

**FEASIBILITY OF INTRODUCING A SYSTEM OF PROVIDING  
START-UP CAPITAL TO CONTRACTORS BY MUNICIPALITIES AS  
OPPOSED TO DEMANDING PERFORMANCE GUARANTEES AND  
RETENTION FEES AS IS THE NORM IN THE CONSTRUCTION  
INDUSTRY**

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**Thesis submitted in fulfilment of the requirements for the  
BUQS7009 course in the School of Construction Economics and  
Management at Wits University**

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**29March 2018**

## DECLARATION

I Moremi Phillip Huma, declare that **“FEASIBILITY OF INTRODUCING A SYSTEM OF PROVIDING START-UP CAPITAL TO CONTRACTORS BY MUNICIPALITIES AS OPPOSED TO DEMANDING PERFORMANCE GUARANTEES AND RETENTION FEES AS IS THE NORM IN THE CONSTRUCTION INDUSTRY”** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

.....  
**MOREMI PHILLIP HUMA**

.....  
**DATE**

## **DEDICATION**

This thesis is dedicated to everyone who assisted me in completing this dissertation to my family, colleagues and friends.....

## ABSTRACT

This study was to determine the feasibility of introducing the start-up capital system on contractors as opposed to demanding performance guarantees and retention fees. In particular, the study investigates the feasibility of introducing the start-up capital system on contractors as opposed to demanding performance guarantees and retention fees. A qualitative research method was used to collect data from a cross-section of key stakeholders from major municipalities in South Africa. All the results are drawn from the data sources, namely, the questionnaires and interviews are enumerated accordingly. *Atlas-ti* version 7 was used to analyse the qualitative data. The analysis is based on the current contract requirements of performance guarantees and retention fees as well as the likelihood of start-up funds for SMMEs in construction within the respective municipalities. In particular, the results illustrate that, in general, waiving of performance guarantees and retention fees is possible as long as, there is joint project management, risk management structures and related policies with regards to waiving guarantees are in place. Furthermore, it is drawn from the results that providing of start-up funds would be possible but faces serious challenges and that was always bound to fail. This study accordingly recommends some options as well as a model for start-up funding. However, there is need for exploring such model further and any other options that could be sighted instead of performance guarantees and retention fees.

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**Keywords:** Performance guarantees, Retention fees, contracts, start-up financing, venture capital

## **ACKNOWLEDGEMENTS**

This research project was challenging and it would have been impossible for me to finish it without the support and help of the following people; Firstly, I would like to express my gratitude to my supervisor, Mr Paul Rudzinske for his valuable support and advice during this research project. I would also like to thank Professor Hassan M. K, for his advice and guidance given to me. This thesis would not have been completed without their supervision and advice.

I would also like to thank Mr E.M Mathebula for his support.

Finally, I would like to thank MsB.L. Mannuel and the family, for their emotional support and for giving me the opportunity to further my studies. My thanks also go to Pastor James Masuluke for their belief in me. To anyone whom I may have forgotten, I am sorry but thank you as well.

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## CHAPTER 1

### INTRODUCTION

#### 1.1 INTRODUCTION

This chapter presents the overall introduction to the study. It provides the orientation, the problem statement, rationale and justification. It also presents the key research question and well as the objectives. It also provides the chapter summary of the entire research paper.

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#### 1.2 BACKGROUND AND ORIENTATION

There are many constructions works taking place in South Africa presently in almost every major city. Within these projects, contractors are required to sign contracts stating that they will be able to provide a construction guarantee to the employer. A construction guarantee is known as a performance bond which guarantees every aspect of the contractor's performance (Entrusty Group, 2005). This statement is corroborated by Jenkins and Wallace ([sa]) who mention that construction bonding is a manner of disseminating all the various risks that may happen during the project period. These guarantees are meant to indemnify the employer in cases where there are damages either to a building or injuries sustained during the course of the construction period or financial loss (Anon, 2009). Indemnity refers to any loss that may occur as a result of the work done or in the process (Anon. 2015:2).

The building industry has made it a normal practice for contractors to provide a construction guarantee to their employers. According to Maritz (2011:1), guarantees are defined as either being on call or on demand. Maritz (2011:1) further mentioned that a principal or an agent provides a certificate that gives evidence that indeed that particular employer deserves to call in the guarantee. It is important to recall that payment of

guarantees was first introduced in South Africa by the Joint Building Contracts Committee of 1991, at that time the payment of guarantees would be made available by the approved financial institution in South Africa (Maritz, 2011:1).

Today, it is mandatory that contractors must pay the employers a guarantee before they commence with their work. The guarantee is required because it serves as a security from any contractor in case they do not finish their work, but it is flexible in that contractors are given a choice on the type of security they wish to provide (Construction Contracts, [sa]). McNair (2013:5) mention that it is standard that contractors must provide what is simply called performance security in order to protect the employer should the contractor fail to adhere to the contractual obligation or deliver the project. The security can be in a form of a bank guarantee which normally ranges between 5 to 15 percent on the total contract price (McNair, 2013:5).

In other words, the requirement is that the employer should be paid monies as a security that will compensate him in the event that the contractor fails to complete the project. Failure to complete may be as a result of liquidation, the contractor is placed under final sequestration, or in the case where the contract is terminated because of a default by the contractor.

This security may be paid in the form of a performance guarantee or cash deposit (Construction Contracts, [sa]). It must be noted that the performance guarantee which co-existed with the retention of funds in the construction industry, has since been replaced by the construction guarantee. The introduction of guarantees in the construction industry was necessitated by the following issues which left municipalities with huge financial liabilities (Genesee Transportation Council, 2010):

- At times projects are never finished by contractors,
- Non-compliances were experienced due to financial challenges, legal, or other issues beyond the contractor's control;
- Challenges related to ameliorations not being installed the right way or stabilizing measures not surviving; and

- Some contractors find themselves out of business due to mismanagement of funds.

According to Bertrams (2004), as cited in Lukic (2014:7), a demand guarantee is defined as a portion of payment by the contractor with an intention to protect the beneficiary contract. In fact, it is some form of undertaking between two parties being the employer and the employee (contractor). Those that are in engineering project or exporter of goods falls under the performance guarantee contract, performance bond or completion bond (Lukic, 2014:7).

Bonds and guarantees are a relatively complex instrument that attempts to set out the obligations between two parties that are consequential upon the actions or inactions of another party (Lowery, 2011:1). According to the General Conditions of Contract (GCC) for Construction Works (2010:76) as substituted by the GCC of 2015, it is obligatory for the contractor to pay the employer (in this case a municipality) for any work that they accept per contract. This is done prior to the commencement of the work where the employer will demand some form of security from the employee (contractor) in a form of money, which ensure that the contractor completes their work within the stipulated time (General Conditions of Contract for Construction Works, 2010:76). Furthermore, the security is flexible in that the contractor is free to make a choice of the type that he may wish to provide.

Bonds and guarantees are a tool that assists in mitigating risks from gaps that might have been created between payments and receipt of performance which cannot be eliminated by any contractual remedy (Rhodes, 2014:2). In other words, a guarantee is an “accessory” to the main obligation, meaning that its sole existence depends upon the continuation of the main obligation. The interesting part is that should the main obligation fall away or be discharged; automatically the guarantee also falls away (Anon.2015:2). Mills and Reeve [sa] state the following types of guarantees:

- Performance guarantees,
- Retention guarantees,
- Advance guarantees, and
- Bid bonds/tender guarantees.

According to Tshaka (2013), a guarantee is not like the constant letters of credit issued by banks to be utilised during international trade. It then becomes obligatory that the bank must pay the seller who is, in this case, a beneficiary. This contractual obligation does not depend on the sales contract but it is an assurance that indeed payment of the purchase price will be done prior to the goods being sold. Tshaka (2013) acknowledged that construction guarantees remain a common practice in the construction industry. What this means is that companies would enter into an agreement, but this time it will be from a financial institution. This is a contract which will ensure that there is proper performance of the contractor's obligations in terms of the signed contract.

In simple terms, the issued guarantee can either be what is called "a conditional guarantee", wherein the employer is sometimes entitled to establish liability on the side of the contractor and this depends on the terms of the guarantee. Another option is where a guarantee is called "on demand" guarantee; in this case, the construction contract states that there is no allegation of liability on its part (Tshaka, 2013). Guarantees that comes from financial institutions demand that a particular financial institution must accept liability in the case the contracting party does not honour an obligation under the project contract and as a result is unable to fix all defaults. In reality, it is a common practice for the guarantee to be spelt out so that the beneficiary knows and understand that they have to fix the default and then claim the face value of the guarantee in case there are damages from the financial institution (Guy, 2013:2).

A retention fee, on the other hand, is an amount of money which is paid back to a contractor after the work is done satisfactorily, on the contrary; the money is not paid to a contractor in case work is not done agreeably or at all (Clause 6.10.3 of the GCC for

Construction Works, 2015:48). In the case where the work is not done due to other reasons, it is retained by the employer. The aim of a retention fee is to make sure that a contractor does his work satisfactorily.

In some cases, employers accept what is called “retention guarantee” rather than to deduct it from the lump sum that will be paid to the contractor (Clause 6.10.3 of the GCC for Construction Works, 2015: 48). According to the National Treasury (2015:46), “retention monies that are held shall not exceed 10% of any amount due to a contractor.

According to Knauf (2014:3), the total amount of retention monies held shall not exceed fivepercent of the contract or package order price”. The retention practice is not only practiced in South Africa, for instance for a number of years in both New Zealand and other overseas commercial construction contracts opted on taking part of the agreed contract value as security instead of asking contractors to pay an additional amount of money as security which is called a retention fee The money is only retained in a situation where the contractor fails to complete a project as per contractual obligation (Knauf, 2014:3).

The Construction Contracts ([sa]:3) states that in numerous contracts, there is a certified progress report, which becomes part of the basis for invoicing per customer. This isalso sometimes called progress billings. Therefore, retention monies or retention debtors refer to the payments that are made by the customer on such invoices. In certain circumstances, the other customers prefer to make a payment, even before the work has been done completely. This is the type of a practice which is done in case of a fairly large contract which might require bridging finance in the form of advances (Construction Contracts, [sa]:3).

According to Masondo (2017:1), a contractor was awarded a tender to the amount of R1 billion for the construction of an acid mine drainage plant in Johannesburg, Springs to be precise. An advance payment of the amount of R81 million was paid to the contractor before he could even commence working. However, the payment of an

advance was in contravention of the Public Finance Management Act (PFMA) (29 of 1999) (Masondo, 2017:1). Furthermore, the normality of conducting business in SA is that a contractor is not paid in advance but only once the goods are delivered or service has been rendered.

Another almost incident occurred in the North West Province (SA) where a company was awarded an R50 million tender without following the correct procurement processes. The company was awarded the tender to supply and run two mobile clinics. An amount of R30 million was paid in advance to the company which was a contravention of the PFMA (Act 29 of 1999). According to the Article 11.1.4 of the JBCC of 2014: "a contractor shall provide an advance payment where it is required which should be equal in value to the aggregate amount of all such advance payment." However, this is not permissible in SA. The Government Procurement: General Conditions of Contract of 2010, Article 16.2 and 16.3 states that once service has been rendered or goods delivered; the supplier has a responsibility to provide the purchaser with copies of invoices. All the invoices must conform to all the obligations as stated in the contract. Once that has been done, payment will be effected within 30 days after the invoices were received by the supplier.

There are four forms of standard contracts that are commonly used in the construction industry, which are the following according to the Construction Procurement (2005:2): the FIDIC which is a French abbreviation for International Federation of Consulting Engineers of 1999, The General Conditions of Contract (GCC), for Construction Works of 2015, the Joint Building Contract Committee (JBCC) Series of 2000, and the New Engineering Contract 3 (NEC3) of 2005 (Family of Standard Contract).

The GCC for Construction Work of 2015 deals with issues of disputes in clause 27. It states all the procedures that must be followed when resolving a dispute. It further states that if parties cannot resolve a dispute within 30 days, the other party may inform of their intention to start with a mediation process (clause 27.1). In clause 61.1 all the payment procedures are mentioned and the most critical one. This clause as read in



conjunction with the Public Finance Management Act of 1999 (clause 8.2.3) states that a contractor or supplier must be paid within 30 days after the goods have been delivered or service rendered. According to the GCC for Construction Work of 2015 in clause 22, it states that subject to clause 25, in case a supplier fails to deliver goods that were specified in the contract, a certain amount of money should be deducted as a form of a penalty.

The GCC (2015) also mentions the payment of a retention fee. A retention fee is a money withheld by the employer until such a time where goods have been delivered or service has been rendered by a contractor (Business Dictionary, 2018). Clause 6.10.3 of the GCC of 2015 states that: 'the payment of retention money is subject to a retention by the employer of an amount called the 'retention fee'.'

The JBCC of 2000 (clause 11.1.1 & 11.1.2) states that the contractor shall have to ensure that an employer is furnished with a guarantee for construction within 15 working days after the acceptance of the offer. Furthermore, the JBCC guarantee for the construction should be 10 percent of the entire sum of the contract as a form of a security which will remain valid and enforceable until the final payment certificate is issued. Alternatively, a five percent of the fixed sum of the contract coupled with a five percent decrease of the value of each payment certificate up to a maximum of a period of five years (clause 11.1.3 of the JBCC of 2000).

This type of a security remains valid and enforced by that particular contractor to a point where the last certificate of practical completion has been issued. The GCC of 2015 in clause 6.2.3 further states that the validity of performance guarantee or a performance bond as it is called internationally shall remain enforced until the work has been concluded. Moreover, according to clause 11.1.4 of the JBCC of 2000, a guarantee for payment is a requirement which is equal in value to the accumulated amount of all other advance payment. It is the duty of the contractor to ensure that this security is kept valid and enforced until the advance payment is paid back.

There is also FIDIC of 1999 which uses a red, yellow and silver book. However, the “red book” is solely used in the civil engineering construction (Skibniewski & Chair, [sa]). Clause 4.2 of FIDIC of 1999 reiterates that mentioned in both the GCC and JBCC respectively that a performance security remains valid and enforceable until the completion of the work or project. It further states that it is allowed an employer to make an advance payment which is deemed as an interest-free loan (clause 4.2 of FIDIC of 1999). The advance payment is meant for the mobilization and design of the project in prospect. However, advance payment remains a challenge in South Africa within the construction industry.

According to the NEC3 of 2005 clause x14, the advance payment should be effected within four weeks of the contract date. The advance payment bond does not come directly from the employer but from the bank or insurer accepted by the project manager. It is then repaid by the contractor to the employer in instalments agreed upon in the contract information.

In almost all construction contracts, there is a very important clause which gives the customer (employer) an advantage to retain a certain amount of money until such time that all contractual conditions have been met and satisfied. Therefore, retention monies are part of the billings that are issued which are not to be paid in full until compliance is guaranteed and all observed defects are completely fixed (Construction Contracts, [sa]: 3). In the financial statements, these monies must be clearly classified as retention debtors. It is further simplified that retention is the money which is paid to the contractor once every work as per contract is done and concluded to the satisfaction of the employer, but it is not paid immediately. It is paid after a certain expiry period as agreed upon and once all small defects and additional costs have been done (Construction Contracts, [sa]: 3).

According to the Specialist Engineering Contractors Group (2002:6) as cited in Bausman (2004:7), there were various studies undertaken on subcontracting community and they came to various conclusions in terms of the relationship between

performance and retainage and had the following findings: “that retention does not add value but, on the contrary, undermine efforts to obtain improvements both in performance and in relationships between all parties”.

Knauf (2014:5) on the other hand states that retentions are widely used as a working capital because of the following reasons:

- It provides payers with an available source of interest-free capital; even though it is known that retentions are part of the security;
- It provides payers with the liberty and flexibility to transfer some part of the risk projects to the payees. Although payees have little or no control at all over the success or failure of a particular project;
- It becomes difficult for some payees to negotiate alternative arrangements because they have inadequate financial strength and reputation in the industry; and,
- For contractors that do not have a strong reputation or those that have a strong financial position, other alternatives become costly.

Lowery (2011:4) mentions that bonds are meant to provide some form of cover to recoup the employer’s costs in case the contractor does not stick to their contractual obligation of finishing the work as agreed upon. The Wrexham County Borough Council as cited in the Specialist Engineering Contractor’s Group (2004:11) state that the retentions are used “to offset the financial effect to the authority of contractors in liquidation or for non-performance for other reasons and to encourage contractors to make good defects.” Hence the Salford Council as cited in the Specialist Engineering Contractor’s Group (2004:11) states that “Retentions are not put to any ‘use’ as such. Budgets are allocated on the basis that retention will be deducted, so indirectly, retentions are used to finance capital schemes.”

Knauf (2013:5) further asserts that retentions are seldom utilised in the residential, civil and infrastructure industries because most of the businesses in the infrastructure sector are bigger than in the commercial construction sector.

This instrument is meant to protect the beneficiary who is, in this case, the government against any financial loss in case the project is either not completed or it is not properly done (Chikeya, 2015). What remains a painful exercise according to Chikeya (2015) is that financial institutions do not just offer anyone such guarantees, but a person must first go through a rigorous process which could eventually prequalify them for whatever facility.

The entire process scrutinises the contractor's operational track record, their ability to adhere to contractual obligations and also their financial muscles that could possibly enable them to support the guarantee. Moreover, a credit record is also scrutinised and this is where SMEs struggle to meet the requirements from financial institutions.

Given the above background, it was deemed necessary to look into contract financing of large construction projects in metros within South Africa. Understanding issues at the core of what has dominantly been a contentious issues around guarantees and financing as well as contract management would help both parties in harmonising these key aspects. The above background is further demystified by the following problem statement.

### **1.3 PROBLEM STATEMENT**

In lieu of this study, most of the researchers' investigations concentrated mainly on start-up capital or on performance guarantees as stand-alone items. The research and findings do not show the in-depth relation between start-up capital, performance guarantees and retention fees and does not address the problem faced by contractors. Attention is drawn to the contractor that is in desperate need for initial cash to kick-start the project and at the same time looking at being relinquished from issuing performance guarantees as this adds further financial strain while still struggling to get cash to kick-start the project.

In this instance, an employer is running the risk of managing the contractor's default due to two factors; one being the contractor's inability to kick-start the project due to the lack of finance and the second factor being unable to kick-start the work due to not being able to issue performance guarantee.

The study conducted by Ludwig and David (2012) focused only on small, micro and medium enterprises (SMME). Their study focused on the development of SMMEs without giving much attention to the financial support of the SMMEs but the issue is more than just SMMEs, but all companies that struggle to sustain themselves irrespective of how small or big they are (Ludwig & David, 2012). Their findings attributed the unsustainability of the emerging contractors to lack of skills. They concluded by proposing future research to the gaps not covered in their study

Another issue is the retention fees that still need to be deducted every time a contractor submits an invoice or payment certificate. The retention fees are part of the obligation to be fulfilled by the contractor in terms of all forms of contracts, for example, the GCC and JBCC latest editions. It also adds further burden to the Contractor. In this case, a Contractor submits an invoice or payment certificate for work done, but a portion or a percentage is held back by the employer till the end of the maintenance period, meaning a period of twelve months after the projects are completed.

Other studies so far do not address the problem statement for the current study. The results of their investigation and the models used as stated before addresses start-up, performance guarantees and retention independently and this explains why the problem still exists. There are still unresolved controversies regarding assisting small and struggling Contractors. This research study focuses on weaknesses identified from previous studies to resolve the controversies.

Various questions still need to be asked, such as whether there is a need by South African municipalities to assist Contractors financially? Whether municipalities in South

African can afford to provide start-up capital and if it is acceptable by law? If it is not acceptable, is there provision and allowance to change the law or policies? Can South African municipality waive performance guarantees and retention fees and replace these with start-up capital? Can they manage the risks associated with that? According to Keasey and Watson (1992), one major constraint on the development of small contractors in developing countries is the lack of access to bank financing; the challenge of obtaining a bank loan.

Rank (2014) emphasises that sustainable growth and economic success is probably the most demanding task for young start-up firms. However, focusing on the need to assist struggling contractors without identifying the risk associated with construction might not help, especially to the employer who should carry the risk if contractor(s) defaults but also to the beneficiary of the project who can't afford to absorb sub-standard work (Westlund, Larsson & Olsson, 2014).

The researcher is of the view that previous studies do not address the problem within the South African environment and specifically the municipalities which is the focus area of this research. However, their research is based on developing countries and South Africa falls under this classification which means the findings are also suitable for the South African environment.

#### **1.4 RESEARCH AIM AND SPECIFIC OBJECTIVES OF THE STUDY**

This section addresses the research aim and the specific objectives of the study.

##### **1.4.1 Research aim**

The aim of the research is to determine the feasibility of introducing the start-up system capital on contractors as opposed to demanding performance guarantees and retention fees. The aim is to address the problems identified in the problem statement, by researching previous case studies and identifying the models in those case studies that are applicable in the South African case. It is also to identify weaknesses in previous

case studies by evaluating their models and findings, to check if those finding were tested or not and reasons why? Finally, it is to suggest a financial model applicable to addressing problems identified within the problem statement.

The focus was also on the new innovative use of the system that provides start-up money to SMMEs in municipalities and to determine how feasible that system could be. This research followed an empirical approach by using a qualitative research method and the focus was on metropolitan municipalities within South Africa.

#### **1.4.2 Specific objectives of the study**

The following objectives guided the study

- i) To determine the possibility of waiving performance security.
- ii) To investigate the feasibility of providing start-up capital to struggling contractors by municipalities.
- iii) To determine the possibility of amending currents laws/regulations/policies to cater for an advance payment.
- iv) To propose a model that can be used to finance start-up firms in the construction industry by municipalities.

The objectives unpacked and studied the current employer risk cover that in this case are mainly the performance guarantees and retention fees that further add strain on struggling contractors who normally struggle to get cash to kick-start the project. It looked at its merit along with the advantages and the disadvantages of providing start-up capital; ultimately it made recommendations based on the outcome of the research. In order to reach the objectives of the research the following research questions were asked:

#### **1.4.3 Primary question**

The primary research question that guided the study is whether the Municipalities in South Africa can provide start-up capital and waive performance guarantees to contractors?

#### **1.4.4 Secondary questions**

- i) Can South African municipalities waive performance guarantees and retention fees and replace it with start-up capital to Contractors?
- ii) What does the current law say about municipalities in South Africa in providing start-up capital?

### **1.5 RATIONALE FOR THE STUDY**

This study provides valuable information on start-up capital which can help emerging contractors and Small, Micro Medium Enterprises (SMMEs) to prosper in the business world. In South Africa (SA) small business are struggling to grow because of lack of finances since they are not being provided with any form of assistance by the government in the form of start-up capital. They are being compelled by the circumstances to approach banks that are also reluctant to grant them loans because they do not have guarantees.

Therefore, this research study paves the way forward that could make it easier for the government to either subsidise or provide start-up capital to small business owners. This study will also be beneficial to other countries within the South African Development Community (SADC) that are experiencing the similar problem(s) of providing small business owners with start-up capital. Finally, other researchers who might desire to undertake a similar study in future might find this research useful.



## **1.6 DEFINITION KEY THEORETICAL CONCEPTS**

**Commented [PB(4):** Key definitions (Theoretical Concepts)?

The following key theoretical concepts are defined:

### **1.6.1 Start-up capital**

According to Fontinelle (2017), a start-up can be defined as a small and underdeveloped company. These companies are most often small and at first, are operated by either a collective of founders or individuals.

### **1.6.2 Retention money**

Retention money can be defined as “an amount withheld by a party to a construction contract (Party A being a municipality) from an amount payable to another party to the contract (Party B being the contractor) as a security for the performance of Party B’s obligation under the contract (Construction Contract Amendment Act of 2015).

### **1.6.3 Performance guarantee**

A performance guarantee is also called a performance security or a performance bond which according to the Government Procurement: General Conditions of Contract (2010:7) “the proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier’s failure to complete his obligation under the contract.”

## **1.7 CHAPTERS LAYOUT**

This research report consists of the following chapters:

### **CHAPTER 1: General Orientation**

The general overview of the study discussed in this chapter includes the background to the study, problem statement, research aim and specific objectives, research questions and the key theoretical concepts.

### **CHAPTER 2: Literature Review**

In this chapter, the researcher looked at the various literature on the research topic being: the feasibility of introducing a system of providing start-up capital to contractors by municipalities as opposed to demanding performance guarantees and retention fees as is the norm in the construction industry. The researcher also looked at various contracts in the construction and civil engineering industry.

### **CHAPTER 3: Research Design and Methodology**

This chapter focused on the research approach, research design, the method(s) used to gather data, the method used to analyse data, the ethical considerations, and the measures taken to ensure the trustworthiness of this study.

### **CHAPTER 4: Discussion of the Research Findings: Details of the Results**

The findings and recommendations of the study are discussed under this chapter and thereafter the researcher. Furthermore, the details of the research findings are also discussed in this chapter.

### **CHAPTER 5: Discussion Of The Research Findings: Summary Of Findings**

The research findings are discussed in this chapter in a form of a summary.

### **CHAPTER 6: Recommendations and Conclusion**

The recommendations of this research are comprehensively discussed under this topic and thereafter the researcher concludes.

#### **1.8LIMITATIONS TO THE STUDY**

There were few challenges that were experienced by the researcher in his quest to gather information about the country (SA). Some of the challenges were the following:

- i) It was a critical challenge to find participants for this study as most that were asked are in senior management level within their respective municipalities and their schedules are too tight. The researcher decided to include more

participants from other municipalities that were not mentioned before such as Tshwane and others. Moreover, the researcher had to send the research questions via email to four participants who are in the coastal municipality and the questions were discussed with them telephonically (telephone interview).

- ii) The researcher occupies a critical position at one studied municipality and it was not easy for him to be released by his superiors to travel around SA gathering information for his research report. The researcher had to ask for a vacation leave for him to do the interviews.

## **1.9SUMMARY**

Contractors in SA are required by law to provide construction performance guarantee. This is meant to indemnify the employer in case the contractor fails to complete their work or in case of damages or injuries sustained during the period of construction. The performance guarantee (performance security or performance bond) is paid prior to the commencement of any construction work. Guarantees are divided into four categories, namely: performance guarantees, advance guarantees, retention guarantees and bid bonds / tender guarantees. Retention fees are paid back to contractors after the work has been done satisfactorily, it is not paid if the work has not been done satisfactorily. Struggling contractors are not provided with a start-up capital in South Africa hence they have to resort to other means of financing their companies.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter gives an overview of scholarly perspective on certain fields of study through comprehensive analysis of arguments from various angles (Maree, 2007: 82). It also critically analyses all available research sources, particularly those related to the phenomena of interest and of views which are relevant to the research subject (Bryman, 2012). A literature review is better defined by Malachi and McEvoy (2012: 3) as a set of arguments aimed at ameliorating a thesis from a standing point of view by paying more attention to previous research studies in order to create a sound and credible evidence. According to Taylor [sa], a literature review is an account of what has been published on a topic by accredited scholars and researchers. Lie [sa] defines a literature review as an effective evaluation of chosen documents on a particular research topic. Chandrasekhar (2000:15) defines a literature the backdrop on which you present your work. He further said it must be selective, but substantial enough for the merits of your work to be judged in relation to what is known.

This chapter makes attempts to share current thinking around the construction industry globally and South Africa. It also alludes to construction issues related to contracts and guarantees, which are the cornerstone of the study.

#### **2.2 THE GLOBAL CONSTRUCTION INDUSTRY**

The global construction industry bears its products in confounded situations which are exclusive to each project with respect to traits which incorporate a group of labourers, innovation, arrangement and owner necessities. The international construction industry contributes around 19 percent of the world economy and all related context

(Construction Industry Development Board 2013:8). It is also believed that the construction sector is a standout amongst and the most important industries in any economy. The efficiency and effectiveness of the field decide the overhead costs for the construction industry and this has a key effect on the competitiveness of each nation (Toakley & Marosszeky 2009:21).

Several countries are currently advancing a more proficient and effective construction sector to enhance asset usage and profitability for the more prominent benefit of their local population. Love, Irani and Edwards (2004:19) refer to Australia, Finland, Hong Kong, Norway, Sweden, Singapore, and the United Kingdom that call for radical changes in the quality and efficiency in the construction industries of these nations. Several lessons in these and different nations point towards a general absence of legitimate contract administration (Love, Li & Mandal 1999; Oakland & Aldridge 2005).

This absence of accentuation to key aspects in the industry is by all accounts a worldwide phenomenon and has been attributed to different causes, for example, the divided idea of undertaking supply chains, an absence of all-encompassing comprehension of contract administration standards, the trouble in applying a predictable way to deal with projects, especially those with exceptional task situations and the apparent absence of clear budgetary benefits from actualizing quality contexts. In the present competitive environment, Toakley and Marosszeky (2009:21) specified that in construction industries are organizations that need to be monitored so as to guarantee that they stay up to date with the competition.

So as to keep pace with the most current development industry patterns, organizations screen industry-related activities no matter how you look at it. For instance, Toakley and Marosszeky (2009:21) additionally stated that industry distributions monitor the most recent data and venture declarations, as well as the most recent development industry patterns. They can cover these patterns in trends in in-depth stories, interview the main players who have helped in building up the patterns or basically take note of the pattern through numeric information. While verifiable these distributions have been magazines

or daily papers that have turned out in print, later action has inclined toward the Internet. There are currently numerous sites - including those that are a piece of a similar parent organization as the print - offering news and investigation on the most recent construction industry tendencies on a day-to-day basis.

As per Oakland and Aldridge (2010:32), a standout amongst the most imperative development within the construction industry as of now is the presentation of Building Information Modelling (BIM) innovation to the commercial centre. BIM goes past conventional three-dimensional modelling as it cannot just play out the undertakings led by past projects but can play out these assignments progressively. For example, other than the capacity to make an entire plan of the building, BIM can effectively indicate extraordinary connections including geographic data. Besides, BIM screens the amounts and properties of construction and also planning and spending issues. It contains all data in a solitary workspace, which followers say will extraordinarily fast-track the plans and building systems.

As alleged by Ofori, (2011:12) another aspect of the construction industry is the development towards feasible, or green, advances. Growing quantities of temporary workers are starting to spend significant time in maintainable development in a manner that enhances productivity and has less of an effect on the environment. As stressed by Ofori, (2011:12) a few temporary workers look to the LEED (Leadership in Energy and Environmental Design); which is a nature positioned building accreditation program under the support of the U.S. Green Building Council (USGBC). The authors underline that the program focuses on enhancing execution crosswise over five key zones of ecological and human well-being: vitality productivity, indoor natural quality, materials choice, economical site improvement and water savings.

Moreover, Cheng, Esener, King and Larsen (2014:12) revealed that modern construction has uncommon rating frameworks that apply to a wide range of structures, including schools, retail and medicinal services offices. Rating frameworks are accessible for new development and real renovations and also existing structures. As

indicated by the authors, the advancement of the LEED (Leadership in Energy and Environmental Design) program has helped to drive this most imaginative of construction industry patterns. With contractual workers attempting to assemble LEED-guaranteed structures, their way to deal with an improvement of development ventures is quickly evolving. This, especially in public sector, has equally led to changes in how construction financing is considered and planned for more so for large construction projects.

### **2.3 THE CONSTRUCTION INDUSTRY IN DEVELOPING COUNTRIES**

In most developing countries, the construction industry makes significant commitments to the socio-economic development. The level of that commitment is estimated in a few ways – prominently regarding GDP of the national economy and of capital resources or gross settled capital arrangement, GFCF (Cheng, et al.,2014:12). The construction industry makes its direct contribution to economic development by laying the foundation as a result of which different areas can develop by building the physical workplaces required for generation and dispersion of different products and ventures i.e. the division in an indirect way invigorates different segments through economic multiplier impacts and influences a critical commitment as far as conserving and generating foreign exchange. This latter influence has inference to the economic development trends of most developing countries (Cheng, et al.,2014:12).

As per observations made by the United Nations Industry Development Organization, UNIDO, between the per capita value added by construction and that of per capita GDP, the stake of construction in GDP tends to surge with expanding per capita GDP. At the end of the day, it might be said that value added by construction maybe in the vicinity of two and ten percent of the GDP; for most developing countries it expresses to three and five percent and for most developed nations in the range of five to nine percent (Boutek, 2010:10). In any case, the current situation with the construction industry in developing countries doesn't meet the local and global quality models and the performance demand anticipated.

The industry also employs a large proportion of labour force at all levels of economic and social development and in that way, it affords income earning and supports in the enhancement or achievement of skills as part of the direct benefits of the sector [28 and 39]. The construction industry is expected to provide from six to ten percent of overall employment in most of the developed countries and from two to six percent in developing countries (Boutek, 2010:10)

Indeed, figures in developing countries may not be as precise as those for developed ones; and besides, the insights may not probably cover the extensive construction projects that occur in the subsistence areas of the economy including the quantity of independently employed and "do it without anyone's help" manufacturers. What's more, work in employment in construction materials and components industry; in transport, stock and flow of construction materials and other auxiliary tasks associated with the division were not recognized independently in the International Labour Organization (ILO), insights that UNIDO used. Notwithstanding, confirmations got from censuses of industrial production could demonstrate that such related segments of development trends may provide an extra four to six percent of aggregate employment in developed nations and likely two to four percent in developing nations (Ofori, 2011:12).

In general, the construction industry, including the production and delivery of the material inputs may, in this way, represent as much as 15 percent of the aggregate work in a portion of the developed counties and for as much as 10 percent in developing nations as portrayed previously. It can likewise have greater employment generation potential, particularly in developing nations in so far as monetarily labour-intensive technologies are embraced for most facets of construction work (Van Weele, 2010:99)

In spite of the above commitments of the construction industry to the economic improvement of the developing nations, a few issues are tending to challenge the industry and consequently, endeavours at building up the local construction industry are extremely constrained and complex (Van Der Merwe, 2008:18). In any case, with the



various constraints within the construction industry as a whole in developing nations, its contributions are as yet important and if endeavours are made to build up a self-supporting local construction industry, rewards can increase essentially (Van Der Merwe, 2008:18)

## **2.4 THE SOUTH AFRICAN CONSTRUCTION INDUSTRY IN A GLOBAL SETTING**

Largely, the construction industry is a sector of the economy, which is responsible for the planning, design, construction, maintenance and eventual demolition of buildings and works (Ofori, 2011:12). It is essentially a service industry that obtains its inputs and outputs from various sectors of the economy with which it is interrelated and interlinked, often in complex ways (Loxton 2004:17). The importance of construction derives from its role in the generation of constructed physical facilities, and in employment, which in turn, play a critical and highly visible role in the process of development of the country. Construction encompasses all civil engineering works and all types of new building projects (including housing), as well as the maintenance and repair of existing facilities (Ofori, 2011:12).

In South Africa, as much as one half of total construction output may be in civil engineering projects – transport facilities, power projects, irrigation, drainage and water supplies, among others (Loxton 2004:17). Housing generally makes up less than one-third of the total output; the remainder is in other buildings such as hospitals, schools, offices, factories, hotels, and agricultural buildings (Ofori, 2011:12).

South Africa has not escaped challenges related to the lack of a focus on quality in the construction industry. The South African construction industry is under pressure due to a combination of factors such as skills shortages, lack of standardisation, delays in payment, increased fee competition and variable quality (Loxton 2004:11). A report on construction industry status highlights that only about half of projects are delivered on schedule, within the budget and relatively defect-free, and that there is low satisfaction with the performance of contractors and consulting professionals (Construction Industry

Development Board (CIDB) 2004:12). In their discussion of some of the problems caused by poor performance of contractors in the South African construction industry, Van Weele(2010:99) identified quality as one of the predominant problems facing the industry. It appears then that quality of construction projects remains a major challenge in the construction sector in South Africa.

A decline in the demand for construction services in South Africa in the last decades led to instability and interconnected structural problems within the industry. In 2000 the South Africa Government enacted legislation (Government Gazette 2000:12) that called for the establishment of a Construction Industry Development Board (CIDB). The purpose of the CIDB is to implement an integrated strategy for the reconstruction, growth and development of the construction industry in South Africa. The government had a vision of developing a growing, internationally competitive local construction industry, while in the process creating sustainable employment and addressing historic imbalances. This seemed to imply that the industry would require strong leadership and the promotion of best practices.

Increasing infrastructure spending has made South Africa an attractive market for foreign contractors (Price water house Coopers (PWC) 2013:5). The South African construction industry has recently come under increasing pressure due to globalisation and the opening up of local markets. The recent award of major infrastructure projects to Chinese contractors has rocked the local industry (PWC 2013:5). Creamer (2006:11) notes that concerns have been raised that Chinese contractors entering the market are subsidised by their government and are competing based on non-market related cost structures and may ultimately overwhelm the local construction industry.

Hill (2009:19) mentions that the South African Federation of Civil Engineering Contractors (SAFCEC) questioned whether the South African industry was ready to meet the challenge of international competition, specifically from China, which has developed a surplus capacity in its domestic construction industry. China was reportedly “churning out” engineers and is able to offer engineering service on a very cost

competitive basis (SAFCEC 2013:13). Urgent action was called for to prepare the South African local industry for global competition (Hill 2009:26). SAFCEC (2013:13) advocated for in-depth dialogue between all stakeholders to ensure the preservation of the local construction industry.

Issues raised included guaranteeing far-off organizations preserved in South African by law and the requirements. Regardless of calls for measures to ensure the local development against outside competition, the Minister of Public Enterprise in July 2006, mentioned that government was not going to intercede to shield local organizations from remote multinationals vying for tenders in South Africa (Mantshantsha 2006:14). The Minister focused on the view that the local construction industry needed to wind up noticeable global competition, in accordance with the vision that legislature articulated for the construction industry (Government Gazette 2000:9).

Recent trends are also showing a reduction in skills in the construction industry in South Africa. For instance, the Engineering Council of South Africa (ECSA 2014:11) noted that the number of professional engineers registering, although more representative, have declined in recent years. The numbers of students registering for engineering and related studies have also declined. ECSA also recorded a fourfold increase in the number of complaints over registered professionals in the last three years (Venter 2013:21). The ratio of engineers to the general population in South Africa also compares dismally when matched to other countries (Van Der Merwe, 2008:18). South Africa has 3166 people for every engineer, China has 130, India has 157, the United Kingdom has 311 and the USA has 389. Furthermore, as noted in a summary of an industry status by Loxton (2004:11), even where clients are satisfied with the quality of the delivered construction product, they are often dissatisfied with the level of quality of the professional services offered

In the longer term, prospects for the industry will be influenced by the South African government's medium-term expenditure framework and investment programme over the next three years in areas such as infrastructure projects (Aveng 2011:5), as well as a

number of other significant influences such as the Accelerated and Shared Growth Initiative for South Africa (ASGISA) and the Joint Initiative for Priority Skills Acquisition (JIPSA).

This section analysed literature focusing on the global construction industry. The literature portrays as one of the developed and complex construction industry in the global perspective. It also emerges that it is therefore not immune to global construction industry drivers and barriers and should be a keen to such strategic dynamics within the construction sector.

## **2.5 THE CONSTRUCTION INDUSTRY IN SOUTH AFRICA**

A report by Boutek (2010:12) pointed to the weaknesses and what the industry would need to do to measure improvements. The report also evaluated the South African construction industry against global standards on competitiveness. The commissioned work provided information that was used in the South African Construction Industry Status Report 2010 of the CIDB(CIDB 2010:12). The first part of the report examined the impact of the economy and the regulatory environment on the performance of the construction industry. It further assessed the capacity of the public sector to translate government's increasing capital expenditure budget into improved construction industry delivery. The report argued that these influences play a fundamental role in ensuring enhanced construction industry performance in the medium term

The second part of Boutek's (2010) report examined the imperatives of sustainable construction activities internationally. It also examined the socio-economic context driving the global debate on sustainable growth and development with an assessment of twenty-four key areas to which construction activities needed to become responsive.

Of these, contractor competitiveness was one (Council for Scientific and Industrial Research (CSIR 2012:15). At the time of commissioning the report, the CSIR had just been launched and there was a total of 457 contractors that were registered. Currently, the construction industry is comprised of 113 937 active registered contractors (PWC

2013:5). Of that number, no less than 78 percent are made up of what the industry would classify as SMMEs Contractors and elucidated in the definition in the South African context as a full spectrum of businesses other than large corporations and publicly owned enterprises.

SMMEs firms include categories known as micro-enterprises, survivalist-enterprises, informal sector enterprises and formal small and medium-sized enterprises. It also covers all businesses in all stages of evolution otherwise referred to as start-ups, emerging or expanding enterprises. The term also characterises family-owned, black-owned, women-owned or co-operatively owned enterprises (DTI, 2005). This finding indicates that the construction industry's make-up is largely out of balance with the initiatives of government: where the percentage spent on economic infrastructure are targeted at large contracting firms when in fact the capacity of the industry is made up of SMMEs.

Smallwood and Emuze(2012:22) lists eleven (11) resources that when amassed by contractors, render them capable to perform within an active construction industry. Smallwood and Emuze's (2012) articulation supports the work of Dulaimi (2002) in which the definitions of requisite contractor resources are listed as capital, management skills, other skills, having premises and facilities. There is a general consensus in the industry on these as no counter-argument exists against them. However, statistical evidence exists which suggests that the SMMEs to whom government's development interventions are targeted do not possess even half of these resources. Without these resources, SMMEs are rendered incapable to perform and in them not being able to perform they are consequently not competitive (Dulaimi (2002)

In addition, the CIDB (2014:3) is engaged in a process of establishing a register for professional services. At the time of completing this research, there were only two registers within the suite of services offered by the CIDB and these are the Register of Contractors (RoC) and the Register of Projects (RoP). The RoP Services are similar to the others in its ability to provide a comprehensive overview with regards to all

participants engaged in the value chain of the construction sector from the design and management sub-components. It also looks at the individual size of the firms engaged in design and management consulting within the sector and the percentages in relation to the size of the sector.

One of the issues that hardly ever get mentioned about the South African construction industry is that it still relies a lot on labour brokers and there is a recurrent political discourse on whether or not they ought to be scrapped (Watermeyer 2010:5). The case for abolishing labour brokers within the construction industry, in particular, being a move to the more permanent employment of labour will reduce the intermittent nature of contract labourers and create stability of employment within the construction industry (Watermeyer 2010:5). As it is, construction workers earn significantly less important if contracted through brokers (Naledi 2010:18).

However, the conundrum to this is that because the construction industry is largely project-driven, it is unfeasible for firms to make permanent appointments as most of these firms would not be in a position to sustain large workforces. The outcome of this debate, initiated by organised labour, has relevance for the South African construction industry and in particular, the construction SMMEs as they employ about 80 percent of the contract workforce for delivery on construction projects (Watermeyer 2010:5).

When asked to assess the character of the South African construction industry and offer submissions related to where further strengths may be required Ofori (2013:19) makes the following interesting observations:

- A greater understanding of the industry by construction SMMEs is imperative;
- An increased maturity in policy development by the sector is required;
- Better awareness of nature and needs of SMMEs, especially in construction – is necessary;
- Development of more appropriate and better-focused policies, programmes, initiatives for SMME development is crucial;

- More readily available guidance books and online resources for better training programmes is required;
- Better and user-friendly tools and techniques, many of which are computer-based are required;
- Greater understanding of value-chain benefits and benefits of competition is essential; and;
- Greater solidarity among businesses and their leaders to foster common interests is imperative.

Ofori (2013:19) further suggests that if the above-mentioned activities can be implemented, a new breed of SMME entrepreneurs would emerge and they would be:

- more aware, going beyond being better informed;
- able to inspire (employees, clients and partners) in order to attain greater joint performance;
- strategic in orientation;
- better able to deal with risk and uncertainty, and
- adept at participating in alliances and partnerships.

From another perspective, the strategies and operational relationships between construction project parties are directly related to the type of construction project and there are different ways to classify them. According to Statistics SA (2013:21), the following are the three major construction categories:

- Heavy and highway: construction of highways, bridges, airports, pipelines, dams and tunnels;
- Non-residential buildings: either institutional or educational building (such as schools or universities, warehouses, and government buildings) or industrial (such as petroleum refineries or nuclear power plants);
- Residential: construction of single-family homes, multiunit townhouses, or high-rise buildings.

Statistics SA (2013:25) further mentions that the types of projects most common in the South Africa construction industry and which are considered to be the backbone of South Africa's development efforts include the following:

- Public housing;
- Schools or Universities;
- Industrial facilities;
- Commercial buildings;
- Power plants;
- Dams;
- Irrigation system;
- Roads and transportation;
- Water purification plants;
- Health and sanitation facilities;
- Government buildings

In summary, aspirant leadership and entrepreneurship is essential to the growth of the construction industry in South Africa and across the continent, as suggested by Ofori (2013:19). Even though there have been some funding and support initiatives already in place, a greater need for leadership is essential for sustainable development and the research subjects targeted through this research may well be the lever through which the sector achieves that ambition. For construction companies, leadership is critical at project and enterprise levels (Ofori 2011:19).

## **2.6 THE ROLE OF THE CONSTRUCTION INDUSTRY IN THE ECONOMY**

According to the Council for Scientific and Industrial Research (CSIR,2003:9), construction makes up more than half of total national capital investment in most countries and can amount to as much as 10 percent of the gross domestic product (GDP). Who Owns Whom (2008:11) highlights that the construction industry accounts for 3.8 percent of GDP and has been the fastest growing sector of the economy in the



past five years. Statistics SA (2010:9) estimates that the total income for the construction industry in 2007 was R169.25 billion.

Infrastructure and construction activity in South Africa has largely been underpinned by the government's infrastructure investment programme. For instance, the government's spending priorities over the past few years have included infrastructure investments to support industrial development through ensuring that adequate public infrastructure is in place and as a means of creating jobs (Jurgens 2010:31). As such, the 2010/2011 budget indicated that government had planned to spend approximately R864 billion on infrastructure over the next three years. About 85.3 percent of this spend was to be channelled towards the provision of infrastructure for electricity generation, roads, pipelines, bulk infrastructure for water and sanitation and housing (Jurgens, 2010:31).

Who Owns Whom (2010:9) estimated that in South Africa, infrastructure construction as a percentage of the total construction industry in 2009 was approximately 56 percent. They further projected that expenditure on public sector capital was expected to reach 9.8 percent of GDP by 2012/13. According to CSIR (2012:32), the construction industry has a multiplier effect on the economy as a whole because it is considered that one job in construction gives rise to two further jobs in the construction and other sectors of the economy

The construction industry is a key barometer of economic performance (Statistics SA 2010:8). The construction industry contributes a significant percentage of the gross domestic product (Statistics SA 2010:8) of countries and provides employment to a substantial proportion of the working population. The construction industry plays a major role in the economy and investment in the construction sector (including residential, non-residential and civil construction works). The industry recorded an expansion of 0,9percent y/y for 2011 quarter Four and had improved from the negative growth rates that were recorded between 2010 quarter one to 2011 quarter three. Total construction investment that took place in 2011 quarter four amounted to R171,73bn from R170,27bn in 2010 quarter four (Statistics SA 2010:31).

Statistics SA (2011:9) noted that investment growth in civil works measured an increase of 2.3percent year on year in 2011 quarter four improving from a 1.7percent y/y growth rate measured in 2011 quarter three. GFCF measured R 110, 36 bn in the fourth quarter of 2011, up from R107, 89 bn in 2010 quarter four, and increasing from R109, 65 bn investment values recorded in 2011 quarter three. The pace of contraction for investment in residential buildings has decelerated and has recorded the smallest contraction in investment in 17 quarters. GFCF in residential for the last quarter of 2011 amounted to R24,29bn from R24,83bn in 2010 quarter four. Although the domestic sector remains under pressure, there has been an improvement in demand for housing, specifically smaller more affordable units, which is likely to enhance construction investment within the sector slightly.

The State of the Construction Industry (2012:11) report recorded an annual contraction rate on non-residential investment of 1.3percent in 2011 quarter four from the previous quarter's decline of 2.6percent per year. Non-residential investment fell to R37. 08bn in the last quarter from R37.56bn in 2012 quarter four. Investment by general government grew by 3.1percent per year in 2012 quarter four, escalating from the 1.1percent per year increase measured in the 2012 quarter three GFCF in monetary value inclined from R52,24bn (2012 quarter three) to R53,83bn (2012 quarter four).

Private enterprises and public corporations recorded increases of 5.5percent per year and 7.7percent per year in 2012 quarter four respectively. The total investment value for private sector investment amounted to R248.15bn, while public corporations amounted to R86.51bn in 2012 quarter four. Of building type, civil construction works made the largest contribution to total GFCF of 28.4percent for the fourth quarter of 2012, from the previous quarter's contribution of 31percent. The non-residential sector's investment held a share of 9.5percent total GFCF, slowing from the 11 percent contribution recorded in 2011 quarter three. Residential investment construction contributed 6.3percent to total GFCF, after a percent contribution measured in the third quarter. Of the total investment expenditure that took place in the construction sector, 64.3percent went into

civil projects, 21.6percent was invested in the non-residential sector, while only 14.1percent of total expenditure was invested into the residential market (Statistics SA 2013:12)

According to Quarterly Financial Statistics (2011:8), (a sample of formal businesses operating in the non-agricultural sector) profitability in the construction sector improved in the last two quarters of 2011, up 6.4percent per year in 2011 quarter four, however slowing from a 15 percent per year expansion measured in 2011 quarter three. These profitability growth numbers came off a low base but showed substantial improvement from the 44.4percent per year and 81.3percent per year declines in profit values measured in the first and second quarters of 2011 respectively. Profitability improved to an average estimated rate of 5percentin the second half of 2011, compared to an average of 1.7percent in the first half of 2011. Spending on capital expenditure (including buildings, improvement, plant, machinery, furniture and fittings and vehicles) fell by 40 percent per year in the 2011 quarter four, although spending on vehicles did increase by 25 percent since 2011 quarter three.

Actual construction expenditure according to Quarterly Financial Statistics (2011:13) was R7.3 billion below the 2011 forecast. For new construction expenditure, the difference was only R1.5 billion with the R6.5 billion and R8.5 billion underspent by municipalities and extra-budgetary accounts respectively partially offset by higher expenditure by public corporations (R11.3 billion) and National Government (R2.0 billion). The remainder of the difference is explained by delays in major renovation projects. The private sector, usually led by the mining industry, has also been a significant contributor to total construction expenditure. The growth in the order book during 2013 was 1percent, as opposed to 16 percent for 2012. The secured order book now only covers 1.2 times the current-year revenue as opposed to the 1.5 times of the prior year (Statistics SA, 2011:21).

In sum, it appears that the South African construction industry contributes a significant percentage proportion of construction to Gross Domestic Fixed and Capital Formation.

The industry is critical to infrastructure development and provides a sizable contribution to fixed capital formation relative to other industries (Statistics SA,2011:9). Construction is relatively labour-intensive in that it uses a larger number of workers per unit output than most other industries, and as such is important as an employer. The industry employs 5 – 15 percent of the labour force in most of South Africa (UNIDO, 2013).

## **2.7 CONTRACTING PRACTICES AND CHALLENGES IN PUBLIC CONSTRUCTION WORKS**

While the construction industry makes the above contributions and is the foundation for national economic development, it is suffering from so many problems and difficulties to meet the national development objectives of developing countries. In these countries, the public sector is the main employer of the industry that forces most formally constituted contractors and consultants to rely on the public sector for work. This is mainly because the commercial or private sector is relatively undeveloped (Watermeyer 2010:5).

From the many other inter-related problems that are taken as causes for lack of any appreciable development of the local construction sector of the developing countries, two of these problems are reported to be the use of inappropriate contract procedures and inequitable contract conditions (Jurgens 2010:31).

Forms of contracts used in developing countries are often derived from those used from developed countries that require a high level of contracting experience than most domestic contractors can meet. These documents and systems are often used without modifications to suit the local situation and the terms and conditions of the contract are said to be unrealistic as to the context of developing countries. Moreover, contractors seldom understand the provisions of such contract forms; small contractors, in particular, are unaware of their rights or unable to enforce their employers. Projects are sometimes unilaterally suspended or abandoned by the employer; contractors are seldom paid promptly for work done. The procedure for payment certificate is

“bureaucratic”, and owing to poor financial management, funds are often not available to pay the contractors (Ofori, 2013:19)

Of course, the finance procedures adopted by public employers govern all formal transactions and cover the procurement of all goods and services by government departments and statutory bodies. The numerous checks and balances are considered essential to ensure that public finances are safeguarded and to properly account for public expenditures. Hence, it may be unrealistic to expect modification of the finance procedures to suit the needs of the construction industry (Ofori, 2013:19)

While this is the case with public contracts in developing countries, the main sources of finance for contractors are their employers and commercial banks. The employers act as a source of finance to the contractors through advance payments at the start of the project and through interim or progress payments at different stages of the project. To assist the contractor's cash-inflow requirements, these payments have to be effected in a prompt manner. However, the situation in most cases is the opposite where in some cases, delayed payments, with no provision for compensation, have contributed to the bankruptcy of some contractors in Ghana and non-provision of advance payment to meet the initial requirements of the contractor was reported to be the case in Ethiopia as well (Watermeyer, 2010:5).

In many developing countries, the doors of commercial banks are practically closed to the construction industry except when the loan applications are backed by real assets as collaterals (Watermeyer, 2010:15). However, domestic contractors have very little fixed assets which might already be used as collateral for acquiring bonds and guarantees. Also, banks in these countries consider construction as a high-risk business due to the uncertainties associated with its nature. These situations leave the contractors to be very much dependant on payments of their employer. The need to approve payment certificates by a large number of individuals in public projects before it enters the “bureaucratic system of the treasury” is said to be the potential reason for delayed payment certificates (Watermeyer, 2010:17).

In adding to the above, contracts for construction or any other service are seldom affected; goodwill between the parties is of utmost importance in the social milieu of these countries. Contractors are not only unable to understand contract documents, but they are also seldom in a position to enforce their contractual rights. The contractors are rather a dependant on public employers for work and are, understandably, unwilling to jeopardize their relationships. Arbitration is undeveloped and qualified arbitrators are fewer in number. The fledgeling legal systems are generally not geared towards handling civil cases, especially, those involving technical issues such as disputes on construction projects (Fins, 2010).

The underlying factors that contribute to the inappropriateness of contract documents in developing countries are summarized and the possible measures which could be taken to resolve the above difficulties include (Bold, 2008):

- Forms of contract incorporating fair and equitable contract conditions should be prepared and adopted, paying attention to issues such as price fluctuation clauses; financial assistance to contractors in the form of advances (maintaining ethics of contractors in properly utilizing the advances); arbitration and dispute resolution; employer's obligations; and penalty or bonus clauses.
- Revising and reformulating contract procedures that reflect the current status of the construction sector so that it will be capable of fulfilling the demand on part of the majority of the population, especially for shelter and infrastructure development.
- Attempting to correct existing problems and providing a framework within which decision makers can formulate comprehensive policies for the promotion of the industry and, in particular, for increasing its efficiency.

In general, contracting should enable achievement of economy and efficiency in a fair way without involving unnecessary costs and procedures in the process (Bold, 2008). In developing countries, contract conditions should take into account the capacities and experience of domestic contractors, domestic consulting firms, and public employers and thus the need to reconcile the short-term goal of gaining a financial advantage, if any, together with the long-term objective of developing the domestic construction industry (Bold, 2008).

Government being a policy maker, apart from being the predominant originator of demand, plays a significant role in the development of domestic construction industry through the introduction of fair and equitable terms of the contract and maintaining proper administration and supervision of contracts. This is because, in addition to providing the majority of finance, the government controls attitudes, policies, institutions and working laws in order that the procedures and legal requirements reflect the practical possibilities to serve the objectives of the contracting parties which otherwise makes the business of contracting unproductive exercise (Uff, 2009: 346)

Therefore, in order to fulfil the potential of the industry to the socio-economic development objectives, developing countries have to develop their domestic construction industry by properly addressing the problems and devising mechanisms to tackle the difficulties. As discussed in brief above, one of the basic problems being the contract procedures adopted in these countries, this thesis looks at the problems facing the domestic construction industry with regard to contract provisions and procedures.

## **2.8 GUARANTEES AND START-UP CAPITAL IN THE CONSTRUCTION INDUSTRY IN SOUTH AFRICA**

This research report focuses on the possibility of alleviating the pressures experienced by the average and struggling contractors, being entrepreneurs looking to get their small business running by providing them with start-up capital. According to Storey (1994), there is no definition of what constitutes a small business. Westlund et al.,(2014)

defines a small company as an entrepreneur who strives to survive and much of the entrepreneurship literature focuses on the growth of these firms.

### **2.8.1 Demanding Performance Guarantee and Retention Fees**

In the SA context, a performance guarantee as it is commonly known (performance bond) is obligatory by law before any work can commence. The payment of the performance guarantee can either be cash or in the form of collaterals. According to article 6.2.3 of the General Conditions of Contract for Construction Works of 2015:

“If the contractor has selected a performance guarantee as a security, he shall ensure that it remains valid and enforceable until the certificate of completion is issued. The performance guarantee shall specify an expiry date, and if the contractor has become entitled to receive the certificate of completion of the works by the date 28 days prior to the expiry date. The contractor shall extend the validity of the performance guarantee until such time that the works have been completed.”

Struggling firms are finding it cumbersome to provide performance guarantees since they do not have the money or any collaterals. At the moment municipalities do not have the capability to provide struggling companies with capital so that they can do their work at the various municipalities. Article 11.1.1 of the JBCC of 2014 states that contractors are obliged to provide their employers with a guarantee for construction within 15 days (excluding weekends) after the acceptance of the contract offer. Therefore, whether it is well established or struggling firms they have to provide security before they could do their work. Article 11.3.1 of the JBCC of 2014 further states that in case a contractor fails to provide security to the employer, the employer may provide the contractor with 10 working days' notice to suspend the work up until the security has been paid by the contractor.

A retention fee according to the Guide to Construction Contract ([sa]:24) is money that usually amounts between five to ten percent of the total value of the work completed.



Retention fee is the money that is kept by the employer in order to correct or repair some of the defective work. In case there are no defects, this money is then returned to the contractor when the project is delivered to the employer. If there are defects, only a portion of it is released and the rest after all the defects are fixed.

A retention fee is also an amount of money which is paid back to a contractor after the work is done satisfactorily, on the contrary; the money is not paid to a contractor in casework is not done satisfactorily or at all (Clause 6.10.3 GCC for Construction Works, 2015: 48). In the case where the work is not done due to other reasons, it is retained by the employer. The aim of a retention fee is to make sure that a contractor does his work satisfactorily. In some cases, employers accept what is called “retention guarantee” rather than to deduct it from the lump sum that will be paid to the contractor (Clause 6.10.3 GCC for Construction Works, 2015: 48).

According to the Standard for Infrastructure and Delivery Management (2015:46), “retention monies that are held shall not exceed 10 percent of any amount due to a contractor. The total amount of retention monies held shall not exceed 5 percent of the contractor package order price”.

### **2.8.2 Understanding the issue of Start-Up Capital**

These are usually the contractors that struggle to kick-start projects due to insufficient capital and resources. Most of the research literature on the development and assistance of contractors focus attentively on small companies that seek to survive in the first few years of inception, being established or formed (Westlund et al., 2014). Therefore, this research looks at the feasibility of introducing a system of providing start-up capital as compared to demanding performance guarantees and retention fees as is the norm in the construction industry.

A study that actually touches on what this research intends to achieve is the study by Alex and Paul (2002) that focused on SMME in terms of Ghana situation and identified

several inter-related factors that accounted for the failure of Bank for Housing and Construction of Ghana programme for Contractors. It identified the need to engage external parties like private finance institutions in Ghana. Furthermore, a government-owned bank called the Bank for Housing and Construction was originally created as Development Finance Institutions with the intention of giving financial support for targeted activities including contractors (Alex & Paul, 2002).

In Alex & Paul's (2002) findings, a need arises for the government to provide finance to the contractors but their study does not indicate how government should assist in financing struggling contractors.

An early-stage or start-up business will transform and morph as it escalates through the different stages of growth, from a fledgeling start-up to a successful large company (Halt Jr; Donch, Stiles & Fesnak, 2017:11). The stages of development that a business goes through during its life cycle include start-up and early-stage development, growth and expansion, and maturity. As the new company moves from the design and conceptualization stages, through product development and finally to commercialization, there are many stages of growth which all require financing in some capacity. Securing funding is important at every stage of a company's development. Funding can come from a variety of different sources (Halt Jr et al., 2017:11).

It is a fact that failures resulting from a weak business model, poor product offering or a lack of vision on the part of the founders are not as common as one might imagine. However, a significant number of new businesses do fail because of inadequate capitalization. While most early-stage businesses recognize a need for start-up capital, many do not have the acumen required to secure these important resources (Goldberg, 2012).

The start-up is the phase of a company's development from its initiation until the actual selection of its actual presence in the market. It may also be understood as a project that has a product ready for the market, and therefore this phase of development lasts

until acceptance of the company by the market, which usually expresses a clear recovery in sales, understood as a phase of early expansion according to Zelek (2013: 12) as cited in Burżacka and Gąsiorowska (2016:142).

The basic requirement for funds in start-up firms emanates from the entrepreneur's constraints. Another significant feature of numerous start-ups is the high risk due to the large doubts about returns, the lack of a track record in operations (Cherif & Elouaer, [sa]). Moreover, many start-ups may face many years of negative earnings before they start to see profits. Due to this situation, banks are critically reluctant to lend money to these firms.

In numerous cases, financial sources include the government, the private sector, commercial banks, development finance institutions, capital markets, private equity, venture capital, crowdfunding and lease finance (Anon, [sa]:3). There are some of the financial sources that can be used by various municipalities as start capital in order to assist struggling firms to expand their businesses, especially in the construction industry.

#### **2.8.2.1 Government financing**

A very significant role is played by the small businesses in any economy globally because they create and provide employment and subsequent competition. Some innovations grow into a fully-fledged business of scale and sophistication and most significantly they assist in the reduction and overconcentration of economic power in the South African perspective (Hudson, 2006). Furthermore, the recent focus of the government on small business and the financial sector is creating lots of pressure for both the government and the private sector respectively to bring about effective ways that would ensure that development and growth within the small business sector are expedited (Hudson, 2006).

#### **2.8.8.2 Private equity**

Private equity transaction has to do with the exact growth of capital including cash-ins or the support of a complete or a partial buyout by the management team. An individual or an entity that decides to invest their capital into a private company like firms which are not necessarily traded on a public exchange is called a private equity investor. Private equity investment includes the exchange of the equity interest in that particular business. In the United States of America (USA) public traded companies are almost 18,000 as compared to the more than 30, 000 companies which are privately held (Hudson, 2006).

The following category of entities may require some capital sourcing from private equity:

- Those companies that are requiring capital in order to fund their capital need that could be beyond traditional bank financing,
- The owners that desire to sell their business partially or completely can seek private equity for assistance, and;
- Those managers that desire to buy a business somewhere else (Hudson, 2006).

According to Missankov, van Dyk, van Biljon, Hayes and van der Veen (2006:7) , a private equity is a phenomenon that has been gradually receiving more attention in South Africa (SA) in the recent years. Furthermore, according to the European Private Equity and Venture Capital Association (EVCA) of 2006 as cited in Missankov, et al., (2006:9) broadly defined private equity as “an investment if securities through a negotiated process”, furthermore, unquoted companies are the ones that have the main private equity investments.

According to the South African Private Equity and Venture Capital Association (SAVCA) (2005), private equity is defined as “the provision of equity capital to enterprises that are generally not quoted on a public stock exchange.” Furthermore, both new products and technologies can be developed and used in order to expand the working capital through the solicitation of equity capital Missankov et al., (2006:9). Equity capital can also be used to make new acquisitions or to strengthen the existing companies. It can also be

utilised to give solutions in case of challenges with ownership or management issues especially in a family owned businesses in order to buy-out or buy-in of a business by more experienced owners or managers (Missankov et al., 2006:9).

There is another aspect, that independent private equity firms also have a manner of raising their own funds which they utilise for investment from external sources. The sources that are used are mainly the institutional investors like the banks, insurance companies and also from the pension funds (Missankov et al., 2006:14 & Cummins, 2017:4). According to Cummins (2017:3), in countries such as Ireland and the United Kingdom (UK), private funds are very active in their markets in most cases and can also pay a higher price than the normal trade buyers especially where they believe in the strength of the management team and the business plan.

#### **2.8.8.3 Commercial banks**

The financing of debts and taking up of loans for small and emerging businesses is a critical source of capital for numerous small businesses (Peavler, 2016). Therefore, commercial banks are often a place where businesses run for loans. However, it can be cumbersome for start-up small businesses to obtain loans because of perceived risk. Only some mature businesses get loans on regular basis from commercial banks because of their track records (Peavler, 2016).

Commercial banks play a pivotal role as financial intermediaries. What they do is to put together all the deposits obtained from investors into a good package loan that can be offered to firms (Anon, [sa]). Another advantage of commercial banks is that they have qualified credit analyst who is able and capable to evaluate the creditworthiness of firms.

#### **2.8.8.4 Development Financial Institutions**

There is a very important role that is played by development finance in financing private enterprise in Africa and therefore, there is a requirement that this should be promoted

further as a significant component to overseas aid (Dickinson, [sa]). There is also an intermediary space which is occupied by the Development Finance Institutions (DFI), this space is between the public aid and private investment. Financial services in developing countries such as SA offer a variety of financial services like such as loans or guarantees to investors and entrepreneurs, equity participation in firms, its investments fund and financing for public infrastructure projects.

Development projects are initiated in various industrial fields and moreover in countries where commercial banks are not willing or reluctant about investing without some form of collateral. DFI also plays a pivotal and active role in financing SMEs, supporting microloans to companies that are in most cases seen as too risky by private sources that could be potential investors (Dickinson, [sa]).

#### **2.8.8.5 Capital markets**

There is a significant role that can be played in the national economy by the capital market such as money market. A speedy growth of the economy can be achieved through the development of a dynamic and vibrant capital market. Further investments are achieved through the mobilization of funds from people into the productive channels of an economy, activating idle monetary resources and puts them in the correct investments. Capital markets also help in capital formation (Kinsella, 2018). It offers an investment relief for individuals who desire to invest their resources for a longer period of time. It also provides sustainable interest rate return to investors (Pakistan Economic Survey, 2012:81). According to Kinsella (2018), the capital market offers caters for both new and up and running businesses with cash or capital. The money that is provided to businesses helps in the day-to-day operational costs.

Capital markets are defined as markets that are meant for financial investments that are in their nature direct or indirect claims to capital. The capital market contains dynamic institutions and mechanism through which intermediate-term funds and long-term funds are pooled and made available to business, government and individuals. Moreover, a

capital market is a place that provides a platform where both suppliers and users of a capital meet to share and discuss each other's views, and where a balance is sought to be achieved among diverse market participants (Pakistan Economic Survey, 2012:3).

According to Odita ([sa]), the capital market is a sub-unit of a well-functioning financial system that operates as an engine of growth but only in modern economies. Long-term funds for productive growth are provided by this system. Governments and companies are provided with an opportunity to raise investment capital, for example: for the construction of waterworks, bridges, schools and factories and purchase vehicles, facilities and equipment using such financial instruments such as equities and bonds. Other companies can be acquired through the use of capital markets (Odita, [sa]).

Medium and long-term funds are made available to both business and governments through capital markets network of institutions and mechanisms where funds are transferred among investors. There are two types of markets globally according to Odita [sa], namely: primary and secondary markets. In the primary markets, investments agents are used to selling new instruments for cash. Once the funds are in, they are utilised for capital investment in the form of retiring outstanding securities of the company, financing new plant or equipment, and to secure additional working capital. The cash that is produced is taken to the issuing company.

The secondary market operates differently to the primary market in that only existing securities are traded without new cash coming in or made available for investment. The existence of the secondary market where existing securities can be bought and sold because it ameliorates the efficiency of the flow of savings in an economy. The cash that is produced goes to the selling investors (Odita, [sa]).

There are numerous benefits for various participants which are found in the economy (EM Compass, 2017). Domestic capital markets offer companies or entities that require funding, it also provides an alternative funding that can complement bank financing. Capital markets are better known for providing good pricing and longer maturities, as

well as access to a wider investor base. Capital markets do not have limitations in providing funding to companies that are regarded as being riskier and thus cannot be traditionally served by the banking sector, and by doing so contribute significantly to innovation in an economy (EM Compass, 2017).

In cases where some governments can easily access international capital markets, the development of local capital markets can escalate the access to local currency financing and thus help to manage foreign exchange risk and inflation in a much better manner. It therefore, becomes more beneficial to governments because it provides them with the liberty to finance fiscal deficits by making loans from local markets without worrying about the exchange rate risks.

Government borrowing is not a new phenomenon since it is a practice that has been done in international markets and moreover in local currency and/or indexed to the exchange rate. However, local markets have the benefit gaining the trust and access to local banks through local investors. The establishment of local capital markets is hugely beneficial to governments attempting to finance development internally (EM Compass, 2017).

According to Kinsella (2018), one major advantage of capital markets is that it creates employment opportunities which automatically leads to economic growth and technological innovation.

#### **2.8.8.6 The Venture Capital Financing**

According to the Business Dictionary (2018), a venture capital can be defined as a 'type of funding for a new or growing business. It usually comes from venture capital firms that specialise in building high-risk financial portfolios.' With venture capital, funding for start-up firms is provided but in exchange for fairness in the start-up. This type of a deal is normally found in commodities such as biotech and technology industries (Business Dictionary, 2018). According to Burżacka and Gąsiorowska (2016:147), venture capital entails funding which is created by purely public investors such as government



agencies, local authorities or private investors such as the banks, insurance companies, pension funds, individuals and universities.

A venture capital is also termed as a risk capital or patient risk capital because it includes the risk of forfeiting the money should a business venture falls flat or do not materialise (Venture capital, 2018). According to the Anon ([sa]:125), a venture capital can be defined as a capital that is given to professional firms who do their investment alongside management in young, fast-growing or companies that are able to change with the high potential for growth. The major characteristics of venture capital are the following (Anon, [sa]:125):

- High degrees of risk: one of the attributes of a venture capital is that it is a financial investment that caters to high-risk projects with the aim of earning a high rate of returns.
- Equity participation: financing is very consistent in venture capital this is because of its real potential equity participation with its major objective being the creation of a venture capitalist in order to gain capital through the selling of shares once the firm becomes productive and profitable.
- Long-term investment: since this is a long-term investment, therefore it also takes a longer period to cash out on the investment in securities collected by the venture capital.
- Participation in management: the management team of a company takes an active role once venture funds are invested in that particular company. Moreover, venture capital has a different approach as compared to other institutions such as traditional lenders and bankers. Therefore, it is also not the same ordinary stock market investor who normally trades in the shares of a company without taking any part in the management of that particular

company. It has been rightly mentioned that: 'venture capital combines the qualities of banker, stock market investor and entrepreneur in one'.

- Achieve social objectives: development capital is mostly provided by the government and central bodies which is completely different to this one since its major reason for the financing of a firm is basically to make a profit. However, employment is created by venture capital projects and thus balanced regional growth indirectly due to the establishment of successful new business.
- Investment in liquid: the management of a venture capital is utterly different as compared to overdraft who are subject to repayment within a specific time frame resulting from a loan repayment schedule. Moreover, an investment is achieved only when the company is sold or listed on the stock market. However, in case the company is liquidated, the investment is lost forever.

Venture capital can also be defined as an equity financing which is offered by various investments institutions that either manage funds on behalf of large institutions such as pension or insurance companies or those that have their own proprietary pool of capital (Anon, [sa]:2). Moreover, numerous companies can benefit from advancing their own venture capital because more financial resources can speed up growth and offer a competitive advantage in the market.

In the early stage, for instance, the technology companies that have a bad credit record in terms of their cash flow, are afforded an opportunity to be provided with some financial boost through venture capital. This also happens to those companies with the physical assets or a longer track record of positive income for that particular company. The problem experienced by entrepreneurs matching their company's stage of expansion and business anticipation with the appropriate venture capital resources (Anon, ([sa]:2).

According to Cherif and Elouaer ([sa]), venture capital is in most cases the main source of financing in the significant stages of the early development of numerous companies. The basic requirement for funding in start-up companies comes from the entrepreneur's wealth limitations.

The seed stage is the initial stage of venture capital financing. This means that seed-stage financings are frequently comparatively low amounts of capital which are offered to inventors or entrepreneurs so that they can finance their businesses early development of a new product or service (Cherif&Elouaer, [sa]). The early financings may be used for numerous things such as product development, market research, building a management team and maybe to develop a business plan. A proper seed-stage firm has often not yet developed commercial operations and therefore a cash injection to fund progressive research and product development is important.

It is very hard to finance companies that in the early stages of development because they frequently need capital for pre-start and do research and development, product development and subsequent testing or the designing of specialised equipment (Cherif & Elouaer, [sa]). Basically, the early stage financing makes it easier for companies that at the stage of beginning operations to step-up their capabilities. It must be noted that new business requires a huge amount of capital to start operating, hence venture capital provides some relief.

In the first stage, capital is offered to small companies so that they can start commercial manufacturing and sales. Numerous companies that fall in the first stage category are those that have been in business for less than three years and have a product or service in testing or pilot production. In some cases, the product may be commercially available. In the other stage called the later stage, the particular company shows some significant growth in revenues without necessarily showing any profit. This happens even if the company has been in business for more than three years (Cherif&Elouaer, [sa]).

There are numerous advantages of using venture capital financing to fund struggling firms. Here are some of the advantages that struggling firms can benefit from (Anon, 2017):

- Financial backing – This is the biggest advantage for many start-ups and companies. Without the initial financial backing, it may be difficult for a company to get off the ground. Beyond that, it can be difficult to grow at the desired rate. With financial backing, you can put your plan into overdrive.
- Business expertise – taking this route does not only provide business owners with money but also the required expertise. This is because it is easy to gain knowledge from some of the members of the group. With all the assistance that can be obtained within a group, it is not easy for a business owner to repeat the same mistake moving forward. Free lessons are also available on financial management so you can use the money more wisely than you would do on your own.
- Connections – teamwork is one major advantage of a venture capital because one will always have other people within their team that are able to encourage them and introduce them to other connections. The building environment demands that one must be connected and venture capital provides that platform to contractors.
- Other resources – another advantage here is the availability of resources that can be helpful to the growth of a business. These resources can be obtained from any right member of the group that might have them. The resources include amongst other things tax matters, personnel matters and legal issues. To make a business more successful an active support is always required which may introduce the business to an angel investor with the right resources.

However, Venture capital is a good method of financing struggling firms but it also has its disadvantages to be considered, they are the following (Anon, 2017):

- Losing control of the company – some investors put lots of money in the company and thus becoming major shareholders. If one is not cautious, they may 'steal' the company even in circumstances where they do not own as many shares compared to the owner. This basically refers to the aggressive investors.
- Running the risk of becoming a minority owner – this happens in cases where investors ask for a bigger piece of the company leaving the owner with less power in the company. This implies that the owner becomes a minority owner with no veto power or final say in the company.

#### **2.8.8.7 Crowdfunding**

The process of collecting numerous small contributions through a manner of online funding platform in order to finance or capitalise a well-known enterprise is called crowdfunding according to Freedman and Nutting (2015:1). Crowdfunding is also a process that facilitates the advancement of capital for numerous reasons using a variety of models. Given the availability of this opportunity arise the need to facilitate the transfer of funds from those who were potential donors or investors to those in need of capital. Furthermore, crowdfunding is an online intermediary platform which facilitates the above-mentioned process and its membership has been growing rapidly over the years (Anon, 2012:2). This is another method that can help struggling firms to fund their projects.

The following are the advantages of crowdfunding (Anon, 2012):

- Income: It is always difficult and challenging to address capital needs in a small company and one significant benefit here is money in cash. Crowdfunding has got the potential to offer the much-needed cash injection

that can allow the management team to focus on other points of execution in a business

- Get honest feedback: Crowdfunding campaigns provide honest feedback which attracts more interest in the project. If it doesn't attract more interest it could mean that the product doesn't cater to the greater needs of the clients. It is always significant to invite inputs from the masses so that valuable insight from would-be customers as to what is good and not good about the idea are sought. It is always an advantage set up for pre-orders so as to gauge consumer interest and make the first run more worth the effort.
- Take advantage of the lab: Just as backers in crowdfunding will give you feedback on whether your project has legs, they will also give very valuable feedback on whether or not the product or services is likely to work as promised. Expect to get comments, questions, and critiques of the product or service as well as requests for improvements to make the product more useful or adaptable to certain situations.
- The legitimacy of the platform: Respected crowdfunding sites vet projects before they are listed, so if you make it through that process, there is instant credibility that is attached to your project.

Just like other forms of funding, crowdfunding has the following are the disadvantages (Anon, 2012):

- Expect to work really hard: To make crowdfunding work, it's not enough to fill out a few online forms, hit the post, and rake in the money. You need to have thoughtful marketing, a well-prepared video, and many other components lined up. This often requires a team with expertise in designing and implementing successful crowdfunding campaigns. Be prepared to work to answer questions from potential backers.

- It can be all-or-nothing: Some crowdfunding platforms take pledges and only collect money from your backers if you meet your stated goal. In other words, if your goal is to raise \$10,000 and you only raise \$9,900, you may end up with nothing in the end. It is very important to set a realistic goal but also one that will get you the desired result.
- It can affect future financing: If your crowdfunding request falls shorts, this can stay on the site forever and be accessible in the future by potential investors. Not only that, they can also see how much you failed to raise and the quality (or lack thereof) of your campaign. In the case of equity crowdfunding, even if your campaign does succeed, sophisticated investors may be reluctant to invest alongside many shareholders who have little to no experience.
- It may not be worth the effort: If your goal is to raise only a relatively small amount, crowdfunding may not be the most worthwhile use of your time. It is really most beneficial for raising larger amounts than what you can get through small loans or donations from friends or family members.
- If you're thinking about crowdfunding for your business, consider scheduling a consultation with our firm. We can help you understand the ins and outs of crowdfunding and how to make it work for your business. Contact us today to get started.

#### **2.8.8.8 Lease finance**

Financial Leasing is a medium-term financial instrument technique for the procurement of machinery, equipment, vehicles and/or properties. Leasing provides financing of fixed assets rather than direct capital. Leasing institutions (Lessors) – banks, leasing companies, insurance companies, equipment producers or supplier, and non-bank

financial institutions – purchase the equipment and provide the equipment for a set period of time to businesses for a fee. At the end of the period, the equipment is transferred to the lessee or it is totally depreciated and discarded or sold to a third party.

Leasing has been an important source of medium and long-term financing for companies, both in developed economies and in countries with economies in transition. Leasing plays an important role in these countries as an effective means to increase the lessee's asset base, particularly in private and/or new companies and in SMMEs, all of which play a key role in introducing innovation and competition in the economy and result in job creation.

Leasing is based on the proposition that profits are earned through the use of assets, rather than from their ownership and focuses on the borrowers' ability to generate cash flow from business operations to service the lease payment, not on the balance sheet or on past credit history. This is why leasing is particularly advantageous for new, small and medium-sized businesses that have neither a lengthy credit history nor a significant asset base for collateral.

A healthy leasing industry facilitates economic growth because leasing increases finance flows to the productive sectors of a country's economy and increases financing options for private businesses. Leasing is an effective mechanism for jumpstarting a growing economy and is particularly advantageous to developing countries like Tanzania. Leasing offers to finance of fixed assets such as equipment, vehicles, and much more as opposed to direct capital. Institutions that lease such as banks, leasing companies, insurance companies, equipment producers or supplier, and non-bank financial institutions procure equipment and then provide the equipment for a set period of time to a business for a stipulated fee.

The basic principle of leasing is based on the arrangement that money or profit is made through the use of those particular assets. If capital is loaned, money is made through the interests agreed upon for a stipulated period of time. Leasing means borrowing



another person either capital or assets for a period of time but at a certain fee. Leasing is based on the proposition that profits are earned through the use of assets, rather than their own and focuses on the borrowers' ability to generate cash flow from business operations to service the lease payment, not on the balance sheet or on past credit history. This is the reason why leasing is particularly advantageous for a new, small and medium-sized business that do not have a long credit record or an important asset base for collateral (Anon, [sa]:3).

Other advantages of lease financing are as follows:

- Leasing offers a way to modernize production and develop small businesses. Leasing companies play an important role in the financing of small, micro and medium-sized businesses (SMMEs), which require funds to expand, but which often lacks credit history or sufficient collateral to access traditional forms of financing. Leasing gives these enterprises an opportunity to create, expand and modernize production.

Leasing increases total capital investment in an economy. Leasing is a complementary form of financing that serves as an alternative to traditional bank lending and increases the ability of companies/clients to source different types of financing for capital investment.

- Leasing creates competition in the financial marketplace. Leasing is not as risky as working capital lending and creates alternative methods of financing businesses in direct competition with traditional bank lending which often requires collateral and extensive paperwork to process.
- Leasing increases equipment sales. Leasing offers domestic and foreign suppliers new mechanisms for increasing their customer base, and access to new clientele, (i.e. previously poorly financed businesses).

However, the following are disadvantages of leasing according to Dhaval ([sa]):

- Higher cost – the lease rentals include comes with high costs which can be attributed to the damage or destruction of the leased items. Therefore, it is regarded as a form of financing risk.
- Loss of moratorium period – it is a disadvantage that the lease rentals do not cater for the growth period of the company or firm. Since the company is undergoing a gestation period, therefore it is not ready to start generating funds to pay back the financial loan. This becomes difficult since the moratorium period provides a loan period for the repayments. However, there is no such moratorium that is permitted under lease arrangements.
- Risk of being deprived of the use of assets – there is a possibility that once the deterioration in the financial status of the lessor, the lessee may be deprived of the use of the assets.
- No alteration or change in asset – leasing an asset put the lessee in a somewhat losing position because they cannot affect any changes or modify it in order to increase its utility as opposed to when they have purchased it.
- Loss of ownership incentives – in case of a lease, the owner is not entitled to benefits such as depreciation and investment allowances which are advantages of owning the assets.
- Penalties for termination of lease – leasing assets or finance go with penalties in the case where the contract is terminated or in case the lessee fails to payback or return the leased good in the agreed time period.
- Loss of salvage value of the asset – normally assets has a certain salvage value at the end of the term leased. When an asset is leased, the lessor does not own it permanently. Therefore, it becomes difficult to notice the

salvage value at the end of the lease rather they return the asset to the lessor.

The researcher believes that municipalities have got the potential to utilise some of the above-mentioned methods of financing struggling firms that are in the construction environment in SA. Leasing whether in the form of assets or capital has its own advantages and disadvantages. In the case of financial leasing, it becomes cumbersome for struggling firms to return the capital within the stipulated time frame. The fact is that struggling firms that are in the construction industry find it difficult to get their business off the ground because of lack of funds hence municipalities do not provide them with money in the form of an advance in SA because of the laws of the land.

## **2.9 SMALL BUSINESS START-UP CAPITAL AND FINANCING**

The lack of financial capital remains a critical challenge in addressing and alleviating amongst other things poverty amongst women and the youth (Anon, [sa]:2). Sources of finance have become a very scarce commodity and if they are available, they become inadequate. Many individuals struggle to get finance and they always wonder where to get finance and how to get funded. Another critical challenge is that potential sources of finance are too expensive and have very strict and tough requirement for accessing loans, especially youths who have no collaterals to enable them to secure bank loans.

Some financial institutions argue that many of the new business ventures are simply not easily fundable. They also mention that the lack of fundable business plans remains a critical challenge Furthermore, issues such as the quality and feasibility of the business idea and the lack of commitment of the entrepreneur and their business management team are profound (Anon, [sa]:3). This has been a critical challenge facing struggling firms in the construction industry in SA and municipalities do not have the means of financing them.

However, there are other ways that can be employed to finance struggling firms being own resources and also to ask for money from close friends and relatives. In most developing countries governments, donor agencies and Non-Governmental Organisation (NGOs) and own sources are major sources of funding (Anon, [sa]:3). It is not always easy to finance a business, especially in the construction industry to have money so that one can finance their own business. Moreover, the SA government is trying to provide finance to struggling firms but it is not enough.

There are five types of financing methods as mentioned by Goldberg (2012) and they are seed investor financing, venture capital financing (See 2.8.8.6), start-up financing, mezzanine financing, first round financing and second-round financing.

### **2.9.1 The seed investor financing**

Seed stage capital is required to finance the early development of a new product or service. These early funding may be directed towards product development, proof-of-concept, market research, or to cover the administrative costs of starting the enterprise. A true seed stage company has not yet established commercial operations. A start-up in this phase establishes proof-of-concept by demonstrating a prototype (product or service) to potential customers and entices them to become sources of capital. The company's goal in this stage is to test the market, establish the viability of the business idea, and measure interest and attractiveness to investors.

### **2.9.2 The start-up financing**

Financing for start-ups entering this phase provides funds for product development, some initial marketing and some administrative overhead. This type of financing is usually offered to recently organized companies or to those that have been in business for a short time but have not yet sold their product into the marketplace. Start-up companies in this stage have, often times, assembled key management, prepared a proper business plan, and have conducted due diligence on the market viability of their product or service.

### **2.9.3 Mezzanine financing phase**

Mezzanine financing is a late-stage form of financing for start-ups and is often used for major expansion of the company. This type of financing can also fund an emerging growth opportunity for the company. At this point, the company may not wish to seek an additional round of equity diluting investment and may prefer the hybrid form of financing that mezzanine debt/equity financing offers. In addition, entrepreneurs may still be unable to obtain traditional bank loans at this point. Mezzanine loan investors are able to obtain a higher degree of security than an ordinary investment in equity since their rights, as debt holders are senior to that of shareholders.

### **2.9.4 The first-round financing**

Start-ups requiring “early” stage financing have usually been in business between 2-3 years and have launched the company. The management team has been established, commercial operations have begun and funding at this stage is often required to cover cash flow requirements. Financing in this stage also strengthens capabilities in the areas of manufacturing, sales, and marketing.

### **2.9.5 The second-round financing**

Second stage capital financing facilitates the expansion of companies that are already selling products or services. At this stage, a company raises additional equity capital to expand its engineering, technology platforms, sales, marketing, and manufacturing capabilities. Many companies in this stage are not yet profitable and they often use the financing obtained in this stage to cover working capital requirements and to support organizational overhead, and inventory costs.

## **2.10 SUMMARY**

This chapter addressed the literature review by paying attention to start-up capital in the construction industry. The signing of guarantees such as the performance and retention

guarantees remains a challenge to small firms or companies since they are not paid in advance in SA. This is because current legislation such as the PFMA, MFMA and the Government Procurement: GCC of 2010 does not make provision for the payment of contractors in advance.

The introduction of start-up capital was also discussed with the specific attention of the various ways that can be utilised such as the following: government, private equity, commercial banks, development financial institutions, capital markets, venture capital financing, crowdfunding and lease financing. Other types of financing are also discussed such as seed investor financing, venture capital financing, start-up financing, mezzanine financing, first round financing and second-round financing. The various challenges facing start-up firms were also discussed at length. Finally, all four forms of contract were discussed namely: the JBCC, NEC3, FIDIC and the GCC.

## **CHAPTER 3**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 INTRODUCTION**

This chapter offers a comprehensive but concise overview of the research methodology that was used in this research report. The discussions in this section of the report entail the following aspects: the research approach, the research design, the methods used to collect data, the methods used to ensure the trustworthiness of this study and the ethical considerations.

#### **3.2 RESEARCH APPROACH**

According to Leedy and Ormrod (2013:146), there are five well known qualitative designs, being a case study, a phenomenological study, ethnography, content analysis and a grounded theory study. Moreover, Creswell (2014:6) mentioned four worldviews being the constructivism, post-positivism, pragmatic worldviews and transformative. The researcher opted to use the pragmatic research approach because it employs actions in situations. Furthermore, the pragmatic approach makes use of both qualitative and quantitative research methods in its quest to find solutions. However, due to the nature of the study, one method was chosen as a qualitative approach so as to identify solutions to situations.

#### **3.3 RESEARCH DESIGN**

Research can either be a process or an activity, although it should be noted that there are numerous research procedures which differ from each other, particularly in their general features that assist in defining their nature (Wiersma & Jurs, 2009:3). Tamal (2010: 32) agrees with the definition by Wiersma and Jurs (2009:3) that a research is a systematic process that can be utilised in attempting to find a solution to a problem

(especially when the solution is not known) through the use of acceptable methodology. Furthermore, research is not only about finding solutions to problems but it also includes cautious pursuit in order to unearth fresh facts and collaborations with regards to solutions (Tamal, 2010:32).

An overall plan for a research can be easily understood as a research design, because it construes the reasons for the particular research to be carried out and how it should be conducted (McNiff & Whitehead, 2010:11). Wiersma and Jurs (2009:234) state that research design is the part of a research plan which addresses issues like participants selection in preparation for data gathering including all other activities that has to be done during the research process. The significant factor according to Wiersma and Jurs (2009:118) is that a research design gives more attention to the specifics rather than generalising with regards to the type of research to be conducted.

A research design according to Maree (2007:70) and Welman, Kruger and Mitchel (2005:52) can be defined as a plan or strategy which is employed when selecting a particular group to be utilised to gather data that will be used during the research and the preferred data analysis method to be used. When drafting a research design, a researcher clearly describes exactly what process are they going to follow with the participants with an aim of arriving at a conclusion pertaining to a research problem (Welman et al, 2005:52). The researcher makes use of a qualitative research method since it qualifies within the social-constructivist worldview.

Basically, in social-constructivist worldview, researchers seek to understand the world they exist and work in (Creswell, 2013: 24). In their effort to comprehend the world they establish unbiased meanings based on their experiences which are directed towards a certain objective. Here researchers depend on the participants' understanding of the subject being studied (Creswell, 2013:24). To reach an informed conclusion, researchers pose open-ended questions and listen carefully to the answers from participants about their life surroundings.



Open-ended questions are the most preferred by qualitative researchers because they provide participants with the liberty to share their experiences and understanding of their environments extensively (Creswell, 2014:8). Creswell (2014:8) further asserts that human beings are able to construct meanings as they engage with the world they are interpreting.

### **3.4 QUALITATIVE RESEARCH DESIGN**

Qualitative researchers conduct most of their studies in natural settings and they do not intervene in the situation unless by their presence, in a need arises (Wiersma, 2009:234). Corbin and Strauss (2015:4) define qualitative research as a form of research in which any other person be it the researcher or participants becomes major role players in the entire process and the data they bring home. A qualitative research is also a strategy which requires increasing the comprehension of why things are the way they are in the social worlds and also why people behave the way they do (Hancock, 2002:1). Grbich (2013:3) is of the understanding that qualitative research is fascinating in its nature in that it provides comprehensive and extensive data and can advance knowledge in a number of avenues.

The researcher decided to employ a qualitative research approach as opposed to either a quantitative or mixed method. The rationale is that it is the type of a social question that pays attention to the manner in which people understand and make logic of their personal experiences and the world they exist in. Furthermore, in exploring people's behaviour, perspectives, views and experiences, a qualitative research is utilised to understand what rests on at the core of their lives.

Leedy and Ormrod (2013:140) assert that this is a kind of an accession that can best serve the purpose of furnishing the following for the research: description, interpretation, verification and evaluation. Certain situations, relationships and people can be revealed through description. Interpretation assists the researcher to gather fresh and viable views about a particular concept and to unearth the problems that exist within that phenomenon.

The researcher was afforded an access to test the validity of certain theories and claims through a verification process. The means in which the researcher can judge the effectiveness of certain policies, creativeness and practices are furnished through the evaluation process (Leedy & Ormrod, 2013:140). Moreover, the data collected in a qualitative study has to naturalistic (Willig, 2008:15).

Every research method has got its advantages and disadvantages and the qualitative research method is no exception. Savin-Baden and Major (2013:6) state that qualitative researchers basically want to learn more since they believe that the social world varies from the natural world. The following are the advantages and disadvantages of qualitative research methods as identified by McMillan and Schumacher (2010:395):

#### **3.4.1 Advantages of qualitative research method:**

- More comprehensive information is provided;
- It provides the researcher with the liberty to study the whole process and also the outcomes;
- It reimburses for limitations with the use of a single method;
- A variety of research questions are investigated;
- Complex research questions are investigated; and
- It amplifies the credibility of findings from a single method.

#### **3.4.2 Disadvantages of qualitative research method:**

- It may be cumbersome to conduct both types of research in a single study due to the inadequacy of training;
- It is regarded as superficial to make use one method;
- More information is required (extensive data gathering),
- Report writing and forming conclusion may be difficult; and
- It may be misleading to readers should the type of approach used not be fully integrated.

Leedy and Ormrod (2013:146), identified five common qualitative designs being the following: ethnography, phenomenological study, casestudy, content analysis and grounded theory Creswell (2014:6) states that there are four worldviews which are constructivism, post-positivism, transformative, and pragmatic worldview. The researcher opted to make use of a pragmatic research approach since it is an approach that best suited this research study

### 3.5 PHILOSOPHICAL WORLDVIEW

A research design explains the plans and procedures for a research that supports decisions from a large hypothesis with a thorough manner of information gathering and the analysis thereof (Creswell, 2009:3). According to Funk (2001), the recommended understanding is based on a condition of reality that influences one's manner of thinking, knowing and doing are called a philosophical worldview.

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Creswell (2009:3) is of the view that worldview assumptions give facts to all the valuable decisions that need to be made in order to bring to the study the manner of inquiry and particularly the techniques utilised to gather information. There are three types of research methods according to Creswell (2009:3) namely: qualitative, quantitative and mixed methods.

Philosophy, as defined by Keller (2006:1), is a theoretical activity which helps to discover the truth just like in any other theoretical activities. The role of abstract thoughts and views that inform peoples' inquiry is called philosophy according to Creswell (2013:16). Philosophical assumptions are basically the initial views in establishing a study, but what remains a mystery is how they relate to the overall procedure of inquiry.

Creswell (2013:15) also mentioned that philosophical assumptions are part of a research irrespective of being aware of them or not. These understandings come into being as information is piled up by extensive reading of books, journals and articles,

also through advice that is received through the engagements of other people during meetings and group discussions. What could be the hardest part is how to integrate all the sources to make a qualitative study Creswell (2013:15).

The mode in which problems are formulated and inquiry questions to read are influenced by the philosophy that is why it is so crucial in determining how data serves to find a solution to a question (Creswell, 2013:18). Creswell (2013:20) identified 4 types of philosophical worldview assumptions and they are epistemological, axiological, methodology and ontological assumptions. Since the researcher will make use of a qualitative research, 2 assumptions will be discussed for the sake of this study and those are the ontological and epistemological assumptions.

When researchers embark on a qualitative study, they are eventually in agreement to its underlying philosophical beliefs, while bringing to the study their own worldviews that result in shaping-up the direction of their research. Creswell (2013:20) describes the following philosophical assumptions: ontological (the nature of reality) and epistemological (how researchers know what they know). Therefore, the researcher believes that the philosophical worldview and its two philosophical assumptions as chosen by the researcher are suitable and applicable to the study.

### **3.5.1 Ontological assumptions**

Maree (2007:53) states that ontology is the study that concentrates on nature and to the realities that can be known through a study. Ritchie, Lewis, McNaughton, McNaughton and Ormston (2014:4) define ontology as an assumption that is interested in the features of reality and the qualities that exist in the world. Major ontological questions that are asked are whether or not there is any social reality that occurs without being influenced by human conceptions and interpretations and whether there is shared reality or only multiple, context-specific ones.

### **3.5.2 Epistemological assumptions**

Epistemology is concerned with ways of knowing and learning about the world and focuses on issues such as how we can learn about reality and what forms the basis of our knowledge (Ritchie et al., 2014:6). Maree (2007:55) further mentioned that epistemological assumptions are concerned with the nature of reality which relates to how things can be experienced, finally on how truths or facts, if they do exist, can be found out or revealed. This assumption will help the researcher in this study since they bring the researcher closer to the participants being studied.

Therefore, subjective evidence is assembled based on individual beliefs and knowledge is acquired through subjective experiences in the place or field where the participants live and work. In addition, Funk (2001) said that epistemological assent is about features and sources of knowledge; it is about what we believe about knowledge and knowing their nature, basis and validation.

### **3.5.3 A pragmatic research design framework**

A worldwide phenomenon which comes to being as a result of actions, situations, and consequences rather than a thing that existed before conditions as in post-positivism is called a pragmatic research approach. Creswell (2009:6) defines a post-positivist approach as defined by Creswell (2009:6) is a scientific, reductionism adjusted approach which in reality uses an all-inclusive computer program to perform data analysis. Creswell (2009:6) went further to explain the features of a post-positivist approach as follows: reductionism, determinism, empirical observation and measurement, and the verification of the theory.

Instead of paying attention to the methods, researchers stress the research problem and employ all approaches at their disposal to realize the problem. They also become conscious of the fact that each and every method has its constraints, however, the various approaches can complement each other according to Creswell (2014:10). Therefore, a pragmatic research approach makes use of a combination of both the

qualitative and quantitative research in soliciting solutions to certain challenges (Du Plooy-Cilliers, Davis & Bezuidenhout, and 2014:78).

Researchers that make use of a pragmatic research approach turn to find numerous benefits. This is a very flexible approach when applied by researchers in their investigative techniques when they endeavour to address certain research questions which are based on their research study (Onwuegbuzie & Leech, 2007:383). Onwuegbuzie and Leech (2007:383) go further to say that pragmatic researchers do encourage the working together of researchers in their quest to find solutions irrespective of philosophical orientation.

The following are the advantages of a pragmatic research approach according to Creswell (2014:10):

- The world is not seen as a definite absolute in a pragmatic approach.
- Pragmatic researchers have the liberty to make use of any of the techniques, methods and procedures that are mostly related to either quantitative or qualitative research provided they match their requirements and purpose.
- The 'what and how' are what pragmatist researchers are based on and also the intended consequences of what they really want to achieve with their research
- Pragmatists are of the understanding that we ought to stop asking questions about reality and the laws of nature (Cherryholmes, 1992) as cited in Creswell (2014:11).
- It is not based on a duality between reality independent of the mind or within the mind.
- Pragmatists agree that research always occurs within a social, historical, political, and within other contexts as well.
- Pragmatists naturally believe in the external world which is totally independent of the mind as well as that what is contained in the mind.

The researcher decided that a pragmatic worldview will be suitable for this study because pragmatists agree that research always occurs in social, historical, political, and other contexts (Creswell, 2009:11). The researcher believes that this approach is suitable for this study since it focuses on the outcomes and on what works in order to address the research problem.

### **3.6 TARGET POPULATION AND SAMPLING**

Population refers to individuals (human beings) or things that the researcher wants to describe (Weathington, Cunningham & Pittenger, and 2010: 232). Some researchers usually refer to target population when asked to define a population. Researchers, therefore, draw their sampling from the larger population they have identified, but based on what they want; they will then choose certain individuals (Weathingham et al., 2010:232).

Based on the research questions that were asked by the researcher and the nature of the research topic, the researcher chose members from various cities and municipalities namely: The City of Johannesburg, City of Tshwane, City of Ekurhuleni, Nelson Mandela Municipality, Ethekwini Municipality, Mangaung Municipality and the Buffalo City Municipality. The rationale for choosing these metropolitan cities is because the problem is more prevalent in their respective municipalities and cities. Within these metropolitan areas, municipality managers, and those that are involved directly with contractors were interviewed.

#### **3.6.1 Data collection method**

Qualitative research was preferred because of the richness of the information it produces. It does not concentrate on reducing numbers but it focuses on the content and its meaning and most significantly on the real things that people say (Wilson & MacLean, 2011:199).

The researcher collected data in the following ways: primary sources (books, journals, articles, internet, and etcetera) and personal or face-to-face interviews (Weathington et al., 2010: 232). Maree (2007:82) states 3 commonly used methods of data collection, namely: observations, interviews and documents. The interviews were recorded and later transcribed for analysis purposes. A researcher that needs to do interviews using semi-structured interviews has to carefully prepare and plan the following (Willig, 2008:24):

- Who to interview and why;
- How to recruit participants;
- How to record and transcribe the interview;
- What style of interviewing to use; and
- What to ask participants.

### **3.6.2 Data analysis**

Audio recordings emanating from semi-structured interviews can produce information which can be analysed in a variety of ways (Willig, 2008:23). This means that semi-structured interviewing is a flexible method that is suitable for a number of data analysis methods, for example, discourse analysis, grounded theory and interpretive phenomenology. The researcher did not have the expertise of doing data analysis using modern technology such *Atlas-ti*, therefore, he outsourced to professionals and detailed approach and description can be followed in 4.2.1.

### **3.6.3 Methods used to ensure trustworthiness**

There are various ways and means that can be used to ensure the trustworthiness of a research study. According to Stringer (2007:57), there are four ways that can be used, namely: dependability, transferability, confirmability and credibility.



#### **3.6.3.1 Dependability**

Dependability means that there is a possibility that the research process followed in this study can be repeated with the similar participants within the similar environment that was used in the original study. This implies the level of trust that the particular research was conducted (Stringer, 2007:59). During the interviews which were conducted with a number of participants, the researcher used a voice recorder in order to capture all the conversations and later transcribed the interviews into word documents, exactly it was said by the participants. The data was then analysed.

#### **3.6.3.2 Transferability**

Transferability provides individuals who did not partake in the study with the liberty to make their own judgement when making use of the particular research findings (Stringer, 2007:59). To ensure transferability, the researcher made use of *Atlas-ti* codes which are part of the information gathered from the interview participants. This is used to ensure that the findings of this study can be used at any given point in time by anyone who desires to do so.

#### **3.6.3.3 Confirmability**

The process of confirming without any doubts that indeed all the necessary described took place is called confirmability (Stringer, 2007:59). One way of ensuring confirmability is 'bracketing', it ensures that the researcher's point of view does not hinder the facts gathered from the participants. In other words, the researcher might be conversant with the research subject but his views do not matter, that is why they must be bracketed. In this case, the researcher was very cautious not to interfere with the various participants as they gave their responses during the interview process.

#### **3.6.3.4 Credibility**

The credibility of any study is ensured once there is trust. It is crucial that the research participants must have complete trust in the integrity of the researcher since this makes

them commit fully to the study (Stringer, 2007:57). In this study, credibility was ensured by applying triangulation which entails combining two or more sources in order to achieve research objective. This helps particularly if the various sources gathered provides a similar conclusion according to Maree (2007:113).

#### **3.6.4 Ethical consideration**

According to Gray (2009:69), ethics are the moral principles that guide a research study. He further expands his explanation of ethics by saying that ethics are a set of moral principles or norms that guide the moral choices of behaviour and the relationships with other people. Fouka and Mantzorou (2011:4) define ethics as the branch of philosophy which deals with the driving force that addresses decision making concerning what is right and wrong. It is important that a researcher should try to focus on a project that is ethically well grounded (Bailey, 2007:35). The researcher informed all the respondents about the necessity, purpose and the value of this study.

The researcher also informed the participants that this study poses no derogatory statements towards other human beings; does not carry any fabric that may harm any individual either physical or emotional. Participants were not obliged to take constituent in this study and those that took part, their identities remain anonymous. Tamal (2010:32) states that it is always important that when embarking in any type of research to ensure that there is a protection of the subjects (participants) and to avoid problems that could lead to lawsuits. He further asserts that there is nothing that could be worse than harming a research subject. The researcher strictly abided by the University of Witwatersrand policy on research Ethics and other research code of ethics and discussed in the following sections.

##### **3.6.4.1 Researcher's responsibilities towards the participants**

There are six principles as mentioned by Bless, Higson-Smith and Sithole, (2013:29) and Laws, Harper, Jones and Marcus (2013:164) that a researcher must abide by when conducting a research. The researcher in this case adhered to all of these principles:

- Non-maleficence - researcher has an obligation to ensure that participants are protected against any physical, social and psychological well-being and rights, interests and privacy of those of those you study. The researcher assessed any risks or costs that may have an effect on participants. Any harm, whether intentionally or unintentionally, was avoided against the participants (Bless et al, 2013:29).
- Autonomy - the researcher obtained prior consent from the participants before embarking on the research. Participants were informed that they were taking part voluntarily in this study and they were also informed about the purpose of the study. Participants were also given an information sheet where they signed a form stating that they give consent to participate in the study (Bless et al, 2013:30).
- Rights to confidentiality and anonymity - All participants have treated anonymously and this was done in order to protect and respect their rights to privacy and confidentiality. Their identities were protected by all means (Laws et al, 2013:164). Bless et al (2013:31) and Streubert and Carpenter (2011:63) called it fidelity which is defined as the principle of ensuring that the researcher abides by promises and agreements made with participants.
- A fair return for assistance - Participants are not exploited in anyway and they were informed that the outcomes of this study would help the organisation to find ways of providing small companies with start-up capital more effectively (Laws et al, 2013:164).
- Respondents' rights in data and publications - participants where possible were given an opportunity to view the transcripts of the interviews or observations and they were also afforded an opportunity to make changes where necessary (Laws et al, 2013:164).

- Justice - This is a principle that is based on the belief that people and in this case, participants should not be discriminated against their religion, race, gender, disability, income or in any manner (Bless et al, 2013:30, Streubert & Carpenter, 2011:63). The researcher ensured that all participants were treated fairly and not discriminated against.

#### **3.6.4.2 The Belmont Report**

On the 12th of July 1974, the National Research Act was signed into which was aimed at paving the way for the protection of human subjects that could be taking part in both behavioural research and biomedical. The main purpose of the Belmont Report was to guarantee that every research involving human subjects are done in a humane manner and in accordance with the principles. To ensure that all the research participants are protected, the researcher adhered to all the principles as mentioned Belmont Report, and the principles are as follows:

- Respect for persons – the participants, in this case, were given to autonomy to partake in this research study meaning that they were not forced to participate. The researcher respected all their rights as human beings. All their opinions and choices were taken into considerations without being destructed during the interviews. The researcher protected all the participants from any possible danger or harm against them.
- Beneficence – one factor that is being stressed by this report is that all human beings must be treated in an ethical manner including the protection of their well-being against any harm of any kind during the research This implies that the researcher had an obligation to maximise possible benefits and on the other hand make sure that harms are reduced as much as possible.
- Justice – this basically means that all people should be treated fairly and equally without any prejudice. Basically, justice entails the benefits of this

research as to who is going to benefit the most. The benefits entail the fair distribution of what was deserved, meaning participants have to get what they sincerely deserve. It also means that participants must not be discriminated because of their age, race, gender, experience.

The Belmont Report states and also recommends all the actions that need to be applied by researchers to acquire informed consent from participants, the evaluation of risks and benefits, and the recruitment of participants thereof

#### **3.6.4.3 Wits University Policy on research ethics**

Researchers that involve the participation of human beings are not a new phenomenon, as methodologies which include conducting interviews, observations (behaviour); questionnaires have been well developed in the social sciences and humanities through which to make sense of social processes (Wits Research Report, 2012:25).

In the past few years, there has been an escalation in the number of studies that involved human participation in a number of disciplines. The field of engineering is one example of a study field that is involving humans in a study. Wits University saw it necessary that all forms of researchers conducted under their banner should be ethical by ensuring the following:

- Participation is completely voluntary,
- Participants are not coerced with money or any other means,
- Participants must never be exhausted as a result of partaking in the study,
- Participants must see value in their participation which will have long-term benefits to the community at large,
- Ensure confidentiality and anonymity of participants,
- Take special attention when dealing with children, prisoners, sex workers, refugees and victims of crime.

Therefore, the researcher strongly adhered to all the above ethical considerations and was at no stage violate any of them. Participants were informed prior to taking part in

this study that it was purely voluntary and they signed a consent form agreeing to participate in the study.

### **3.7SUMMARY**

The research study is necessitated by the manner in which municipalities do their business with contractors who are trying to make a living. This research study employs a qualitative research method where data is to be collected from various sources such as personal interviews, critical analysis of other sources such as magazines, journals, books, internet and many more. The philosophical assumptions as chosen by the researcher are Ontological and Epistemological. Since the researcher chose qualitative method a pragmatic method approach was chosen. After data has been gathered, it was analysed by using the appropriate software namely; *Atlas-ti* as a tool for data analysis was used.

Initially the population were planned to be taken from the four major metropolitan cities of South Africa being Johannesburg, Cape Town, Port Elizabeth and Durban but due to lack of commitments from some of the participants the sample was enlarge to includes other major metropolitan municipality which are City of Tshwane, City of Ekurhuleni, City of Johannesburg, Nelson Mandela Municipality, Ethekewini Municipality, Mangaung Municipality, and Buffalo City Municipality. The researcher strictly abided by the University of Witwatersrand policy on research ethics and other research code of ethics. The researcher informed respondents about the necessity of the study. The researcher sought permission to conduct interviews with the members of the above-mentioned municipalities. The next chapter presents and analyses findings.

## CHAPTER 4

### DATA PRESENTATION AND ANALYSIS

#### 4.1 INTRODUCTION

This chapter encompasses data presentation, analysis, and discussion of the interviews for the study. The summary of the participants and participating companies have been provided with anonymity observed, as articulated at the outset of the study due to ethical grounds. Second, their participants' comments have not been edited in order to preserve their authenticity. The data were transcribed and content analysis used for the interpretation. The interpreted data were then analysed from key issues and themes stemming from the input of primary data derived from *Atlas-ti* version seven tool of qualitative data analysis. The details and summaries of the key data outputs are given in the appendices attached at the end of this document.

#### 4.2 DESCRIPTION OF PARTICIPANTS

The interviews were conducted among management and construction engineers within the City of Tshwane, City of Ekurhuleni, City of Johannesburg, Nelson Mandela Municipality, Ethekeini Municipality, Mangaung Municipality, and Buffalo City Municipality. This coverage is representation of major municipalities in South Africa that claim more construction projects annually according to the CIDB (2016) report.

Participants included qualified engineers with Bachelors of Civil engineering (9) in number, Transportation engineers (3), Post Graduate Diploma in project management (3), LLB (1) Masters in Project Management (2) and Masters in Hydrology (1). The classification of participants was against the need to capture a whole range to diverse and segmented views as regards to the feasibility of introducing the start-up system capital on contractors as opposed to demanding performance guarantees and retention fees in the South African construction industry.

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#### 4.2.1 THEMATIC ANALYSIS OF RESPONSES

According to Saldanha (2013:14), most of the data collected in open-ended responses are qualitative, that is, are in a non-numeric form. Thus, in order to analyse and make sense of this data, one has to conduct Qualitative Data Analysis (QDA). QDA involves a range of processes and procedures that aim to provide an explanation, understanding and interpretation of the collected data, which in this case was *Atlas-ti* version seven as mentioned earlier.

**Commented [PB(7):** Sentence construction issues. Perhaps you wanted to say: According to Saldanha (2013), responses of participant from data collected through interviews are open-ended and have a non-numeric form. So a researcher needs to conduct a QDA in order to make sense of .....

Buoyed by Wiedemann (2013:5), the two of the most popular approaches to analyse answers to open-ended questions are the content analysis and thematic analysis. For the authors, the first approach employs a more systematic and mechanical process and is usually used with a purpose of classifying and quantifying data. The second approach employs a more flexible and reflective process and is usually used to capture the richness and in-depth nature of qualitative data.

For a more realistic and valid content analysis, the researcher involved a rigorous and systematic classification process of coding and identifying themes or patterns that emphasize the reliability and replicability of observations and subsequent interpretations as suggested by Sinkovics and Alfoldi (2012:8). For the authors, such content analysis is a particularly useful approach when the purpose is to classify, summarize, quantify and tabulate qualitative data.

To create a clearer perspective, the structuring process of content analysis followed a three-step process involving:

##### 4.2.1.1. Identification of the categories of analysis and development of the coding system

This involved determining the appropriate unit or level of analysis (this was all answer, sentences, or words that had been captured during data collection) and identifying the



recurrent categories that gave meaning to the data. The purpose was to develop a coding system that enabled the conversion of the data into meaningful and specific units of information (codes or categories).

The researcher had in mind the view that the development of the coding system can be data-driven or theory-driven as emphasised by Leech and Onwuegbuzie (2007:9). In a data-driven approach, the categories (codes) were selected based on a detailed analysis of all data. This approach was particularly suited where there was little knowledge about the themes that came up in the answers or when the goal was to make an in-depth exploration of the data.

Furthermore, referring to Leech and Onwuegbuzie (2007:9), the reference to the theory-driven approach, was only when the categories (codes) selected were predetermined by an existing theory. Thus, in this approach it was not strictly necessary to go through all data in order to select the categories, making it less time-consuming than the data-driven approach. The theory-driven approach was particularly suited to already knowledge and a conceptual organisation of the themes that should have been analysed in the answers or when the goal is to test a theory.

To identify and consider thematic analysis, the researcher used deductive thematic analysis, a structure or predetermined framework used to analyse data (Saldanha, 2013:14). Essentially, the researcher imposed his own structure or theories on the data and then used these to analyse it. This approach was particularly useful as specific research questions that already identify the main themes or categories to be used to group the data so as to look for similarities and differences had been crafted beforehand. Given that this approach was relatively quicker and easier to perform, it was particularly useful where time and resources are limited. However, by using predetermine thematic framework one loses in the flexibility of analysis which can bias and limits the interpretation of the data.

At the end of it all, referring to both approaches, the end product of this step was a checklist or coding system instrument that identified all the relevant categories, providing clear definitions and concrete examples in the data of each category, and accompanied with rigorous instructions of how the data should be coded using the instrument.

#### **4.2.1.2 Coding of the data into the categories of analysis**

This step involved the organisation and coding of all data in a way that ensured reliability and meaningfulness, i.e., the previously defined categories (codes) were used to classify the content into explicative categories. Thus, this step required the execution of an explicit set of recording instructions about the rules for coding the data into categories. For Wiedemann (2013:5), recordings should involve more than one judge so that the coding of each content/unit can be examined for reliability, and sources of disagreement can be identified and corrected. Reliability of the coding system was then evaluated through computation of coefficients of agreement between two or more different judges/coders.

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A more comprehensive approach followed the *Atlas-ti* approach to coding and thematic development and included the following phases: familiarisation with data; generation of initial codes; searching for themes among codes; reviewing themes; defining and naming themes; and producing the final report.

#### **4.2.1.3 Analysis and interpretation**

Once all data had been organised and coded, qualitative (e.g., content, relationships between categories), the quantitative analysis was performed and followed by an interpretation of the results. To analyse the structured themes, (thematic analysis), which is often implicitly and explicitly a part of other approaches of data analysis including grounded theory and narrative analysis according to Saldanha (2013:14), it was the first step to look for broader patterns in order to then conduct a more fine-

grained analysis using alternative approaches. The main goal was to provide a description and understanding of answers. This helped the study to move the analysis from a broad reading of the data towards discovering patterns and developing themes.

Table 4.1 Summarise the phase followed

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Phase	Description of the process
<b>Familiarization with the data</b>	Read and re-read data in order to become familiar with what the data entails, paying specific attention to patterns that occur and noting down initial ideas/patterns.
<b>Generation of initial codes</b>	Generated the initial codes by identifying where and how patterns occur. This happened through data reduction where the researcher collapsed data into labels in order to create categories for more efficient analysis. Data compilation was also completed here by making inferences about what the codes mean.
<b>Searching for themes</b>	Collated codes into themes that accurately depicted the data. It was important in developing themes that the researcher described exactly what the themes meant, what they included and excluded.
<b>Reviewing themes</b>	Checked if the themes made sense and account for all the coded extracts and the entire data set. When analysis seemed incomplete, the researcher went back and found what was missing. Generated a thematic “map” of the analysis.
<b>Defining and naming categories</b>	Generated clear definitions and names for each theme. Described which aspects of data being captured in each theme, and what was interesting about the themes.
<b>Producing final report</b>	Decided which themes made meaningful contributions to understanding what was going on within the data. The researcher also conducted verification of the data to check if their description was an accurate representation.

Adapted from Braun and Clarke (2006:6)

For the purpose of presentation and analysis, the following key themes were identified and subsequently presented in this study:

- Knowledge and understanding of contracts
- Cause of poor performance of the contractors
- Municipality and waiving of performance guarantee
- Municipality and waiving of retention fees
- Municipality and start-up capital to struggling contractors
- Stumbling blocks to start-up capital to struggling contractors
- Policies and legislation

In this chapter, P is specifically used to refer the participant that took part in the study in terms of numbers and the number (P 1) related to the different participants that responded to the interview, while the number of the respective quotes as generated from the coding follows.

#### **4.2.2 KNOWLEDGE AND UNDERSTANDING OF CONTRACTS**

The South African construction industry is diverse and well regulated. Within the municipalities, regulations linked to procurement and management of construction projects are commonplace. Of this, contracts and guarantees have been one of the key regulatory issues within the construction sector. Therefore, it was important to have an understanding as to whether the respective respondents who are senior in the management of the construction projects have a clear understanding and conceptualisation of contract.

For this, participants were asked to share their opinions on contracts in the South African Construction industry and the following were some of their responses;

- “In terms of knowledge and understanding of the contract neh....in terms of the knowledge and understanding of the contract, not in terms of performance” (P 1: 1.rtf - 1:30 -111:111)

- “..If I..., we have appointed..., the ones that I’ve worked with, the average, I would give them a six..” (P 2: 1.rtf - 1:30 -114:114)
- “They know they have to build the roads but they don’t have a realistic picture always of what is expected from them. So, I don’t think they have that perception of what contract are”. (P 2: 1.rtf - 1:30 -114:114)
- “I want to be honest, our own contractors that we appointed, they seem to have an even better knowledge than project managers that are managing them and I think that as I have picked up in my own unit, to be frank, and honest that it looks like ... “(P 3=2: 1.rtf - 1:30 -115:115)
- “In fact in one of the meetings, I recommended that we need to introduce contract management and training of project managers on project management” (P 4: 11.rtf - 1:30 -116:116)
- “They don’t seem to have an idea. Some of the things they would say that they will get from the contractors” (P 5: 1.rtf - 1:30 -117:117)
- “We end up having a situation where a contractor has to manage a project manager. But to me in our unit, I think maybe it’s a capacity issue because, in our unit, we have quite multiple contracts” (P 6: 1.rtf - 1:30 -118:118)
- “But when you sit and engage on the issues around project management, you realise that they don’t seem to have sufficient capacity or understanding of contract management so that they are able to manage contractors”.
- “..in my view, our contractors seem to even be better than our own project managers in terms of understanding. Better than the officials” P71: 1.rtf - 1:30 (119:119)

The findings indicate that most contractors had scanty knowledge and information about contracting. While it was clear that many had been engineers and project managers for that matter, their understanding and interpretation of contract before and during the process has a lot to be desired. Although, it was common for many to have a better understating of what is expected from the contract itself than most municipal project managers.

This is in conformity to findings revealed by Watermeyer 2010:5) that pointed to the lack of proper understanding of tenders and the tendering process thought-out the procurement process as well their shallow knowledge of contract management. The study reveals that many have had to outsource manpower, rely on family and friends provide the most significant relationships for micro-business assistance, particularly during start-up, and are the main source of information during the start-up process and heavily outsource project management frequently.

Furthermore, the findings are in agreement to Kujawa and Prinsloo (2013:12) that stressed that a lack of knowledge on the availability of information or the perceived contracts properly more often leads to legal remedies. This is corroborated by the findings above and suggests that the frequent poor understanding of contracts and information for owner/managers requires education and training to be made available to the wider community rather than just targeting individual project owner/managers.

#### **4.2.3 CAUSES OF POOR PERFORMANCE OF THE CONTRACTORS**

Some literature in this study alluded to the views that the South African construction industry is frequently engaged with substantial and extensive projects which regularly turn out to be extremely big and complex, making it impossible to realize timelines, quality, management of risks together with inconsistent providers can plot to make it hard to manage and achieve results. Regardless of the performance contract and guarantees which is at the canter of this study, Chapter 2 also revealed that the

multifaceted nature of challenges in the management of construction contractors as well as projects by most municipalities difficult.

For this, participants were asked to share their sentiments on the causes of poor performance of contractors and the following were some of their responses;

- “I think many of the times they are over-committed, most definitely”  
(P 1: 1.rtf 1:30 - 40:40)
- “they are over-committed. I base this on the last three contractors that we had, I think they were over-committed” (P 1: 1.rtf 1:30 - 42:42)
- “because of commitment and other projects, they are neglecting their own appointments, chasing volumes of work” (P 1: 1.rtf 1:30 - 44:44)
- “the lack of internal knowledge in that expect and another cause which is very relevant and I don’t know how relevant it is, in other municipality but in our municipality it is interference by the community where the contractors they have to use people from the community you find that want they want from the contractor is more than what the contractor can give and provide or provide (P 8: 6.rtf - 8:2 -74:74)
- “I think in this country we have many contractors that are registered with the CIDP and I think there’s stress there, there’s not a proper control of how many appointments are being awarded to these registered contractors. and I think they are just stretching themselves too far, too greedy too quickly” (P 1: 1 rtf 1:30 - 50:50)
- “And that’s the reason that they struggle actually to give the performance guarantees is they don’t believe that they can finish projects with managed risks”  
(P 1: 1.rtf 1:30 - 51:51)

- “Some contractors are not in a position to be able to finance the job up until the specific payment and then also so another problem we sometimes find is experience lack of experience in the contractors not necessarily familiar with the type of standards” (P 2: 10.rtf 1:30 - 108:108)
- “Currently I have experience in the BRT division and I still repeat that the main cause is lack of performance or contract management on the part of the project managers that are responsible for the project” (P 5: 17.rtf 1:30 - 200:200)
- “the officials are adding to the poor performance.. poor business management, no financial planning and a lot ....” (P 4: 15.rtf 1:30 - 198:198)
- “If a contractor fails to meet a deadline, our project managers will come and seek an extension but I'll say to them no, you need to tell me what the reason for that extension is. If the fault is on the part of the contractor, then there are penalties or the contractor must be asked to accelerate to work over weekends at the cost of the contractor not at the expense of the municipality. But they are not able to ensure that these things are carried out. Instead, they would then have an extension. So, there is a lack of understanding and capacity on project management by officials” (P 6: 19.rtf 1:30 - 208:208)
- “Most contractors do not have start-up capital, they don't have the financial muscle and lending institutions are not willing to help out contractors. Some of them have bad credit records. Some of them have bad financial management skills. So, there are various reasons why they don't. The main thing it boils down to is mismanaging or mishandling of finances when they have money” (P 9: 20.rtf 1:30 - 228:228)
- I think it's community involvement in the alignment of resources, problems of delay on labour and the complexities around having to incorporate local labour and ...and others as well as the requirements of supply. I think it will be



complexity and there are some that apply for jobs and they might not quite have the capacity to deal with at the same time. (P 10: 21.rtf 1:30 - 230:230)

The responses point to a number of issues that had been similar and broadly articulate by most respondents. Ranging from start-up capital shortages to individual contractors' poor business and finance management set up. The issue of poor project and risk management is also prominent in the respondents. It was also observed that many contractors had been over-committed to several projects which do render contract management difficult. For some, the lack of experience in a large project has been an on-going problem even when legislation is clear for them to be given opportunities.

These findings demonstrate the criticality of the constraints within the construction industry in South Africa in agreement with Dlungwana et al., (2012:12), with referencing common quotation from the participants, it is important to note that the construction industry is highly saturated and growing daily. While industries look to guarantee stability and are watching the bottom line, an upward trend is fuelling demand for construction projects.

The challenge emerging in the construction market is the availability of candidates with the desired skill sets, as shortages are prevalent throughout most lines of functions. Unfortunately, the employers and employees, however, are not investing the necessary time required to source and later on train candidates with the appropriate backgrounds, which is generating competition within the market for the same skilled employees. In procurement, indirect spend experience is highly sought after, as financial services continue to hire and the public-sector places increased emphasis on the profession (Gewe, 2009:12). Construction and facilities-based commodity experience are also in high demand, creating a need for strong skills in managing complex contracts for large builds and engagement with third-party construction businesses.

Furthermore, the findings above must be an area of concern, as the presentation skills and ability deficiency, which most companies do not seem keen to address as raised by a number of participants as captured in their own words above. This speaks to a potential limitation on the execution of the key supply chain and construction-based areas in general (De Louw, 2009:19). In the event that administration is not keen on learning and development as a key lever, it is important to view the information labourer's position as focal in the organisation. Analysis has demonstrated that most directors have a small comprehension of how individuals identify with data and relate to contract -based information, subsequently, observed tendencies to concentrate on useless system arrangements, neglecting to perceive the significance of the better Knowledge Management of contracts

Observations also seem to agree with Bendix (2009:21) that the construction companies appear to have ignored the development in the construction supply chain, resulting in poor overall knowledge and skills within their organisations. Most major players have only commenced with the process of introducing strategic sourcing into their organisations in the past decade. This has however not had the desired impact, mainly due to resistance from within. Their structures have remained one in which operational staff including quantity surveyors, estimators, contracts managers, engineers and site managers have greater influence over procurement activities than do traditional buyers, who remain administrative in nature (Branch, 2010:9) and Cosser (2010:16). Without a management paradigm shift, strategic sourcing will continue to fail. They have however not as yet realised the implications of having a visible, functional and streamlined construction system chains which controls inbound and outbound logistics as well as inventory and procurement. This implies that the existing systems remain disparate and open to fraud and corruption and or practices which are not adding value to the organisation. Traditional buyer skills remain poor, with higher skilled individuals being side-lined and therefore unable to add value.

The continued focus by construction companies on operations, without realising the full impact of a supportive construction chain remains a mystery, and overall, the sector

requires a culture shift. Current practices remain archaic and non-value adding. No wonder Cheng, Esener, King and Larsen (2014:12) pointed out categorically that in order to effectively understand the shortcomings of present supply chains, both buyers and line managers need to be able to understand the role of a contract project management within an organisation and must be able to buy into the concept. Given the historical practices, no wonder Chenget al., (2014:12) emphasised that the inherent culture, the incestuous nature of movements from one company to the next, and the inability of new blood from outside of construction to influence or impact thinking, there will never be a view within the operation that supply chains can add value or are necessary. Given this backdrop, normal change management strategies will not apply- these are changes which need to be forced onto the organisation from top management in order to succeed. Traditional consultative change management methods have clearly failed in some organisations.

Not surprising from the findings relate to the latest publication about talent management and the skills shortage In PwC's Annual Global CEO Survey (2015), where more than two-thirds of CEOs, senior and middle managers in the construction industry expressed extreme concern about their access to key skills. Additionally, 70 percent show apprehension about increasing workforce costs in high-growth markets much as 62 percent have not even attempted to make up-skilling the workforce an internal business priority.

Shortage of staff know-how not only affects a company's capability to compete for and complete contracts but also adds to the growing risk it faces in the management of key task whose success is system aligned. Similarly, staff retention should be critical to the sustainability of a company yet the study shows the massive movement of staff across the top ten construction companies.

#### 4.2.4 MUNICIPALITY AND WAIVING OF PERFORMANCE GUARANTEE

In this section, many respondents seemed to have an idea of what Performance guarantees are. The common denominator in this was that guarantees are required from contractors to guarantee the performance of a particular contract. For this, participants were asked to share their sentiments on whether a municipality can afford to waive performance guarantee and the following were some of their responses;

- “I don’t really see the value in deducting retention fees from the contractors but as soon as we have latent defects, that is the only method of keeping the contractor accountable to come and finish their job”(P 1: 1.rtf -2:10 -55:55)
- “I am talking more about new entrants – emerging SMMEs. Those are contractors that I can agree for the Municipality to waive performance guarantees” (P1: 1.rtf - 1:74 -125:125)
- “I would say yes definitely. As mentioned in the previous questions, we will not have a full commitment from a contractor. There will not be the security for the city to know that we have a hold onto the contractor and especially after completion, releasing the performance guarantee then I have my retention at least for if there are defects”. (P 1: 1.rtf - 1:59 -82:82)
- “My experience is that with the experience of the contractors, you sit with the bigger risk of defects in a short period so quality of work is already for me a concern because we try to develop emerging contractors and by meaning emerging contractors, meaning they are learning and they are not fully experienced” (P 1: 1.rtf -2:10 - 83:83)
- “in actual fact, I think the risk is bigger on emerging contractors than on well-established contractors that have a good track record for many years” (P 1: 1.rtf - 2:10 -93:93)

- “by reducing the guarantee, I give him an opportunity to have cash flow but if he doesn’t have a proper bank rating to state that he has this cash and then also proper records that he is not overstretched with 20 other projects on the bank rating” (P 2: 10.rtf - 2:10 -125:129)
- “sometimes some entrepreneur in a business that they want todo construction work but they don’t necessarily have the capital cash flow available whatever to start-up eh big projects or start-up construction work necessary so they might have the skills to do the work physically but they do not necessary have the financial backing” (P 2: 10.rtf -2:10 - 2:3 - 131:133)
- “project you need to go lease equipment and whatever and if you don’t have the financial backup to do that you might end up sitting in a problem not being able to start to work” (P 2: 10.rtf - 2:10 -183:184)
- “I think it will definitely affect municipalities as I mentioned, basically all the risk of the municipality” (P 2: 110.rtf - 2:11 -189:191)
- “Basically, all the risk his putting on the municipality and none of the risks is put towards the contractor so eh yes I think it will definitely help the municipality” (P 2: 10.rtf - 2:12 -204:204)
- “contractor that really his aiming to be a successful contractor and he doesn’t have the necessary capital now to start up a project you definitely assist the contractor” (P 2: 10.rtf - 2:13 -204:204)
- “I think for eh it might have a benefit but also it also has a negative effect on some of the contractors “(P 3:1.rtf - 1:48 -60:60)

- “if the municipality is gonna waive performance guarantees, I will question the commitment of the contractors of this project” (P 4: 1.rtf - 1:49 -61:61)
- “if they are awarded a better opportunity to go, cause then there’s no limit for them on the stretching to put cash flow” (P 5: 1.rtf - 1:50 -61:61)
- “I think the contractor will be awarded too many contracts... which will put you at risk at the end as a client. So, I think the commitment - it will be a lacking commitment and there will be an over-commitment, where the contractor stretches himself so far cause it’s a means of controlling them to have a certain cash flow and they can commit themselves through that” (P 6: 1.rtf - 1:51 -62:62)
- “Basically, it’s like a tool, it’s like a tool that we can use to avoid contractors having too much work” (P 7: 1.rtf - 1:52 -64:64)
- “it’s a multi-purpose thing but on the other hand, if I ask a person to commit himself on a project and for some or other reason he cannot perform, then there is at least a cover for the city” (P 8: 1.rtf - 1:53 -64:64)
- “I am working 23 years, it has never happened to me before, it was never necessary to call up a performance guarantee ever except where a contractor was liquidated.” (P 9: 1.rtf - 1:54 -67:67)
- “Probability of having this risk is very small but the impact of it, if it happens, the city will be at risk. So, I think this is a good guarantee for this” (P 9: 1.rtf - 1:63 - 91:91)
- “Yes, they can. It is possible, but I am just of the opinion that it shouldn’t be done that way but yes, it is possible.(P 10: 1.rtf - 1:63 -91:91)

- “Maybe it has to do with both the contractor himself knowing very well that there are capacity constraints on their part” (P 10: 1.rtf - 1:63 -92:92)
- “I think the rating of the contractor is bank rating and his financial state is also very important to show us that if there should be a direct benefit if I reduce the guarantee but he doesn’t have anyway cash, it’s not gonna even help the contractor.”(P 11: 1.rtf - 1:63 -92:92)
- “We must understand that a performance guarantee ties up your cash flow, which means that you reduce the capital that you have to work with. So, it could well be access to finance and having a strong enough balance sheet for the work that they need to do to be able to get a guarantee.”(P 11: 1.rtf - 1:63 -93:93)
- “I do see value in that, in a way it enables you, and that when there are problems with the contract or with the delivery of the project itself, you can always fix whatever latent defects from the retention that had been kept. But you still then have to prove the capacity of those that are project managing the contractors” (P 1: 1.rtf - 1:63 -94:94)
- “I think they cannot afford to waive this because any performance agreement...you know..., ensures that a contractor is able to deliver and obviously before you appoint, you may have qualified through the procurement process, but now the project is here...so you need to be assured by way of whatever means that the project will be delivered. So, if we waive it and we appoint, then the project does not get delivered on time, then there’s a problem “(P 1: 1.rtf - 1:64 -91:94)

With regards to the performance guarantees, it was a common observation of the undoubted role of such, much as it could be managed differently depending on the nature of the contract and clients. Most respondents seem to agree that waiving of performance guarantees or retention fees might have slightly different effects between

the two. Performance guarantees often are the only mechanism for ensuring that the project gets completed in the first place.

Mixed responses had also been generated. Some respondents mentioned that performance guarantees stand because most municipalities cannot simply manage properly all project risks associated and thus is the only way to safeguard against shoddy and poor workmanship. However, they mentioned that with proper systems in place, it was possible for both parties to understand contract terms and well as related performance guarantees for it to be waived. Some mentioned the use of insurance guarantees paced within a given time so that small contractors are not affected. Other mention of proper project management control that addresses all these aspects so that poor workmanship never happens. For example, quality control, risk management, evaluations and appraisals.

#### **4.2.5 MUNICIPALITY AND WAIVING OF RETENTION FEES**

Retention fees in many respondents' words carry similar context as money that gets retained from the claims made by the contractor for a purpose of future latent defects in case in the future there are defects after the contractor has left site. Most agree to the need to be able to at least utilise such retention to fix whatever issues. Retention would be a certain amount of money which is taken from the invoice of a contractor, usually up to five percent which is held until the contract has been fully performed and until has been fully completed. It's only released then. So, it's an amount which is held as well, to ensure that the contractor performs and that he makes correct of any defects within the period that he's supposed to.

For this, participants were asked to share their thoughts on if the municipality can afford to waive retention fees and the following were some of their responses;

- "retention fees are just to cover myself or not to cover myself, the client, if there is any latent defects to have some sort of control over the contractor to take



liability for latent defects". (P 1: 1.rtf - 2:13 -73:73)

- "if we would not have had any retention, I believe the city will be in a challenge to force or keep the contractor accountable to come and correct the latent defect". (P 1: 1.rtf - 2:13 -78:78)
- "forme it is a stronghold for the client to have on his contractor do it. The amount or the size of that we can perhaps" (P 1: 1.rtf - 2:13 -78:78)
- "could be a flow or scale on that depending on the size of a project" (P 1: 1.rtf - 2:13 -78:78)
- "If that contactor does not have the cash to provide the city with the guarantee, then he is also not gonna have start-up cash, but he can do a loan or he can have a lesser commitment with the guarantee so if he split it half at least, there will be a little bit of cash flow" (P 1: 1.rtf -2:13 -91:91)
- "okay there might be positive and there might also be negative, the positive eh the value it definitely it will assist contracts or maybe contractors to get participate in projects and to do some construction work and to start project so that might positive to that as well but then also I want to go to the negative side" (P 2: 10.rtf - 2:13 -139:141)
- "the municipality so to assist somebody that is not set out to be a contractor that might be might cause some problems for you" (P 2: 10.rtf - 2:13 -143:145)
- "I would say but eh definitely there are benefits if you eh assist the contractor" (P 2: 10.rtf - 2:13 -148:149)
- "I mean that you the council is basically gonna sit with a big risk because if the

contractor let's say start up with the work eh maybe it's a main road and his company starvation is not in a position to complete the work you got no eh finances available to at least make safe again or whatever so I would say to waive it in total I don't think it's a good idea" (P 2: rtf - 2:13 -156:156)

- "but we must definitely look at maybe alternative how you can accommodate some the contractors maybe to afford a guarantee to minimize your own" (P 2: 10.rtf - 2:13 -158:160)
- "contractor that really his aiming to be a successful contractor and he doesn't have the necessary capital now to start up a project you definitely assist the contractor" (P 2: 10.rtf - 2:13 -204:204)
- "I think for eh it might have a benefit but also it also has a negative effect on some of the contractors" (P 5: 10.rtf - 2:13 -274:274)
- "They can afford to do that. But at the same time, like I mentioned previously the reason why I think this tool is effective, is so that we ensure performance and we ensure that the contractor makes correct of the defects within that particular period. Because contractors do run away and abandon sites". (P 6: 10.rtf - 2:13 - 104:104)
- "yeah., I think so. It will affect municipalities in that the delivery of projects may not serve the purpose that it's supposed to serve" (P 2: 10.rtf - 2:13 -204:204)
- "I think they cannot afford because you know a project..., every construction project, you may never know what will happen within a particular period after it has been completed" (P 7: 10.rtf - 2:13 -204:204)
- "A building that's constructed within 6 months or eight months then there's cracks. That's what that retention money will be utilised for. So I think it still

works” (P 9: 10.rtf - 2:13 -204:204)

- “Yes, I see value because we actually use this as collateral in cases where many contractors have abandoned the site. But if you have some form of collateral or guarantee which we can hold against him, he’s likely to perform. So yes, I think it does help” (P 16: 10.rtf - 2:13 -304:304)
- “Yes, they can afford to waive performance guarantees. Municipalities can actually afford to do that. But the one reason why I think it should actually continue is per guarantee or ensuring performance by these guys. Many contractors abandon projects. They run away, they abandon sites, they don’t perform. So holding them financially is one of the reasons or is one of the things that is much more effective”. (P 12: 10.rtf - 2:13 -114:114)
- “It will not really affect the performance. It will not really affect municipalities. Because municipalities, after all, they do have budgets for these projects that they plan. So, they are not really in need of any financial resources from contractors. So, the only one of the few things I think is effective is that they are able to have something strong to hold on these contractors. But yes, they can afford to waive I think”. (P 12: 10.rtf - 2:13 -114:114)
- “It will contribute to contractors in that when you don’t retain fees, it means they will improve cash flow and issues of guarantees. They don’t have to guarantee you anything, So, hence there won’t be any delays in terms of delivering guarantees and in their claims, they don’t have to keep any retention, therefore their cash flow will improve” (P 13: 10.rtf - 2:13 -204:204)
- “Retention fees are crucial to ensure that, firstly in terms of that, there is an incentive to ensure that there is good quality and if there is rectification, that it will be done and if it’s not done then there is also availability to be able to call on that to appoint someone else to do rectification work” (P13: 10.rtf - 2:13 -204:204)

Similar to performance guarantees, retentions fees had been popular throughout the interaction with the respondents. the overwhelming view is that municipalities need to manage the risks associated with the projects over the time and the only way that can be ensured is to have retention fees. This is some fee that they can fall on whenever project risks arouse, more especially related to shoddy works. Retention fees definitely will be an effect because there is a need for ensuring maintenance quality and financial return. The However, there are also strong views that if the project and entire processes are well managed, municipalities can indeed waive performance guarantees as well as retention fees. There are incidences where SMME have indeed limited finance surety from the banks, and also that inadequate cash flow that would easily imply automatic exclusion which is in line with observations made by (Jurgens 2010:31).

Respondents in numbers mentioned that in theory, retention encourages efficiency and productivity for the construction project. It helps ensure that contractors achieve practical completion on a timely basis so their initial retention payment is released. The use of retentions also acts as an incentive for a defect-free project at the end of the defects liability period. However, as well as the administrative time involved in managing and recovering retention payments, suppliers can experience a drain on working capital and inflated bad debt, compounded by issues such as overdraft fees and limited access to finance as a result.

There is some evidence from a study that contractors deeper in the supply chain may be more inclined to write off retentions: in some cases, because the work was priced to offset the retention costs; in other cases where companies were keen to maintain good working relationships with the main contractor and win future work.

#### **4.2.6 MUNICIPALITYANDSTART-UP CAPITALTOSTRUGGLING CONTRACTORS**

The common view is that South African construction industry is saturated with a large number of large companies as well as SMME competing for a lot of projects. The MFMA, however, does not draw the line on aspects of start-up capital for struggling companies. There were also aspects of the understanding struggling firms either in capacity or finance terms as that may not guarantee to start up.

For this, participants were asked to share their opinions on contracts in the South African Construction industry and the following were some of their responses;

- “small contractors to provide them with capital for the procurement of equipment and that was about seventeen years back”. (P 1: 1.rtf - 1:65-97:97)
- “the contractors would not be able to do the contractor development programme, which I feel made that thing successful. It did help them in that sense”. (P 1: 1.rtf - 1:66 -101:101)
- “the biggest challenges for contractors, is to obtain plant - might be one but the hiring of the plant, but on the other hand also to have accounts with suppliers and by means of doing so” (P1: 1.rtf - 1:72 -120:120)
- “The city should structure a tender for emerging contractors to support them with sessions with suppliers”. (P 1: 1.rtf - 1:73 -120:120)
- “I myself am not in a position but if we have a contractor development programme, my mind says - help with start-up capital if we have a potential emerging already established contractors, which is still emerging”, (P 1: 1.rtf - 1:79 -137:137)
- “I think it will be a good proposal to put in there, but at this stage, there is no plan and no action”. (P 1: 1.rtf - 1:80 -137:137)

- “eh I’m not I’m not aware of eh any start-up capital that was provided at the beginning of the project” (P 2: 10.rtf - 2:14 -216:217)
- “expect maybe in some instance maybe in the provision certain material budge by eh in any emerging contract development program” (P 3: 10.rtf - 2:15-233:236)
- “if you have got a business program like the helping part emerging contractor development program eh to assist some of the contractors there eh I think it will definitely be something for the municipality to be able or to have a look at” (P 12: 10.rtf - 2:18 -237:244)
- “I think it’s going to be a risk for the municipality because eh if you look you must definitely define which project will you here make this type of eh program and which will be a normal conventional because the normal conventional eh if you have to provide funding to start-up of a project eh you are already a risk on your side because you then you also already acknowledged that the contractor is not fit is not on his own finances being able to start up the project so there’s already a big risk” (P 9: 10.rtf - 2:19 -256:258)
- “Providing certain payment methods for your performance guarantee then also maybe assisting the contractor by providing certain materials or whatever from council side” (P 9: 10.rtf - 2:19 -256:258)
- “This would almost be acting like a financing body which I believe the municipality is not. I just think that if it falls around providing start-up capital if not linked to a project, it might be a bit much to overcome” (P 16: 10.rtf - 2:19 -256:258)
- “No, I don’t think it’s worth it because the reason being that, they’ll have to provide customer capital for everyone and municipalities are not in a business of

paying people money upfront to do certain works. And with the history of contractors especially emerging contracts, contractors have very little knowledge more so that money will actually go down the drain. It will get wasted and we know how small contractors - how they mismanage funds. It may help to a certain few, but I think for the majority, it will be a bad thing to have" (P 9: 10.rtf - 2:19 - 256:258)

- "Yeah, I think so in that upcoming...struggling contractors...or newly introduced contractors. I think it is necessary for empowerment purposes to help those..." (P 10: 10.rtf - 2:15 -217:217)
- "that would be one way of empowering up and coming contractors" (P 2: 10.rtf - 2:16 -219:220)
- "I don't know about struggling...Does struggling refer to established that are now struggling? That I won't agree. But if it's about struggling up and coming contractors that are new in the industry, yes municipality and actually government needs to provide them with start-up capital to empower them" (P 12: 10.rtf - 2:16 -219:220)
- "For instance, you might find contractors that have been working for five years and they have been getting contracts, construction work in the municipality. But they are struggling - so their struggling might not have to do with retentions and guarantees. Maybe it has to do with the management of their business. Management of their affairs. There are contractors that get projects and they go spend the money, instead of investing back in their businesses" (P 12: 10.rtf - 2:16 -219:220)

Regarding start-up capital, mixed views were captured regarding start-ups. The consensus is that there is no start-up capital of any nature. Many though agree that it would have been ideal to have such a fund, to for struggling companies for emerging

ones. It may be capital towards equipment and working capital. Those are two kinds start-up capital that is key. Because for a start-up to work you must have the equipment, whether it has been bought or hired, you must have the equipment. But there must be enough capital to can have the equipment to start a project as well as working capital for payment of whatever they may need, working capital that will be cash that will be needed for whatever it is. Like in the case of material. Many small and emerging companies that may have the technical knowledge would easily benefit from this.

Some responses agree that start-up project finance aims to get the project off the balance sheet of the sponsor. By doing so the funding that is required will be repaid from the revenues of the project only. It was a common view that service delivery has little space for experiments and start-up funds cannot be availed by municipalities, in any case, some municipalities are also struggling financially. However, there should be a record of contractors that defends any project. One prominent view was that in raising the start-up capital, a structure is required that is bankable. Complex contractual arrangements will tie down the rights and obligations of the different parties and allocate the risks between them. Findings also agree to the views of (Jurgens, 2010:31) that any project promoter seeking finance for a new project should preferably seek the services of a financial advisor to assist with the feasibility study of the project and appoint arrangers to raise the funding which becomes a costly exercise for the municipalities.

If municipalities are to issue start-up funding, a rigorous project preparation process will have to be undertaken to prove the merits of the project to potential beneficiaries. Financial close is the milestone in the project cycle that is reached when funds are secured. To get to that position the feasibility of the project and beneficiaries needs to be proven and the project contractual structure must be substantially in place.

A characteristic of the process is the involvement of a number of advisors on behalf of the sponsors and the lenders to provide advice on technical, market, financial, legal and other issues which many municipalities may not be able and willing to undertake. Later on, the lack of policy related to this. This does not, however, disregard the majority view



that financial support of some kind would indeed be relevant helpful to struggling contractors.

#### **4.2.7 STUMBLING BLOCKS TO START-UP CAPITAL TO STRUGGLING CONTRACTORS**

Access to finances is indeed big issues in most projects in South Africa. As was noted in the literature, Smallwood (2006:22) listed eleven (11) resources that when amassed by contractors, render them capable to perform within an active construction industry. Smallwood's articulation supports the work of Dulaimi (2002) in which the definitions of requisite contractor resources are listed as capital, management skills, other skills, having premises and facilities. Statistical evidence exists which suggests that the struggling firms to whom government's development interventions are targeted do not possess even half of these resources. Without these resources, struggling firms are rendered incapable to perform and in them not being able to perform they are consequently not competitive (Dulaimi, 2002)

For this, participants were asked their views on what the major inhibitors to start-up capital to contractors and the following were some of their responses;

- "If the contractor is struggling, then he can't provide the city with even a reasoning behind that" (P 1: 1.rtf - 1:70 -111:111)
- "So, I will not for a struggling contractor...no, for emerging contractors I will say there could be a benefit" (P 1: 1.rtf - 1:71 -111:111)
- "The start-up capital for the struggling contractors would mean that you are appointing contractors who don't have the capacity. So, if it's something of a progression part, where you say.... you start up small, you will be able to build a track record, then it would help if they have started up initially. But its medium contractors who would still need start-up capital from the municipality. It will be

difficult to guarantee that the project will be completed in time. So, the risk for start-up capital for struggling contractors who are mid-sized will be high” (P 7: 5.rtf - 7:14-196:196)

- “Contractors are appointed by the city and we have not done a pre...a pre-evaluation of the contractor’s capability in a sense of his financial rating, the city will put themselves in a predicament to simply issue start-ups”. (P 1: 1.rtf - 1:74 - 125:125)
- “I think most municipalities are performing in low capacity municipalities that are struggling with operational costs” (P 6: 4.rtf - 6:14 -131:131)
- “the unavailability of capital to be able to give the start-up capital can be one of the major drawbacks” (P 6: 4.rtf - 6:14 -131:131).
- “I think that the legal provisions are the minister of finance management is the biggest contracts, I don’t think conflict tree from the CIBD will form the condition of comfort that is supposed to be proper that is from the financial side” (P 6: 4.rtf - 6:14 -131:131).
- “There could be two things. You need to provide capital and a contractor may still not be able to deliver the project and it will be the whole blow to the city that’s affected for failure to deliver the project on time. But at the same time, having to chase the start-up capital that was provided to the contractor. You know that would be unfortunate”. (P 1: 1.rtf - 1:74 -125:125)
- “Our budget has always been married with the project that has been identified by our communities so you’ve got to deliver on those. So, I think with budgetary constraints” (P 7: 5.rtf - 7:10 -166:166)

- “The thing with municipalities is that they are not a profit-making company or organisation but, they are service rendering. So, if you’re gonna help or assist an emerging contractor financially, there must be some deliverables” (P 7: 5.rtf - 7:10 -166:166)
- “Contractors appoint Project Managers who are expected to draw up workable project plans and modalities for their implementation. A faulty plan will lead to delay in project completion. Most Local Contractors rarely have practicable work programs at the initial stage of project planning. Lack of appropriate work programs impairs monitoring of project progress against the stipulated time” (P 7: 5.rtf - 7:10 -166:166)
- “I don’t think there’ll be stumbling blocks there. Already the industry is..., already the market is over-saturated and people are hungry for these opportunities. So, providing start-up capital will only make the market bigger, while there’s little work to sustain the market. So, I think in fact, as it is already, the industry is in bad shape” (P 5: 3.rtf - 5:11 - 143:143)

Construction companies are both emerging and the not have serious constraints. The findings above points to the several issues as a stumbling block to better access to funding especially for struggling contractors. It can be said that the massive competition creates a survival situation for companies and some have been in the industry for so long. The absence of well organised and structured systems, as well as proper project plans, render such efforts futile. It is not strange for experienced companies with guarantees to not adequate funding released during relevant phases of projects’ execution. Milestones payments are not made on time due to organisational lapses or bureaucracy. Inadequate cash flow leads to delay in delivery of materials and equipment to the site and delay in payment of workers’ salaries.

Furthermore, participants observe that top management of firms involved in a project rarely commits themselves to mutual objectives. Thus, mutual objectives are not always achieved at project completion and profit sharing tends to be unfair. As Watermeyer

(2010:17) noted, that in the long-term relationships need to be promoted with its advantages, but such has not been the case as observed from the findings. The participants noted that 'reinventing' the wheel of past mistakes is not avoided as lessons learnt to suffer implementation problems. Performance measures on projects are not consistent, while performance reviews are not conducted, either formally or informally.

It is also clear from the findings that the implementation of management-based solutions has not had a justifiable positive impact on the construction industry and may not be an efficient solution when dealing with supply chains. Mabin et al., (2010:169) made the emphasis that the management-based thinking may even be repelling the movement into a performance-based environment. The research also conjectures that leadership-based solutions may be more successful. Leadership based solutions also include information-based solutions where decision making, management, and external control are lessened but supervision, independence and support increased.

It is also clear from the views raised by the respondents that there is a high level of entry into the construction industry by new participants interesting that may be considered unattractive to investors. This is because of the high number of competitors; similarity of offering, standardised through design in the traditional procurement system, meaning that the main focus of competition is price; high threat of new entrants as clients are not typically loyal, the lowest bid usually wins and there are low switching costs soon new projects new contractors are often used; high level of client bargaining power as there are few construction clients compared to the many service providers available to deliver projects. All of which act a stabling block to access to finance.

#### **4.2.8 INTERNAL POLICIES AND LEGISLATIONS**

Most respondents revealed that is was a clear need to support emerging contractors with caution but all municipalities did not have a policy in place on how that could be

handled. The only guiding framework if the municipal fiancé management act that only stipulated spending and procurement guidelines but not any internal policies to follow that regulate start-up capital to struggling contractors. Many agree that it is the issues like the Municipal Finance Management Act but the legislation at the moment doesn't allow for upfront payment for any service providers or contractors included. So that Municipal Finance Management Act must be looked at to make provision for such kind of contractors, to make sure that they are able to advance them. Because start-up capital is an advance payment but the MFMA doesn't allow for advance payment to service providers including contractors

#### **4.2.9 SUMMARY**

The apparent study shows an ambivalence towards the understanding of contracts, as well as issues related to guarantees within the construction industry in most municipalities South Africa. The study identifies numerous constraints to guarantees of which many companies are aware of, which forms the main rationale for the study. With the expected extensive use of subcontractors and suppliers in South Africa not slowing down in the near future, the management of construction projects is deemed to be vital to performance progress and profitability in the sector. The research strategy adopted the qualitative approach and therefore provides a vivid example of construction financing in practice in South Africa.

It was observed that management strategies that are synonymous with construction projects are yet to be fully assimilated in the construction firms because only the possibility of a long-term relationship and the availability of a database constitute the main management approaches that are presently used by the firm. The perception of guarantees in the sector is also sophisticated enough for it to become a means of driving performance improvement in the firm to lower levels. Nevertheless, the description and level of understanding of contracts and guarantees that were visible when interviewing the informants support the notion that there is a major need to adopt

a proactive instead of a reactive approach to contracts are managed by both parties within the municipalities in South Africa.

The chapter provided data presentation, analysis and interpretation for this study. Specific and succinct accounts from the participants have been presented from which understanding the underlying constriction within the construction emerge. The next chapter provides the conclusions and recommendations.

## **CHAPTER 5**

### **SUMMARY OF FINDINGS**

#### **5.1 INTRODUCTION**

This study was set out to assess the feasibility of introducing a system of providing start-up capital to contractors by municipalities as opposed to demanding performance guarantees and retention fees as is the norm in the construction industry. To achieve this aim, the study was guided by the following objectives;

- i) To determine the possibility of waiving performance security.
- ii) To investigate the feasibility of providing start-up capital to struggling contractors by municipalities.
- iii) To determine the possibility of amending current laws/regulations/policies to cater for an advance payment.
- iv) To propose a model that can be used to finance start-up firms in the construction industry by municipalities.

This chapter, therefore, is a summation of key findings from the study with specific attention to the themes that were generated during secondary data and primary data analysis. The secondary literature provides input to the primary research findings as it shares the assessment of current thinking against what is on the ground.

#### **5.2 SUMMARY OF FINDING FROM THE QUALITATIVE STUDY**

### **5.2.1 Knowledge and understanding of contracts**

Contract and bidding process are not easy to understand so much that is even challenging to renowned contractors. Remarkably, some respondents mentioned that most contractors have no idea what they are doing. As far as contracts are concerned, most contractors, even consultants have no understanding of what form the contracts are.

It was also clear of the anxiety and excitement that contracts generate. At some point when venture financing, at last, comes through, contractors, consultants and project managers alike are anxious for scoops to hit the ground. For contractors are hesitant to take part in what they see to be tedious contract transactions, and temporary consultants and project managers are frightful that in the event that they protest nonsensical contract terms, the work will go to another person. This is coupled with their sheer lack of understanding of common terms and conditions as well as negotiation skills. Indeed, this so prevalent that some managers from municipalities have a better understanding of what contracts entail and how to manage them than the contractors. The low level of skills and general poor organisation management makes the situation worse as was revealed in the next segment.

### **5.2.2 Cause of poor performance of the contractors**

The study identifies a number of challenges that many contractors face. These range from external and internal factors such as poor financial management, poor project management, and poor-cash flow, as some of the main cause of poor performance.

Respondents mentioned that municipalities are public entities and most projects are community projects with involvement. This call for the alignment of resources accordingly, which creates problems of delay on labour and the complexities around having to incorporate local labour as well as the requirements of supply chain and procurement. In summary, the following common causes of poor performance from the response can be segmented into two as follows;



Table 5.1 Major causes of poor performance of contractors.

People related limitation	System-related limitations
<ul style="list-style-type: none"> <li>• Poor leadership in key areas of systems</li> <li>• Deficient internal and external communication and information transfer.</li> <li>• Lack of coordination, collaboration and commitment between suppliers and clients within the construction supply chain.</li> <li>• Poor training of contractor's suppliers, subcontractors and workers.</li> <li>• Poor Financial Management;</li> <li>• Poor Planning;</li> <li>• Not enough resources allocated to the Project;</li> <li>• Late payments by the Client;</li> <li>• The main Contractor not paying Suppliers and Labours</li> </ul>	<ul style="list-style-type: none"> <li>• Complex tendering process.</li> <li>• Design problems (many changes and inconsistent information).</li> <li>• Inadequate management within the supply chain, mainly poor planning and control.</li> <li>• Inability to integrate the company's internal procedures</li> <li>• Lack of integrated information systems and electronic commerce linking firms</li> <li>• Lack of suitable organisational setup</li> <li>• Poor Financial records</li> <li>• lack of trust by Banks to Black Contractors</li> <li>• No Quality Management Systems in place;</li> </ul>

Source: Interview data

The table above is a summary of the major cause of poor performance by many contractors. Soundly though, some issues are worth the emphasis; the lack of experienced construction managers and the lack of internal knowledge of proper project management. This is worsened by incidences where some municipality interferes in projects due to its community nature. More often, the community where the contractors are having to use people from the community whose expectations are often higher than what contractors can afford.

### 5.2.3 Municipality and waiving of performance guarantee

The findings in this section portray mixed perceptions. There are views that municipalities can indeed afford to waive performance guarantees. But the one reason why performance guarantees should actually continue is per guarantee or ensuring performance by contractors. It has been common for many contractors to abandon projects, abandon sites and fail to perform at all. So, holding them financially is one of the reasons or is one of the things that is much more effective to ensure compliance.

The other view is that performance guarantees will not really affect the performance of many contractors nor the municipalities. Because municipalities, after all, have budgets for these projects often plan accordingly. So, they are not really in need of any financial resources from contractors. The only one of the few things that are effective, is that they are able to have something strong to hold on these contractors.

It is also understood from the findings that a performance guarantee ties up your cash flow, which means that you reduce the capital that you have to work with. So, it could well be access to finance and having a strong enough balance sheet for the work that they need to do to be able to get a guarantee. One memorable observation was the agreement that municipalities can waiver retention, however, retention fees must always be imposed so as the contractor can take ownership and commitment to the Project if they know that there's still monies kept by the Municipality.

#### **5.2.4 Municipality and waiving of retention fees**

Similarly, the basis for holding retentions is thought to be to act as an incentive for the contractor to complete any remedial work that may be required after substantial completion of the project and handing over to the client. If the contractor is unable or unwilling to complete remedial works in a timely manner, the client is in possession of funds to enable that work to be carried out by others.

Municipalities can also afford to waive retention fees according to the findings. But at the same time, the reason is this tool is effective, is so that ensures performance and municipalities ensure that the contractor makes correct of the defects within that

particular period. Because contractors do run away and abandon sites. It was a common view that retention fees are crucial to ensure that, firstly in terms of that, there is an incentive to ensure that there is good quality and if there is rectification, that it will be done and if it's not done then there is also available to be called on that to appoint someone else to do rectification work.

Almost all respondents agree that retention fees are a reliable method because there is a contract and there is a performance that needs to be ensured and then there's also rectification of works. There is always a danger that when the job is partially done and the contractor leaves or a project is not finished it becomes a bit difficult to even get a contractor to complete. Nonetheless once a project is complete when the workmanship was not good as seen over a one-year period, such retention fees come to rescue. So, retention fees ensure that the work that is done is of good quality and durable and that there remains an obligation at least for that period scheduled for the one year or if it is poor workmanship is discovered within that one-year period, such can be fixed.

Many respondents also agree that waiving of retention fees would lead to inadequately financed contractors would be forced out of business. Contractors would be more inclined to award subcontracts considering more than just the lowest cost. Furthermore, contractors would be obliged to take responsibility for engaging sound and competent subcontractors. More professional subcontractors as head contractors became more selective, less financial damage from construction company failures.

Some respondents, however, see an opportunity that such retention fees can be waived. However, there is need to look at any policies that can propel such. Most municipalities agree that to have cession with contractors. Such cession assists a contractor with finance to buy material as a start-up and then you can deduct that money from the payment certificate. This is the kind of support needed to replace retention fees as well as addressing the start-up finance shortage.

### **5.2.5 Municipality and start-up capital to struggling contractors**

There is an overarching agreement from the findings that access to start-up capital is serious constraint especially if retention fees and performance guarantees are in question. There is a common view among respondents that it not worth for start-up capital as municipalities have to provide capital for everyone and municipalities are not in a business of paying people money upfront to do certain works. Furthermore, the history of contractors especially emerging contracts, some contractors have very little knowledge more so that money will actually go down the drain. It will get wasted as some small contractors have been known and proven to mismanage funds. The start-up capital may help a few but in the long run, largely unsustainable.

The contention against start-up capital is because it is against legislation and also the fact that the Municipalities are not banks and do not have the know how to manage to start up financing. Business Development areas of banks are best suited for this. This will give rise to Audit qualifications. In addition, struggling is temporary, contractors should be properly trained through available programmes to grow and become competitive in the future. Furthermore, the Capital used by the municipalities is a public purse which needs to be utilized in an accountable and transparent manner and minimizes the risk of abuse.

However, some findings agree that indeed start-up capital much as had been abused by some and risky, as it related to first-time constrictors, there could be a form of programme to test and appraise the contractor, they will be able to pass off on projects. Some respondents also note that there is also an incubator programme for Economic Developments that liaise with banks, but not direct funding from the Municipality.

Another option revealed in the findings is that minimal start up for specific projects is possible, however, it must be closely monitored and provide mentorship programmes to the emerging contractors. It should not be paid directly to the owner of the company account. It should first pay material, labour, plant, etc. Only then, the profit will be paid to the owner's account. Funding for capital, material and labour, provided that they have

undergone a mentorship programme, and it should be paid directly into the suppliers and labourers account is an option.

#### **5.2.6 Stumbling blocks to start-up capital to struggling contractors**

Responses in this section are closely linked to section 5.2.2 above. However, the lack of funds and mentorship Programmes are some of the major stumbling blocks is that the demands are always high and the budget does not match them. Contractors are short of the better project and financial management and as such most of time misuse the privilege and not deliver anyway.

Findings also show that start-up capital for the struggling contractors would mean appointing contractors who don't have the capacity. So, if it's something of a progression part, where they start up small, be able to build a track record, then it would help if they have started up initially. But its medium contractors who would still need start-up capital from the municipality, it will be difficult to guarantee that the project will be completed in time. So, the risk for start-up capital for struggling contractors who are mid-sized will be high.

There is also a view that most municipalities are underperforming and the majority are struggling with operational costs. So, the availability of capital to be able to give the start-up capital can be one of the major drawbacks. The financial format would need a policy and adopted policies. The council must have adopted policies that say we will support and that the method of support should be defined. The MFMA provisions would be used to give a loan to a contractor who was supposed to do the work for you.

#### **5.2.7 Policies and legislation linked to start-up capital**

Apart from the MFMA, there is no clear policy to support emerging contractors. Most respondents pointed out the absence of any policy internally that strongly supports and holds that need to provide start-up capital currently. To some respondents, a review of the current Procurement Regulations relating to tendering would identify policy options for capital. The Municipal Finance Management Act would be a definite as well as dialogue with CIDB practices to identify any form of policy of financing.

The industry is known to be maverick in nature, with the concept that management will do whatever it takes to deliver a project on time and within budget. This creates an environment not conducive to operating within structured policies and processes. An environment of this nature will result in a lack of control and effectiveness and governance is lost. Policies and process are necessary for any company, and compliance to same is instrumental in ensuring on-going effectiveness and success.

### **5.3 SUMMARY**

Responses from the major role players in the construction sector confirm the importance and the role of funding and contract management in the construction industry. A good number agrees that proper contract knowledge, understanding of guarantees and general construction project management is vital for construction project success. This assertion is based on experiences gathered on construction projects executed within the years that they have been in the industry with views that if it were to be done differently, most finance obstacles within the sector would have been dealt easily. The next chapter presents the study conclusions and recommendations

## **CHAPTER 6**

### **CONCLUSION AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION**

The purpose of this final chapter is to stem out sound and coherent conclusions and suggest suitable recommendations to address the issues raised as study objectives. This final chapter of the study that draws to conclusions derived from the study. These conclusions are split issues of start-up financing and waiver of guarantees as well as limitations within the construction industry. The classification of these conclusions and recommendations are presented in this chapter.

#### **6.2 EMERGING THEMES**

##### **6.2.1 Performance guarantee and retention fees**

In theory, performance guarantees and retention encourage efficiency and productivity for the construction project. It helps ensure that contractors achieve practical completion on a timely basis so their initial retention payment is released. The use of retentions also acts as an incentive for a defect-free project at the end of the defects liability period. However, as well as the administrative time involved in managing and recovering retention payments, suppliers can experience a drain on working capital and inflated bad debt, compounded by issues such as overdraft fees and limited access to finance as a result.

##### **6.2.2 Start-up financing**

Much as municipalities are sceptical of the nature and model of funding, and that it is also none extent, this will provide much-needed assistance to emerging Contractors.

However, an intense mentorship in terms of Financial Management and Project Management will be needed so that the Municipality can rest assured that the funds they are putting in yields positive results

The main limitation of this study is that the literature reviewed regarding start-up financing is scanty and is mostly old and it does not provide any evidence of how the changes in approach have taken place with the passage of time. There have been changes in the preferences of the start-ups over the last decade. Furthermore, after the recessions, the situation has changed to a greater extent where especially Bank-based financial systems have to counter numerous challenges. Therefore, the situation can vary along with the required options of finance for the start-ups.

### **6.2.3 Obstacles faced by emerging contractors**

On a first or shallow view of the construction industry, one might get the mistaken impressions that it is a well organised and smoothly flowing operation, carefully organized to accurately interface one with the other, and all cast or controlled in a sort of absolute setting. Nothing could be farther from the truth. There are arrange of obstacles most of which impact on contracts are both external and internal. Flexibility, attitude and action are prime prerequisites for continued success in the industry. The possibilities for variations of personnel and resources are infinite. Constant change is an occupational hazard of the whole business.

Close co-operation and collaboration between the municipality being the employer, the Contractor within the framework of the contract, with a mutual desire to produce a satisfactory product by well organised, safe and efficient methods, will reduce to a minimum the risk of delays and misunderstandings. When mistrust and lack of confidence occurs, trouble may arise and a contract may run into difficulties. No wording in the contract can prevent this from happening if one or both of the parties or the contractors fails to perform his duties under the contract responsibly and correctly.



#### **6.2.4 Policy and legislation**

There seems to be room for policy and legislation that would give way for start-up financing with precautions. The CIDB, which is allowed in terms of national legislation to regulate construction procurement in South Africa, is a Schedule 3 entity to the PFMA and is therefore obligated to do so in accordance with section 217 of the constitution. The procedures used to award government construction contracts overall appear to comply with section 217(1). The qualification criteria for contractors who perform construction works contracts appear to be equitable, transparent, competitive and cost-effective.

However, the Regulations governing the pre-qualification of construction works contracts only, therefore, the criteria for supplies and services contracts remain unregulated. As an organ of the state bound by the Act, the CIDB obligates and implement its preference policies in accordance with the framework in the PPPFA. The general Codes of Good Practice for B-BBEE and the Construction Codes of Good Practice are aligned with the PPPFA. CIDB prescripts should, therefore, be brought in line with the relevant legislation in order to best give effect to section 217 as a whole.

In summary, the study observes that most contract used in South African, for example, are often derived from those used for developing countries that require a high level of contracting experience than most domestic contractors can meet (Ofori, 2013:19). These documents and systems are often used without modifications to suit the local situation and the terms and conditions of the contract are said to be unrealistic as to the context of developing countries. Moreover, contractors seldom understand the provisions of such contract forms; small contractors, in particular, are unaware of their rights or unable to enforce their employers. Projects are sometimes unilaterally suspended or abandoned by the employer; contractors are seldom paid promptly for work done. The procedure for payment certificate is "bureaucratic", and owing to poor financial management, funds are often not available to pay the contractors (Ofori, 2013:19). There is room for policy change.

## **6.3 RECOMMENDATIONS**

The following undermentioned objectives and recommendations are discussed:

### **6.3.1 To determine the possibility of waiving performance security/bond**

It is very cumbersome for both SMMEs and struggling firms to raise capital to maintain their firms. It is even extremely strenuous for them to pay a performance security before they could commence with the work as per contract.

**Recommendation(s):** Therefore, the researcher recommends that the performance security must be replaced with another method that would in its nature not compromise the client. A performance security is meant to ensure that construction firms perform to the best of their ability since they know that if they utterly fail to deliver the project they are bound to lose money which is paid in the form of a performance guarantee.

### **6.3.2 To investigate the feasibility of providing start-up capital to struggling contractors**

It is actually feasible that municipalities can provide funding to start-up firms in South Africa. A venture capital can be used in this regard. As mention earlier (see 2.3.6) that venture capital is a type of funding created by public investors such as the government agencies, local authorities or private investors, banks, insurance companies and pension funds.

**Recommendation:** Therefore, the researcher recommends that respective municipalities can create a venture capital in order to assist SMMEs and other struggling firms within their respective constituencies. Each municipality would then manage its own venture capital and make sure that assistance is offered to firms with a potential to grow. Most importantly, finance should be provided to firms that are about to

do some work for that particular municipality because they (municipality) will be able to strictly monitor and evaluate the progress of that particular company while working for them. This can be done bearing in mind that since venture capital is also termed as a risk capital, in cases where a company falls flat, the money cannot be recovered ever. Start-up capital must only be provided to small and struggling companies without the financial muscles until they are able to sustain their companies.

In addition, venture capital can be managed through a project finance model. Such would include contractual arrangements that need and must be certifiable and strong enough to ensure the project's reliable performance. Such joint approach would effectively monetize construction contracts, such as through long-term offtake agreements or other guarantees that may have no immediate but longer-term results.

Common response with regards to start-ups was the risk associated with struggling contractors. The study recommends joint project management, of which most of the municipalities would be involved since it lowers the risk profile of the project. It should be also noted that such ensures that both parties are closely involved in all the stages of the project and understanding the current circumstances, more so that most construction project finance requires completely proven technology in the hands of developers that have to build multiple projects under similar conditions.

### **6.3.3 To determine the possibility of amending current laws/regulations/policies to cater for an advance payment**

Much as there is no policy linked to retention fees and performance guarantees, it can be argued that legislation ought not to avoid parties enthusiastically going into business understandings under whatever conditions they acknowledge. This is the same as the circumstance applying to pay if/when paid clauses. There is a remarkable disparity of negotiating power between a big head contractor with regulatory staff gaining practical experience in imposing issues and contractual matters, and a little subcontractor who

might be a competent and seasonal contractor, yet without the assets to completely understand, substantially much less negotiable and legally binding issues.

The best example is that big airliner in some parts of the world like USA, New Zealand, Australian are built using multiple subcontractors, they don't have retention fees held until a half year after the plane is given over to the client just to guarantee it really continues flying. Review of legislation would be a replication of such in construction projects and would be much easier once projects are jointly managed.

**Recommendation(s):** The current legislation in SA such as the MFMA does not make provision for the payment of an advance to contractors, hence the FIDIC and NEC3 which are used globally does make that provision. Therefore, the researcher recommends that both the PFMA and the MFMA must be reviewed so that the payment in advance is allowed. This review must be done by the National Treasury since they are the custodian of these legislations. Furthermore, there is no need to review the GCC and other clauses that do not accommodate advance payment because they can be dealt under "Special Condition of Contract" clauses as and when required on a project.

#### **6.3.4 To propose a model that can be used to finance start-up firms in the construction industry by municipalities**

South Africa in the past ten years has had several financing options available to SMMEs. However, there have been instances where it has been largely abused. Today, banks are a major source that is at the moment the most easily available source of finance for the start-ups. They play the role of business angels as well. Banks make easy access to finance for the start-ups along with reduced costs (interest rate) as the relationship strengthens. The major obstacle is the many intricacies linked to bank financing. The obstacles mentioned in 5.2.2 plays an impediment role, although well organised SMMEs surely have access to bank financing. It's a clear and simple model.

The literature review explored Venture capital as one of the major and likely options as the financing available for the start-ups in their later stage of the firm life cycle. Venture

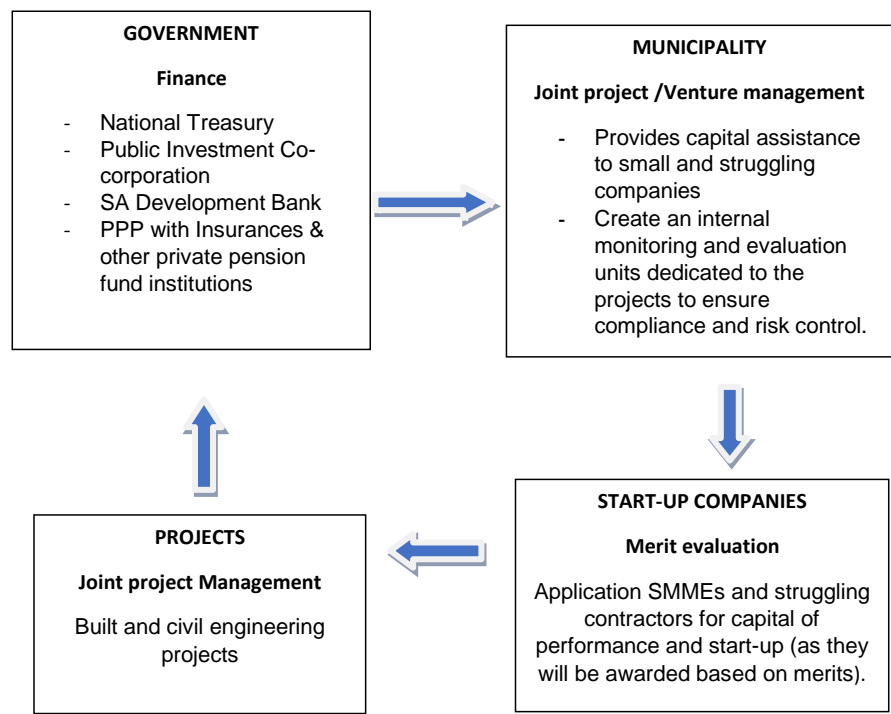
capitalists do demand control over the firms' operations sometimes even if the firm is not achieving their targets. Such public-private partnership would more likely rip rewards. The literature also explored financing indifferent countries and it was found out that Owner's capital was the primary source of finance for the start-ups. This also applies to South Africa. But in Germany, which is a bank-based structure, has Banks and Venture Capitalists as the primary sources of finance for the firms. Hence there are different financial trends across these countries depending on various factors ranging from the financial system to the religious beliefs and lack of knowledge of other financial options to restricted facilities for the start-ups. Therefore, sources of finance are available for the start-ups in almost all the countries; it is just the matter of finding the right one and carrying it till the end.

**Recommendation(s):**The researcher studied numerous financial models that are used to finance SMMEs and struggling contractors but out of all the current and existing models in SA, he could not find an appropriate model that is suitable to address the plight of struggling contractors. Majority of participants indicated not being aware of any financial models available in the industry for assisting in start-up capital. Therefore, the researcher decided to recommend the following undermentioned model to address both start-up capital and the performance bond. One should not shy away from the fact that the government is the government of the people and by the people. It should be government's objective to support SMMEs so that it can grow the economy and create an opportunity for employment thereby encouraging individuals to be employers rather employees.

In SA, we have seen government providing that kind of support in the farming industry. The downfall of this is that the government in most cases becomes the culprit when it comes on board to lay a helping hand to a particular programme. It actually found itself on the losing site by not ripping the seed it has sown. In comparison with private institutions whose focus is actually marginalising profit that is not the case with the government due to the fact that government is in the business of assisting its people and its local business enterprises rather than maximising profit. In SA we have seen

government bailing out state entities such as Eskom, South African Airways and many more; therefore, if it was possible for government within its powers to bail out those entities from their financial miseries then it is also possible for the government to finance small and struggling contractors as a matter of empowerment and job creation

Figure 6.1. Proposed financing model



Source: Own adaptation

This model basically means that the Government must solicit some funds through the National Treasury by involving other stakeholders such as the Public Investment Cooperation, SA Development Bank and other NGO's Finance institutions in order to assist municipalities who will, in turn, assist struggling contractors. These Capital will then be made available to various municipalities on a need basis, meaning it will only be provided whenever they have a requirement. The application for capital by the

respective municipalities will be scrutinised before approved. The municipalities will do the same before requesting funds, they will first have to look at the requirement including vetting the contractor before sending the application to the National Treasury.

The municipalities must also establish an internal unit that will do the monitoring and evaluation of projects taking place within their jurisdiction so that risks are controlled and subsequently eliminated. Once all the requirement has been satisfied, the Contractor can then be given capital assistance to start a business. But this model should apply only to the built environment and Civil Engineering projects. Similarly, it is advisable for the model to firstly be pilot on Metro Municipalities for a certain number of years before it can consider on the rest of the municipalities within the country. The model should cater for application for start-up capital and performance security.

#### **6.4 RECOMMENDATIONS FOR FURTHER RESEARCH**

This study could not have exhausted all possible avenues of replacing guarantees with a financing model that would work well. The further study thus would help to read deeper into such territories to explore what options could be feasible.

It would be decent to look into the possibility of a public-private partnership model of financing construction projects. Research into that would bridge gaps between two providers to ensure better streamlining of contracts and obligations to each party with minimum risks.

There have been many studies regarding a shortage of financing in SMMEs, but further efforts could be directed to options that would substitute guarantees without hampering the progress of such SMMEs.

An insight into legislation to ascertain whether policy change would be an option to usher in any possible funding approach to SMMEs would be an opportunity.

## 6.5 CONCLUSIONS

Based on the above findings and recommendations it can be concluded that it is feasible for municipalities in South Africa (SA) to introduce a system of providing the start-up capital to struggling contractors. According to the study, the focus should only be on SMMEs and struggling Contractors. Also, in terms of these findings, it is advisable for municipalities not to entirely abolish performance security and retention fees. The study provides alternative solutions to the abolishment of performance guarantee and retention fees. The venture capital is therefore proposed as a solution in addressing the waiving of performance security but also suggest venture capital as a tool in providing start-up capital.

On the issue of retention fees, there is a general view from some of the respondents that retention fees systems provide no real benefits and has a negative overall impact on the construction industry. Rather than replace an unsatisfactory system with something else that may also be unsatisfactory, it would be better to abolish it totally. The argument is that it is unlikely that unsound contractors would voluntarily give up this source of free unsecured finance as it would inevitably spell the end for some. The only practical way of changing the situation is by legislation related to retentions fees. For now, it is the only way according to the majority of respondents that municipalities can safeguard against the risks that could be associated with none compliance. At the very least, legislation could require that retention amounts and periods for them to be held to be subject to a justification for each specific subcontract, rather than to be held to the end of the head contractor's maintenance period.



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## APPENDICES