar studies which have used entrepreneurs, venture capitalists (Shepherd, 1999) as the unit of analysis. Understanding the decision-making process is important in improving entrepreneurial capacity and process in Africa, at a critical juncture in its economic and social transformation discourse, espoused under the Broad-Based Black Economic Empowerment programme.

## 2.8 Opportunity Recognition

Opportunity recognition has been viewed as the cornerstone of entrepreneurial process; from which all is drawn and from which all else follows. It is for this reason that opportunity recognition has been the subject of much interest in the scope of entrepreneurship (Baron, 2006). The theory of entrepreneurial opportunities presents the foundation of understanding the role of individuals in entrepreneurship. Its main focus is on entrepreneurial opportunities. An opportunity is a chance to please a market need, through the exploitation of entrepreneurial capital to deliver superior value (Venter et al, 2012).

A lot of assumptions have been done regarding the nature of the opportunity, sustainability and their end-means relationship. Opportunities have been assumed to have minimal impact on the growth of an existing organization, because the results are believed to be an act of collective and difficult information processing. The results originated from the information asymmetries, which are not supported by the market, and as such they can be related to Kirznerian theory of imperfect market disequilibria (Vaghely and Julien, 2010). Most opportunities are not innovative, Vaghely and Julien (2010) cite. If they are, then the innovation is insufficient to have an impact and would be classified as taste related fashion

items. Perceived success factors of any innovation are meaningful information and speed of access to the targeted market. The foundation of other opportunities stems from break-through innovations and access to this information requires special focus and knowledge. Such opportunities can easily be related to the Schumpeterian theory of market disequilibria, as their base innovation tends to be more disruptive as time goes by, with technology-related opportunities.

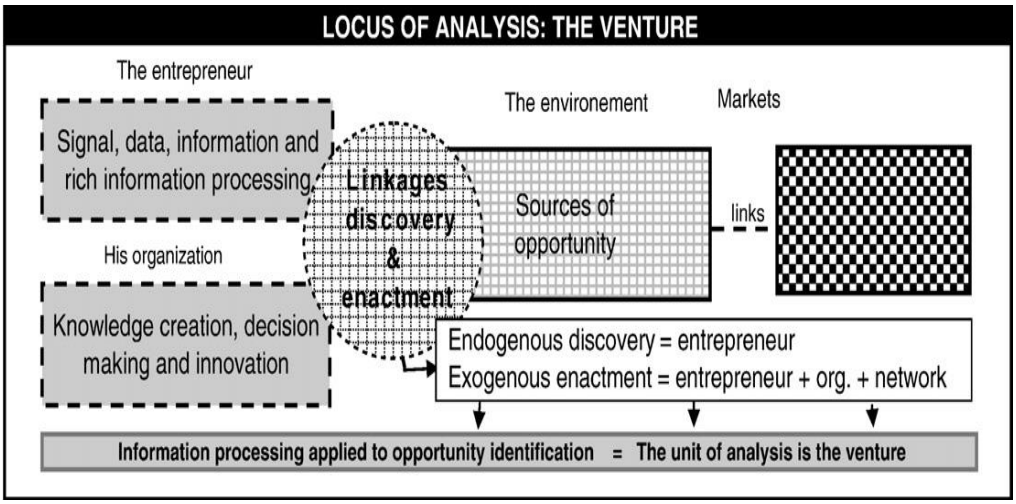



**Fig.1. Locus of analysis.**

Opportunity recognition and identification is not an instant result fix; rather a process, and therefore extremely time sensitive (Bruyat and Julien, 2001). Time has an increasing effect on knowledge, it puts together absorptive capability and incubates intuition. Time means the fastest to access the market, perfect market timing to penetrate the rich market. And lastly, as shown in Fig. 1, opportunities seek targeted markets in an ends-means relationship.

Opportunity recognition and identification is stated as one of the key factors of the entrepreneurial process. In real terms, it doesn't matter where one obtains the information; but for any entrepreneur the most important part is to identify an opportunity for a new enterprise (Nicolaou, Shane, Cherkas and Spector, 2009).

Nicolaou et al,( *2009)* suggest that to be entrepreneurial, heritable, genetic factors have a role to play in the entrepreneurial characteristics of a person. They further imply that the same genetic aspects influence the entrepreneurial tendency of an entrepreneur. They explain the rationale with the three genetic pillars of opportunity recognition.

1. The heritability of opportunity recognition

An identification of an opportunity that will yield profits in a business venture is one of the key parts of entrepreneurship (Gaglio and Katz, 2001; Shane, 2003; Shane and Venkataraman, 2000). In addition, Baron and Ensley, 2006; Casson and Wadeson, 2007; Gaglio and Katz, 2001; Shane, 2000 cite that for a person to be an entrepreneur they need to have acquired the skill of identifying opportunities. However, not everyone is equally skilled in identifying entrepreneurial opportunities, as argued by Ardichvili, Cardozo and Ray, 2003; Baron and Ensley, 2006. On the other hand, researchers have recognized the following three factors that correlate with the identification of an existing opportunity: Shane (2000) pre-existing information; Gaglio and Katz (2001) psychological opportunity recognition alertness and Baron and Ensley (2006) the structure of entrepreneurs social network.

2. The heritability of entrepreneurship

Studies by Nicolaou *et al*, (2008) show that the tendency to be entrepreneurial is in fact partially genetic, as opposed to what the above study says. They have found that only 37% to 48% is heritable and this is dependent on the measures. Even after including personal factors such as age, income, education, marital status, race, these genetics are still present.

3. Accountability of common factor between heritability of opportunity recognition and heritability of entrepreneurship

However, the research done by Baron (2006) shows that the same genetic factors influence both the ability and a skill to recognize opportunity and the entrepreneurship tendencies.

The same genetic factors that influence the tendency to be an entrepreneur might also influence opportunity recognition. Much research shows that similar factors are associated with both phenomena (Baron, 2006). Moreover, all of the above mentioned mechanisms, through which genetics affect opportunity recognition, also affect the tendency to be an entrepreneur. Moreover, Shane (2003) adds that creativity enables the entrepreneur to progress from opportunity recognition to finding better ways of exhausting resources, to make a success of the opportunity at hand.

## 2.9 Conceptual Framework

The study linked decision making theory and theory of opportunity evaluation to construct hypotheses on decision criteria used by DFIs to evaluate opportunity. The decision criteria consist of three variables: personal factors (age, academic background, gender); business factors (business sector, industry experience of applicant, capital intensity, new venture performance measured through B-BBEE level, risk, and SMMEs definition); and business outcomes (potential market growth and return on investment). The study adopted the perspective that if these variables are a predictor of successful opportunity evaluation, which is critical to increasing TEA in South Africa, then they need to be sufficiently recognised by DFIs. Review of extant literature has shown that each of these variables has a direct effect on the ability of DFIs to consider launch funding for new ventures.

There is common consensus that potential funders do not use a rational process when deciding to invest in an entrepreneurial business and that different investors employ diverse criteria in arriving at funding decisions (Shepherd, 1999; Harrison and Mason 2002; Mason and Stark, 2004; Urban, 2010). The three dominant factors covered by such criteria are the personal factors, business factors, and business outcome factors

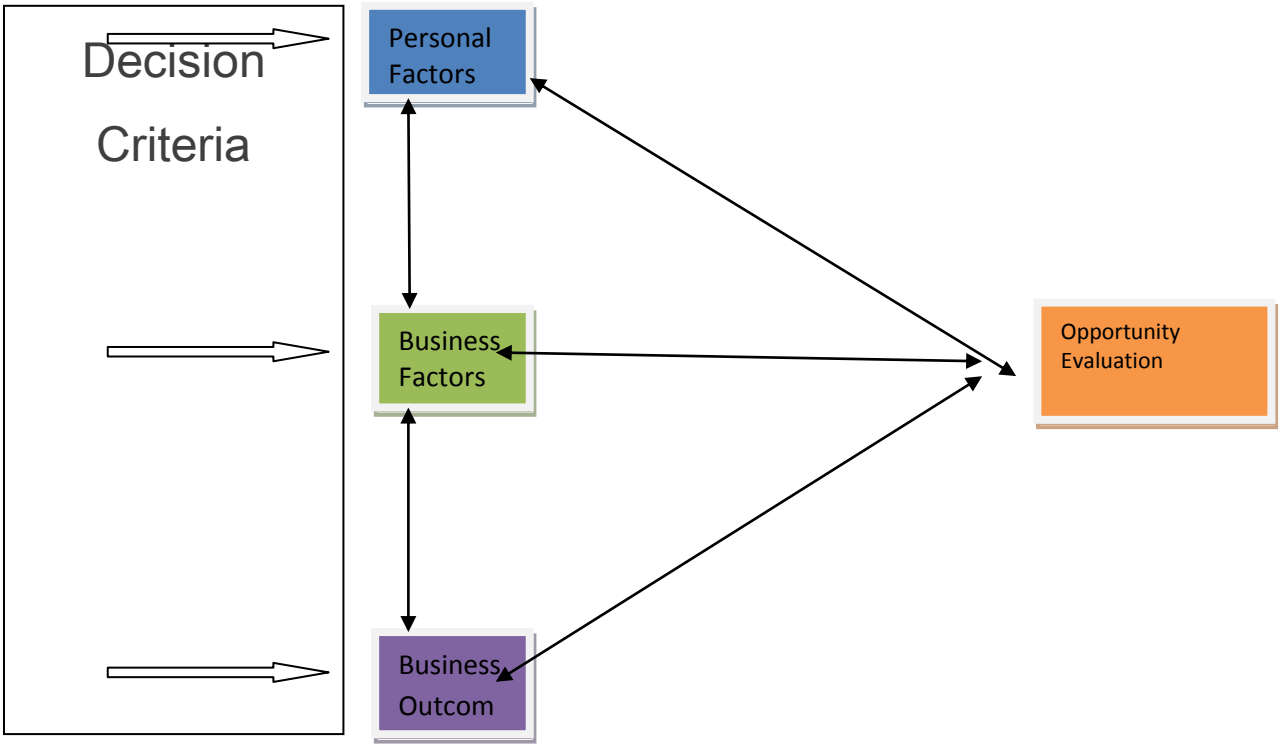


**Figure 2 Conceptual Framework**

**Source:** *Own- derived from the research questions*

**Table 2.3 Conceptual Framework Items**

| VARIABLE | ITEMS UNDER VARIABLE |
|---|---|
| **Personal Factors** | • Age<br>• Race<br>• Gender<br>• Academic Background |
| **Business Factors** | • Business Sector<br>• Industry experience of Applicant<br>• Capital Intensity<br>• Technological orientation<br>• Proxies for new venture business performance:- SMME definition, B-BBEE,<br>• Risk Analysis |
| **Business Outcomes** | • Market Growth<br>• Return on Investment |

The Conceptual theoretical model in Figure 2 shows the relationship between opportunity evaluation and the three variables: personal factors, business factors, and business outcome. Successful opportunity evaluation, in terms of approved loan applications from the DFIs, is directly related to each of these variables. Several items that make up the three factors are used in assessing the importance of the factors in opportunity evaluation by DFIs.

Personal factors such as age, gender and academic background have been known to have a perceived influence on the decision-making process of opportunity evaluation by funders.

## 2.10 Decision Criteria and Opportunity Evaluation

In this study, it is imperative to understand the decision making process of DFI's when deciding to fund an entrepreneur seeking funding. Dey, Ho and Xu (2009) describe the supply management criterion as one that seeks to uphold the long term relationships with its

suppliers/investors/funders and in this study we look at the entrepreneurs that will, against all odds, make a success of their businesses and grow them where needed.

Fund managers have a responsibility to choose "quality" entrepreneurs, therefore the process involves more than just receiving a loan application form, ticking the boxes required section and processing the loan application for funding.

Choices or decisions by DFI managers will depend on a variety of factors that will require quantitative measures (Dey et al, 2009).

There is a recognized body of knowledge exploring the diversity in interpretations about the same situation within the context of decision-making theory. Such variances in interpretation are due to the different emphases induced by a piece of information. How an individual perceives and interprets a situation is guided by the cognitive maps that they develop. These cognitive maps are the source of an individual's domain-specific knowledge structure (Urban, 2010). In decision-making situations, individuals rely on these information structures to make specific decisions. Typically, such information structures, also called scripts, are divided into expert information structures, in which the possibility of thinking error is narrowed and an apprentice knowledge structure, in which thinking errors linked with information dispensation, may occur (Urban, 2010) . This viewpoint has been used to explain individual differences in entrepreneurial intentions and opportunities and has practical application to the domain of opportunity evaluation by both entrepreneurs and investors (Kruger, 2000) and Urban, 2010).

This research is characterised by two key aspects. The first one is that decisions to fund an entrepreneurial opportunity are based on an analysis of the potential risks and returns of that opportunity, in terms of some verifiable and tangible factors such as capital intensity, business sector, market potential, technological maturity, evidence of patent protection and marketplace acceptance (Manigart and Sapienza, 1999; Mason and Stark, 2004; and Urban, 2010).

A second feature characterising the research is the inclusion of more subjective human factors such as (a) family status, (b) professional training, (c) academic background, (d) gender, (e) race,, (f) previous work experience, and (i) the age of the applicant in the

decision making of funders in relation to an entrepreneurial opportunity (Shepherd, 1999; Urban, 2010).

The most popular decision making process criterion, as expressed by Dey et al. (2009). is the one that evaluates and selects the most successful entrepreneur by following this quality criterion, with delivery, price/cost, manufacturing capability, service, management, technology, research and development, finance, flexibility, reputation, relationship, risk, and safety and environment following in turn. Any sound decision making process should ask these three questions during the process of evaluation and processing:

- Which approach was generally applied?
- Which estimate criterion was paid more attention to?

Is there any insufficiency in the approaches?

## Table 2.4 An Overview of Common Evaluation Criteria used by DFIs and Venture Capitalists in Developed Countries and South Africa

| Evaluation Criteria | USA | | UK | SOUTH AFRICA |
|---|---|---|---|---|
| | Tyebjee and Bruno (1984) | MacMillan et al (1985) | Dixon (1987) | This Study |
| **DFI Requirements** | | | | |
| Cash out Potential | X | | | |
| Familiarity with technology, product, market | X | | | X |
| Geographic Location | X | | | X |
| Size of Loan | X | | | X |
| Stage of Development | X | | | X |
| **Characteristics of the Proposal** | | | | |
| Requirement for additional material | | | | X |
| **Characteristics of the Entrepreneur** | | | | |
| Ability to evaluate risk | | X | X | X |
| Background experience | | X | | X |
| Capable of sustained effort | | X | | X |
| Managerial capabilities | | X | | X |
| Marketing Skill | | | X | |
| Financial Skill | | | X | |
| **Nature of the Proposed Business** | | | | |
| Product/market considerations | | | | |
| **Economic Environment of Proposed Business** | | | | |
| Market attractiveness | | | X | |
| Potential Size | | | X | |
| Threat Resistance | | | | |
| **Strategy of Proposed Business** | | | | |
| Product Differentiation | | | | |
| Proprietary Product | | | | |
| | | | | |

**Source:** Adapted from Boocock, G and Woods, M. (1997) *The Evaluation Criteria used by Venture Capitalists: Evidence from a UK Venture Fund.*

## 2.11 Derivation of Hypotheses

### 2.11.1 Personal attributes

#### *2.11.1.1 Gender*

A peculiar distinction is proposed by Kuhn and Schuetze, 2001, who investigated the reasons why self-employment had risen dramatically in Canada in the period 1982-1998. Using data on flows (not on stocks) that provided cues on the causes of changes, they noted a gender effect in the entrepreneurial choice. In fact, male increase in self-employment is associated with a decrease in permanence in working in top jobs, whereas women's increase is related to higher survival rates in self employment. Their results also emphasized the fact that general labour market conditions play a more relevant role in explaining the changes in women's and men's transition probabilities than changes in observable demographic conditions, such as age, education, and immigration GEM (2012). In terms of the profile of intentional entrepreneurs, males in South Africa are more likely to have entrepreneurial intentions than females (16% versus 12%). Black Africans have the highest rate of entrepreneurial intentions (16%) of the four race groups. A positive correlation was found between entrepreneurial intentions and level of education attained. In terms of demographics, South Africa's gender gap widened in early-stage activity, with the TEA rate showing 61% male involvement versus 39% female involvement. Male early-stage entrepreneurs currently employ a mean of 5.6 people, compared to 2.5 for female entrepreneurs. Where age is concerned, for the first time the highest concentration of entrepreneurs was found in the 35–44 years cohort (11% of those in the age group) instead of in the 25–34 year old cohort. In terms of demographics, males are slightly more likely than females to be involved in established business activity (3% of the total population versus 2%). The gender gap in the youth population is fairly small (8% young males versus 6% young females).

#### *2.11.1.2 Race*

Black Africans have the highest rate of entrepreneurial intentions (16%) of the four race groups. The percentage of Black Africans in the early-stage entrepreneurial population is higher than the percentage of Black Africans in the overall population (with a ratio of 1.2). Coloureds are the least entrepreneurial in the early stages, with a ratio of 0.3 entrepreneurs to the overall Coloured population. Furthermore, of the Coloured early-stage entrepreneurs, a high majority are motivated by necessity (67%), compared to the other race groups where the majority are motivated by opportunity. Indians have the highest ratio of established business owners to their overall prevalence in the population (3.2), while Coloureds have the lowest ratio (0.2) GEM (2012).

#### *2.11.1.3 Age*

It is often found that the personal financing preferences of entrepreneurs appear to change according to age. According to Romano, Tanewski and Smyrnios ,2001, the effect of the owner–manager's age on the financial behaviour of SMEs can be noted, in that, unlike younger entrepreneurs, older entrepreneurs are less likely to invest additional finance into their firms. This finding is in line with that of Van der Wijst (1989), who suggests that older SME owner–managers are more reluctant when it comes to accepting external ownership in the firm. Further, Vos, Veh, Carter and Tagg.(2007) examined SME financial behaviour, utilizing two data sets from the UK and the US, consisting of 15 750 and 3 239 SMEs, respectively. The results show that younger owner–managers tend to use more bank overdrafts and loans, credit cards, own savings, and family sources than older owners, who appear to be more dependent on retained profits. Clarifying the connection between the financial growth cycle of SMEs and the owner–manager's life cycle, Briozzo and Vigier, (2009, p.37) state that;

> "As the firm and its owner grow older, information asymmetries decrease, granting easier access to debt (a supply-side effect), while the owner's risk aversion and personal costs of bankruptcy increase with age, and thus he or she desires to use less leverage (demand side effect)".

Another occupational choice story is the one suggested by Jovanovic (1979), who sustains the idea that age is a crucial determinant because individuals tend to try riskier occupations such as entrepreneurship when they are younger. However,

entrepreneurship may not be a feasible option for younger people because they have had less time to build the capital needed to start a business. South Africa's early-stage entrepreneurial activity rate (TEA) for its youth is 7%, the lowest of the 10 sub-Saharan African countries, and far below the average for the 10 countries of 29%. Where age is concerned, 5% of 18 to 24-year-olds and 9% of 25 to 34-year-olds in South Africa are involved in early-stage entrepreneurial activity, a slight decrease from 2011.

#### *2.11.1.4 Academic Background*

A positive correlation exists between early-stage entrepreneurial activity among youth in South Africa and level of education attained. Furthermore, a positive correlation exists between the mean number of people employed by youth entrepreneurs in South Africa and level of education attained. 89% of the youth entrepreneurs in South Africa want to remain business owners in the long term. A positive correlation exists between the perceptions of capabilities among the youth in South Africa and level of education attained. The Entrepreneurial Framework Conditions most likely to have an impact on perceived feasibility are education (general) and entrepreneurship education. These EFCs were given unfavourable mean scores, indicating that the education system in South Africa is not leading to positive perceptions of personal feasibility where entrepreneurship is concerned, which will also have a negative impact on the size of the country's pool of intentional entrepreneurs GEM (2012)

#### *2.11.1.5 Previous work experience*

Turning to experience, as measured by the number of years in an industry, Cole (1998) found that experience also enhances the availability of credit. In fact, Nofsinger and Wang (2011) hypothesised that the experience of the entrepreneur is one factor that explains the difference in external financing levels available to SMEs. The findings of the study proved this hypothesis. They further explained that prior experience in the industry positively correlates with the share of external financing in the firm and added that the cumulative experience of the owner–manager plays a crucial role in overcoming some of the problems that hinder SME access to external finance, including information asymmetry and moral hazard. From the lender's perspective, as experienced entrepreneurs are believed to be better performers than less experienced entrepreneurs, it is then rational to factor experience into the process

of evaluating the creditworthiness of SMEs (Gompers, Kovner, Lerner, & Scharfstein, 2006).

**Research question 1: Is there a significant difference in successful versus unsuccessful applications to the DFI, in terms of personal attributes of the applicant?**

### 2.11.2 Business Factors

#### *2.11.2.1 Sector/Industry*

A number of studies evidenced that factors related to the industry sector in which a firm operates also explain capital structure and financial decisions Abor (2007). Firms in the services sector, for example, can differ from those operating in manufacturing or construction, in terms of financial needs and choices. The effect of industry classification on the capital structure of Ghanaian SMEs was examined by Abor (2007). The results of the study revealed some differences in the funding preferences of the Ghanaian SMEs across industries. SMEs in the agriculture sector and medical industries rely more on long-term and short-term debt than their counterparts in manufacturing. Abor (2007) further concluded that short-term credit is more used in wholesale and retail trade sectors compared with manufacturing SMEs, whereas construction, hotel and hospitality, and mining industries appear to depend more on long-term finance and less on short-term debt.

#### *2.11.2.3 Capital/Labour intensity*

A country like South Africa is grappling with pervasive unemployment and needs to produce an entrepreneurial development strategy that strikes a balance between labour-intensity and capital-intensity to address the triple challenge of poverty, unemployment and inequality. DFIs are likely to give preference to entrepreneurship which is labour intensive, especially at targeting the youth, GEM (2012)

#### *2.11.2.4 Age and Size*

Even though there is no consensus amongst researchers about the criteria that should be employed to measure the size of the firm (typically total assets, sales or the number of employees), the notion that firm size has an effect on SME's activities and its potential to expand appears to receive general agreement. A firm's size is usually coupled with its age, as they tend to have similar influence on the firm's life cycle. This influence can be strongly observed in the decision making process in the firm, regarding whether one particular type of finance, or another, should be chosen and utilized (Cassar, 2004). Studying firms financing and capital structure using a sample consisted of 292 Australian firms, Cassar (2004) concluded that the "larger" small firms are, the more they rely on long-term debt and external financing, including bank loans. This is consistent with Storey (1994) who found that in the case of SMEs, the owner–manager's personal savings are more important as a source of funds during the start-up stage than outside finance such as loans and overdrafts from banks. From another perspective, the extent to which firm size can impact the availability of finance to the firm was measured by Petersen and Rajan (1994). They argued that as firms grow, they develop a greater ability to enlarge the circle of banks from which they can borrow. They then provided evidence that firms dealing with multiple banks and credit institutions are nearly twice as large as those with only one bank. According to Klapper, Sarria-Allende and Sulla (2002), younger enterprises (those established less than four years), are more reliant on informal financing and far less on bank financing. In addition, in their investigation on the impact of firm and entrepreneurial characteristics on SME access to debt finance in South Africa, Asah and Fatoki, (2011) observed that SMEs established more than five years have a far better chance to be successful in their credit applications than SMEs established for less than five years.

#### *2.11.2.5 Gross Asset Value*

As the provision of collateral plays an indispensable role in easing SME access to debt finance, SMEs that have more fixed assets tend to utilise higher financial leverage (Bradley, Jarrell, & Kim, 1984). The reason for this is that these firms can borrow at lower interest rates, as their loans are secured with these assets serving as collateral. This explains why Coco (2000) describes collateral as the lender's second line of defence. In their investigation of the role of collateral and personal guarantees using a unique data set from Japan's SME loan market, Ono and Uesugi, (2009) found

that a positive relationship between the use of collateral and the strength of the borrower–lender lending relationship results in easier SME access to external sources of finance. A similar conclusion was reached by Odit and Gobardhun, (2011), when examining the factors determining the use of financial leverage by SMEs in Mauritius. They concluded that access to debt finance is affected by the positive association between the debt ratio and the asset structure. Furthermore, they revealed that SMEs with a lower portion of tangible assets in their total assets are more likely to encounter difficulties in applying for outside finance, because of the inability to provide the collateral required.

### *2.11.2.6 SMME definition*

**Table 2.5: Broad Definitions of SMMEs in the National Small Business Act**

| Enterprise Size | Number of Employees | Annual Turnover (ZAR) | Gross Assets excluding Fixed Property |
|---|---|---|---|
| **Medium** | Fewer than 100- 200 depending on industry | Less than 4 million to 50 million depending on industry | Less than 2 million to 18 million depending on industry |
| ***Small*** | *Fewer than 50* | *Less than 2 million to 25 million depending on Industry* | *Less than R2m to R4.5m depending on industry* |
| **Very Small** | Fewer than 10- 20 depending on industry | Less than R200 000 to R500 000 depending on Industry | Less than R150 000 to R500 000 depending on industry |
| **Micro** | Fewer than 5 | Less than R150 000 | Less than R100 000 |

**Source**: SEDA: Research Study to Identify Needs, Opportunities and Challenges of SMEs in the Chemicals and Plastics Sector

### *2.11.2.7 BBBEE Level*

The Broad Based Black Economic Empowerment Act (53 of 2003) is meant to promote economic transformation of the previously disadvantaged individuals, in order to enable meaningful participation of black people in the mainstream economy. According to the South African President in the State of the Nation Address (2013), it was indicated that this Act is under review to enhance and fast-track transformation of economy. The BBBEE Act of 2003 is measured against seven elements, with relative weightings as indicated below:

| | |
|---|---|
| Ownership | 20% |
| Management and Control | 10% |

| | |
|---|---|
| Employment Equity | 10% |
| Skills Development | 20% |
| Preferential Procurement | 20% |
| Enterprise Development | 10% |
| Corporate Social Investment | 10% |

The main and objectives of BBBEE may be stated as follows:

- Promoting equitable access and participation of Black people in the mainstream economy;
- De-racialising enterprise ownership, control, skilled occupations and management of existing and new enterprises;
- Unlocking the full entrepreneurial skills and potential of Black people in the economy;
- Socially uplifting and restoring the dignity of Black South Africans within the mainstream economy;
- Increasing the extent to which communities, workers, co-operatives and other collective enterprises own and manage existing and new enterprises,
- Increasing their access to economic activities, infrastructure and skills training;
- Increasing the extent to which Black women, people living with disabilities and the youth own and manage existing and new enterprises, increasing their access to economic activities, infrastructure and skills training
- Empowering rural and local communities to have access to economic activities, land, agricultural infrastructure, ownership and skills.

The financial sector committed itself to the development of a Broad Based Black Economic Empowerment (B-BBEE) charter at the NEDLAC Financial Sector Summit in August 2002 (Financial, 2006). The Financial Sector Charter (2006) states that:

"We, the parties to this charter, therefore commit ourselves to actively promoting a transformed, vibrant, and globally competitive financial sector that reflects the demographics of South Africa, and contributes to the establishment of an equitable society, by effectively providing accessible financial services to black people and by directing investment into targeted sectors of the economy".

B-BBEE, as defined, means the economic empowerment of all black people. There are many facets to B-BEE, and the researcher will elaborate only those pertaining to SMEs. The turnover bands for small or medium BEE enterprises are between R500 000 per year to R20 million per year. Specific actions were agreed with the financial services industry to ensure sustainable and affordable banking services; contractual savings schemes; and credit facilities for small and micro enterprises and poor households. The financial sector has agreed to follow initiatives through joint ventures, debt financing and equity investments in BEE companies (Financial, 2006).

#### *2.11.2.8 Risk analysis*

The historical and current challenges faced by SMEs have contributed to the negative perceptions of small and medium business in terms of being high risk with high failure rates. There is a view that policies should be designed to be pro small and medium business, which should positively change the risk profile of SMEs, thereby increasing their access to funding. There are, however, contrasting views on the impact that small and medium business has on economic growth (Carree and Thurik, 2003). Some literature indicates that small and medium business is not key to economic growth, whereas other studies indicate that small and medium business fosters entrepreneurial activity and innovation, which then in turn drives economic growth (King and Levine, 1993). The literature further indicates that the lack of access to finance can negatively impact the growth of small and medium business (Beck and Demirguc-Kunt, 2006).

There are 3 major risk factors that small and medium businesses face in terms of determining their success or failure (Everett and Watson, 1998). These risks consist of the economy based risk, industry based risk and firm based risk.

**Economy risk** refers to the risk associated with the macro and micro economy that the business operates within. Upturns and downturns within the economy impact directly on the sustainability of these small and medium businesses.

The **industry risk** refers to the risk associated with the industry in which the business operates. Economic changes impact different industries differently and where an industry is seriously impacted by a negative change within that industry, this is likely

to have an even greater impact on the small and medium business, which is more susceptible to industry changes than large business.

The third risk, which is **firm based risk,** refers to the risk that is unique to the small or medium business itself (Everett and Watson, 1998).

As indicated by (Everett and Watson, 1998), the two primary causes of small business failure are poor management skills and the inadequate capital at both the start up and operational phases of these businesses. These relate directly to the firm based risk and are internal failures of these businesses. The literature further indicates that although these two reasons for failure are often identified as the root cause of the failures of small and medium business, these failures are exacerbated by the exogenous or external factors, such as the economy and the industry in which they operate (Everett and Watson, 2000).

Small and Medium businesses are exposed to a range of risks throughout their operating cycles (Ejembi and Ogiji, 2007). The risks that SMEs are exposed to have further increased as a result of diversification of their operations into the competitive local as well as global markets. The high rate of business failure has been traced back to several factors which include funding or the lack thereof, poor management ability, infrastructure constraints, poor record keeping which translates to poor available financial information, the lack of skilled personnel as well as ineffective risk management (Ejembi and Ogiji, 2007). Further risks that SMEs are exposed to include credit risk, which is the risk of not being able to meet their financial obligations in terms of their credit; interest rate risk, which relates to the fluctuations of the interest rate and the impact thereof; market risk, which relates to adverse market conditions; political risk, which results from political changes within the country of operation or internationally; purchasing power risk, which is linked to inflation fluctuations; profit risk, which is the risk that the SME does not generate sufficient profits to become sustainable and reputation risk, which relates to problems within the SME that could result in investors or funders losing confidence in the business (Ejembi and Ogiji, 2007).

The literature further indicates that often the reason that people go into small and medium business is a contributing factor to their failure. This is particularly relevant in the case of women entrepreneurs who go into business as a result of being discriminated against in the workplace (Rosti and Chelli, 2005). Rosti and Chelli indicate that men go into business to continue with an activity that is more profitable than while they were a salaried employee,

while women go into business to move out of their current situation. The study further indicates that they fail to remain in the businesses and exit from business at the same rate that they enter. This high exit rate from businesses is another contributing factor to the negative perception associated with small and medium business (Rosti and Chelli, 2005). Negative perception is a major contributor to the high risk profile of the SME. In addition the literature indicates that the failure rates of small and medium business is high and it is this perception that decreases their likelihood of being able to successfully secure the funding that they require.

**Research question 2: Is there a significant difference in successful versus unsuccessful application to the DFI, in terms of business factors of the applicant?**

### 2.11.3 Business Outcomes

#### *2.11.3.1 Potential Market Growth*

A study by Mullender (2011), focusing on the selection criteria used by European venture capitalists, noted that market characteristics are rated very important. The key market characteristics are market growth, market acceptance, and market size; other notable market characteristics related to post-entry barriers, as well as competitive advantage potential for the proposed venture. The research findings suggest that the ability by a proposed venture to create post-barriers to entry was not rated highly, while competitive advantage in a competitive market was valued significantly. The assumption is that the presence of weak competition is indicative of a poor market.

#### *2.11.3.2 Potential Return on Investment*

Mullender (2011) further highlights the significant importance of financial characteristics, such as the projected return on investment of a proposed venture's loan application. The study makes interesting findings in this aspect, such as the significant importance attached to those which loan applications can guarantee a rate of return within 5 to 10 years. Other indicators of financial characteristics include the riskiness of the proposed venture as well the ease of exit in the venture.

**Research question 3: Is there a significant difference in the degree of importance in successful versus unsuccessful application, in terms of personal factors, business factors and business outcomes?**

## 2.12 Conclusion of Literature

Opportunity evaluation is at the crux of how total entrepreneurial activity can be ramped up in a country like South Africa. Opportunity recognition is the starting point and is located within the domain of the entrepreneur. On the other hand, there is an interface between the entrepreneur and the lenders, when it comes to access to finance for these recognised opportunities.

The decisions that are made by lenders have attracted a lot of attention from researchers and entrepreneurs alike, with considerable studies having been conducted, focusing on venture capitalists. However, there is a dearth of literature on the decision-making process of DFIs. Hence this study examined the decision-making criteria of DFIs from a supply-side perspective, since how finance is availed to entrepreneurs has a direct impact on the percentage of total entrepreneurial activity in the country.

Following similar studies conducted elsewhere, but using venture capitalists as the focus of enquiry, the study of DFIs identified three variables associated with decision-criteria, for approving or rejecting a loan application. In this study, the explanatory variables are personal factors, business factors and business outcome factors and these form the basis of the main hypotheses of the study. The main items covered under each variable are:

**Personal factors**, which consider the age, gender, academic background and experience of the applicant

**Business Factors**, which consider the business sector under which the proposed new venture falls; the years of relevant industry experience that the applicant has; the capital intensity of

the proposed new venture, the level of technological innovation associated with the business venture, and several proxies of new venture business performance, such as its location within the SMMEs continuum or definition, risk profile and its B-BBEE credentials.

**Business Outcome**, which considers the key financial characteristics of the proposed new business venture, such as potential market growth and projected return on investment.

The main variables of the research have been summarised in a conceptual framework cited as Figure 2 and Figure 3, in both Chapters 2 and 3, and show the hypothesised links between their variables and opportunity evaluation.

The three main research questions based on these variables are:

**Research question 1: Is there a significant difference in successful versus unsuccessful applications to the DFI, in terms of personal attributes of the applicant?**

**Research question 2: Is there a significant difference in successful versus unsuccessful application to the DFI, in terms of business factors of the applicant?**

**Research question 3: Is there a significant difference in the degree of importance in successful versus unsuccessful application, in terms of personal factors, business factors and business outcomes?**

# CHAPTER 3: RESEARCH METHODOLOGY

## 3.1 Introduction

Research Methodology is a term which denotes how data is gathered and research is executed. It is a term which specifies the data collection method, its measurement and subsequent analysis, with the key goal of meeting the study objectives (Wegner, 2012). This case study of SEFA employed the quantitative research approach to collect data, on the basis of a structured research instrument in order to gain insight and understanding into how DFIs make decisions in evaluating opportunities, using the loan applications submitted to them for funding as a proxy for an opportunity.

## 3.2 Research Methodology/paradigm

According to snaosurvey.com, quantitative research is used to quantify the problem by way of generating numerical data or data that can be transformed into useable statistics. It is used to quantify attitudes, opinions, behaviours, and other defined variables – and generalize results from a larger sample population.

Quantitative data collection methods are much more structured than qualitative data collection methods. Quantitative data collection methods include various forms of surveys, such as online surveys, paper surveys, mobile surveys and kiosk surveys, face-to-face interviews, telephone interviews, longitudinal studies, website interceptors, online polls and systematic observations.

### 3.2.1 Advantages and Disadvantages of Quantitative Research

Quantitative data is statistics driven and can provide a lot of information. One of the advantages of this type of research is that it is easier to compile the data onto a chart or graph because of the numbers that are made available (Wegner, 2012). Another advantage of quantitative research is that the research can be conducted on a large scale and gives a lot

more information as far as value and statistics. One of the disadvantages of quantitative research is that it is more costly than using qualitative research. Even though it comes with advantages, because of the larger scale of research, it may not be necessary for the type of research that needs to be done. Another disadvantage of quantitative research is that numbers change often (Wegner, 2012). So if research is conducted on a statistical level, then it would have to be conducted much more frequently to help balance out the consistent changing of numbers (Wegner, 2012).

Quantitative analysis will be done on the data from the forms which have been approved and those which have been rejected at SEFA forming the sample, followed by quantitative analysis of data using Frequencies and Chi-Square statistics. The research uses the DFIs approved and rejected applications as unit of analysis to understand the impact of assessment policies of DFIs.

## 3.3 Research design

The term "research design" is amenable to various interpretations and there is no conclusive definition. However, (Cooper and Schindler, 2011) have attempted to give a fairly comprehensive definition of research design by suggesting that it refers to the structure and a plan of an inquiry which is designed to elicit answers to specific research questions. Such a plan denotes the bigger picture of the research. It is a complete outline of all the activities to be conducted by the research from conception, inception and completion of the research process. The research design adopted for this study was premised on the quantitative approach.

The research design involved the use of document analysis. The documents analysis entailed reviewing a sample of both successful and unsuccessful funding applications at SEFA, against a standard research instrument developed by researcher, based on the generic requirements for funding used in the DFIs. The research instrument (Appendix A) had been developed on the basis of information that will be obtained from the DFIs' evaluation criteria forms and examined to address the data requirements for Research questions 1, 2 and 3.

The key documents to be analysed were those which contained information on the personal attributes of the entrepreneur (Research question 1) information on the business factors (Research question 2) and business outcomes (Research question 3). Consistent with this, the funding application form, evaluation forms, FICA forms, business plans, financial statements,

identity copies, B-BBEE verification certificates and CIPC registration certificates, among other documents, were analysed

.

Secondary data was collected, captured and analysed using the Statistical Packages for Social Sciences (SPSS) v.21. The research instrument is a set of criteria used for the Documents analysis derived from the "Investment Proposal" that is used by DFI's to evaluate proposals received from them. The Investment Proposal assessment starts from the Loan Application forms and is then sent to the fund managers for approval of due diligence to be conducted on the applicants business by the DFI's task managers. Once it has passed this stage, it is then forwarded to the risk manager, who performs a risk analysis test, based on the recommendation from the fund managers who undertook the due diligence process. The final stage is when the fund managers decide whether to fund the applicant or decline the applicant's application, for a business loan from the DFI.

## 3.4 Population and sample

### 3.4.1 Population

The population or population of interest is the total group of people from whom we need to obtain information (Mc Daniel and Gates, 2001). It is important that the researcher clearly defines the population of interest. The population for this research consisted of all applications for funding received by SEFA by the end of the 2012/2013 financial year.

Quota sampling was used for the loan applications. The quota sampling and simple random sampling methods were used to select the applications.

#### 3.4.1.1 Sample and sampling method

##### *3.4.1.1.1 Convenient Sampling for DFI*

The researcher approached 5 different DFI's requesting for permission to conduct the research in terms of data collection, however 4 of these DFIs declined the request and only one (1) accepted the request therefore resulting in a convenience sampling method.

Convenient sampling or accidental opportunistic sampling is a form of non-probabilistic sampling associated with quantitative studies. A convenience sample is made up of participants who are readily available to the researcher. When a sample is

drawn to suit the convenience of the researcher, it is called convenience sampling (Wegner, 2012). In the case of the study, SEFA's Head Office is located in Gauteng Province and is thus easily accessible to the researcher. However, the use of the convenient samples for the study is also a form of limitation for the study, since the research findings cannot be over-generalised beyond this one DFI.

#### *3.4.2.2 Simple Random Sampling for Loan Applications*

Simple random sampling is defined as a probabilistic form of sampling in which each item in a population has an equal chance of being included in the sample and whose probability of being included is independent of other items in the population (Teddlie and Yu, 2007). Simple random sampling method was then used to select the application forms to fulfil the set quotas from the number of forms approved and rejected in the financial year 2012/2013. This ensured that each approved and rejected form had the same chance of being included in the final sample.

#### *3.4.2.3 Quota Sampling for Successful and Unsuccessful Loan Applications*

Quota sampling involves the setting of quotas of sampling units to interview from specific subgroups of a population. When the quota for any one subgroup is met, no more sampling units are selected from that subgroup for interview (Wegner, 2012). In the case of the loan application forms, two quotas were set, that is, 50% of successful applications and 50% of unsuccessful applications.

Data was collected from the successful and unsuccessful funding application forms (120) from this DFI. This is a key DFI, which operate a range of funds targeting neglected entrepreneurs and with plain mandates to uphold entrepreneurship and SMMEs in line with the government policy objects relating to job creation, poverty eradication, reduction of inequalities, and sustainable socio-economic transformation. This DFI is headquartered in Gauteng Province which is considered to be the economic hub of South Africa and which can benefit a lot from enhanced entrepreneurial activity. This limits the research results to this one DFI only. The sampling frame is shown in Table 3.1

**Table 3.1: Profile of respondents**

| Description of respondent type | Number sampled |
|---|---|
| Successful application forms – SEFA | 60 |
| Unsuccessful application forms – SEFA | 60 |
| TOTAL SAMPLE | 120 |

## 3.5 The Research Instrument

The research instrument is a set of criteria or a checklist based on criteria derived from the document's analysis of the "Investment Proposal" that is used by the DFI to evaluate proposals received from them. The research instrument was used to conduct archival analysis of a sample of 60 approved loan applications and another sample of 60 rejected loan applications, as per set criteria. Consistent with that the funding application form, evaluation forms, FICA forms, business plans, financial statements, identity copies, BBBEE verification certificates and CIPC registration certificates were analysed.

The research instrument was divided into different sections, which addressed the hypotheses set out in the study. The research instrument allowed for the collection of pertinent quantitative responses in line with the quantitative research approach. The research instrument consisted of the following sections:

**Section 1: Demographic information**

The demographic section of the questionnaire measured different variables which included::

- The gender of applicant in terms of whether they are male or female. No reference was made to people of sexual orientations, such as homosexual and bisexual.

- The race of applicant of the applicant was split into White African, Black African, Indian African, Coloured African, and Chinese African

- The age group of the applicant, ranging from 18 years to 56 years and older

- Marital status of applicant in terms of whether the applicant is single, married, divorced or widowed

- Academic background of applicant in terms of whether they have Matric, post-Matric, junior degree or postgraduate qualification

- Years of experience of an applicant in running a business

**Section 2: Assessing Business factors**

Section 2 of the research instrument measured different variables, considered as the key business factors taken into account by DFIs when approving or rejecting a loan application and these included:

- Business Sector/Industry, which was split into Business Consulting, Franchising, Manufacturing, Hospitality and Tourism, Biotechnology, and ICT

- The years of experience of an applicant in that sector/industry, ranging from 0 to over 20 years

- The factors of capital intensity when assessing opportunity, in terms of whether a proposed venture is capital intensive or labour intensive

- The technological orientation of the proposed venture in terms of whether it uses unproven innovation, proprietary but proven technology, or uses conventional and familiar technology; among others.

- Factors of new venture business performance such as turnover, which was measured from below R 1 500 000 to between R 5000 000 to R 10 000 000

- Another variable relating to new venture business performance was the number of employees, which ranged from 1 (owner/manager) to between 51 and 200 employees

- The Gross Asset Value was also used as a proxy for new venture business performance and ranged between 0 and R 5 000 000.

- The nature of the proposed new venture was also considered as a business variable, in terms of the SMME definition in South Africa, which identifies them as Survivalist, Micro, Small, and Medium

- The proposed new venture's BBBEE Level was also considered as a variable of business performance and the main levels range from 1 to 7

- Risk analysis was considered an important variable of new venture business performance. The key Risks are Financial, Market, Technical, Environmental, Management/Operational and Supplier.

**Section 3: Assessing Business outcomes**

Section 3 of the research instrument measured different variables considered as the key business outcomes taken into account by DFIs, when approving or rejecting a loan application and these included:

- Market Growth potential as a variable when assessing opportunity in terms of whether the new venture will yield 25% return on investment potential, 10% return on investment potential, or 0% return on investment potential

- The Return on Investment potential is also used when assessing opportunity in terms of whether it will yield 25% return on investment potential, 10% return on investment potential, 0% return on investment potential

### 3.5.1 Measures of Constructs

The literature on entrepreneurship was used to derive the hypotheses outlined in Chapter 2. A conceptual framework was formulated on the basis of the literature review and it was used to formulate the constructs and eventually the research instrument; but the research instrument was a checklist based on criteria derived from documents' analysis of the "Investment Proposal" The personal factor variables (age, education, gender, marital status, and experience) were measured first and then Business Outcomes were measured with their own items (the items were aggregated on the basis of review of extant literature) in the model.

Business factors were identified as business sector, years of experience of an applicant in that sector/industry, capital intensity technological orientation and several proxies for business performance (SMME definition, B-BBEE credentials, turnover, and number of employees). The various items used to measure each of the variables are indicated in the research instrument and are a result of extensive review of literature, based on similar studies done in Chapter 2. Business outcome was measured in terms of potential, that is, Market Growth and Return on Investment and this constituted the other piece of the Conceptual Framework of the research.

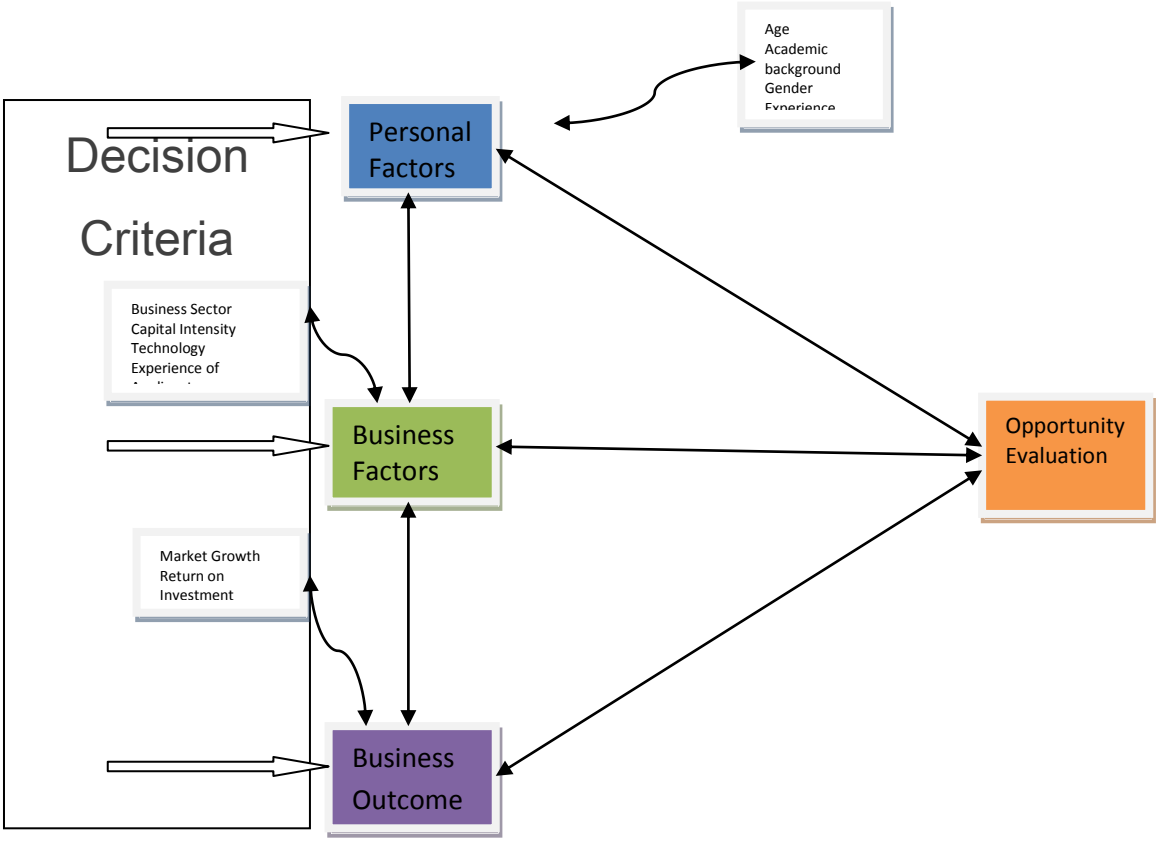



**Figure 3 Conceptual Framework**

**Source:** *Own- derived from the research questions*

The conceptual model shown in Figure 3 was used to formulate the hypotheses of the study, which looked at the relationship of three variables of decision criteria and opportunity evaluation. The research analysed the importance attached to personal factors, business factors, and business outcomes as represented by various items and illustrated in Table 3.

**Table 3.2 Conceptual Framework Items**

| VARIABLE | ITEMS UNDER VARIABLE |
|---|---|
| **Personal Factors** | • Age<br>• Race<br>• Gender<br>• Academic Background |
| **Business Factors** | • Business Sector<br>• Industry experience of Applicant<br>• Capital Intensity<br>• Technological orientation<br>• Proxies for new venture business performance:- SMME definition, B-BBEE,<br>• Risk Analysis |
| **Business Outcomes** | • Market Growth<br>• Return on Investment |

## 3.6 Procedure of Data Collection

The researcher made prior arrangements with the Head of Lending (HOL) of SEFA to be accorded facilities to come and analyse the relevant documents based on the sample. The HOL was responsible for releasing the documents as requested by the researcher. Simple random sampling was used to obtain a sample of both successful and unsuccessful funding applicants during the period under review.

The use of simple random sampling reduces bias, in that each form has the same probability of being chosen. The researcher systematically analysed all documents against the research instrument. To minimise the risk of loss of documents, all analysed documents were returned at the end of each working day to the HOL. The documents not analysed were be kept in a secure place provided by the HOL.

## 3.7 Data analysis and interpretation

This section discussed the data analysis and interpretation relevant to each research question. The collected data was analysed using descriptive and inferential statistics. Descriptive statistics condenses sample data into a few summary descriptive measures. These summary measures allow a user to identify profiles, patterns, relationships and trends within data (Wegner, 2012). Descriptive statistics in form of charts was used to summarise the data. Inferential statistics is that area of statistics that allows managers to understand the population picture of a random variable based on the sample evidence (Wegner, 2012), but Inferential statistics generalise sample findings to the broader population. In this study the chi-squared tests were used to test the hypotheses formulated under each research question.

## 3.8 Validity and Reliability

### 3.8.1 External validity

External validity refers to the general ability of research findings and representativeness of the subjects (Archery, 2009). To ensure external validity, the researcher used the simple random sampling method to draw a sample of documents from the population, which l allowed for stronger generalisations to be made.

### 3.8.2 Internal validity

Damm (2007) defines internal validity as a validity which allows for cause and effect conclusions to be made from the research.

To ensure internal validity, the researcher conducted the research with due diligence and rigor in terms of choosing what will be measured and not measured in the documents reviewed such as evaluation forms, FICA forms, business plans, financial statements, identity copies, B-BBEE verification certificates and CIPC registration certificates, among other documents.

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### 3.8.3 Reliability

Reliability is the degree to which iterative measurements taken under uniform conditions will yield similar results (Lewis, 1999). The use of data extracted from archived documents such as evaluation forms, FICA forms, business plans, financial statements, identity copies, B-BBEE verification certificates and CIPC registration certificates, among other documents, were analysed using specific measures and procedures, Document analysis designed by the researcher ensured that the data collected is reliable.

## 3.9 Conclusion

Chapter 3 looked at the research methodology to enable the researcher to select the relevant research design, sampling strategy and the measuring instrument. It also was an attempt at seeking out the best way to ensure validity of the potential results and ensure that the results would be credible. This chapter was an attempt to inform how the research will be executed and how the results will be interpreted. The next chapter looked at the presentation of results.

# CHAPTER 4: PRESENTATION OF RESULTS

## 4.1 Introduction

This chapter presents the results of the analysed data based on the three research questions discussed in Chapter 2. As discussed in Chapter 3, the quantitative research method was used. The quantitative data analysis took the form of descriptive and inferential statistics. Descriptive statistics include statistical procedures that are used to describe the population under study. The data can be collected from either a sample or a population, but the results assist in organising and describing data. Descriptive statistics can only be used to describe the group that is being studied. That is, the results cannot be generalized to any larger group. Inferential statistics, on the other hand, are concerned with making predictions or inferences about a population from observations and analyses of a sample. That is, one can take the results of an analysis using a sample and can generalise it to the larger population that the sample represents. In order to do this, however, it is imperative that the sample is representative of the group to which it is being generalised (Frankfort-Nachmias & Leon-Guerrero, 2006)

However, descriptive statistics are a prerequisite for inferential statistics, hence in this study descriptive statistics in the form of bar charts are done first, before the testing of hypotheses (inferential statistics). The charts have been used to show the difference between male and female applications that were successful or unsuccessful.

The Chi-square t-test is a statistical test usually used to compare data that is observed by the researcher with that would be expected when conducting a test according to a specific hypothesis. The test is done to ascertain whether there was deviation between the expected and the observed. In this research, multiple group chi-square tests were carried out on the outcome of the application against each of the personal attributes and business attributes.

## 4.2 Results pertaining to research question 1

Research question 1: Is there a significant difference in successful versus unsuccessful applications to the DFI, in terms of personal attributes of the applicant?

This research question is answered using five hypotheses as given below.

Fig 4.1 below displays the number of successful and unsuccessful applications from male and female applicants at DFI.

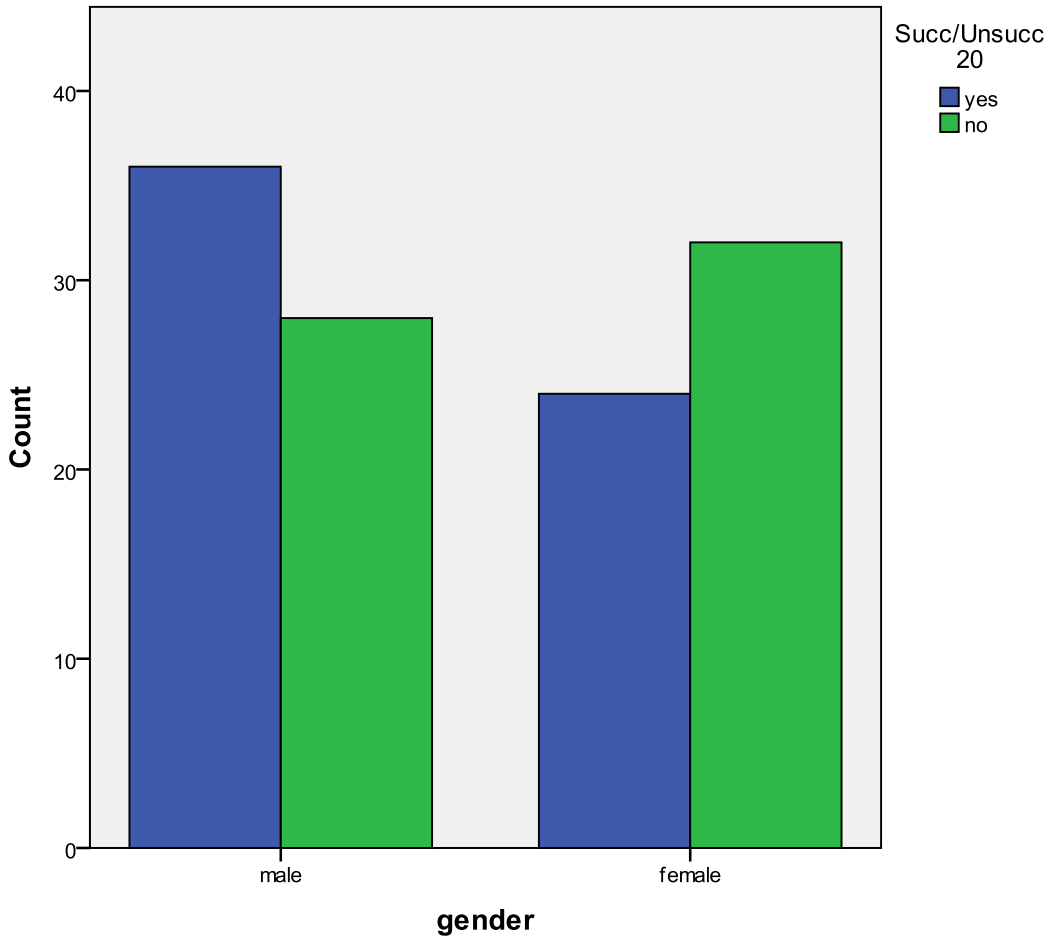



**Fig 4.1 Gender of applicant**

**Hypothesis 1**

$H_0$: There is no difference in the gender composition of accepted and rejected applications.

$H_1$: There is a difference in the gender composition of accepted and rejected applications.

The level of significance of the test is 5% (0.05).

The Pearson Chi-Square value is 2.143 and the p-value is 0.143.

Conclusion: Since p = 0.143> 0.05, we fail to reject $H_0$ and conclude that there is no significant difference in the gender composition of accepted and rejected applications. The Cramer's V of 0.134 also shows a very weak association between gender and the outcomes of the applications.

The distribution of accepted and rejected applications by race is shown in Fig 4.2.

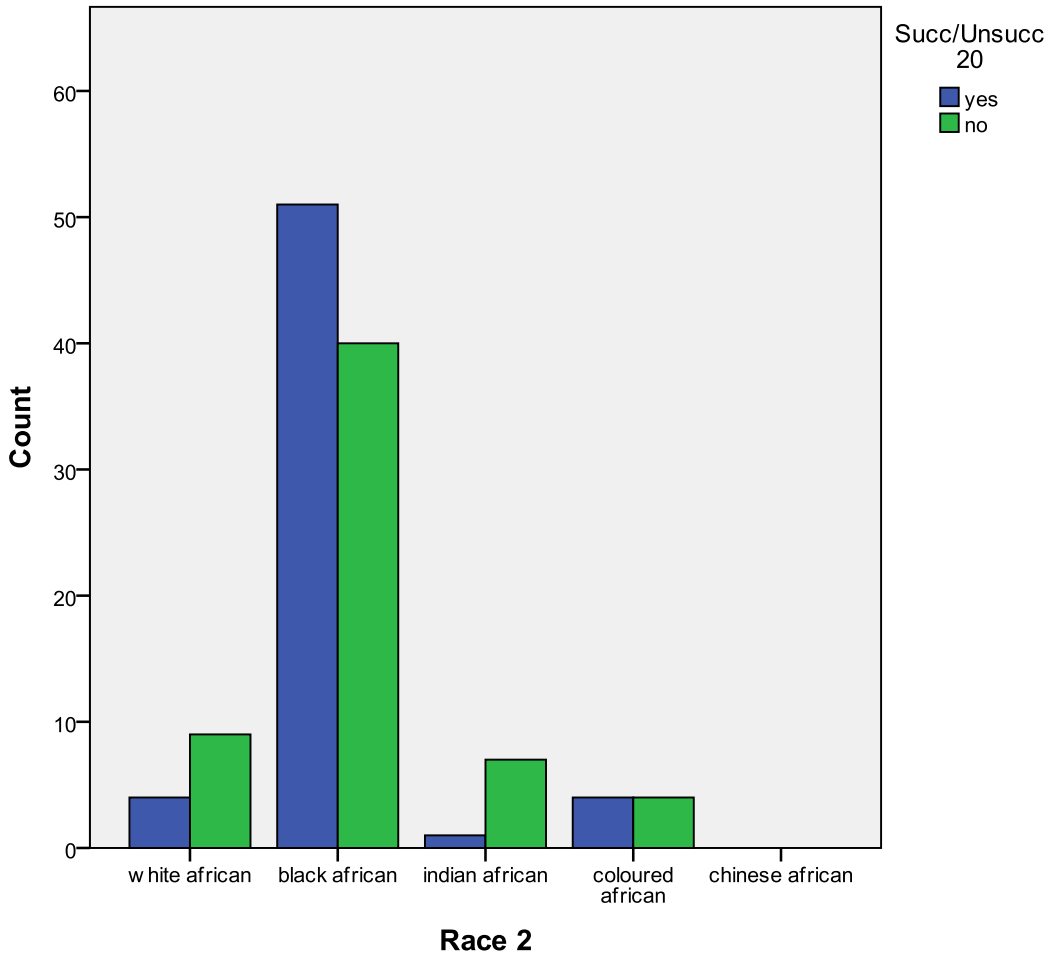



**Fig 4.2 Race of applicant**

**Hypothesis 2**

$H_0$: There is no difference in the race composition of accepted or rejected applications.

$H_1$: There is difference in the race composition of accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 7.753 and the p-value is 0.051.

Conclusion: Since p = 0.051> 0.05, we fail to reject $H_0$ and conclude that there is no significant difference in the race composition of accepted and rejected applications. The Cramer's V of 0.254 also shows a very weak association between race and the outcomes of the applications.

Fig 4.3 below displays the accepted or rejected applications according to the age groups of the applicants.

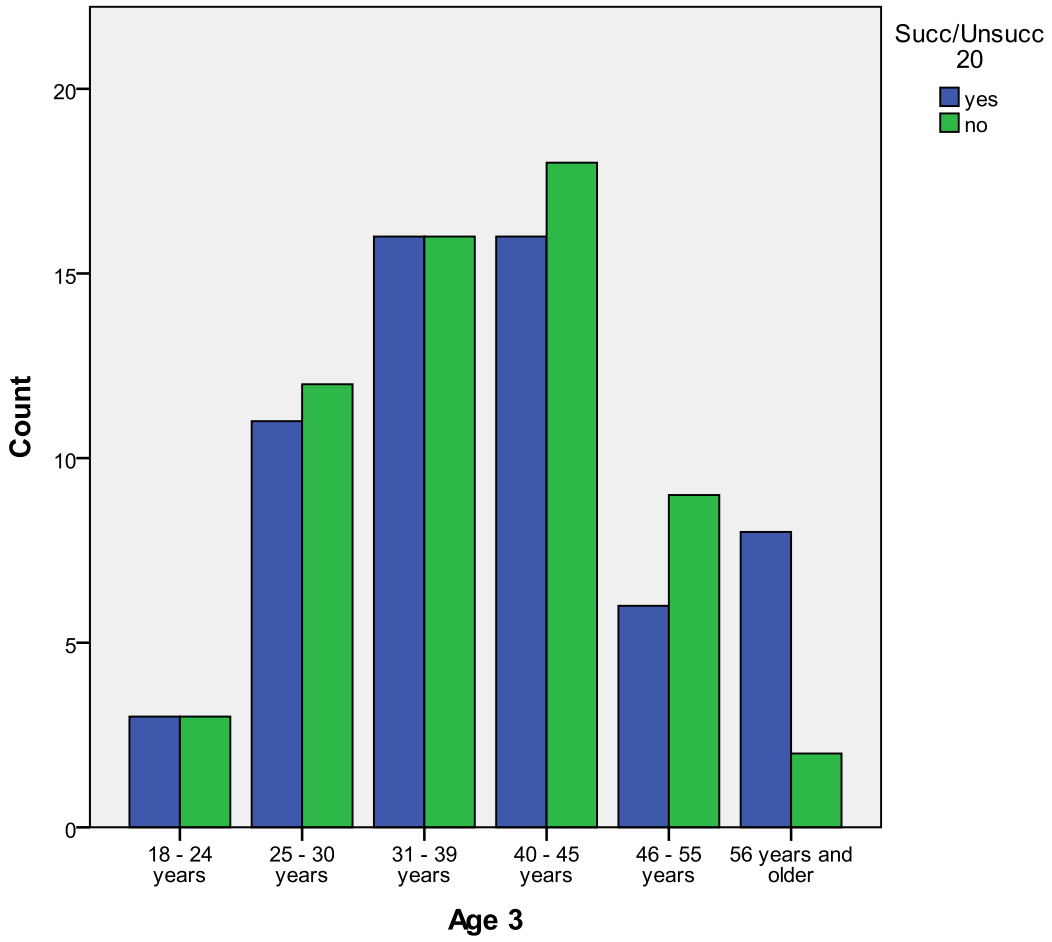



**Fig 4.3 Age of applicant**

**Hypotheses 3**

$H_0$: There is no difference in the age composition of accepted or rejected applications.

$H_1$: There is difference in the age composition of accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 5.561 and the p-value is 0.474.

Conclusion: Since $p = 0.474 > 0.05$, we fail to reject $H_0$ and conclude that there is no significant difference in the age composition of accepted and rejected applications. The

Cramer's V of 0.215 also shows a very moderate association between race and the outcomes of the applications.

The distribution of accepted and rejected applications by marital status is shown in Fig 4.4.

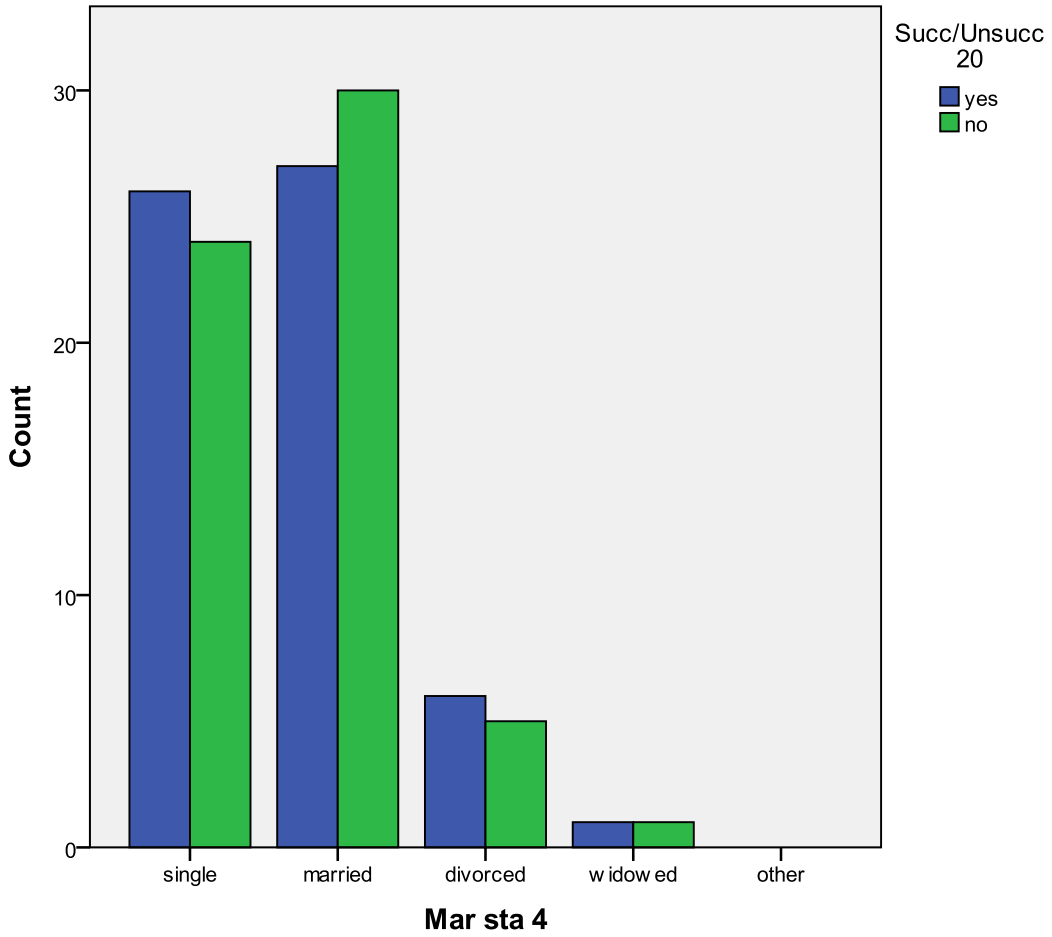



**Fig 4.4 Marital Status of applicant**

**Hypotheses 4**

$H_0$: There is no difference in the marital status composition of accepted or rejected applications.

$H_1$: There is a difference in the marital status composition of accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 0.329 and the p-value is 0.955.

Conclusion: Since p = 0.955> 0.05, we fail to reject $H_0$ and conclude that there is no significant difference in the marital status composition of accepted and rejected applications. The Cramer's V of 0.052 also shows a very weak association between race and the outcomes of the applications.

Fig 4.5 below displays the accepted or rejected applications according to the academic background of the applicant.

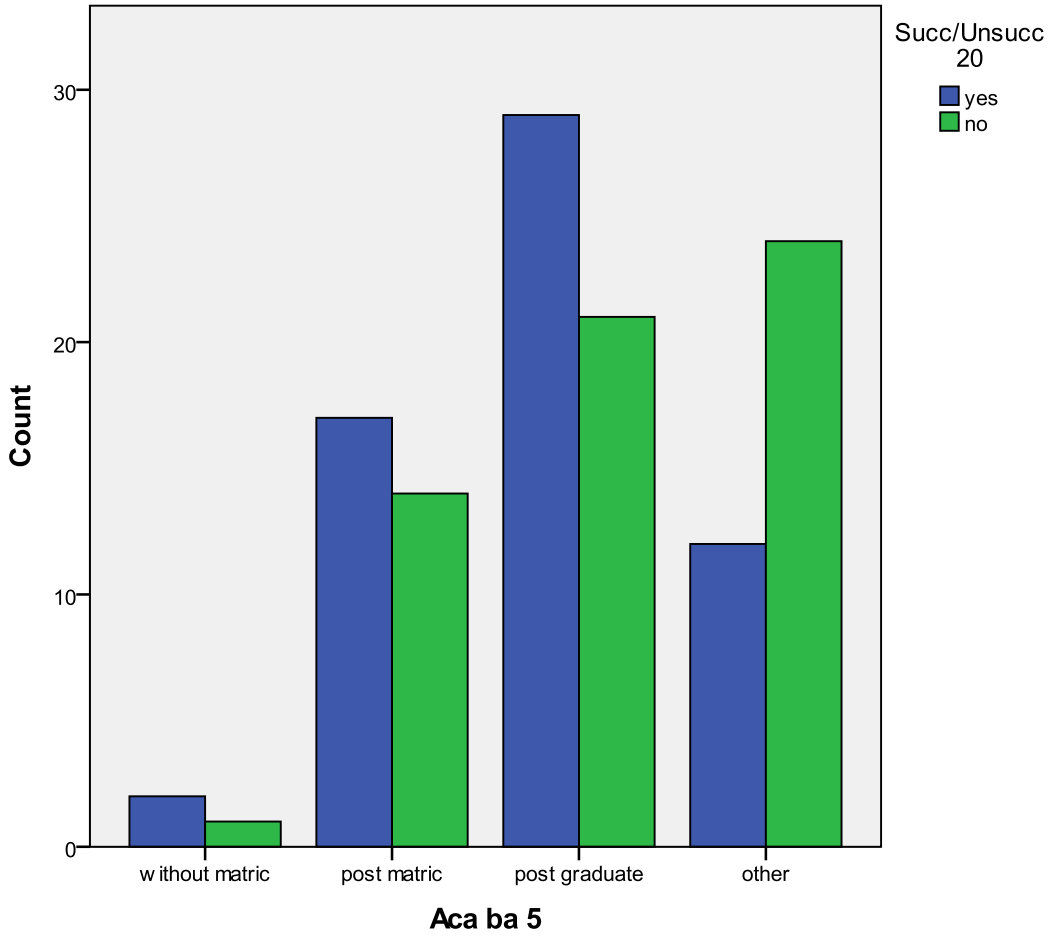



**Fig 4.5 Academic Background of applicant**

**Hypotheses 5**

$H_0$: There is no difference in the academic backgroundlevel of accepted or rejected applications.

$H_1$: There is a difference in the academic background level of accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 6.324 and the p-value is 0.276.

Conclusion: Since $p = 0.276 > 0.05$, we fail to reject $H_0$ and conclude that there is no significant difference in the academic background level of accepted and rejected applications. The Cramer's V of 0.230 also shows a moderate association between academic background level and the outcomes of the applications.

All the personal factors have no statistically significant influence on the assessment of the funding applications at DFI.

## 4.3 Results pertaining to research question 2

Research question 2: Is there a significant difference in successful versus unsuccessful application to the DFI, in terms of business factors of the applicant?

The distribution of accepted and rejected applications by business sector is shown in Fig 4.6.

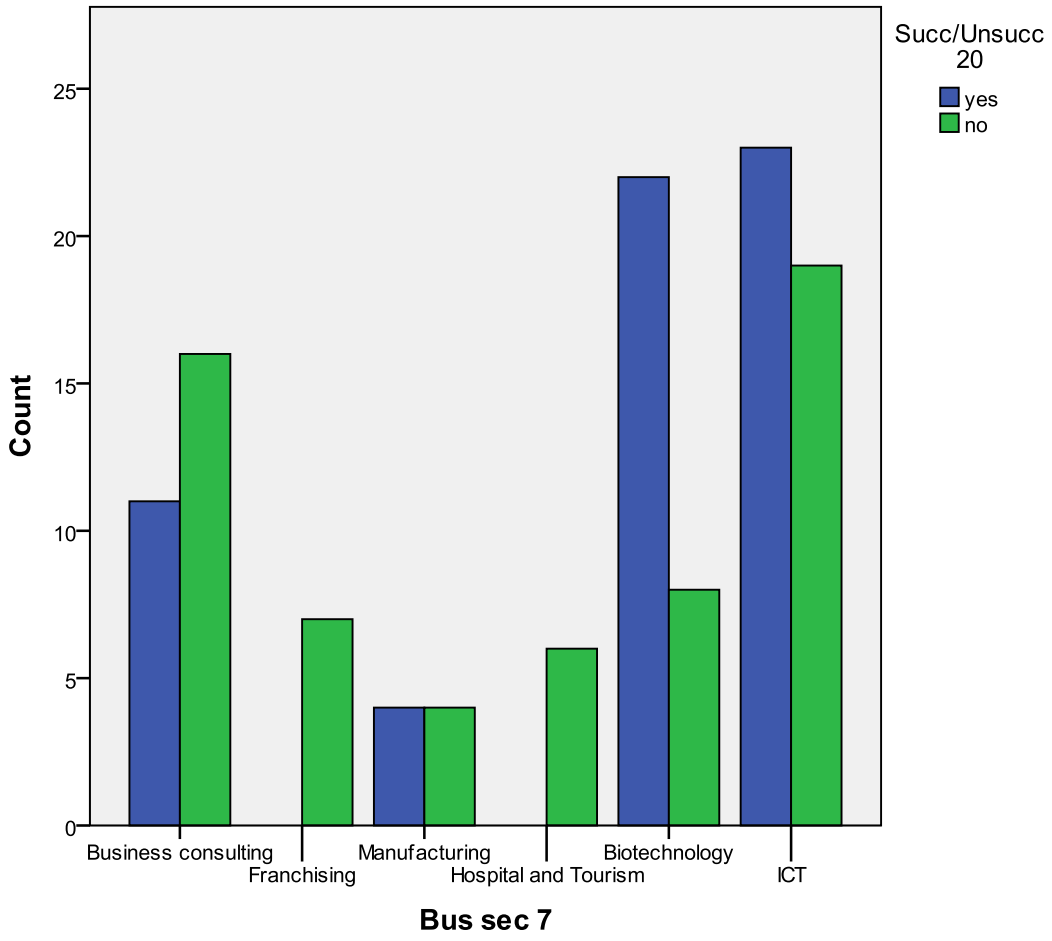



**Fig 4.6 Business Sector of applicant**

Most of the loan applications from the business consulting, biotechnology and ICT were successful.

**Hypothesis 6**

$H_0$: There is no difference in the business sector of accepted or rejected applications.

$H_1$: There is a difference in the business sector of accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 20.840 and the p-value is 0.001.

Conclusion: Since p = 0.001< 0.05, we reject $H_0$ and conclude that there is a significant difference in the business sector of accepted and rejected applications. The Cramer's V of 0.572 also shows an extremely good association between business sector and the outcomes of the applications. Some business sectors are more likely to receive funding than others, for example business consulting, biotechnology and ICT.

Fig 4.7 below displays the accepted or rejected applications according to the years of experience in business of the applicant.

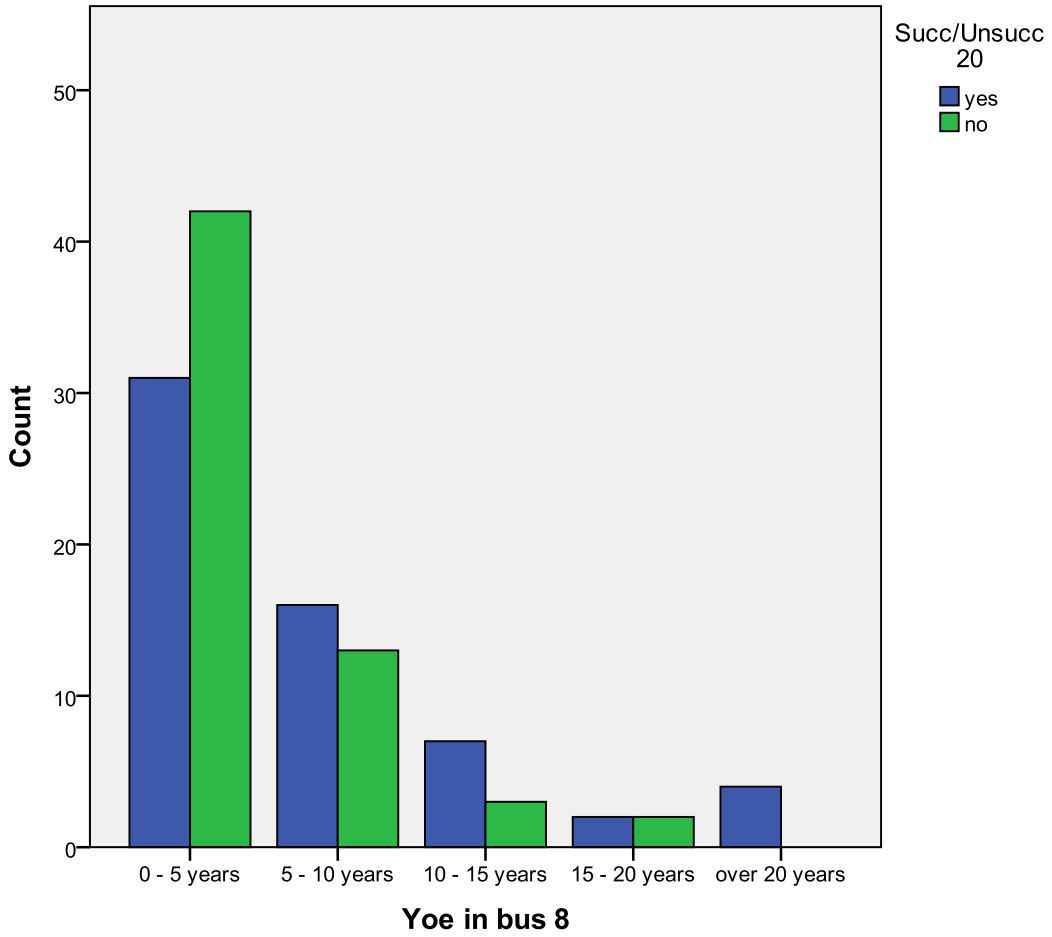



**Fig 4.7 Years of experience in Business (YOE) of applicant**

**Hypothesis 7**

$H_0$: There is no difference in the years of experience in that sector of accepted or rejected applications.

$H_1$: There is a difference in the years of experience in that sector of accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 7.568 and the p-value is 0.109.

Conclusion: Since p = 0.109> 0.05, we fail to reject $H_0$ and conclude that there is no significant difference in the years of experience of accepted and rejected applications. The Cramer's V of 0.251 also shows a weak association between years of experience and the outcomes of the applications.

The distribution of accepted and rejected applications according to the intensity of capital or labour of the new venture is shown in Fig 4.8.

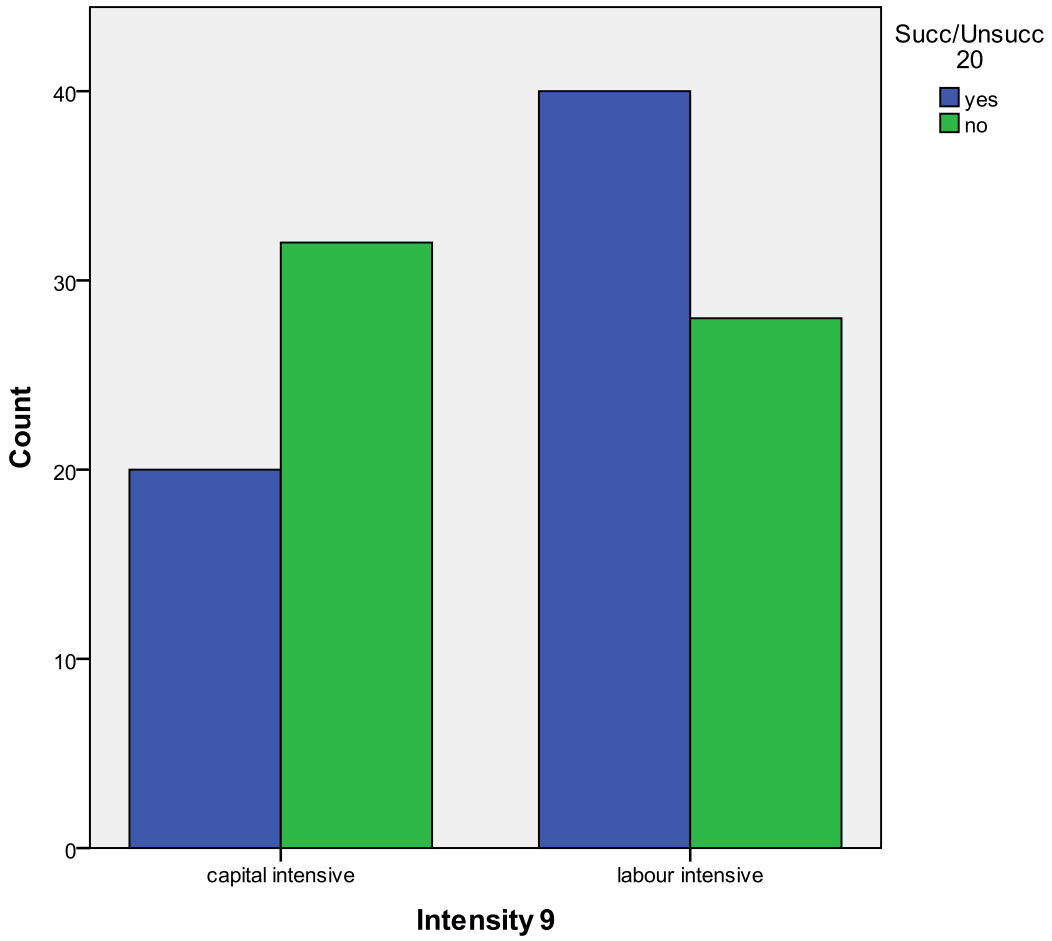



**Fig 4.8 Intensity of capital or labour of the business on application assessment**

**Hypothesis 8**

$H_0$: There is no difference in the capital or labour intensity of the accepted or rejected applications.

$H_1$: There is a significant difference in the capital or labour intensity of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 4.887 and the p-value is 0.027.

Conclusion: Since $p = 0.027<0.05$, we reject $H_0$ and conclude that there is a significant difference in the capital or labour intensity of accepted and rejected applications. The Cramer's V of 0.202 shows a moderate association between race and the outcomes of the applications.

Fig 4.9 below displays the accepted or rejected applications according to the level of importance attached to technology.

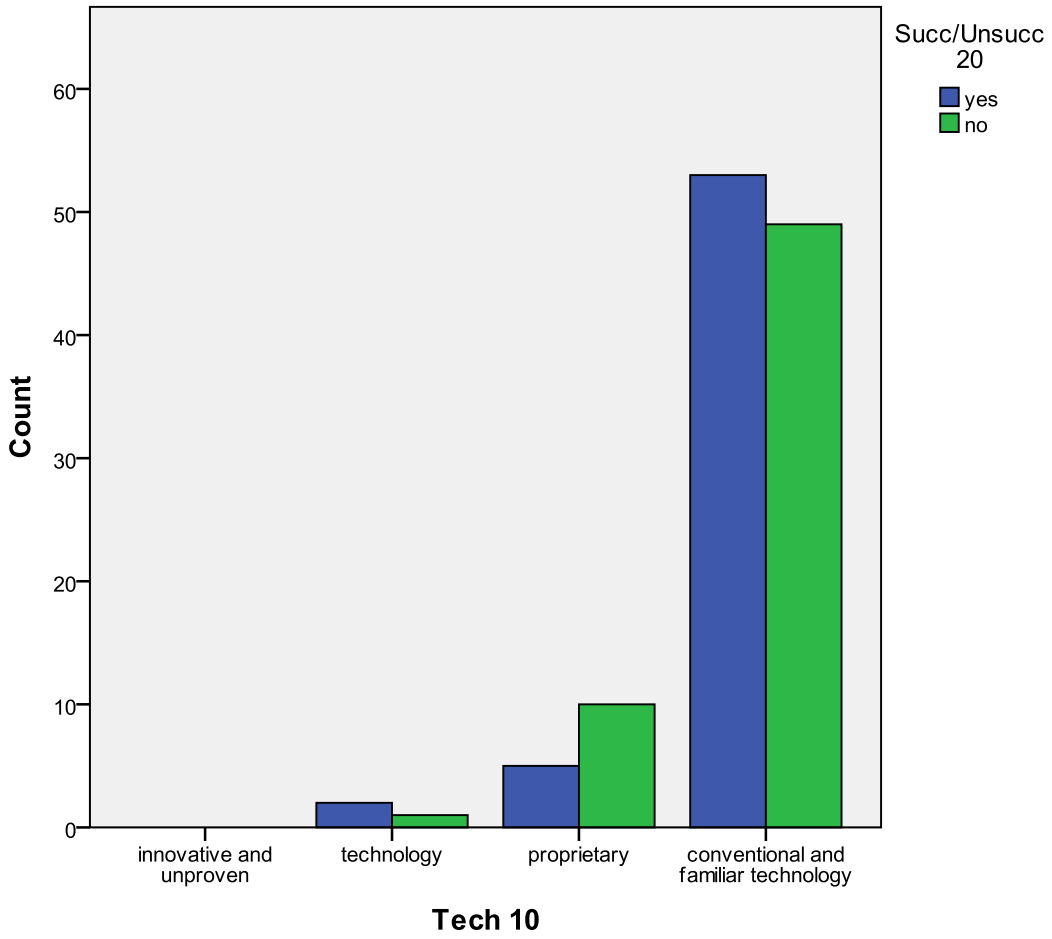



**Fig 4.9 Level of importance attached to technology during assessment of application**

**Hypothesis 9**

$H_0$: There is no difference in the technology of the accepted or rejected applications.

$H_1$: There is a significant difference in the technology of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 2.157 and the p-value is 0.340.

Conclusion: Since $p = 0.340 > 0.05$, we fail to reject $H_0$ and conclude that there is no significant difference in the technology of accepted and rejected applications. The Cramer's V of 0.134 also shows a weak association between technology and the outcomes of the applications.

The distribution of accepted and rejected applications according to turnover level of new venture is shown in Fig 4.10.

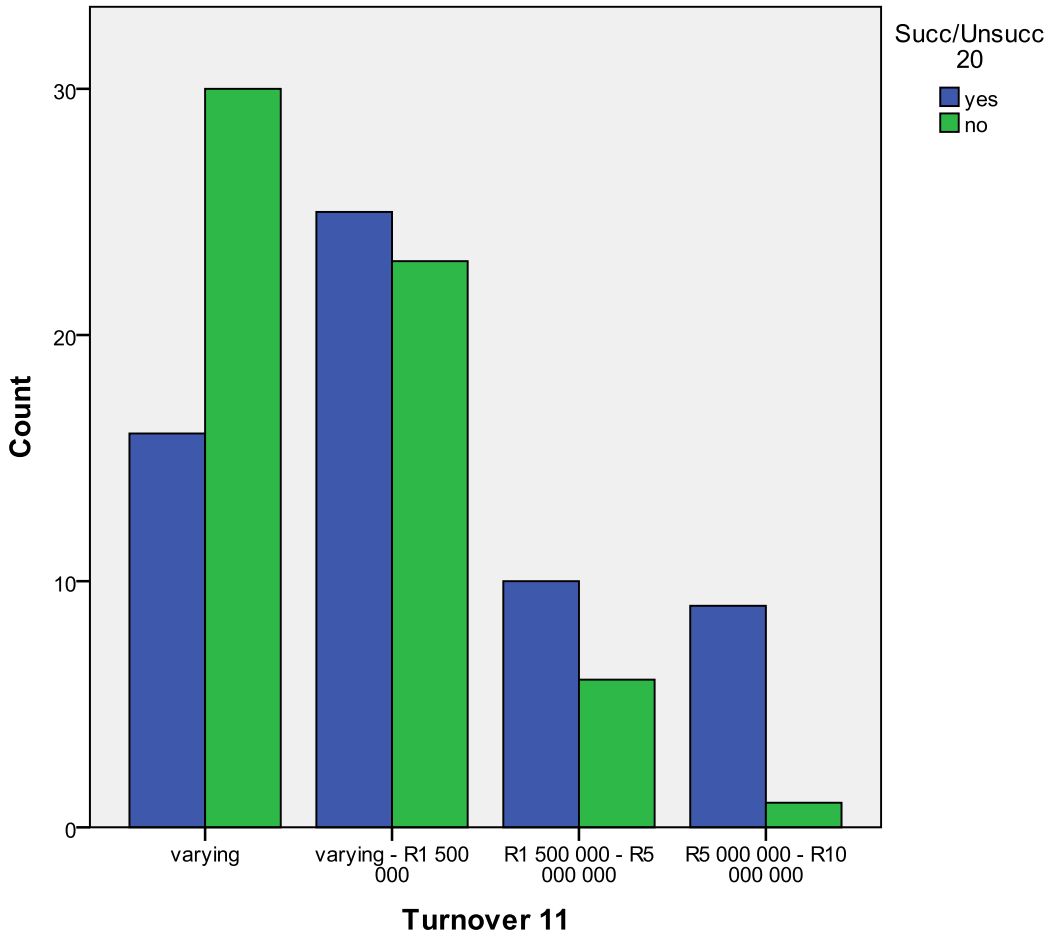



**Fig 4.10 The effect of turnover level of new venture on application assessment**

**Hypothesis 10**

$H_0$: There is no difference in the turnover of the accepted or rejected applications.

$H_1$: There is a significant difference in the turnover of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 11.744 and the p-value is 0.008.

Conclusion: Since $p = 0.008 < 0.05$, we reject $H_0$ and conclude that there is a significant difference in the turnover of accepted and rejected applications. The Cramer's V of 0.313 also shows a strong association between turnover and the outcomes of the applications.

Fig 4.11 below displays the accepted or rejected applications according to the number of employees of the new venture.

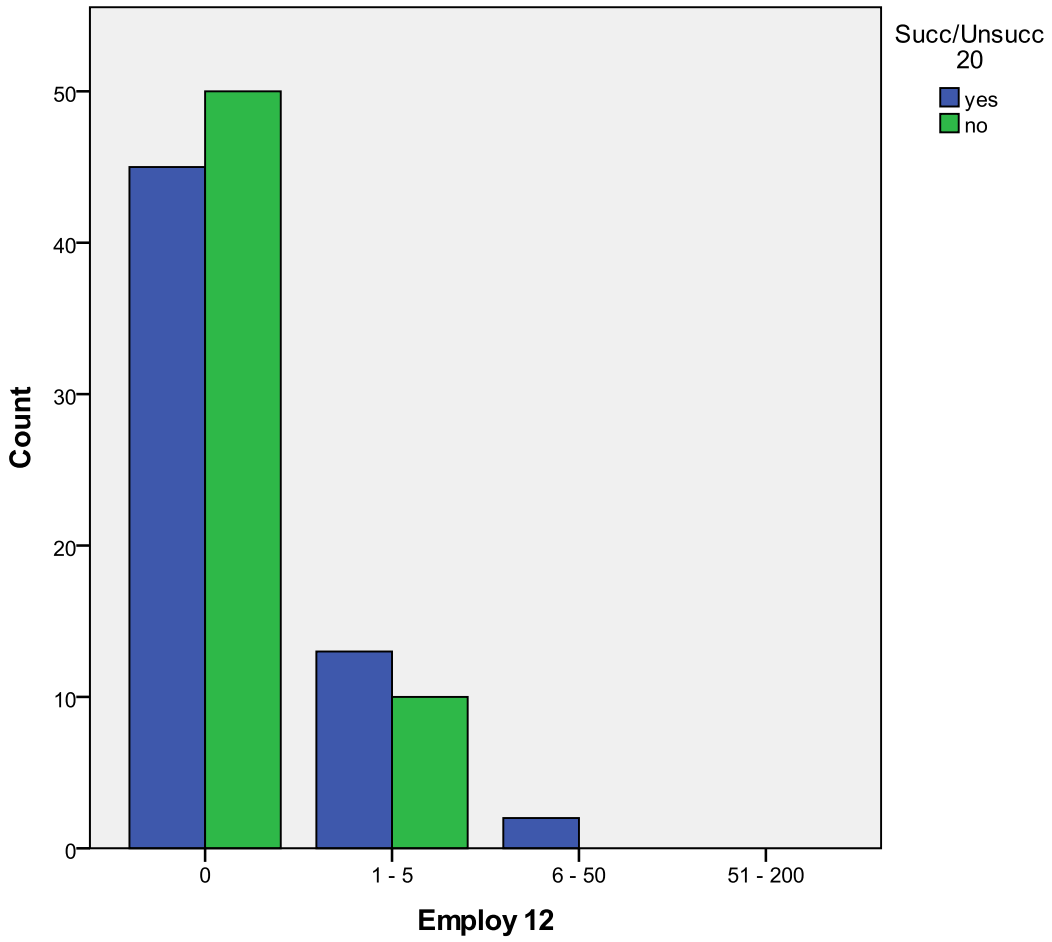



**Fig 4.11 The effect of the number of employees in the new venture on application assessment.**

**Hypothesis 11**

$H_0$: There is no difference in the number of employees of the accepted or rejected applications.

$H_1$: There is a significant difference in the number of employees of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 2.654 and the p-value is 0.265.

Conclusion: Since p = 0.265> 0.05, we fail to reject $H_0$ and conclude that there is no significant difference in the number of employees of accepted and rejected applications. The Cramer's V of 0.149 also shows a weak association between number of employees and the outcomes of the applications.

The distribution of accepted and rejected applications according to the gross asset value of the business is shown in Fig 4.12.

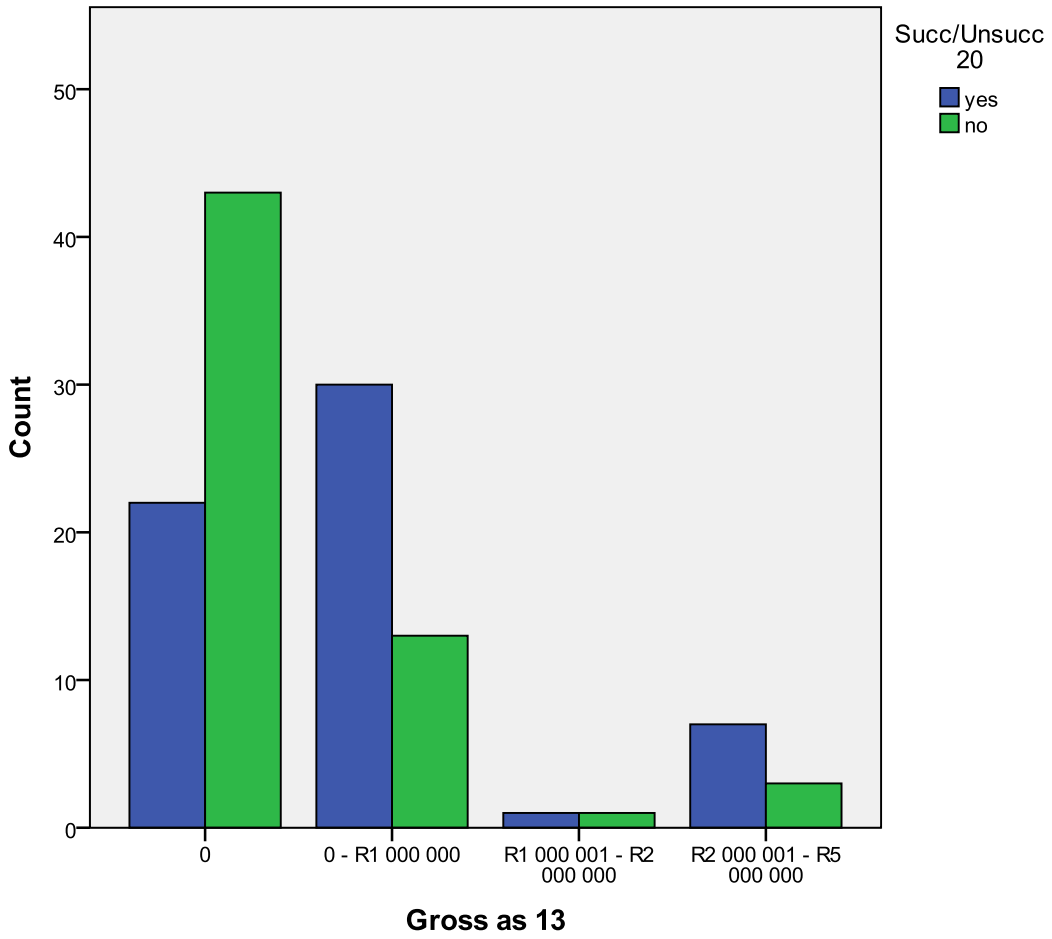



**Fig 12 The effect of Gross Asset Value of the new venture on application assessment**

**Hypothesis 12**

$H_0$: There is no difference in the gross asset value of the accepted or rejected applications.

$H_1$: There is a significant difference in the gross asset value of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 17.283 and the p-value is 0.002.

Conclusion: Since p = 0.002< 0.05, we reject $H_0$ and conclude that there is a significant difference in the gross asset value of accepted and rejected applications. The Cramer's V of 0.380 also shows a strong association between gross asset value and the outcomes of the applications.

Fig 4.13 below displays the accepted or rejected applications according to the SMME definition of the new venture.

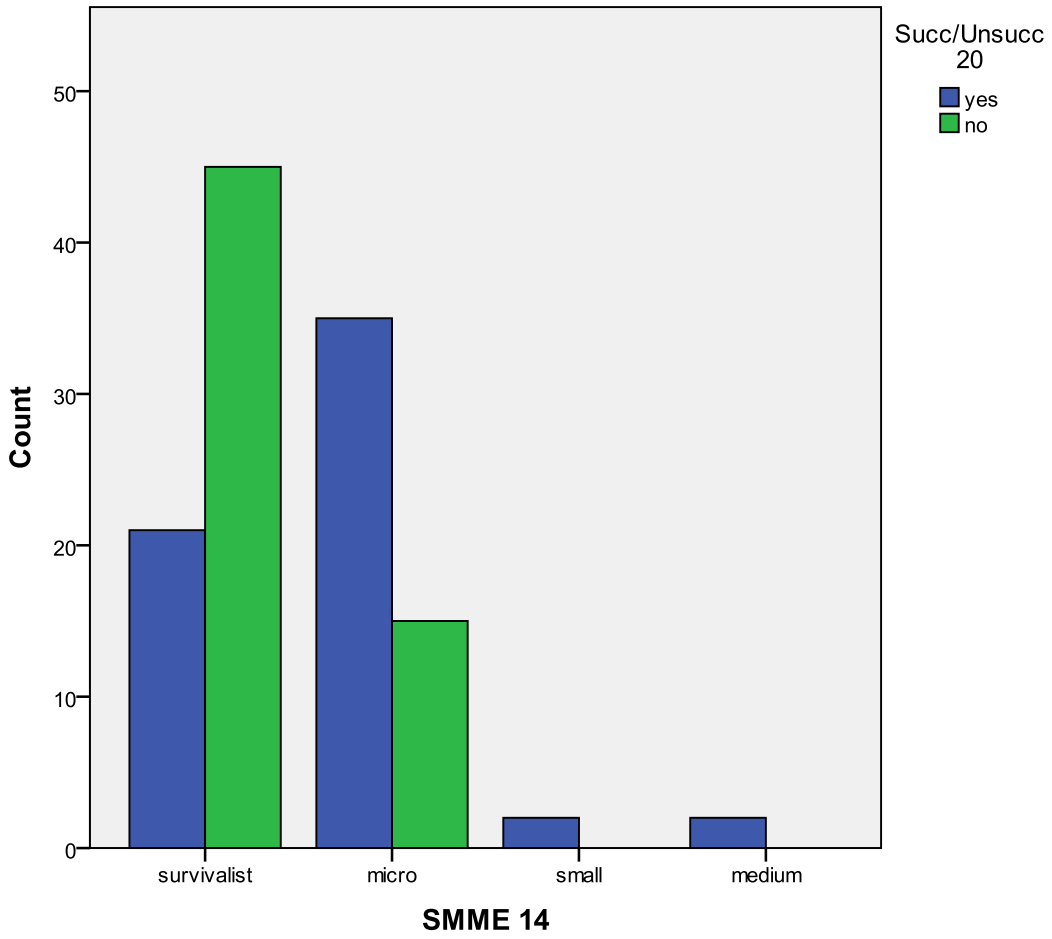


**Fig 13 The effect of SMMEdefinition of new venture on application assessment.**

Fig 13 shows a 100% success rate for small and medium business organisations, a very high percentage for micro enterprises and a lower percentage for survivalist enterprises.

**Hypothesis 13**

$H_0$: There is no difference in the type of SMME of the accepted or rejected applications.

$H_1$: There is a significant difference in the type of SMME of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 20.727 and the p-value is 0.000.

Conclusion: Since $p = 0.000 < 0.05$, we reject $H_0$ and conclude that there is significant difference in the type of SMME of accepted and rejected applications. The Cramer's V of 0.416 also shows a very desirable association between type of SMME and the outcomes of the applications. This means that the type of SMME is a key factor in the determination of the result of the loan application. In this sample the small and medium business organisations had a 100% success rate in the applications for funding.

The distribution of accepted and rejected applications according to BBBEE level is shown in Fig 4.14.

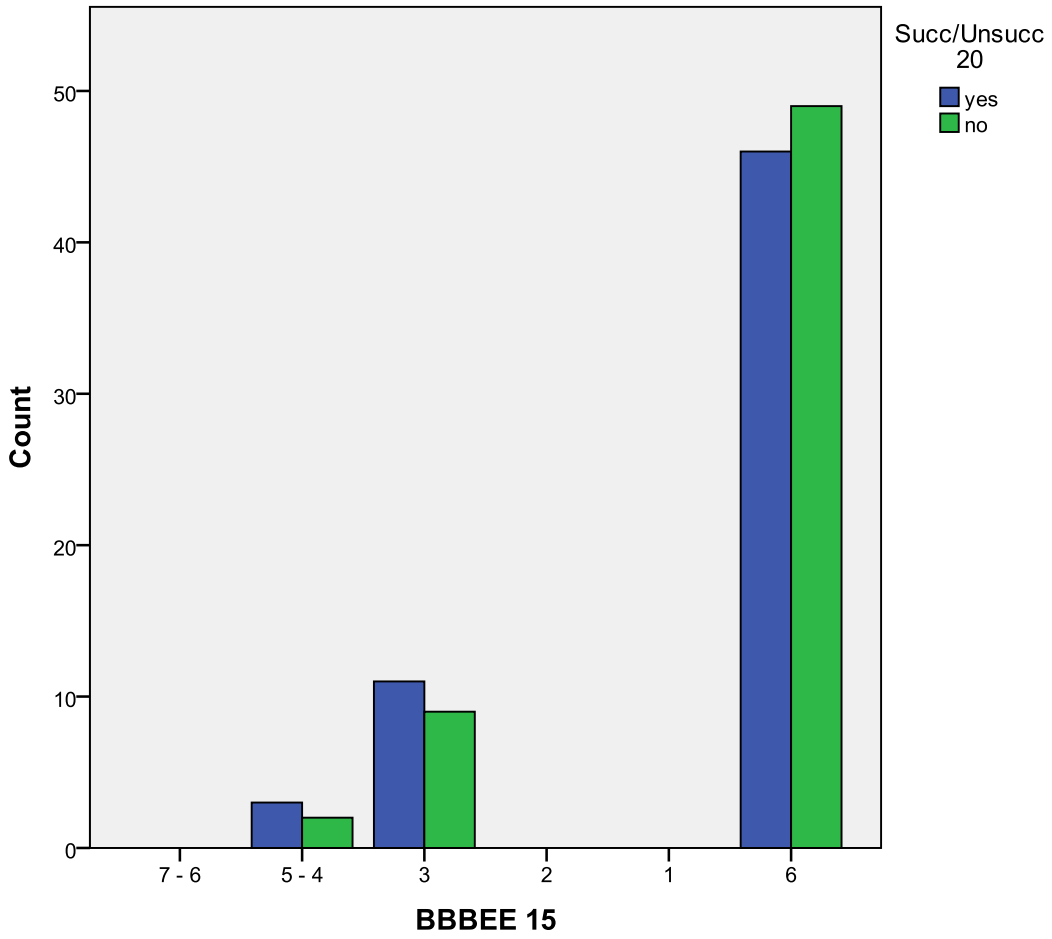



**Fig 4.14 The effect of BBBEE level of new venture on application assessment.**

**Hypothesis 14**

$H_0$: There is no difference in the BBBEE status of the accepted or rejected applications.

$H_1$: There is significant difference in the BBBEE status of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 0.495 and the p-value is 0.781.

Conclusion: Since $p = 0.781 > 0.05$, we fail to reject $H_0$ and conclude that there is no significant difference in the BBBEE status of accepted and rejected applications. The Cramer's V of 0.064 also shows a weak association between BBBEE status and the outcomes of the applications.

Fig 4.15 below displays the accepted or rejected applications according to the new venture risk analysis of the business.

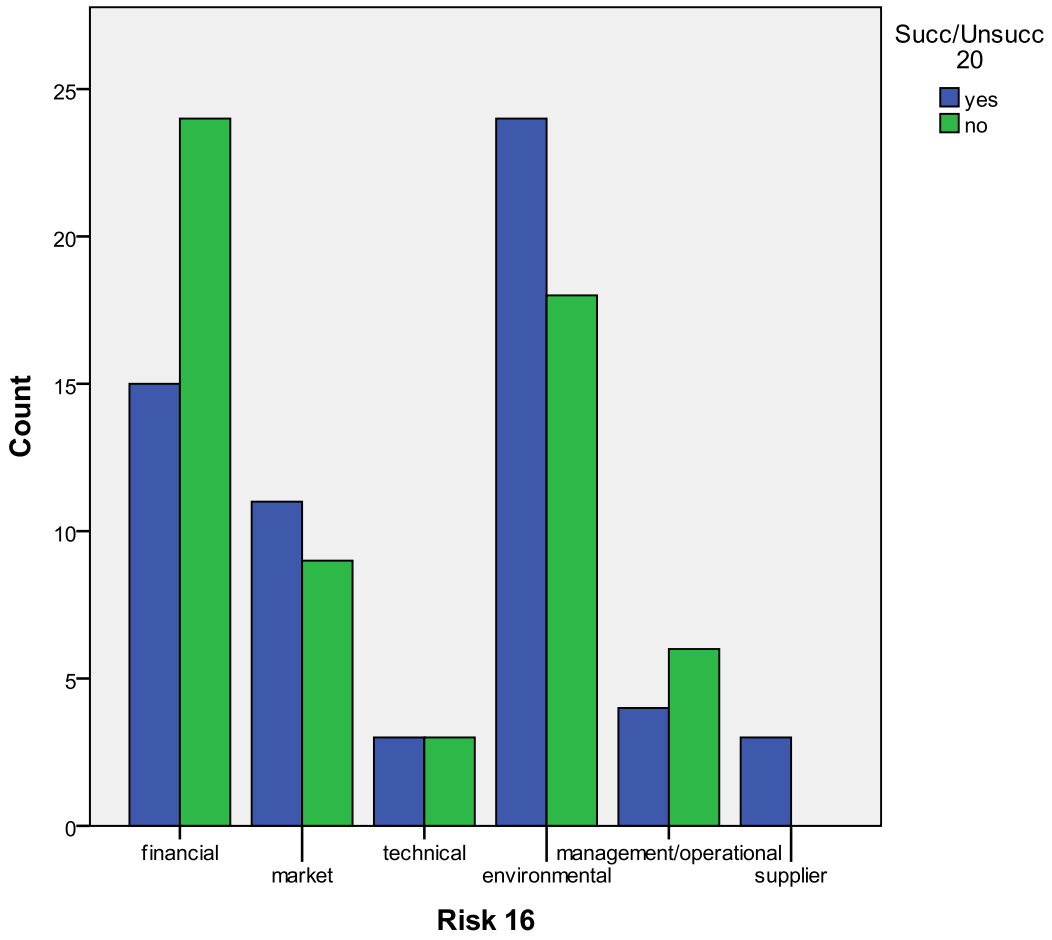



**Fig 4.15 The effect of the new venture risk analysis on the application assessment**

**Hypothesis 15**

$H_0$: There is no difference in the type of risk analysis of the accepted or rejected applications.

$H_1$: There is a significant difference in the type of risk analysis of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 6.534 and the p-value is 0.258.

Conclusion: Since p = 0.258> 0.05, we fail to reject $H_0$ and conclude that there is no significant difference in the type of risk analysis of the accepted and rejected applications. The Cramer's V of 0.233 also shows a weak association between type of risk analysis and the outcomes of the applications.

The following business factors have a significant influence on the assessment of a loan application at DFI:

- Business sector
- Intensity of capital or labour
- Business turnover
- Gross Asset Value
- SMME status

The factors given below have no statistically significant influence on the outcome of a loan application at DFI:

- Years of experience of the applicant
- Technology of the new venture
- Number of employees of the new venture
- BBBEE level of the new venture
- The risk analysis of new venture performance.

## 4.4 Results pertaining to research question 3

The distribution of accepted and rejected applications by market potential of the business is shown in Fig 4.16.

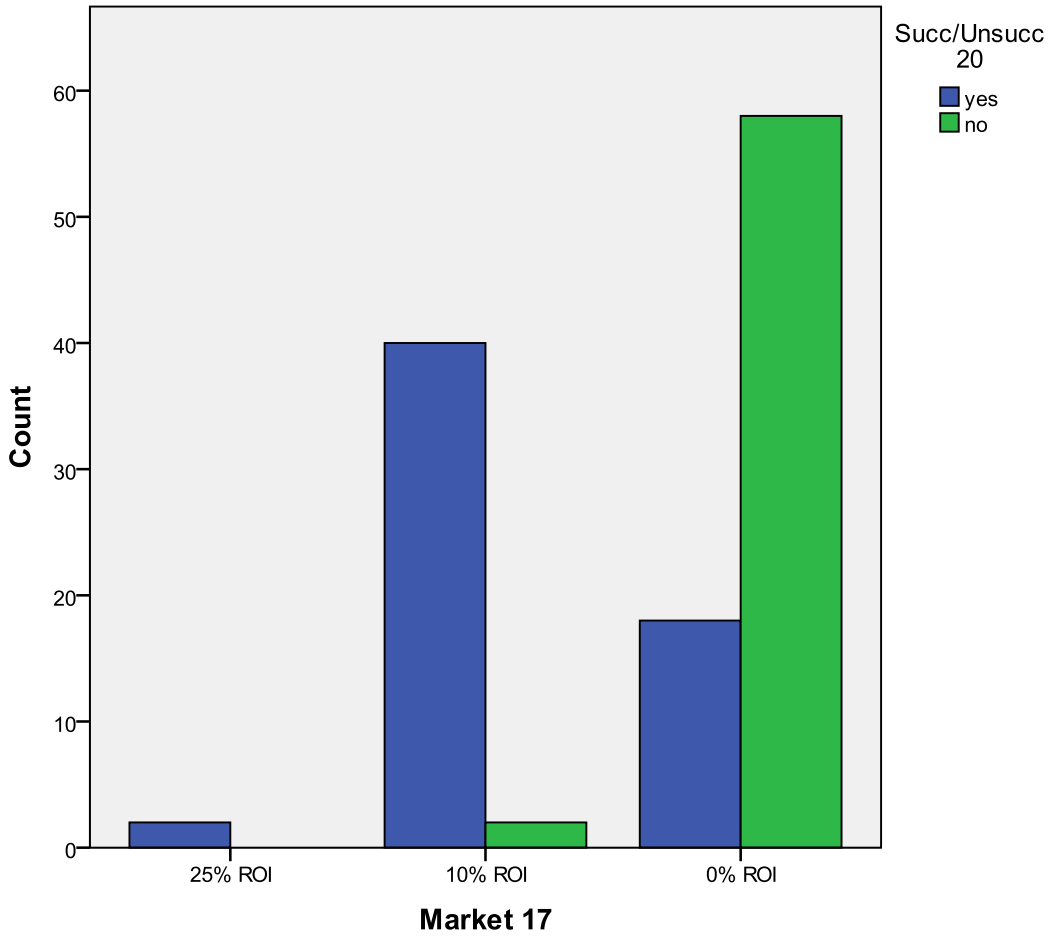



**Fig 4.16The effect of Market Growth Potential on the application assessment**

**Hypothesis 16**

$H_0$: There is no difference in the market growth potential level of the accepted or rejected applications.

$H_1$: There is a significant difference in the market growth potential level of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 57.661 and the p-value is 0.000.

Conclusion: Since p = 0.000< 0.05, we reject $H_0$ and conclude that there is a significant difference in the market growth potential level of accepted and rejected applications. The Cramer's V of 0.693 also shows an extremely desirable association between market growth potential and the outcomes of the applications.

Fig 4.17 below displays the accepted or rejected applications according to the expected return on investment of the business.

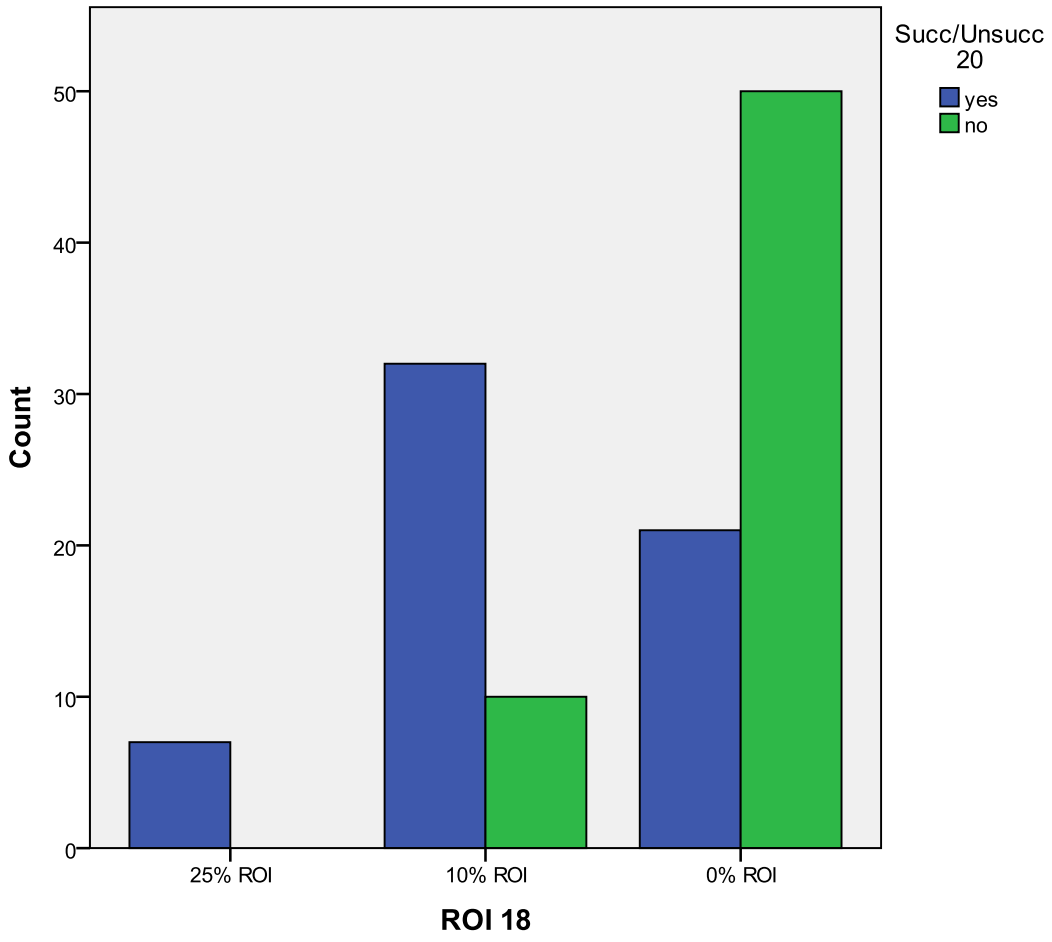



**Fig 4.17 The effect of Return on Investment Potential on the application assessment**

**Hypothesis 17**

$H_0$: There is no difference in the return on investment potential level of the accepted or rejected applications.

$H_1$: There is a significant difference in the return on investment potential level of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 30.724 and the p-value is 0.000.

Conclusion: Since $p = 0.000 < 0.05$, we reject $H_0$ and conclude that there is a significant difference in the return on investment potential level of accepted and rejected applications. The Cramer's V of 0.506 also shows a strongassociation between return on investment potential level and the outcomes of the applications.

The distribution of accepted and rejected applications according to collateral status of the applicant is shown in Fig 4.18.

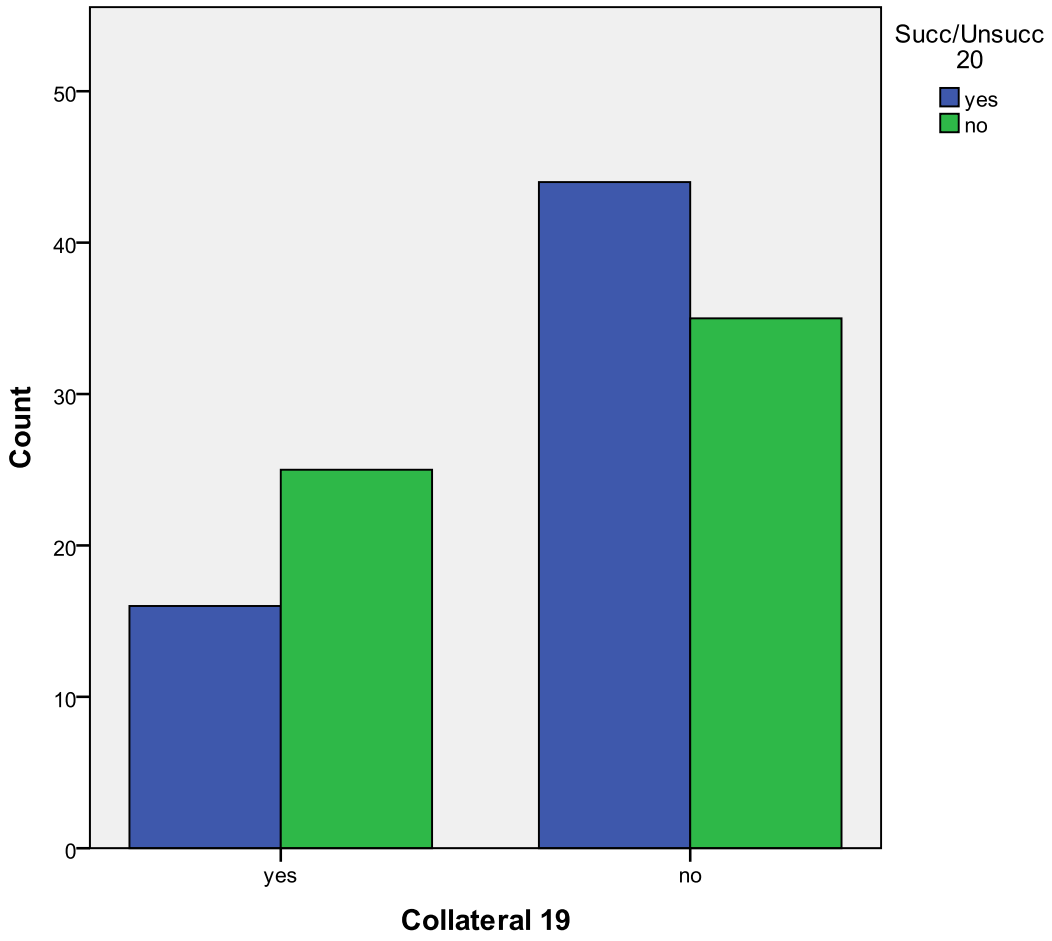



**Fig 4.18 The effect of collateral on the application assessment**

**Hypothesis 18**

$H_0$: There is no difference in the collateral status of the accepted or rejected applications.

$H_1$: There is a significant difference in the collateral status of the accepted or rejected applications.

The level of significance of the test is 5% (0.05)

The Pearson Chi-Square value is 3.001 and the p-value is 0.083.

Conclusion: Since $p = 0.083 > 0.05$, we fail to reject $H_0$ and conclude that there is no significant difference in the collateral status of accepted and rejected applications. The Cramer's V of 0.158 also shows a weak association between collateral status and the outcomes of the applications.

The market growth potential and the return on investment potential of the new venture have a significant influence on the assessment of a loan application at DFI.

## 4.5 Summary of Results

**Table: 4.1 The results of the study are summarised below:**

| **Research Question** | **Outcome** |
|---|---|
| **Question 1** | |
| **Hypotheses** | |
| 1.1 $H_0$: There is no difference in the gender composition of accepted and rejected applications.<br><br>1.2 $H_0$: There is no difference in the race composition of accepted or rejected applications.<br><br>1.3 $H_0$: There is no difference in the age composition of accepted or rejected applications.<br><br>1.4 $H_0$: There is no difference in the marital status composition of accepted or rejected applications.<br><br>1.5 $H_0$: There is no difference in the academic background level of accepted or rejected applications. | We fail to reject Ho |
| **All the personal factors are not significant in the assessment of the loan application.** | |
| **Question 2** | |
| **Hypotheses** | |
| 2.1 $H_0$: There is no difference in the business sector of accepted or rejected applications.<br><br>2.3 $H_0$: There is no difference in the capital or labour intensity of the accepted or rejected applications. | Reject $H_0$ |

| | |
|---|---|
| 2.5 $H_0$: There is no difference in the turnover of the accepted or rejected applications.<br><br>2.6 $H_0$: There is no difference in the gross asset value of the accepted or rejected applications.<br><br>2.7 $H_0$: There is no difference in the type of SMME of the accepted or rejected applications. | |
| 2.2 $H_0$: There is no difference in the years of experience in that sector of accepted or rejected applications.<br><br>2.4 $H_0$: There is no difference in the technology of the accepted or rejected applications.<br><br>2.8 $H_0$: There is no difference in the number of employees of the accepted or rejected applications.<br><br>2.9 $H_0$: There is no difference in the BBBEE status of the accepted or rejected applications.<br><br>2.10 $H_0$: There is no difference in the type of risk analysis of the accepted or rejected applications. | We fail to reject $H_0$ |
| **Significant factors:** type of SMME, gross asset value, capital or labour intensity of business, business sector and turnover level.<br><br>Non significant factors: years of experience in that sector, technology level, number of employees, BBBEE status and type of risk analysis. | |
| **Research Question 3** | |
| **Hypotheses** | |
| $H_0$: There is no difference in the market growth potential level of the accepted or rejected applications. | Reject $H_0$ |

| | |
|---|---|
| $H_0$: There is no difference in the collateral status of the accepted or rejected applications. | We fail to reject $H_0$ |

## 4.6 Conclusion

This chapter presented the findings of the study using descriptive and inferential statistics. The effect of each of the factors under personal factors and business factors were analysed, using chi-square tests. The next chapter discussed the research findings.

# CHAPTER 5: DISCUSSION OF THE RESULTS

## 5.1 Introduction

This Chapter discussed the results of the study in terms of the three research questions. Research Question One looked at the influence of personal factors of the applicant on the assessment of the loan applications. Research Question Two examined the influence of business factors on the assessment of the loan applications, whilst Research Question Three investigated the influence of business outcomes on the assessment of loan applications. The results of the study were compared with the literature on loan application assessment to determine similarities and differences. There is common consensus that potential funders do not use a rational process when deciding to invest in an entrepreneurial business and that different investors employ diverse criteria in arriving at funding decisions (Shepherd, 1999; Harrison and Mason 2002; Mason and Stark, 2004; Urban, 2010). The three dominant factors covered by such criteria are the personal factors, business factors, and business outcome factors.

## 5.2 Discussion pertaining to Research Question One

Research question one investigated the relationship between the loan application and the personal factors of the applicant, such as gender, race, age and academic background.

### 5.2.1 Gender

Literature has shown that males (16%) in South Africa are more likely to have entrepreneurial intentions than females (12%). The gap between young males (8%) and young females (6%) is low (GEM, 2012). This information should be considered when assessing loan applications, as it has implications on the potential of the new enterprise. The study results have shown that there is no significant difference in the gender composition of accepted and rejected applications at DFIs. In other words, DFIs do not take into account the differences between male and female entrepreneurs in their assessment of loan applications, although overall more males are involved in entrepreneurial activities than females.

### 5.2.2 Race

Black Africans have the highest rate of entrepreneurial intentions (16%) of the four race groups. The percentage of Black Africans in the early-stage entrepreneurial population is higher than the percentage of Black Africans in the overall population (with a ratio of 1.2). Coloureds are the least entrepreneurial in the early stages, with a ratio of 0.3 entrepreneurs to the overall Coloured population. Furthermore, of the Coloured early- stage entrepreneurs, a high majority are motivated by necessity (67%), compared to the other race groups where the majority are motivated by opportunity. Indians have the highest ratio of established business owners to their overall prevalence in the population (3.2), while Coloureds have the lowest ratio (0.2) GEM (2012). The study results have shown that there is no significant difference among the races of accepted or rejected loan applications. In other words the assessment of loan applications at the DFI did not reflect that preferential treatment is given to previously disadvantaged races. This shows that although BBBEE status is a key factor in the assessment of loan applications, other factors are also be considered to reach the assessment decision.

### 5.2.3 Age

According to Romano, Tanewski and Smyrnios(2001), the effect of the owner–manager's age on the financial behaviour of SMEs can be noted, in that unlike younger entrepreneurs, older entrepreneurs are less likely to invest additional finance into their firms. This finding is in line with that of Van der Wijst (1989), who suggests that older SME owner–mangers are more reluctant when it comes to accepting external ownership in the firm. This shows that the assessment criteria for loan applications should somehow favour young entrepreneurs, all things being equal, but the study findings at DFIs show that age is not a significant factor in the assessment of loans.

### 5.2.4 Academic Background

Literature has shown that a positive correlation exists between early-stage entrepreneurial activity among the youth in South Africa and the level of education attained. Furthermore, a positive correlation exists between the mean number of people employed by young entrepreneurs in South Africa and level of education attained. 89% of the young entrepreneurs in South Africa want to remain business owners in the long term. A positive correlation exists between the perceptions of capabilities among the youth in South Africa and level of education attained (GEM, 2012). The research results indicate that DFIs do not

consider the academic background of loan applicants when assessing the loan applications, that is, the academic background is not the main deciding factor in this process.

Overall, the results have shown that the personal factors of the loan applicant carry less weight in the assessment of loan applications at DFI when compared to the other two groups of factors.

## 5.3 Discussion pertaining to Research Question Two

Research question two investigated the relationship between the loan application and the business factors of the applicant, such as business factors, years of experience in business capital or labour intensity of business, gross asset value, SMME definition, BBBEE status and risk analysis.

### 5.3.1 Business factors

A number of studies evidenced that factors related to the industry sector in which a firm operates also explain capital structure and financial decisions (Abor, 2007). Firms in the services sector, for example, can differ from those operating in manufacturing or construction, in terms of financial needs and choices. The effect of industry classification on the capital structure of Ghanaian SMEs was examined by Abor (2007). The results of the study revealed some differences in the funding preferences of the Ghanaian SMEs across industries. SMEs in the agriculture sector and medical industries rely more on long-term and short-term debt than their counterparts in manufacturing. Abor (2007) further concluded that short-term credit is more used in wholesale and retail trade sectors compared with manufacturing SMEs, whereas construction, hotel and hospitality, and mining industries appear to depend more on long-term finance and less on short-term debt. In this study there is a significant difference in business sectors of accepted or rejected applications, thus agreeing with similar studies done elsewhere, although the current study did not specify which sectors tend to receive more loan approvals than the others.

### 5.3.2 Years of experience in business

According to Klapper, Sarria-Allende and Sulla (2002), younger enterprises (those established less than four years), are more reliant on informal financing and far less on bank financing. In addition, in their investigation of the impact of firm and entrepreneurial characteristics on SME access to debt finance in South Africa, Fatoki and Asah (2011)

observed that SMEs established more than five years have a far better chance to be successful in their credit applications compared with SMEs established for less than five years. The results of the study are contradicting literature, because there is no significant difference between the applicant's years of experience and accepted or rejected applications. In other words the loan application outcome has nothing to do with the years of experience of the entrepreneur.

### 5.3.3 Capital or Labour intensity of business

A country like South Africa is grappling with pervasive unemployment and needs to come up with an entrepreneurial development strategy that strikes a balance between labour-intensity and capital-intensity, to address the triple challenge of poverty, unemployment and inequality. DFIs are likely to give preference to entrepreneurship which is labour intensive, especially those targeting the youth, (GEM, 2012). The study results show that there is a significant difference in capital or labour intensity of business in accepted and rejected applications; thus supporting the above literature. The DFIs are deliberately giving more loans to business that are labour intensive than those that are capital intensive to encourage more enterprises to employ more people in order to address the challenge of unemployment in South Africa.

### 5.3.4 Risk Analysis

The historical and current challenges faced by SMEs have contributed to the negative perceptions of small and medium business in terms of being high risk with high failure rates. There is a view that policies should be designed to be pro small and medium business which should positively change the risk profile of SMEs, thereby increasing their access to funding. The results show that there is no significant difference in the risk analysis of accepted and rejected applications. This shows that the negative perception that SMEs are high risk and have high failure rates is slowly being eliminated or the policies that are pro SMEs are gaining ground in changing the risk profiles of SMEs.

### 5.3.5 BBBEE Status

B-BBEE, as defined, means the economic empowerment of all black people. There are many facets to B-BEE, and the researcher will elaborate only those pertaining to SMEs. The turnover bands for small or medium BEE enterprises are between R500 000 per year to R20 million per year. Specific actions were agreed with the financial services industry to ensure sustainable and affordable banking services; contractual savings schemes; and credit facilities

for small and micro enterprises and poor households. The financial sector has agreed to follow initiatives through joint ventures, debt financing and equity investments in BEE companies (Financial, 2006). The study findings show a contradiction with the literature above, because they show that there is no significant difference in the BBBEE status of accepted and rejected applications. This means that the financial sector is yet to implement the agreed actions given above as it is still to reflect on the ground.

### 5.3.6 SMME Definition

There is significant difference in the type of SMME of accepted and rejected applications. The Cramer's V of 0.416 also shows a very desirable association between type of SMME and the outcomes of the applications. This means that the type of SMME is a key factor in the determination of the result of the loan application. In this sample the small and medium business organisations had a 100% success rate in the applications for funding.

### 5.3.7 Gross Asset Value

The provision of collateral plays an indispensable role in easing SME access to debt finance. SMEs that have more fixed assets tend to utilise higher financial leverage (Bradley, Jarrell, & Kim, 1984). The reason for this is that these firms can borrow at lower interest rates as their loans are secured with those assets serving as collateral. This explains why Coco (2000) describes collateral as the lender's second line of defence. In their investigation of the role of collateral and personal guarantees using a unique data set from Japan's SME loan market, Ono and Uesugi (2009) found that a positive relationship between the use of collateral and the strength of the borrower–lender lending relationship results in easier SME access to external sources of finance. The research results support the available literature that says the gross asset value of a business is key in the assessment of the loan application. Loan providers are very concerned about whether they will recover their investment back, hence those enterprises with high gross asset value are more likely to pay back the loan than those with less gross asset value.

## 5.4 Discussion pertaining to Research Question Three

### 5.4.1 Market Growth Potential

A study by Muellender (2011) focusing on the selection criteria used by European venture capitalists noted that market characteristics are rated very highly. The key market characteristics are market growth, market acceptance, and market size. Other notable market

characteristics related to the post-entry barriers as well as competitive advantage potential for the proposed venture. The research findings suggest that the ability by a proposed venture to create post-barriers to entry was not rated highly while competitive advantage in a competitive market was valued significantly. The assumption is that the presence of weak competition is indicative of a poor market. The current research results support the above argument, since there is a significant difference in the market growth potential level of accepted and rejected applications. It means DFIs consider market growth potential of the new venture as a very important factor in the assessment of loan applications.

### 5.4.2 Return on Investment

Mullender (2011) further highlights the significant importance of financial characteristics such as the projected return on investment of a proposed venture's loan application. The study makes interesting findings in this aspect, such as the significant importance attached to those which loan applications, which can guarantee a rate of return within 5 to 10 years. Other indicators of financial characteristics include the riskiness of the proposed venture as well the ease of exit in the venture. The research results show that there is a significant difference in the return on investment potential level of accepted and rejected applications. This means that there is a similarity between the research results and literature.

## 5.5 Conclusion

The chapter discussed and compared the study findings to the literature on loan assessment criteria in South Africa and other countries with similar economic systems in the world. All the personal factors of the applicant seem not to have an influence on the outcome of the loan application at DFIs. The most critical business factors in loan application assessment at DFIs are business sector, intensity of capital or labour, business turnover, gross asset value and SMME status. The market growth potential and return on investment of a new venture are very important on the assessment of a loan application at DFIs. The next chapter examined the conclusions and recommendations.

# CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

## 6.1 Introduction

This chapter provide a summary of Development Finance Institutions' Opportunity Evaluation Process in South Africa. In particular, to investigate whether DFIs assessment policies of opportunity are consistent with those arising from entrepreneurship strategy literature predominantly from an entrepreneurship process model perspective.Conclusions were developed from research findings which further facilitated formulation of appropriate recommendations.

## 6.2 Summary of the research findings

The following is a summary of research findings that were obtained on each developed research problem after collecting and analysing data from processed application forms:

**Sub-Problem 1:**

**To describe the DFIs' assessment of opportunity in terms of the criteria of personal factors (a) family status, (b) professional training, (c) academic background, (d) gender, (e) race, (f) previous work experience, and (g) the age of the applicant.**

According to the results of the data analysis, the personal factors have no influence on the application assessment at DFI. This shows that the criteria used to assess opportunities is fair, as it does not take into account factors such as the background of the applicant, gender, race among others. However this result contradicts the reviewed literature, which highlighted that gender, academic background, race, age and previous work experience of the applicant play a major role in the assessment of a loan application.

**Sub-Problem 2:**

**To describe the DFIs' assessment of opportunity in terms of the criteria of business factors (a) capital intensity, (b) labour intensity,(c) business sector,(d) market potential,(e) technological maturity, and (f) return on investment potential when assessing entrepreneurial business opportunity.**

According to the results of the study, the business factors given below have significant influence on the application assessment at DFIs: business sector, intensity of capital or labour, business turnover, gross asset value and SMME status.

The following business factors have no significant influence on the outcome of DFI application assessments: years of experience of the applicant, technology of the new venture, number of employees of the new venture, BBBEE level of the new venture and the risk analysis of new venture performance. However, this is in contradiction with the reviewed literature which seems to suggest that these factors are also important in the assessment of loan applications.

**Sub-Problem 3:**

**To describe the DFIs assessment of opportunity in terms of the criteria of potential business outcomes: (a) market growth potential (b) return on investment**

The results show that the two business outcomes, that is, the market growth potential and return on investment potential of the new business venture are critical to the determination of the outcome of a loan application assessment at DFIs.

## 6.3 Recommendations

After having considered the above summary of research findings, the following recommendations were developed:

- Loan applicants should concentrate on making sure that their business factors are aligned to the DFI requirements in order to successfully get the loan, especially their SMME types and business sector categories they choose.
- The loan applicants should also do research on the market growth potential and return on investment of the new venture, in order to provide accurate information as this is very important in the determination of the loan application outcome.

## 6.4 Suggestions for future research

- Future research should look into the scoring of the factors to determine which ones are the most critical in the application of loans from DFIs.
- Conducting research using more DFI’s instead of one

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# APPENDIX A: DOCUMENT ANALYSIS

This document analysis is collecting views on the assessment of entrepreneurial opportunities by Development Financial Institutions (DFIs). This will be done to answer a number of research questions for a Masters degree in New Venture Creation and Management at Wits Business School. The results of the questionnaire will be used purely for academic purposes and will not be shared with third parties outside this purpose or without your consent.

## DFI EVALUATION OF ENTREPRENEURIAL OPPORTUNITY

This document analysis is collecting views on the assessment of entrepreneurial opportunities by Development Financial Institutions (DFIs). This is being done to answer a number of research questions as well as meet research objectives as part of meeting the partial requirements of the Masters degree in Management (Entrepreneurship and New Venture Creation) of the Wits Business School. The results of the questionnaire are used for academic purposes and will not be divulged to third parties outside this purpose without your consent.

## SECTION 1: DEMOGRAPHIC INFORMATION

**1. Gender of applicant**

1. [ ] Male
2. [ ] Female

**2. Race of applicant**

1. [ ] White African
2. [ ] Black African
3. [ ] Indian African
4. [ ] Coloured African
5. [ ] Chinese African

**3. Age group of applicant**

1. [ ] 18 yrs - 24 yrs
2. [ ] 25 yrs - 30 yrs
3. [ ] 31 yrs - 39 yrs
4. [ ] 40 yrs - 45 yrs
5. [ ] 46 yrs - 55 yrs
6. [ ] 56 yrs and older

**4. Marital status of applicant**

1. [ ] Single
2. [ ] Married
3. [ ] Divorced
4. [ ] Widowed
5. [ ] Other

**5. Academic background of applicant**

1. [ ] Without Matric certificate/equivalent
2. [ ] Post Matric
3. [ ] Post Junior degree
4. [ ] Post graduate
5. [ ] Other: [ ]

**6. Years of experience of an applicant running a business**

1. [ ] 0 - 5yrs
2. [ ] 5 yrs -10 yrs
3. [ ] 10 yrs - 15 yrs
4. [ ] 15 yrs - 20 yrs
5. [ ] Over 20 years

**SECTION 2: ASSESSING – BUSINESS FACTORS**

**7. Business Sector/Industry**

1. [ ] Business Consulting
2. [ ] Franchising
3. [ ] Manufacturing
4. [ ] Hospitality and Tourism
5. [ ] ICT
6. [ ] Other

**8. Years of experience of an applicant in that sector/Industry**

1. [ ] 0 - 5yrs
2. [ ] 5 yrs -10 yrs
3. [ ] 10 yrs - 15 yrs
4. [ ] 15 yrs - 20 yrs
5. [ ] Over 20 years

**9. Factors of Capital intensity when assessing opportunity**

1. [ ] Capital Intensive
2. [ ] Labour Intensive

**10. Please indicate the level of importance you attach to Technology when assessing opportunity**

1. [ ] Innovative and unproven

2. [ ] Technology
3. [ ] Proprietary but proven technology
4. [ ] Conventional and familiar technology

**11. Factors of new venture business performance – Turnover**

1. [ ] Varying
2. [ ] Varying – R1 500 000
3. [ ] R1 500 000 – R5 000 000
4. [ ] R5 000 000 – R10 000 000

**12. Factors of new venture business performance – Number of employees**

1. [ ] 0
2. [ ] 1 - 5
3. [ ] 6 - 50
4. [ ] 51 - 200

**13. Factors of new venture business performance – Gross Asset Value**

1. [ ] 0
2. [ ] 0 – R1 000 000
3. [ ] R1 000 001 – R2 000 000
4. [ ] R2 000 001 – R5 000 000

**14. Factors of new venture business performance – SMME Definition**

1. [ ] Survivalist
2. [ ] Micro
3. [ ] Small
4. [ ] Medium

**15. Factors of new venture business performance – BBBEE Level**

1. [ ] 7 - 6
2. [ ] 5 - 4
3. [ ] 3
4. [ ] 2
5. [ ] 1

**16. Factors of new venture business performance – Risk Analysis**

1. [ ] Financial
2. [ ] Market
3. [ ] Technical
4. [ ] Environmental
5. [ ] Management/Operational
6. [ ] Supplier

## SECTION 3: ASSESSING BUSINESS OUTCOMES

**17. Market Growth potential when assessing opportunity**

**1.** [ ] 25% return on investment potential
2. [ ] 10% return on investment potential
3. [ ] 0% return on investment potential

**18. Return on Investment potential when assessing opportunity**

1. [ ] 25% return on investment potential
2. [ ] 10% return on investment potential
3. [ ] 0% return on investment potential

**19. Collateral**

1. [ ] Yes
2. [ ] No

**20. Opportunity Evaluation**

1. [ ] Successful
2. [ ] Unsuccessful