

**SETTING UP THE PROVISIONS OF START-UP CAPITAL FOR
CONTRACTORS AS OPPOSED TO PERFORMANCE
GUARANTEES AND RETENTION FEES**

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**Research Report 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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Final submission of Research Report

DECLARATION

I Moremi Phillip Huma, declare that this study **“SETTING UP THE PROVISIONS
OF START-UP CAPITAL FOR CONTRACTORS AS OPPOSED TO
PERFORMANCE GUARANTEES AND RETENTION FEES”**

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.

.....
MR MOREMI PHILLIP HUMA

.....
DATE

DEDICATION

This research report is dedicated to my family, colleagues and friends for their assistance and support.

ABSTRACT

This study investigates the feasibility of introducing the start-up capital system for contractors as opposed to demanding performance guarantees and retention fees to municipal contractors in infrastructure projects. A qualitative research method was used to collect data from a cross-section of key stakeholders from major municipalities in South Africa. The results are drawn from the interviews that were conducted accordingly and 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. The results illustrate that, in general, waiving of performance guarantees and retention fees is possible if 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 start-up funds would be possible but that may face 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 a need for exploring such a model further and any other options that could be considered instead of performance guarantees and retention fees.

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 the programme coordinator, Prof Samuel Laryea and to my supervisor, Mr Paul Rudzinske for their invaluable support and advice during this research project. I would also like to thank Professor Hassan M. K., for his advice and guidance. This research report would not have been completed without their supervision and advice. I would also like to thank Mr E.M. Mathebula for his support and guidance.

Finally, I would like to thank Ms B.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 his belief in me. To anyone whom I may have forgotten and not mentioned, please accept my apology, but thank you as well.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
List of tables	xi
List of figures	xi
CHAPTER 1	1
INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 BACKGROUND AND ORIENTATION.....	1
1.3 PROBLEM STATEMENT	11
1.4. RESEARCH AIM AND SPECIFIC OBJECTIVES OF THE STUDY	13
1.4.1 Research aim	13
1.4.2 Specific objectives of the study	14
1.4.3. Primary question	14
1.4.4. Secondary questions	15
1.5. RATIONALE FOR THE STUDY	15
1.6. DEFINITION OF KEY THEORETICAL CONCEPTS.....	15
1.7. CHAPTER LAYOUT	17
1.8. LIMITATIONS TO THE STUDY	18
1.9. SUMMARY	19
CHAPTER 2	20
LITERATURE REVIEW	20
2.1. INTRODUCTION.	20
2.2. THE GLOBAL CONSTRUCTION INDUSTRY.	20

2.3. THE CONSTRUCTION INDUSTRY IN DEVELOPING COUNTRIES.	23
2.4. THE SOUTH AFRICAN CONSTRUCTION INDUSTRY IN A GLOBAL SETTING	25
2.5. THE CONSTRUCTION INDUSTRY IN SOUTH AFRICA	28
2.6. THE ROLE OF THE CONSTRUCTION INDUSTRY IN THE ECONOMY.	32
2.7. CONTRACTING PRACTICES AND CHALLENGES IN PUBLIC CONSTRUCTION WORKS.	36
2.8. UNDERSTANDING THE ISSUE OF START-UP CAPITAL.....	39
2.8.1. Government financing	42
2.8.2 Private equity.....	42
2.8.3. Commercial banks	43
2.8.4 Development Financial Institutions	44
2.8.5. Capital markets	44
2.8.6. The Venture Capital Financing	46
2.8.7. Crowdfunding	51
2.8.8 Lease finance	52
2.9. SMALL BUSINESS START-UP CAPITAL AND FINANCING	54
2.9.1. The seed investor financing	55
2.9.2. The start-up financing	55
2.9.3. Mezzanine financing phase	55
2.9.4. The first-round financing	56
2.10. GUARANTEES AND START-UP CAPITAL IN THE CONSTRUCTION INDUSTRY IN SOUTH AFRICA.....	56
2.10.1. Demanding Performance Guarantee	56
2.10.2. Demanding retention fees	57
2.11. SUMMARY	58
CHAPTER 3	59

RESEARCH DESIGN AND METHODOLOGY	59
3.1. INTRODUCTION	59
3.3. RESEARCH DESIGN	59
3.4. QUALITATIVE RESEARCH DESIGN	61
3.4.1. Advantages of qualitative research method	62
3.4.2. Disadvantages of qualitative research method.....	62
3.5. PHILOSOPHICAL WORLDVIEW	62
3.5.1. Ontological assumptions	63
3.5.2. Epistemological assumptions	64
3.5.3. A pragmatic research design framework.....	65
3.6. TARGET POPULATION AND SAMPLING	66
3.6.1. Data collection method.....	67
3.6.2. Data analysis	68
3.6.3. Methods used to ensure trustworthiness.....	68
3.6.3.1. Dependability	68
3.6.3.2. Transferability.....	69
3.6.3.3. Confirmability	69
3.6.3.4. Credibility.....	69
3.6.4. Ethical consideration.....	70
3.6.4.1. Researcher's responsibilities towards the participants.....	70
3.6.4.2. The Belmont Report.....	71
3.6.4.3. Wits University Policy on research ethics	72
3.7. SUMMARY	73
DATA PRESENTATION AND ANALYSIS.....	75
4.1. INTRODUCTION	75
4.2. DESCRIPTION OF PARTICIPANTS.....	75

4.2.1. THEMATIC ANALYSIS OF RESPONSES	76
4.2.1.1. Identification of the categories of analysis and development of the coding system.....	77
4.2.1.2. Coding of the data into the categories of analysis	78
4.2.1.3. Analysis and interpretation	78
4.2.2 Knowledge and understanding of contracts	80
4.2.3 Causes of poor performance of the contractors	82
4.2.4 Municipalities and waiving of performance guarantee	86
4.2.5 Municipalities and waiving of retention fees	90
4.2.6 Municipalities and start-up capital to struggling contractors	93
4.2.7 Stumbling blocks to start-up capital to struggling contractors.....	97
4.2.8 Internal policies and legislations	100
4.2.9. SUMMARY	101
CHAPTER 5	102
SUMMARY OF FINDINGS	102
5.1. INTRODUCTION	102
5.2. SUMMARY OF FINDINGS.....	102
5.2.1. Knowledge and understanding of contracts.....	102
5.2.2. Causes of poor performance of the contractors	103
5.2.3. Municipalities and waiving of performance guarantee	104
5.2.4. Municipalities and waiving of retention fees	105
5.2.5. Municipality and start-up capital to struggling contractors	106
5.2.6. Stumbling blocks to start-up capital to struggling contractors.....	107
5.2.7. Policies and legislation linked to start-up capital	107
5.3. SUMMARY	108
CHAPTER 6	109
CONCLUSION AND RECOMMENDATIONS	109
6.1. INTRODUCTION	109

6.2. EMERGING THEMES.....	109
6.2.1. Performance guarantee and retention fees.....	109
6.2.2. Start-up financing.....	109
6.2.3. Obstacles faced by struggling contractors.....	110
6.2.4. Policy and legislation	110
6.3. RECOMMENDATIONS	112
6.3.1. To determine the possibility of waiving performance security/bond.....	112
6.3.2. To investigate the feasibility of providing start-up capital to struggling contractors.....	112
6.3.3. To determine the possibility of amending current laws/regulations/policies to cater for an advance payment.....	114
6.3.4. To propose a model that can be used to finance start-up firms in the construction industry by municipalities.....	115
6.4. RECOMMENDATIONS FOR FURTHER RESEARCH	118
REFERENCES	120

List of tables

Table 1.1 Difference between performance guarantees and retention fees.....	6
Table 4.1 A summary of participants of the study.....	76
Table 4.2. Summary of the phases followed in the coding	80
Table 5.1 Major causes of poor performance of contractors.....	103

List of figures

Figure 2.1: Stages and life cycle small business development.....	41
Figures 3.1 Geographical location of all the metro municipalities.....	68
Figure 6.1. Proposed financing model	117

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.

1.2 BACKGROUND AND ORIENTATION

Currently there are many construction works taking place in almost every major city in South Africa. 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 view is substantiated by Jenkins and Wallace (2016:1) who mention that construction bonding is a manner of disseminating all the various risks that may happen during the project period. Hughes and Murdoch (2008:243) further emphasise that one major function of the construction contract is to allocate such risks to one or two parties to the contract. Bonds or guarantees are used as a means of covering such risks by providing protection against contractual failures (Hughes & Murdoch, 2008:243). These bonds or guarantees are meant to indemnify the employer in cases of damages either to a building or injuries sustained during or after construction, meaning that one party will be liable to another party in case loss or damage occurs (Hughes & Murdoch, 2008:243).

Numerous activities are performed amid the execution of construction contracts. All things considered, a proficient development process is priceless and often invaluable to all stakeholders. Besides, because of the characteristic uniqueness of interests; constraints

and conflicts among the contracting parties seem inescapable. Construction conflicts include, but are not limited to, the following main types: general breach of contract; failure to perform; delays; payment disputes; workmanship standards; labour disputes; and termination (including repudiation) (Maritz, 2011:1).

Regularly, the sad consequences of such clashes are loss of profitability, postponements and increments in development costs. With an end goal to lessen risks and to ensure the interests of the contracting parties, different kinds of securities have been brought into standard building agreements throughout the years. As the contents of agreements progressively became more modern, sophisticated and included new provisions, inventive courses had to be developed to secure the risks and interests of the stakeholders with more noteworthy conviction (Maritz, 2011:1).

Therefore, 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 mentions that a principal or an agent provides a certificate that gives evidence that 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 by law for contractors to pay the employers a guarantee before they commence with the work. The guarantee is required because it serves as a security from any contractor in case they do not finish the work, but it is flexible in that contractors are given a choice on the type of security they wish to provide (Zaghoul & Hartman, 2013:3). McNair (2013:5) mentions that it is standard that contractors must provide what is simply called performance security 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 if the contractor fails to complete the project. Failure to complete

may be because of liquidation; the contractor is banished from doing further business or 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 (Zaghoul & Hartman, 2013:3). 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 in the right way or stabilizing measures not surviving; and
- Some contractors find themselves out of business due to mismanagement of funds.

According to Bertrans (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, namely the employer and the employee (contractor). Those that are in engineering projects or exporters of goods fall 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 the form of money, which ensures that the contractor completes the 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 tools that assist 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 (Rhodes, 2014:2). Mills and Reeve [n.d] state the following types of guarantees:

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

According to Tshaka (2013), a guarantee is constant letters of credit issued by banks to be utilised during international trade. Furthermore, Tshaka (2013) asserts that a guarantee is a contract that provides the employer (beneficiary of the guarantee) with security in the event of default or non- performance by the contractor. It is intended to cover the Employer for the Increased Costs of Completion because of the non-performance or default of the contractor. It then becomes obligatory that the bank pays 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) acknowledges 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 an “on demand” guarantee; in this case, the construction contract states that there is no allegation of liability on its part (Tshaka, 2013). Guarantees that come from financial institutions demand that a particular financial institution must accept liability in case the contracting party does not honour an obligation under the project contract and, as a result, is unable to fix all defaults. It is common practice for the guarantee to be spelt out so that the beneficiary knows and understands that he/she has 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 if the 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, the employer retains it. The aim of a retention fee is to make sure that a contractor does his work satisfactorily. The table below distinguishes between performance guarantee and retention fees.

Performance guarantee	Retention fees
To safeguard a contractor against non-performance.	A Financial (also called cash retention or withheld cash) held by the lead contractor to ensure that its subcontractors adequately fulfil the obligation required from them under the contract.
A guarantee vets the financial capacity of, provides the financial protection, seeks financial recovery for the bonded contractor.	Providing a Retention Bond slowly nudges away the practice of cash retentions (or retention monies) to guarantee the quality of contractor workmanship.
Security to the employer for any losses or damages incurred as a result of the default and non-performance of the contractor in failing to complete or comply with the conditions of contract.	A Retention Bond offers clients the financial protection they need in place of cash retention while improving a contractor's financial standing as it enables Clients to keep hold of their cash.
The principal purpose is to cover the employer for the increased cost of completion as a result of the default of the contractor.	Benefit is that the contractor will be notified of the purported defect and is given the opportunity to correct it within a specified amount of time.

Table: 1.1: Difference between performance guarantees and retention fees

Source: (Knauf, 2014:8)

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 five percent of the contract or package order price”. The retention practice is not only practised in South Africa, but in New Zealand and other countries commercial construction contracts opted for 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 for several years. The money is only retained in a situation where the contractor fails to complete a project as per contractual obligation (Knauf, 2014:3).

Zaghoul and Hartman (2013:3) state that in numerous contracts, there is a certified progress report, which becomes part of the basis for invoicing per customer. This is also 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, some customers prefer to make a payment, even before the work has been done completely. This is the type of practice which is done in cases of a large contract which might require bridging finance in the form of advances (Zaghoul & Hartman, 2013:3).

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 South Africa, Springs. 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 similar 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 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, Articles 16.2 and 16.3 state 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 notify of their intention to start with a mediation process (clause 27.1). In clause 61.1 all the payment procedures are mentioned and are read in conjunction with the Public Finance Management Act of 1999 (clause 8.2.3) which states that a contractor or supplier must be paid within 30 days after the goods have been delivered or service rendered. The GCC for Construction Work of 2015 clause 22 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) which may be offered.

This type of a security remains valid and enforced by that 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 (Skibnieski & Chair, [n.d]). 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 (Bowen, Akintoye, Pearl & Edwards, 2007: 221) 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 ((Bowen, et al., 2007: 221).

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

retention 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 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 retrieve 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 to be 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 pre-qualify them for whatever facility.

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

Given the above background, it was deemed necessary to investigate contract financing of large construction projects in metros within South Africa. Understanding issues at the core of what has dominantly been 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

The idea about guarantees is that 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 Martin and Root (2009:672) 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 (Martin & Root, 2009:672). 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 a further burden on 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 (Westlund, Larsson & Olsson, 2014). 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 Kangani (1988), 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.

Oferi and Kirsten (2009) applaud that SMMEs in the construction industry create jobs. They further state that SMMEs in the construction industry find it difficult to access finance as compared to other types of SMMEs in other industries. This is as a result of “low-skill” nature of their core activities possessed by SMMEs in the construction. As a result, many small and struggling contractors find it difficult to participate in the tendering process because of lack of bridging finance (Oferi & Kirsten, 2009). Havemann (2001) states that even if there is a need for financing SMMEs, the financial institution will always regard SMMEs in the construction industry as lending risks, unless SMMEs can show a successful track record on their projects (Havemann, 2001). 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, et al., 2014).

The researcher is of the view that previous studies have not addressed 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

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 reason for that is because of the choice of the titles of their study which is limited to their scope of study as compared to this research study which focuses on start-up capital, performance guarantees and retention fees collectively. Their 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.

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; to:

- i) determine the possibility of waiving performance security on contractors.
- ii) investigate the feasibility of providing start-up capital to struggling contractors by municipalities.
- iii) determine the possibility of amending current laws/regulations/policies to cater for an advance payment.
- iv) 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 employers' risk cover that in this case are mainly the performance guarantees and retention fees that further add strain to 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. 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 businesses 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 OF KEY THEORETICAL CONCEPTS

The following key theoretical concepts are defined:

1.6.1. Start-up capital

Start-up capital is sometimes referred to as seed money; the money that is needed or required to start a new business of any nature or any other expense related to initial investment (Hudson, 2006).

1.6.2. Retention Fees

A retention fee is usually an amount deducted in each payment certificate submitted by the contractor to the employer/client as an insurance deduction for the performed works sometimes it can be 10% and reduced to 5% as you surpass 50% of the financial value of the contract signed, excluding the variation orders and by the time you hand over your last payment certificate and performed all the testing and commissioning activity you should include the cumulative amount of the retentions deducted in each invoice(Construction Contract Amendment Act of 2015).

1.6.3. Performance bond or guarantee

A performance bond or guarantee is an arrangement under which the performance of a contractual duty owed by one person (A) to another (B) is backed up by a third party (C). What happens is that C promise to pay B a sum of money if A fails to fulfil the relevant duty. In this context A is commonly known as a principal debtor or simply principal; B is called the beneficiary; and C is called the bondsman, surety or guarantee (Hughes & Murdoch, 2008:243).

1.6.4. Sequestration

According to the Merriam Webster dictionary (2014), sequestration is a legal writ authorizing a sheriff or commissioner to take into custody the property of a defendant who is in contempt until the orders of a court are complied with. b): a deposit whereby a neutral depositary agrees to hold property in litigation and to restore it to the party to whom it is adjudged to belong.

1.6.5. Small, Micro and Medium Enterprises

In terms of South African context, the terms small business and SMME are actually used as 'synonyms' whereas the term 'enterprise' refers particularly to entities more especially close corporation, co-operatives companies that are registered with Companies and Intellectual Property Commission (CIPC). Very small businesses employ between 6 and 20 employees, small businesses employ between 21 and 50 employees.

1.6.6. Labour Broking

According to Deloitte (2016), it is a process whereby certain companies provide “casual workers” through labour broking which are the “middle-man”. Labour broking is a legitimate practice in SA, however workers are only provided for a short period of time (Deloitte, 2016).

1.6.7. Cession

According to Scout (1991), in a court case of Johnson v Incorporated general Insurance Ltd1983 (1) SA 318, cession is defined as an act of transfer in terms of which a creditor (the cedent) transfers his/her credit's right or personal right 'debt' against his/her debtor (cessionary). The transfer is effected by means of an agreement (a transfer agreement) between the cedent and the cessionary. Upon completion of the transfer, the cessionary replaces the cedent as the creditor of the debtor. (Scout, 1991)

1.7. CHAPTER 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 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 the 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.

1.8. LIMITATIONS 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 within their respective municipalities and their schedules are very tight. The researcher decided to include more participants from other municipalities that were not mentioned before such as Tshwane and others. Details of the municipalities are discussed in chapter three of this study (See 3.6 para 2).
- ii) The researcher had to send the research questions via email to four participants who are at a coastal municipality and the questions were discussed with them by telephone. This proved to be a very exhausting enduring exercise in terms of respondent's availability and time.

1.9. SUMMARY

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, but it is not paid if the work has not been done satisfactorily. Struggling contractors are not provided with start-up capital in South Africa hence they have to resort to other means of financing their companies as explained in detail in chapter two of this study.

CHAPTER 2

LITERATURE REVIEW

2.1. INTRODUCTION.

This chapter provides an overview of scholarly perspective on major themes 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). Malachi and McEvoy (2012: 3) explain a literature review as a set of arguments aimed at ameliorating a thesis from a standing point of view by paying attention to previous research studies to create a sound and credible evidence. Zikmund (2008:45) alludes to a wide range of types of discourse on existing information. In its crude frame literature is any wellspring of perceived data and information. At the centre of any literature survey are works that show up as journals, books or articles which entails deliberate correspondence of academic learning. Chandrasekhar (2000:15) defines a literature review as the backdrop against which you present your work. The author mentioned that 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. (Construction Industry Development Board 2013:8). It is also believed that the construction sector is among those contributing to gross domestic product (GDP) and the most important industries in any economy. The

efficiency and effectiveness of the field decides 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 1999:12; Oakland & Aldridge 2005:18).

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) specify that construction industries are organisations that need to be monitored to guarantee that they stay up to date with the competition.

To keep pace with the most current development industry patterns, organisations screen industry-related activities no matter how you look at it. For instance, Toakley and Marosszeky (2009:21) state 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 provable, these distributions in the print media and 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 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) reveal 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 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 (Cheng, et al.,2014:12).

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 because 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 about 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 (Boutek, 2010:10). Furthermore, 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 as far as monetarily labour-intensive technologies are embraced for most facets of construction work (Van Weele, 2010:99)

Despite 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 in developing nations, its contributions are still important and if endeavours are made to build up a self-supporting local construction industry, rewards can increase essentially (Van Der Merwe, 2008:18). The emphasis made by Van Der Merwe (2008:18) is that developing countries need to find a way around the financing for large construction infrastructure projects for the construction industry to yield better results.

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 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 and that has been attributed to poor contracting terms especially limited financing to finance project scope (Van Weele, 2010:99).

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 especially due to changes in contracting terms and conditions, specifically the retentions fees and performance guarantees.

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 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.

According to Lombard (2006) the South African Federation of Civil Engineering Contractors (SAFCEC) poses a question on the readiness of South African construction industry coping with challenge of international competition, more especially the challenge from China, which has developed massive capacity in its domestic construction industry. China has been reported as producing engineers at a rapid pace and offer engineering service on a very cost competitive basis (SAFCEC, 2013:13). Meaning urgent action needed to prepare the South African construction industry to cope on global competition (Lombard, 2006). For this reason SAFCEC (2013:13) has advocated for in-depth dialogue between all stakeholders to ensure the preservation of the local construction industry by availing financing for contractors through the Public Private Partnerships models more so where contract issues are hard to fulfil. The above challenges as raised by SAFSEC, an

association that represent the interest of contractors in SA prove that the industry find it difficult to cope with its competitors international and this call for an urgent drastic changes for the industry to overcome these challenges. The challenges face by small and struggling contractors in SA in terms of lack of start capital, performance and retention fees which cripple them cannot be ignore as it contributes to the weakness of the local construction industry.

Issues raised included guaranteeing far-off organisations preserved in South African by law and their 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 organisations 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. This implies that many risks are then linked to many construction projects often suffer from compromised quality due to limited skills, extended project scope and time lines just to mention. No wonder, that guarantees become the only form of assurance.

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 as well as the proper management of performance guarantees and retention fees (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. It also emerges that this industry is not immune to global construction industry drivers and barriers and should be keen to such strategic dynamics within the construction sector. It is therefore important to note that once such issues are not handled properly, together with the complex issues of contracting, it will negatively affect the progress made in the construction sector in South Africa.

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. At the time of commissioning

the report, the CIDB 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). There has been an increase of 24,937, approximately 51 percent, and of that number, no less than 78 percent are made up of what the industry would classify as SMME 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.

SMME 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. This area may be explored in future research.

Smallwood and Emuze (2012:22) list eleven (11) resources that, when amassed by contractors, render them capable of performing within an active construction industry. Smallwood and Emuze's (2012) articulation supports the work of Dulaimi, Ling, Ofori and De Silva (2002:123), in which the definitions of requisite contractor resources are listed as capital, management skills, other skills, having premises and facilities. There is consensus in the industry with regards to these, as there is no counter-argument against them. However, statistical evidence exists which suggests that the SMMEs at which government's development interventions are targeted do not possess even half of these resources. Without these resources, SMMEs are rendered incapable of performing and are consequently not competitive (Dulaimi et al., 2002). The researcher's view is that the proposed model (See Figure 6.1) could be a solution to the challenges experienced by SMMEs.

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 their 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 gets mentioned about the South African construction industry is that it still relies heavily on labour brokers and there is a recurrent political discourse whether they ought to be scrapped (Watermeyer, 2010:5). Labour broking is a process whereby certain companies provide “casual workers” through labour brokers which are the “middle-men”. Furthermore, labour broking is a legitimate practice in SA, however workers are only provided for a short period of time (Deloitte, 2016:3). The case for abolishing labour brokers within the construction industry to move to 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 if they are 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 able to sustain large workforces. The outcome of this debate, initiated by organised labour, has relevance for the South African construction industry and 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 (2012:19) 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;

- Increased awareness of the nature and needs of SMMEs, especially in construction, is necessary;
- Development of more appropriate and better-focused policies, programs, and initiatives for SMME development is crucial;
- More readily available guidance books and online resources for improved training programs are required;
- Better and more 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 (2012:19) further suggests that if the above-mentioned activities are implemented, a new breed of SMME entrepreneurs would emerge and they would be:

- more aware, going forward being better informed;
- able to inspire (employees, clients and partners) to attain greater joint performance;
- strategic in orientation;
- able to deal with risk and uncertainty more effectively, 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, multi-unit 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 constitute the backbone of South Africa's development efforts include the following:

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

In summary, aspirant leadership and entrepreneurship are 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 in achieving stated objectives (Ofori, 2012:19).

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 the 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 the 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 activities in South Africa have largely been underpinned by the government's infrastructure investment program. 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 expenditure 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 because it is considered that one job in construction gives rise to two further jobs in the construction and other sectors of the economy. However, this may be affected by limited financing, performance guarantees and retention fees which apparently cripple many small or struggling contractors.

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 0,9 percent y/y for 2011 fourth quarter and had improved from the negative growth rates that were recorded between 2010 first quarter to 2011 third quarter. The total construction investment that took place in 2011 fourth quarter amounted to R171,73bn from R170,27bn in 2010 fourth quarter (Statistics SA, 2010:31).

Statistics SA (2011:9) noted that investment growth in civil works measured an increase of 2.3 percent year on year in 2011 quarter four, improving from a 1.7percent y/y growth rate measured in 2011 third quarter. GFCF measured R 110, 36 bn in the fourth quarter of 2011, up from R107, 89 bn in 2010 fourth quarter, and increasing from R109, 65 bn investment values recorded in 2011 third quarter. The pace of construction 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 fourth quarter. 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 1.3 percent in 2011 fourth quarter from the previous quarter's decline of 2.6 percent per year. Non-residential investment fell to R37. 08bn in the last quarter from R37.56bn in 2012 fourth quarter. Investment by general government grew by 3.1 percent per year in 2012 fourth quarter, escalating from the 1.1 percent per year increase measured in the 2012 third quarter. GFCF in monetary value inclined from R52,24bn (2012 quarter three) to R53,83bn (2012 fourth quarter).

Private enterprises and public corporations recorded increases of 5.5 percent per year and 7.7 percent per year in 2012 fourth quarter 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 28.4 percent for the fourth quarter of 2012, from the previous quarter's contribution of 31 percent. The non-residential sector's investment held a share of 9.5 percent total GFCF, slowing from the 11 percent contribution recorded in 2011 quarter three. Residential investment construction contributed 6.3 percent to the total GFCF, after a percent contribution measured in the third quarter. Of the total investment expenditure that took place in the construction sector, 64.3 percent went into civil projects, 21.6 percent was invested in the non-

residential sector, while only 14.1 percent of total expenditure was invested in 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 6.4 percent 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 44.4 percent per year and 81.3 percent per year declines in profit values measured in the first and second quarters of 2011 respectively. Profitability improved to an average estimated rate of 5 percent in the second half of 2011, compared to an average of 1.7 percent 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 third quarter.

Actual construction expenditure, according to the 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 the total construction expenditure. The growth in the order book during 2013 was 1 percent, 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 the 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). It is therefore important to assert the importance of understanding the dynamics of guarantees as they can indeed play a significant role in enhancing the capacity of contractors to manage projects.

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 a multitude of 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 regarded as causes for lack of any appreciable development of the local construction sector of the developing countries; two of these problems are reported, namely 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 in developed countries, which require a higher level of contracting experience than most domestic contractors are able to 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; and small contractors are unaware of their rights or unable to exercise their rights with regards to their employers. Projects are sometimes unilaterally suspended or abandoned by the employer; and contractors are seldom paid promptly for work done. The procedure for the 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 account properly 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 is often 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). In addition, 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 dependent on payments of their employer to a large extent. The need to approve payment certificates by many individuals in public projects before they enter 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 and 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 able to enforce their contractual rights. The contractors are rather

dependent on public employers for work and are, understandably, unwilling to jeopardize their relationships. Arbitration is undeveloped and there are very few qualified arbitrators. 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:

- 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 most 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 for increasing its efficiency (Boyd & Chinyio, 2006:25).

In general, contracting should enable achievement of economy and efficiency in a fair way without involving unnecessary costs and procedures in the process (Boyd & Chinyio, 2006:25). In developing countries, contract conditions should consider 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 (Boyd & Chinyio, 2006:25).

Government, being a policy maker, apart from being the predominant originator of demand, plays a significant role in the development of the 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 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 make the business of contracting an unproductive exercise (Uff,2009:326), as cited in Maritz (2011:5).

Therefore, to fulfil the potential of the industry to the socio-economic development objectives, developing countries must develop their domestic construction industry by properly addressing problems and devising mechanisms to tackle the difficulties. As discussed briefly above, because one of the basic problems is the contract procedures adopted in these countries, this research looks at the problems facing the domestic construction industry regarding contract provisions and procedures.

2.8. UNDERSTANDING THE ISSUE OF START-UP CAPITAL

There are 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 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 touches on what this research intends to achieve is the study by Owusu-Frimpong and Martins (2010:26) that focused on SMMEs in terms of the Ghana context. The study identified several inter-related factors that accounted for the failure of the Bank for Housing and Construction of Ghana program 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 (Owusu-Frimpong & Martins, 2010:26). According to Owusu-Frimpong and Martin's (2010:26) findings, there was a need for the government to provide finance to the contractors, but their study did 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 fledgling start-up to a successful large company (Halt J; Donch, Stiles & Fesnak, 2017:11). The stages of development that a business goes through during its life cycle are illustrated below:

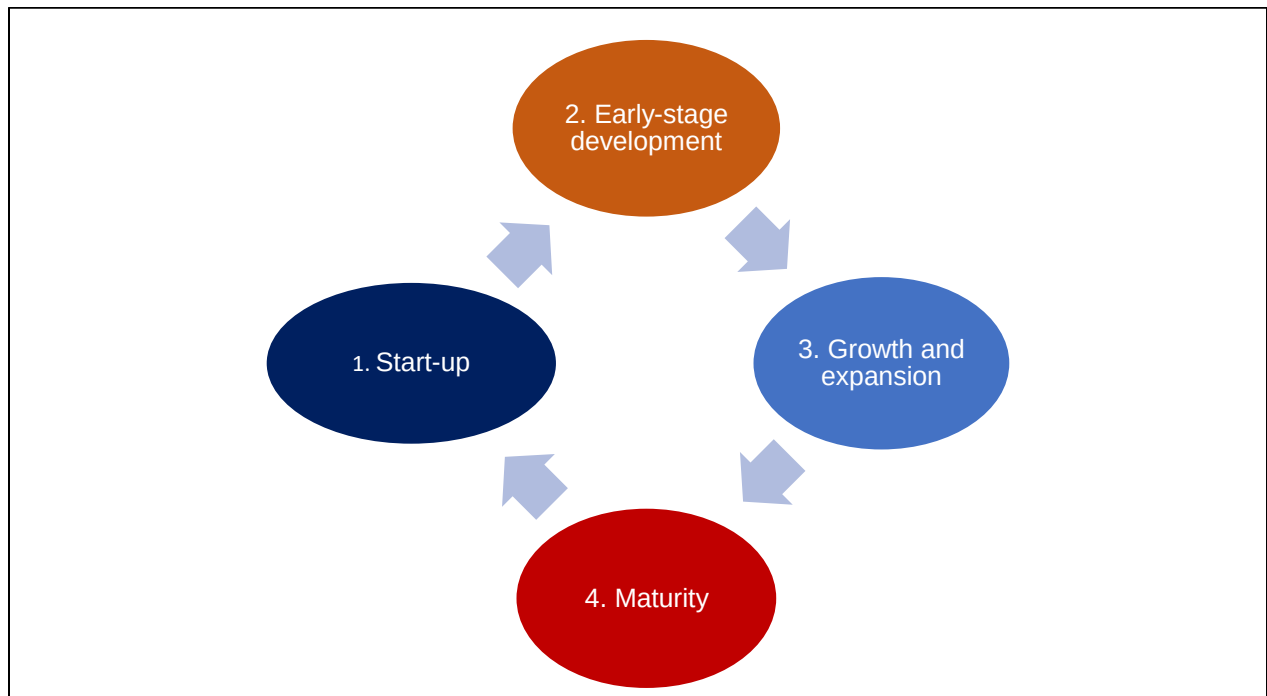


Figure 2.1: Stages and life cycle small business development

Source: Adapted from (Halt et al., 2017:11)

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 such as banks, micro lenders, family and friends (Halt 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). Thus, a study into possible start-up funding would help to possibly address this.

According to Zelek (2013: 12), as cited in Burżacka and Gąsiorowska (2016:142), the start-up is the phase of a company's development from its initiation until the 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.

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 and the lack of a track record in operations (Cherif & Elouaer, [n.d]). Moreover, many start-ups may face many years of negative earnings before they start to see profits. As a result of 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 (Cherif & Elouaer, [n.d])). There are however, some financial sources that can be used by various municipalities as start capital to assist struggling firms to expand their businesses, especially in the construction industry.

2.8.1. Government financing

Small businesses play a very significant role in any economy globally because they create and provide employment and subsequent competition. Some innovations grow into fully-fledged businesses of scale and sophistication and most significantly they assist in the reduction and overconcentration of economic power in the South African perspective (Hudson, 2006:11). Furthermore, the recent focus of the government on small businesses 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, 2006:11).

2.8.2 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 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 categories of entities may require some capital sourcing from private equity:

- those companies that are requiring capital to fund their capital need that could be beyond traditional bank financing,
- 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 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) private equity is “an investment of 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) (2005:5), private equity asset class is defined as “predominantly equity funding of high tech, high growth potential business, whose growth is achieved typically through radial global scaling”. Furthermore, both new products and technologies can be developed and used 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 business to buy-out or buy-in of a business by more experienced owners or managers (Missankov et al., 2006:9).

There is another aspect, namely that independent private equity firms also have a manner of raising their own funds from external sources which they utilise for investment. The sources are mainly institutional investors like banks, insurance companies and from 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 and they also pay a higher price than the normal trade buyers, especially if they believe in the strength of the management team and the business plan.

2.8.3. 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, 2016:5). Therefore, commercial banks are often chosen when businesses run for loans. However, it can be cumbersome for start-up small businesses to obtain loans, because of the perceived risk. Usually, only mature businesses get loans from commercial banks on a regular basis, because of their track records (Peavler, 2016:5).

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 (Peavler, 2016:5). Another advantage of commercial banks is that they have qualified credit analysts who are able and capable to evaluate the creditworthiness of firms.

2.8.4 Development Financial Institutions

Development finance plays a very important role in financing private enterprise in Africa and therefore it is of vital importance that this be promoted further as a significant component to overseas aid (Tulchin, 2009:12). Development Finance Institutions (DFI) occupy the intermediary space between public aid and private investment. Financial services in developing countries, such as SA, offer a variety of financial services such as loans or guarantees to investors and entrepreneurs, equity participation in firms, its investments funds and financing for public infrastructure projects.

Development projects are initiated in various industrial fields and especially 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 (Tulchin 2009:12).

2.8.5. Capital markets

Capital markets such as money markets can play a significant role in the national economy. The development of a dynamic and vibrant capital market can achieve rapid growth of the economy. Further investments are achieved through the mobilization of funds from people into the productive channels of an economy, activating idle monetary resources and putting them in the correct investments. Capital markets also assist in capital formation (Kinsella, 2018:7). It offers investment relief for individuals who desire to invest their resources for a longer period. It also provides sustainable interest rate returns to investors (Pakistan Economic Survey, 2012:81). According to Kinsella (2018:7), the capital market 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 mechanisms through which intermediate-term funds and long-term funds are pooled and made available to businesses, government and individuals. Moreover, a capital market is a place that provides a platform where both suppliers and users of 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 ([n.d]), 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 by means of capital markets (Odita, [n.d.]).

Medium and long-term funds are made available to both business and governments through a capital market network of institutions and mechanisms where funds are transferred among investors. There are two types of markets globally, according to Odita[n.d.], namely primary and secondary markets. In the primary markets, investments agents are used to sell 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 plants or equipment, and to secure additional working capital. The cash that is produced is taken to the issuing company (Kinsella, 2018:7).

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

There are numerous benefits for various participants in the economy (EM Compass, 2017). Domestic capital markets offer companies or entities that require capital 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 granting 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 of 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.

2.8.6. The Venture Capital Financing

According to the Business Dictionary (2018), 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. Venture capital is also termed risk capital or patient risk capital because it includes the risk of forfeiting the money should a business venture

be liquidated or fail to exist (Investopedia, 2018). Pradhan, Arvin, Nair and Bennet (2017:2) further mention that venture capital is crucial in fostering support to start-up companies for rapid increase in growth to undertake initiatives that contribute to country wealth. They further state that venture capital creates opportunities for small companies to transfer risky initiatives into economic wealth. According to Engel and Keibach (2007), as cited in Pradhan., et al., (2017:2) several studies conducted have shown that venture capital start-up companies that have been funded experience high growth as compared to average start up SMMEs. Samilo and Sorenson (2011), as cited in Pradhan et al., (2017:2) indicate that by doubling funding of venture capital in metropolitan areas? companies/ in USA start-up companies increased by 0.48 percent to 3.78 percent, jobs increased by 0.22 percent to 1.24 percent and income increased by 0.48 percent to 3.78 percent. One cannot shy away from the contribution that venture capital can offer to small and struggling contractors in South Africa. It is clear that venture capital comes with many benefits which are not limited to small and struggling contractors but also to enhance the economy and provide jobs opportunities. The major characteristics of venture capital are the following (Burżacka and Gąsiorowska, 2016:147):

- High degrees of risk: one of the attributes of venture capital is that it is a financial investment that caters for high-risk projects with the aim of earning a high rate of returns.
- Equity participation: financing is very consistent in venture capital because of its real potential of equity participation with its major objective being the creation of a venture capitalist 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 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 company. It has been rightly mentioned that: 'venture capital combines the qualities of banker, stock market investor and entrepreneur in one. (Burżacka and Gąsiorowska, 2016: 147).

- 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, resulting in balanced regional growth indirectly due to the establishment of successful new business.

Investment in liquid capital: the management of venture capital is utterly different as compared to overdrafts which are subject to repayment within a specific time frame resulting from a loan repayment schedule. Additionally, an investment is achieved only when the company is sold or listed on the stock market. However, if the company is liquidated, the investment is lost forever (Burżacka and Gąsiorowska, 2016:147).

Venture capital can also be defined as investments equity held in high esteem in private growth companies (Martin, 2012, as cited in Callagher & Smith & Ruscoe, 2015:2). It is further stated that governments are increasingly aware of the impact that venture capital can make to economic growth (Murray, 2007 as cited in Callagher et al., 2015). Moreover, numerous companies specifically SMMEs can benefit from advancing their own venture capital because more financial resources can speed up growth and offer a competitive advantage in the market.

For instance, in the early stage, technological companies that had bad credit record in terms of their cash flow, are afforded an opportunity to be provided with a 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 company. There are problems experienced by SMME matching the expansion stage of technological companies and business anticipation with the appropriate venture capital resources (Callagher et al., 2015:2).

According to Tulchin (2009:12), 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 (Tulchin, 2009:12). 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 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, [n.d.]). Basically, the early stage financing makes it easier for companies 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. Similar to contractors in SA, they need start-up capital to kick-start the construction works so that they can be entitled to first payment, which in terms of the four forms of contracts discussed in this study report is called Payment Certificate Number 1. The works to be perform under this payment are for site establishment and consist of the erection of a fence, installing electricity/water/sanitation axillaries, erecting offices for the Engineer/Site Engineer/Clerk, erecting stores and other buildings as necessary etc. (GCC, 2015). These works are paid under Preliminary Fixed Charges and the works are performed before real construction works start. Most contractors have no cash to kick start such works, hence the entire model can provide some relief (Hughes & Murdoch, 2008).

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 later stage, the company shows 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, [n.d.]). It is therefore evident why the early stage of financing small and struggling contractors is so important in the sense that kick start financing will help in acquiring resources such as plant machines and equipment but will also help in kick starting the construction by setting up the site camp which requires a cash injection.

However, although venture capital is a good method of financing struggling firms it also has the following challenges:

- Losing control of the company – some investors invest much money in the company and thus become major shareholders. If one is not cautious, they may ‘steal’ the company even in circumstances where they do not own so many shares compared to those of the owner. This basically refers to aggressive investors. In principle, the large shareholders that are active can improve firm performance through better control of managers.
- 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 (Van der Burg & Prinz, 2010:72).

The meaning for a minority owner with no veto power is the minority owner is a small shareholder with no benefit of a voice in a company which is a result of the effects of their votes on the value of shares and the few shares they possess (Van der Burg & Prinz, 2010:72). Van der Burg and Prinz (2010:72) further state that for large shareholders the benefit of voice is high, because of the larger number of shares they possess (Van der Burg & Prinz, 2010:72).

2.8.7. Crowdfunding

According to Freedman and Nutting (2015:1), the process of collecting numerous small contributions through an online funding platform to finance or capitalise a well-known enterprise is called crowdfunding. 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 need to facilitate the transfer of funds from those who were potential donors or investors to those in need of capital is created (Howe 2008). Kleemann et al., (2008) and Bogus (2013), as cited in Bade (2018:167) further states that, crowdfunding is a modified form of crowdsourcing which uses a large audience (the crowd) to provide ideas and feedback to develop a business or organization entity. Moreover, crowdfunding is regularly associated with community-based experiences resulting from social interaction and participation in Crowdfunding platforms (Bade, 2013). Meaning small and struggling contractors can benefit from Crowdfunding model. In the business context, such Crowdfunding campaigns can address potential investors to test the service of the SMME or struggling Contractor and evaluate his idea for possible investment.

However, there is a difference between Crowdfunding and buying or selling of shares. According to Van der Burg and Prinz (2010:76) direct owner of a share is defined as the human beneficial owner of a share. In this case the direct owner of the share means the person or the organization that eventually purchase the shares. Further defined the direct owner as the human being or organization that has the authority to sell the shares. In this case means the one in possession of the shares and intend to sell those shares. In both scenario one will have the buyer being the human beneficial of a share and the seller being direct owner of the share (Van der Burg & Prinz 2010:76).

Van der Burg and Prinz (2010:76) further state that if a person invests directly in the shares of a company, the person is both the direct and the human owner. In case the person invests in an investment fund that will eventually buys shares in companies, the person together with that other investor will be called the human owner of these shares, and the investment fund will be called the direct owner. It is clear that Crowdfunding differs from shares in a sense that Crowdfunding involves for example the society, the

community, stakeholders and groups (the crown) that have interest in investing or donating to a certain initiative with no intention of acquiring shares to the beneficial. While shares are strictly business concepts, meaning one will invest (not donate) in an initiative through buying of shares to guarantee one investment in terms of return, dividend and profits. The Crowdfunding model will actually benefit small and struggling Contractors more as compared to shares, due to the fact that the small and struggling contractors are not obliged to offer shares to the investor.

2.8.8 Lease finance

According to Eisfeldt and Rampini (2009), as cited in Neuberger and R  thke-D  ppner (2012), finance leasing is an investment tool through which the legal ownership of the goods is dissociated from its economic ownership. Contrary to a classical bank loan, the lessor remains the owner of the asset. It is further mentioned that because of this ability to repossess, a lessor can implicitly extend more credit than a lender whose claim is secured by the same asset (Neuberger & R  thke-D  ppner, 2012). Therefore, leasing has a higher debt capacity than secured lending, making it especially valuable to financially constrained firms (Neuberger & R  thke-D  ppner, 2012). However, the separation between ownership and control of a leased asset involves agency costs that have to be traded off against the benefit of higher debt capacity. While banks evaluate borrowers according to their ability to repay the loan, leasing companies also evaluate potential leasing assets to assess whether their use improves the lessee's profitability (object assessment) (Neuberger and R  thke-D  ppner, 2012). Therefore, a firm may finance an investment by leasing, even if it is credit rationed (KFW, 2006, as cited in Neuberger & R  thke-D  ppner, 2012). So struggling contractors can choose leasing because it is an important source of external finance and also because of the preservation of liquidity.

In terms of mobility of the leased assets, leasing operations are classified into mobility leasing, for example the procurement of machinery, equipment, vehicles and/or properties. Leasing provides financing of fixed assets rather than direct capital (Neuberger & R  thke-D  ppner, 2012). So, leasing is an asset-based form of finance where the lessee is allowed to use assets owned by the lessor. In the case of struggling

contractors this can help by relaxing their finance and by removing the burden of applying for a bank loan that they might not even qualify to obtain.

According to Neuberger and R  thke-D  ppner (2012), the growing use of leasing can be explained by its effects of generating liquidity, releasing equity capital and improving accounting ratios. Firms may thus improve their credit rating, gaining better access to bank loans. Because of the growing use of credit ratings in bank loans in recent years, the equity ratio of a firm has become more and more important for its access to bank loans and loans terms. Consequently, SMMEs that traditionally relied on internal finance and bank loans have been compelled to look for alternative financial instruments (Neuberger and R  thke-D  ppner, 2012). Beyond financial leasing, leasing institutions often offer services such as administration, machinery management, debt management or advice, which can help small and struggling contractors to profit from advantages of Specialization (KFW, 2006, as cited in Neuberger and R  thke-D  ppner, 2012).

According to Neuberger and R  thke-D  ppner (2012), the literature on financial leasing explains the use of leasing in three main ways:

- **Tax differentials between lessee and lessor:** Transfer of tax shields from firms that cannot fully utilize the tax deduction (lessees) to firms that can (lessors). Therefore, firms with marginal tax rates are expected to lease more.
- **Debt substitutability:** Leasing served as a complementary form of financing. It serves as an alternative for bank loans, because it reduces debt capacity. However, it has a higher debt capacity than secured lending for the lessors, because the lessors have to claim first on the asset leased and have a greater ability to repossess the asset to preserve its capital. Therefore, leasing is likely to be advantageous for financially distressed, debt constrained firms.
- **Agency costs:** The use of leasing may reduce agency costs of the separation between ownership and control in larger companies, because leasing is not an investment decision and lessors have claims over the asset (Lasfer, 1998, Levis, 1998, as cited in Neuberger & R  thke-D  ppner, 2012).

It is therefore important to mention that there are several forms of start -up financing available to SMMEs. However, the question of real accessibility remains unanswered. This is more common when it comes to start-up for companies within the construction sector, as its capital-intensive nature cripples all funding portions due its collateral requirements, while retention fees and guarantees worsen the situation. This implies that while there are several qualified SMMEs, the lack of start-up funds will always be an obstacle to participate in the construction industry.

2.9. SMALL BUSINESS START-UP CAPITAL AND FINANCING

This research report focuses on the possibility of alleviating the pressures experienced by average and struggling contractors, who are trying to get their small businesses running, by providing them with start-up capital. According to DTI (2005), small businesses include such in all stages of development and at times referred to as start-ups, emerging or expanding enterprises. Westlund et al., (2014) define a small company as an entrepreneur who strives to survive and much of the entrepreneurship literature focuses on the growth of these firms.

According to Purnus (2015:1227), there is a necessity for a specialised bank that would cater for the high amount of money required by contractors in order to start their projects. He further emphasises that this bank must not be just like any commercial bank, but a special bank that would be able to address the financial needs of contractors in terms of financial loans (Purnus, 2015: 1227).

According to Yin (n.d.), as cited in Ibn-Homaid and Tijani (2015), the inadequacy of financial capital in the construction industry is the major contributor to the failure of many construction companies. He adds that in most cases contractors do not possess fixed assets as compared to their counterparts who are within the manufacturing industry since they have construction equipment as opposed to owning buildings and land. Another challenge, as mentioned by Yin in Ibn-Homaid and Tijani (2015) is that banks only accept immovable assets as collateral for financial loans to contractors. This situation makes it cumbersome for contractors to be afforded financial loans by the banks to start their projects (Yin [n.d], as cited in Ibn-Homaid & Tijani, 2015).

There are five types of financing methods as mentioned by Goldberg (2012) and they are seed investor financing, venture capital financing (See 2.8.6), 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. This 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 overheads. 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 market place. Start-up companies in this stage often have, assembled key management, a properly prepared business plan, and have conducted an investigation 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 can obtain a higher degree of security than an ordinary investment in equity since their rights as debt holders are higher than those 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 at this stage also strengthens capabilities in the areas of manufacturing, sales, and marketing.

2.10. 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 average and struggling contractors, trying to get their small businesses running, by providing them with start-up capital. According to DTI (2005), a small business includes such in all stages of development and at times referred to as start-ups, emerging or expanding enterprises. Westlund et al., (2014) define a small company owner as an entrepreneur who strives to survive and much of the entrepreneurship literature focuses on the growth of these firms. What these definitions have in common is the view that small businesses need all the necessary support they can get to grow and survive in such a competitive construction environment. Thus, demanding performance guarantees would instead impede their growth and development as illustrated in the following sections.

2.10.1. Demanding Performance Guarantee

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 in cash or in the form of collaterals. According to article 6.2.3 of the General Conditions of Contract for Construction Works (2015:10)

“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 they are 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.

2.10.2. Demanding retention fees

A retention fee, according to the General Condition of Contracts of 2015, is money that usually amounts between five to ten percent of the total value of the work completed. A retention fee is the money that is kept by the employer 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 case the work has not been 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, the employer retains it. 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”. What these definitions have in common is the view that small businesses need all the necessary support they can get to grow and survive in such a competitive construction environment. Thus, demand performance guarantees would instead impede their growth and development as illustrated in the following sections.

2.11. 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 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 were 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 contracts were discussed in relation to start-up capital namely: the JBCC, NEC3, FIDIC and the GCC.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

This chapter offers a comprehensive 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

Creswell (2014:6) mentions four worldviews, namely constructivism, post-positivism, pragmatic and transformative. The researcher opted to use a 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 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 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 to unearth fresh facts and collaborations with regards to solutions (Tamal, 2010:32).

An overall plan for a research study can be understood as a research design, because it construes the reasons for the 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 have 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 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 he/ she will follow with the participants with the aim of arriving at a conclusion pertaining to the research problem (Welman et al., 2005:52). This study employed a qualitative research method since it resorts within the social-constructivist worldview.

Basically, in a 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. Researchers therefore 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 preferred by qualitative researchers, because they provide participants with the liberty to share their experiences and understanding of their environments extensively (Creswell, 2014:8). Other authors such as Yin, 2009; Lichtman 2013 and Robson, 2002, further assert that human beings can 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, if the 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 the participants become major role players in the entire process and the data they bring home. Qualitative research also involves a strategy which requires increasing the comprehension of why things are the way they are in the social world and 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 several 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 a type of a social question that pays attention to the way people understand and make logic of their personal experiences and the world they exist in (Yin, 2009:44). Furthermore, in exploring people's behaviour, perspectives, views and experiences, qualitative research is utilised to understand what rests at the core of their lives.

Leedy and Ormrod (2013:140) assert that this is a kind of 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 concept and to unearth the problems that exist within that phenomenon.

The researcher was afforded an opportunity 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 must be naturalistic (Willig, 2008:15).

Every research method has 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

According to McMillan and Schumacher (2010:395), a qualitative research methods has several advantages that often include the following: more comprehensive information is provided; it provides the researcher with the liberty to study the whole process and 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. This study endeavoured to take advantage of this method to enrich data.

3.4.2. Disadvantages of qualitative research method

Contrary to the above McMillan and Schumacher (2010:395) emphasise that 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 use one method only; more information is required (extensive data gathering); report writing and forming conclusions may be difficult; and it may be misleading to readers should the type of approach used not be fully integrated. The researcher was cognisant of the above and efforts were put in place to minimise any setback that would arise (see section 3.6.3)

3.5. PHILOSOPHICAL WORLDVIEW

A research design explains the plans and procedures for the 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 (2001:12), the recommended understanding is based on a condition of reality that influences one's manner of thinking, knowing and doing and is called a philosophical worldview.

Creswell (2009:3) is of the view that worldview assumptions give facts to all the valuable decisions that need to be made 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 people's 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 mentions that philosophical assumptions are part of a research, irrespective of the researcher 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 and therefore it is crucial in determining how data serves to find a solution to a question (Creswell, 2013:18). Creswell (2013:20) identifies 4 types of philosophical worldview assumptions, namely epistemological, axiological, methodological and ontological assumptions. Since the researcher will use a qualitative research method, three assumptions will be discussed for the sake of this study and those are the ontological, epistemological and pragmatic assumptions.

The researcher embarked on a qualitative study, in agreement with its underlying philosophical beliefs, while bringing to the study his own worldviews that result in shaping the direction of the research. 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 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 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 or not. The construction industry is a complex field with multifaced nature of barriers to the entry of SMMEs. They show that multiple realities are not only manifested in the literature review, but also as stated s in Chapter Three of this study that the policies and difficulties in the area interface with humanity- which is a realistic phenomenon reflecting ontological principles.

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 mentions 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. These assumptions 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) states 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. Because the study is an inquiry in nature, its epistemological assumption is the possibility of knowing and learning through focusing on the probability of waiving performance guarantees and retention fees, as well as investigating whether start -up financing would be a possibility. This then brings together the two aspects of ontology—linked to realities and epistemology and knowing and understanding the realities.

3.5.3. A pragmatic research design framework

A worldwide phenomenon which comes to being because of actions, situations, and consequences rather than truth or facts, if they do exist as in post-positivism is called a pragmatic research approach. Creswell (2009:6) defines a post-positivist approach as a scientific, reductionism adjusted approach which uses an all-inclusive computer program to perform a data analysis. Creswell (2009:6) further explains 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 resolve the problem. They also become conscious of the fact that 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 qualitative research in soliciting solutions to certain challenges (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:78).

Researchers that make use of a pragmatic research approach tend 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) further say that pragmatic researchers do encourage the working together of researchers in their quest to find solutions irrespective of philosophical orientation.

According to Creswell (2014:10) the following are the advantages of a pragmatic research approach: 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 focus on and 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 (Cherry Holmes, 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, and;
- 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 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, 2010:232). Some researchers usually refer to the 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 (Weathington 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 participants from various cities and metro municipalities namely: The City of Johannesburg, City of Tshwane, City of Ekurhuleni, Nelson Mandela Municipality, Ethekewini Municipality, Mangaung Municipality and the Buffalo City Municipality, using a simple convenient sampling approach (Yin, 2009:64).

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 as well as those that are directly involved with contractors were

interviewed. The map below shows the geographical location of all eight metro municipalities in South Africa.



Figure 3.1: Geographical location of all the metro municipalities

Source: Ivan Turok (2014)

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, etc.) 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. According to Willig (2008:24), the following key questions were constantly borne in mind:

- whom to interview and why;
- how to recruit participants;
- how to record and transcribe the interview;
- what style of interviewing to use; and
- what questions 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 several data analysis methods, for example, discourse analysis, grounded theory and interpretive phenomenology. Having collected and transcribed the data, the researcher then used *Atlas-ti*, Version 7 software for data analysis being assisted by an outsourced data analyst. The detailed approach and description are described 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 similar participants within a similar environment than was used in the original study. This implies the level of trust in which the research was conducted (Stringer, 2007:59). During the interviews which were conducted with several participants,

the researcher used a voice recorder to capture all the conversations and later transcribed the interviews into word documents, exactly as the participants said it. 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 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 processes described took place is called confirmability (Stringer, 2007:59). One way of ensuring confirmability is 'bracketing', which 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 to achieve research objective. To realise this, several policy documents and project evaluation as well as feasibility reports had been consulted to reveal some information linked to contract constrains, start-up shortages and contractors' views on both performance guarantees and retention fees. This helped particularly as the various sources gathered provided similar conclusions, 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 possible 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 physically or emotionally. Participants were not obliged to participate in this study and those that took part, remained anonymous. Tamal (2010:32) states that it is always important when embarking on any type of research to ensure that protection of the subjects (participants) is guaranteed 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's policy on research ethics and other research codes of ethics which are 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 research. The researcher in this case adhered to all these principles:

- Non-maleficence - the 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 you study. The researcher assessed any risks or costs that may influence 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 requested to sign a consent form stating that they give consent to participate in the study (Bless et al., 2013:30).
- Rights to confidentiality and anonymity - All participants were treated anonymously to protect and respect their rights to privacy and confidentiality. Their identities were protected (Laws et al., 2013:164). Bless et al., (2013:31) and Streubert and Carpenter (2011:63) call 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 were not exploited in any way 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 with regards to 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 12 July 1978, the National Research Act was signed which was aimed at paving the way for the protection of human subjects that may be taking part in both behavioural and biomedical research. The main purpose of the Belmont Report was to guarantee that all research involving human subjects are done in a humane manner and in accordance with

stated principles. To ensure that all the research participants are protected, the researcher adhered to all the principles as mentioned in the Belmont Report, (1978). These principles are as follows:

- Respect for persons – the participants, in this case, were given 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 consideration without being distracted during the interviews. The researcher protected all the participants from any possible danger or harm.
- Beneficence – one factor that is 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 possible harm is reduced as much as possible.
- Justice – this basically means that all people should be treated fairly and equally without any prejudice. 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 against because of their age, race, gender or experience.

The Belmont Report states and 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

Research that involves participation of human beings is not a new phenomenon, as methodologies which include conducting interviews, observations (behaviour); and 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 several disciplines. The field of engineering is one example of a study field that involves humans in a study. Wits University saw it necessary that all forms of research 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 because of partaking in the study,
- Participants must see value in their participation which will have long-term benefits to the community at large,
- Confidentiality and anonymity of participants must be ensured,
- Special care must be taken when dealing with children, prisoners, sex workers, refugees and victims of crime.

The researcher adhered strictly to all the above ethical considerations and 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.

3.7. SUMMARY

The research study was necessitated by the way 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 and a 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 employed a qualitative method a pragmatic method approach was chosen. After data had been gathered, it was analysed by using the appropriate software namely; *Atlas-ti* version 7 as a tool for data analysis.

Initially the population were planned to be taken from the four major metropolitan cities of South Africa, namely Johannesburg, Cape Town, Port Elizabeth and Durban, but due to lack of commitment from some of the participants, the sample was enlarged to include other major metropolitan municipalities which are the City of Tshwane, City of Ekurhuleni, City of Johannesburg, Nelson Mandela Municipality, Ethekwini 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. Secondly, the participants' comments have not been edited to preserve their authenticity. The data was transcribed, and content analysis was used for the interpretation. The interpreted data was then analysed from key issues and themes stemming from the input of primary data derived from *Atlas-ti* version 7 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, Ethekewini Municipality, Mangaung Municipality, and Buffalo City Municipality. This coverage is a representation of the major municipalities in South Africa that claim more construction projects annually according to the CIDB (2016) report.

Classification of respondents by Qualification	Number
Bachelors of Civil engineering	9
Masters in Hydrology	1
LLB	1
Transportation engineering	3
Masters in Project Management	3
Post Graduate Diploma in project management	3

Table 4.1: A summary of participants of the study.

The classification of participants was against the need to capture a whole range of diverse and segmented views about the feasibility of introducing the start-up system capital for contractors as opposed to demanding performance guarantees and retention fees in the South African construction industry.

4.2.1. THEMATIC ANALYSIS OF RESPONSES

According to Corbin and Strauss (2018:134), responses of participants from data collected through interviews are open-ended and have a non-numeric form. So, a researcher needs to conduct a Qualitative Data Analysis (QDA) order to make sense of data. 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 7 as mentioned earlier.

Maintained by Marshall and Rossman (1990:111), two of the most prevalent methods 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 the 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 Lee and Lings (2008:9). 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 (the answers, 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 believed that the development of the coding system should be data-driven or theory-driven, as emphasised by Leech and Onwuegbuzie (2007:9). In a data-driven approach, the categories (codes) are 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 to select the categories, making it less time-consuming than the data-driven approach. The theory-driven approach was particularly suited to existing 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 (Corbin & Strauss, 2008:134). 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 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 a predetermined thematic framework one loses the flexibility of analysis which can bias and limit the interpretation of the data.

At the end of it all, referring to both approaches, the 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 by means of 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. According to Marshall and Rossman (1990:111), 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.

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, (the qualitative analysis, 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 Corbin and Strauss (2008:134), it was the first step to look for broader patterns 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 as seen in the table below:

Phase	Description of the process
Familiarization with the data	Read and re-read data to become familiar with what the data entails, paying specific attention to patterns that occur and noting down initial ideas/patterns.
Generation of initial codes	Generated the initial codes by identifying where and how patterns occur. This happened through data reduction where the researcher collapsed data into labels to create categories for more efficient analysis. Data compilation was also completed by making inferences about what the codes mean.
Searching for themes	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.
Reviewing themes	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.
Defining and naming categories	Generated clear definitions and names for each theme. Described which aspects of data were captured in each theme, and what was interesting about the themes.
Producing final report	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.

Table 4.2. Summary of the phases followed in the coding

Adapted from Braun and Clarke (2006:6)

For 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 to 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. With regard to the above contracts and guarantees have been one of the key regulatory issues within the construction sector. Therefore, it was important to have an understanding whether the respective respondents who are senior in the management of the construction projects have a clear understanding and conceptualisation of contract.

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 contractin 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, their understanding and interpretation of contract before and during the process revealed definite knowledge gaps. Nevertheless many of them have a better understanding 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 as a shallow knowledge of contract management. The study reveals that many have had to outsource manpower, rely on family and friends to provide the most significant relationships for micro-business assistance, particularly during start-up, and they are the main sources of information during the start-up process and frequently outsource project management.

Furthermore, the findings correlate with Croeser (2010) who stresses that lack of knowledge on the availability of information or the perceived contracts 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 and, together with inconsistent providers, render it very difficult to manage and achieve results (Croeser, 2010). Regardless of the performance contract and guarantees which is at the centre 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 are difficult.

Participants were therefore 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 several issues that had been similar and broadly articulated by most respondents, ranging from start-up capital shortages to individual contractors' poor businesses and finance management structures. The issue of poor project and risk management is also prominent in the comments made by 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 which are in agreement with the views expressed by Dlungwana, Nxumalo, Van Huysteen, Rwelamila and Noyana (2012:12). With reference to many responses from the participants, it is important to note that the construction industry is highly saturated and still 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 such as a legal background, project management, as well as soft skill; 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 train candidates with the appropriate backgrounds, which is generating competition within the market for the same skilled employees. Within the construction sector in South Africa, procurement, supply chain and logistical experience is highly sought after, as financial services continue to struggle to hire the right professionals (Gunasekaran & Love, 1998:12). 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 desired skills such as legal background/project management/soft skills and capacity shortage, which most

companies do not seem keen to address, were raised by several participants, as captured in their own words above. This speaks to a potential limitation on the execution of the key supply chain processes and construction-based areas in general (Rwelamila, 2011:319). If project management skill and soft skill are not keen on learning and development as a key aspect of human development, it is important to view the the position of struggling contractors as focal in the construction industry. Analysis has demonstrated that most directors have limited comprehension of how individuals identify with data and relate to contract -based information, subsequently, have the tendency to concentrate on useless system arrangements, neglecting to perceive the significance of the better knowledge management of contracts.

Observations also seem to agree with Barret (2010:21) that 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 those 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 (Abdul-Rahman. Kwan & Woods, 1999:597).

Without a management paradigm shift, strategic sourcing will continue to fail. They have however, not yet realised the implications of having visible, functional and streamlined construction system chains which control 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, et al., (2014:12) point out categorically that to understand the

shortcomings of present supply chains effectively, both buyers and line managers need to be able to understand the role of contract project management within an organisation and must be able to buy into the concept., Cheng et al., (2014:12) emphasise that, given the historical practices, 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 do add value or are necessary. Given this backdrop, normal change management strategies will not apply as these changes need to be introduced and supported within the organisation from top management to succeed. Traditional consultative change management methods have clearly failed in some organisations. Many of the findings relate to the latest publication about talent management and the skills shortage in n PwC's Annual Global CEO Survey (2015), in which 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 and as 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 tasks, the success of which 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. Also the roles of the professional bodies in providing Continuing Professional Development (CPD) in South Africa should be encouraged.

4.2.4 Municipalities and waiving of performance guarantee

In this section, many respondents seemed to have a broad idea of what performance guarantees are. The common denominator in this was that guarantees are required from contractors to guarantee the performance of a contract. With regards to this aspect,, participants were asked to share their sentiments , whether a municipality can afford to waive performance guarantees 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, which 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 SMMs. 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)
- “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 to do 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 necessarily 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: 10.rtf - 2:11 -189:191)
- “Basically, all the risk is 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.

There were also mixed responses... Some respondents mentioned that performance guarantees stand because most municipalities cannot simply manage all project risks associated properly and thus it is the only way to safeguard against shoddy and poor workmanship. However, they mentioned that with proper systems in place, it would be possible for both parties to understand contract terms as 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 mentioned 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 Municipalities and waiving of retention fees

Retention fees in many respondents' words carry a 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 the site. Most agree to the need to be able to at least utilise such retention to fix whatever issues there may still be. 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 work or project has been fully completed. It is only released then. So, it is an amount which is held as well, to ensure that the contractor performs and fixes any defects within the period that he is supposed to.

Pertaining to the above, participants were asked to share their thoughts regarding the question whether 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)
- “for me 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 contractor 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 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 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, retention fees had been popular throughout the interaction with the respondents. The overwhelming view is that municipalities need to manage the risks associated with projects over time and the only way that can be ensured is to have retention fees. This is the only fee that Clients can withhold in managing project risks, more especially related to shoddy works. In this case retention fees will be the only effective tool to use because there is a need for ensuring maintenance quality and financial return. 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 SMMEs have indeed limited finance surety from the banks, and an inadequate cash flow that would easily imply automatic exclusion, which is in line with observations made by Jurgens (2010:31).

Participants in numbers mentioned that in theory, retention encourages efficiency and productivity for the construction project. It helps to 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 defect 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.

According to the responses, there is evidence from a study that Clients 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 Contractors were keen to maintain good working relationships with the Clients and win future work.

4.2.6 Municipalities and start-up capital to struggling contractors

The common view is that the South African construction industry is saturated with many large companies as well as SMMEs competing for many projects. The Municipal Finance Management Act (MFMA), however, does not draw the line on aspects of start-up capital

for struggling companies. The issue of start-up capital is of concern as struggling contractors lacks capacity and finance to kick start projects.

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 expressed. The consensus is that there is no start-up capital of any nature. Many though, agreed that it would have been ideal to have such a fund for struggling companies and emerging ones. This capital may be utilized towards equipment and working capital. Those are two kinds of start-up capital that are key. For a start-up to work you must have the required equipment, whether it has been bought or hired. But there must be enough capital to access the equipment to start a project as well as working capital for payment and revolving credit or cash that will be needed for key project financing, like in the case of material. Many small and emerging companies that may have the technical knowledge would benefit from this.

Some responses agreed 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, as, many municipalities are also struggling financially. However, there should be a database showing performance of each contractor on any project undertaken for evaluation purpose. One prominent view was that in raising the start-up capital, a structure is required that is going to be workable. Complex contractual arrangements will tie down the rights and obligations of the different parties and allocate the risks between them. Findings subscribe 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 may become 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. Project initiation/ execution 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's contractual structure must be substantially in place.

A characteristic of the process is the involvement of several 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. The lack of policy related to this will be discussed later. This does not, however, disregard the majority view that financial support of some kind would indeed be helpful to struggling contractors.

4.2.7 Stumbling blocks to start-up capital to struggling contractors

Access to finances is indeed a big problem 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 et al., (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 at which 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 because they are not able to perform, they are consequently not competitive (Dulaimi et al., 2002).

Participants were asked about their views regarding 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)

The findings above point to the several issues as stumbling blocks 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 very 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 not to have adequate funding released during relevant phases of projects execution. Milestone payments are not made on time due to organisational lapses or bureaucracy. Inadequate cash flow leads to delays in delivery of materials and equipment to the site and delays in payment of workers’ salaries.

Furthermore, participants observe that top management of firms involved in a project rarely commit 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 reciprocal relationships need to be promoted in the long term because of their advantages, but this 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 learn from past experience to avoid such in the future. 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 and Balderstone (2010:169) emphasise 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 participants that there is a high level of new contractors entering the construction industry hoping that they may be considered attractive to investors. This is because of the following:

- 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,
- there are low switching costs and soon new projects and new contractors are used and
- 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 as a stumbling block to access finance.

4.2.8 Internal policies and legislations

Most respondents revealed that there was a clear need to support emerging contractors with caution, but not all municipalities had a policy in place on how that could be handled. The only guiding framework is the MFMA 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 there are issues like the Municipal Finance Management Act but the legislation for now does not allow for upfront payment for any service providers or contractors included. The Municipal Finance Management Act should be revised to make provision for such kind of contractors, to make sure that municipalities are able to advance them, because start-up capital is an advance payment, but the MFMA does not allow for advance payment to service providers, including contractors.

4.2.9. SUMMARY

This study shows an ambivalence towards the understanding of contracts, as well as issues related to guarantees within the construction industry in most municipalities in South Africa. This study identifies numerous constraints to guarantees of which many companies are aware, which forms the main rationale for the study. With the expected extensive use of subcontractors and suppliers in South Africa not slowing down, the management of construction projects is deemed to be vital to performance progress and profitability in the sector. This research strategy adopted a qualitative approach and therefore provides a vivid picture 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 construction firms, because only the possibility of a long-term relationship and the availability of a database constitute the main management approaches that are currently used by the firms. The perception of guarantees in the sector is also sophisticated enough to become a means of driving performance improvement in the construction industry. Nevertheless, the description and level of understanding of contracts and guarantees that became evident during the interviews support the notion that there is an urgent need to adopt a proactive instead of a reactive approach to contracts, 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 industry emerge. The next chapter provides the conclusions and recommendations.

CHAPTER 5

SUMMARY OF FINDINGS

5.1. INTRODUCTION

This study 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 currently the norm in the construction industry.

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 provided input to the primary research findings. As they share the assessment of current thinking against what is happening in reality.

5.2. SUMMARY OF FINDINGS

5.2.1. Knowledge and understanding of contracts

Contract and bidding process are not easy to understand, so much so that it 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 should have.

This research also highlights the anxiety and excitement that contracts generate. At some point if decision is made to implement venture financing then contractors, consultants and project managers might be unable to find a way to come off the mountain of anxiety with the stress they might be facing on their projects... Contractors are hesitant to take part in what they see to be tedious contract transactions, and temporary consultants and project managers are frightful that if 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. Causes of poor performance of the contractors

The study identifies several 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 causes of poor performance.

Respondents mentioned that municipalities are public entities and most projects are community projects with involvement. This calls 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 responses can be segmented into two sections:

People- related limitations	System-related limitations
• Poor leadership in key areas of systems • Deficient internal and external communication and information transfer • Lack of coordination, collaboration and commitment between suppliers and clients within the construction supply chain • Poor training of contractor's suppliers subcontractors and workers • Poor Financial Management • Poor planning; • Not enough resources allocated to the project; • Late payments by the client; • The main contractor not paying suppliers and labourers.	• Complex tendering process • Design problems (many changes and inconsistent information) • Inadequate management within the supply chain, mainly poor planning and control • Inability to integrate the company's internal procedures • Lack of integrated information systems and electronic commerce linking firms • Lack of suitable organisational setup • Poor financial records • Lack of trust by banks of Black contractors • No Quality Management Systems in place.

Table 5.1 Major causes of poor performance of contractors.

Source: Interview data

The table above is a summary of the major causes of poor performance by many contractors. Some issues are worth the emphasis, like the lack of experienced construction managers and the lack of internal knowledge of proper project management. This is worsened by incidences where some municipalities interfere in projects, due to their community nature. More often, these communities have to provide the labourers for the projects and their expectations are often higher than what contractors can afford to pay.

5.2.3. Municipalities 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 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 responsible? Is one of the reasons, or one of the things that is much more effective in ensuring compliance.

The other view is that performance guarantees will not really affect the performance of many contractors, nor the performance of the municipalities. Because municipalities, after all, have budgets for these projects and often plan accordingly. So, they are not really in need of any financial resources from contractors. The things that makes performance guarantee effective and working for municipalities, is that it is the only tool the municipalities can use in binding contractors.

It is also derived from the findings that a performance guarantee ties up the cash flow, which means that the capital necessary for daily expenditure may be reduced... So, it could well provide access to finance and a strong enough balance sheet for the work that need to be done 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 that the contractor can take ownership of and commit to the project if they know that there are still monies kept by the municipalities.

5.2.4. Municipalities and waiving of retention fees

Similarly, the basis for holding retentions is thought 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 ensure that the work can be carried out by others.

According to the findings, municipalities can also afford to waive retention fees. This tool is effective, to ensure performance and to ensure that the contractor fixes defects within that period, because contractors do run away and abandon sites. It was a common view that retention fees are crucial to ensure that, there is an incentive to ensure that there is good quality and if there is need for rectification, it will be done. If this is not done satisfactorily, there are funds available to appoint someone else to do rectification work.

Almost all respondents agreed that retention fees are a reliable method because there is a contract and there is an expected performance and then there is 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 difficult to even get another contractor to complete it. Nonetheless, once a project is complete and the workmanship was not up to standard, as perceived over a one-year period, such retention fees come to the 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 the poor workmanship is discovered within that one-year period, such can be fixed.

Many respondents also agreed that waiving of retention fees would result in inadequately financed contractors to 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. The more selective professional subcontractors as head contractors become, the less the financial damage would be from construction company failures.

Some respondents, however, saw a possibility that such retention fees may be waived. However, there is need to look at any policies that can propel such. Most municipalities

agree to have cession with contractors. Such as cession assists a contractor with finance to buy material as a start-up and then y that money can be deducted 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 a serious constraint, especially if retention fees and performance guarantees are in question. There was a common view among participants that it is not worth as 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 contractors, of having very little knowledge and expertise is a further indication that money will be lost. 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, it will be largely unsustainable.

The contention against start-up capital is that it is against current legislation and the fact that municipalities are not banks and do not have the knowhow to manage start- up financing. . This will give rise to audit qualifications. In addition, struggling is temporary, and contractors should be properly trained through available programs to grow and become competitive in future. Furthermore, the capital used by the municipalities is a public purse which needs to be utilized in an accountable and transparent manner and the risk of abuse should be minimized.

However, some findings agree that although start-up capital had been abused by some and remains risky, as it relates to emerging Contractors, there could be a form of program to test and appraise the contractor, and some may be able to complete projects successfully. . Some respondents also noted that there is an incubator program for Economic Developments that liaise with banks, but there is no direct funding from municipalities.

Another option revealed in the findings is that a minimal start up for specific projects is possible, however, it must be closely monitored and must provide mentorship programs

to the struggling contractors. It should not be paid directly to the owner of the company account. It should first pay for material, labour, equipment's, machinery, etc. Only then, the profit will be paid into the owner's account. The main funding should be for capital, material and labour, and whether the money should be paid directly into the suppliers' and labourers' accounts should be 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 programs are some of the major stumbling blocks, as the demands are always high, and the budget does not match them. Contractors often do not have expertise in project t and financial management and very often abuse the privilege of getting funds and do not deliver anyway.

Findings also show that start-up capital for the struggling contractors would mean appointing contractors who do not have the required capacity. If they are helped to start up small, and build a good track record, the initial start-up funding would have been a successful endeavour. But if medium- sized contractors 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 confirm I support and that the method of support would be defined. The MFMA provisions would be used to give a loan to a contractor who is supposed to do the work up to standard.

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 referred to the absence of any policy internally, a matter that strongly supports the urgent 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 along with CIDB practices would be the ideal catalysts in the development of financing policies.

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 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 with 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 provide sound, coherent conclusions and to suggest suitable recommendations that address the issues raised as study objectives. This final chapter of the study focuses on 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 or bonds and retention fees 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 fees 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, contractors 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 non-existent, funding will provide much-needed assistance to small and struggling contractors. However, an intense mentorship in terms of Financial Management, Contract Management and Project Management will be needed so that municipalities can rest assured that the funds they are putting in yield positive results.

The main limitation of this study is that the literature reviewed regarding construction guarantees or bonds is scanty and although? Start-up financing is mostly old, the literature provides little practical 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 recession, the situation has changed in which especially bank-based financial systems have to face numerous challenges. Therefore, the situation can vary along with the required options of finance for the start-ups.

6.2.3. Obstacles faced by struggling contractors

Looking at the construction industry superficially, one might get the mistaken impression 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 an absolute regulated setting. Nothing could be farther from the truth. There is a range of obstacles, most of which impact on contracts, both external and internal. Flexibility, attitude and action are prime prerequisites for continued success in the industry. The possibilities for fluctuations of personnel and resources are infinite. Constant change is an occupational hazard of the whole business.

Close co-operation and collaboration between the municipality as the employer and 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 the risk of delays and misunderstandings to a minimum. 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 parties of the contractors fail to perform their 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 govern 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 is obligated to 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 to give effect to the section.

In summary, the study observes that most contracts used in South Africa, for example, are often derived from those used for developed countries that require a higher 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, and small contractors are unaware of their rights or unable to enforce those on their employers. Projects are sometimes unilaterally suspended or abandoned by the employer and contractors are seldom paid promptly for work done. The procedure for the payment certificate is “bureaucratic”, and owing to poor financial management, funds are often not available to pay the contractors (Ofori, 2013:19). Hence, there is a definite need for policy change.

6.3. RECOMMENDATIONS

The following 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 current performance security must be replaced with performance security 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.

The researcher further recommends that special conditions to the contract on all four forms of contract as discussed in this study should allow for modification so that the conditions of contract on these forms of contracts suit the South African environment for the benefit of small and struggling contractors. Such modification should be done in such a way that small and struggling contractors are able to understand the provisions of such contracts, but also understand their obligations and their rights. Also small and struggling contractors must be encouraged to enhance their knowledge and skills to familiarise themselves with these forms of contracts by regularly attending courses and receiving training on contract law, contract management and construction management.

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

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

Recommendation: Therefore, the researcher recommends that respective municipalities create venture capital 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 risk capital, in cases where a company collapses, the money cannot be recovered. 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. This model would effectively monetize construction contracts, through long-term offtake agreements or other guarantees whose results would also materialise over the long-term.

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

The researcher believes that municipalities have the potential to utilise some of the methods of financing struggling firms that are in the construction environment in SA as

discussed in Chapter 2, item 2.8: “Understanding the Issue of Start-up Capital”. The fact is that struggling firms that are in the construction industry find it difficult to get their businesses 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 country. To implement this recommendation will require changes in policies.

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 prevent parties from going into business understandings under whatever conditions they acknowledge. This is the same as the circumstances 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 airliners in some parts of the world like USA, New Zealand, Australian are built using multiple subcontractors. They do not 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 and PFMA does not make provision for the payment of an advance to contractors, whereas the FIDIC and NEC3 which are used globally does make that provision. Therefore, the researcher recommends that both the MFMA and the PFMA be reviewed so that payment in advance is allowed. The National Treasury, together with policy makers, should do this review since they are the custodians of these legislations. Furthermore, there is no need to review the GCC, JBCC and other clauses that do not accommodate advance payment

because they can be dealt with 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 these have been largely abused. Today, banks are a major and easily available source of finance for start-ups. Banks provide easy access to finance for 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 is 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 its targets. Such public-private partnerships would more likely reap rewards. The literature also explored different methods of financing available in different countries and which can be used for start-ups. But Germany, which has a bank-based structure, has banks and venture capitalists as the primary sources of finance for the firms.

There are different financial trends across countries, depending on various factors ranging from financial systems to religious beliefs and lack of knowledge of other financial options to restricted facilities for start-ups. Therefore, sources of finance are available for start-ups in almost all the countries; it is just the matter of finding the right system 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. The majority of participants expressed no knowledge 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 they can grow the economy and create an opportunity for employment, thereby encouraging individuals to be employers rather than 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 lend a helping hand to a program. It found itself on the losing side by not reaping the seeds it has sown. In comparison with private institutions whose focus is marginalising profit, it is not the case with the government since 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 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.

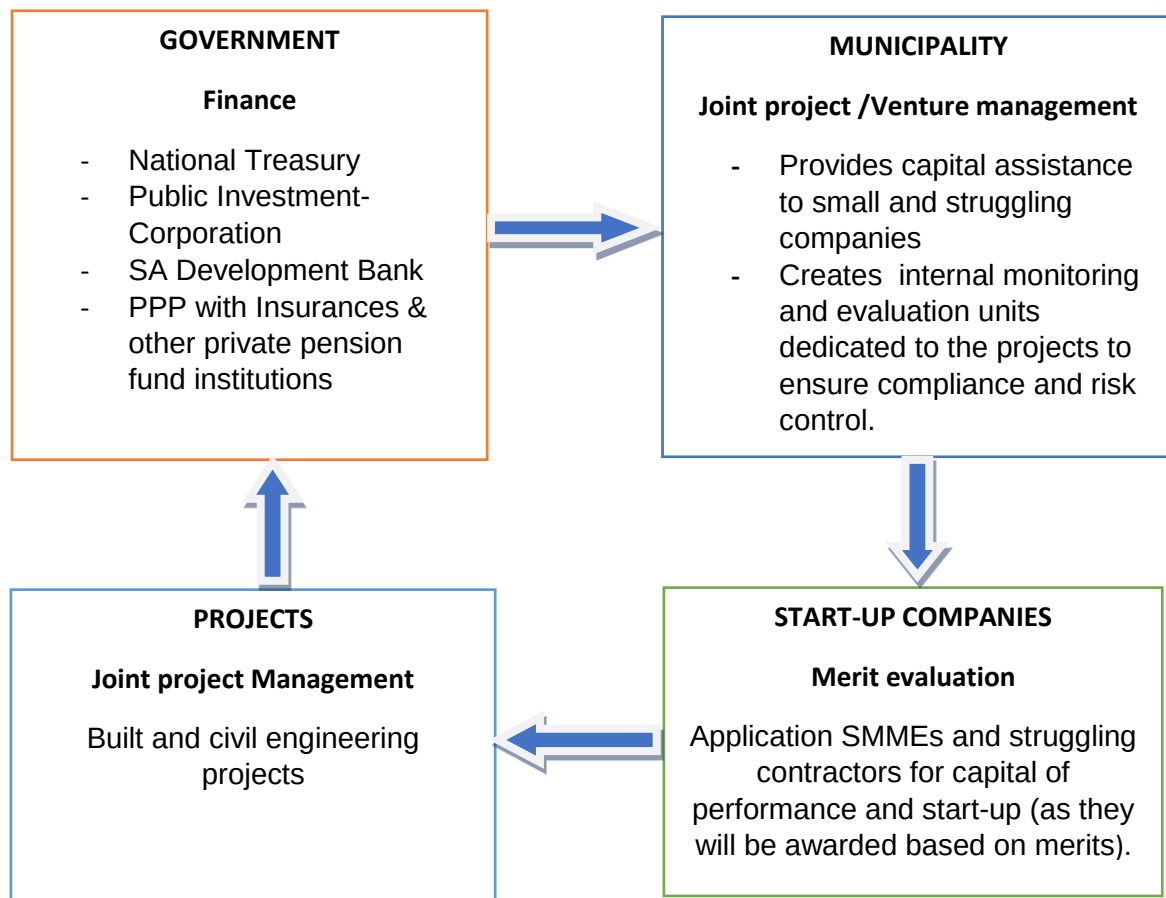


Figure 6.1. Proposed financing model

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 Corporation, SA Development Bank and other Financial Institutions in order to assist municipalities who will, in turn, assist struggling contractors. This Capital will then be made available to various municipalities on a requirement basis, meaning it will only be provided whenever they have a specific need. The application for capital by the respective municipalities will be scrutinised before being approved. The municipalities will do the same before requesting funds, as 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 requirements have been satisfied, the Contractor can then be given capital assistance to start a business. This model should apply only to the built environment and Civil Engineering projects. Similarly, it is advisable for the model to firstly be piloted in Metro Municipalities for a certain number of years before it can be extended to 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. Further study would help to delve deeper into such territories to explore what options could be feasible.

A possibility would be to investigate 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 abolish performance security and retention fees entirely. The study provides alternative solutions to the abolishment of performance guarantees and retention fees. Venture capital is therefore proposed as a solution in addressing the waiving of performance security, but also 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 participants that the retention fees systems provide no real benefits and has a negative overall impact on the construction industry. Rather than replacing 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 most participants, that municipalities can safeguard against the risks that could be associated with non-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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