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DEDICATION

I would like to dedicate this research study to my family whose unwavering support and lonely weekends made it possible for me to complete these studies. Shona Elvis Jnr Kanyira, Chrislyne Tatenda Chigumbura Kanyira and Joana Kanyira. I love you guys.

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ABSTRACT

After the introduction of SI142 of 2019 there has been a decline in construction projects success. The goal of this quantitative, correlational study was to critically analyze non-legal factors affecting implementation of construction projects success in Zimbabwe, case of Zimbabwe Power Company Hwange Expansion Project. The study sought to outline the critical factors that may be addressed to improve performance of construction project.

In an effort to address the outlined problem above mentioned, the research adopted a quantitative approach in which population of this study was identified as personnel working on Hwange Expansion Project, both technical and non-technical and a sample was drawn from this population. Stratified random sampling method was used to select respondents to a pilot tested structured questionnaire with the assistance of the researcher in some instances.

The data responses from these questionnaires were then analyzed using data analysis methods such as regression analysis and correlation analysis into findings that were used for further analysis, interrogation and recommendations. Conclusions were deduced from these findings leading to the formulation of recommendations.

The study recommended that the key stakeholders should consider Material Availability, Project Funding, Technological Transfer and Employee Motivation as key to projects success.

KEY WORDS:

BOOT   - Build-own-operate-Transfer

ZPC   - Zimbabwe Power Company

HEP   - Hwange Expansion Project

BOT   - Build-Operate-Transfer

CAD   - Computer Aided Design

CEO   - Chief Executive Officer

CI   - Construction Industry

DBO   - Design-Build-Operate

FEM   - Finite Element Method

GFC   - Global Financial Crisis

ICT   - Information Communication Technology

KMO   - Kaiser-Meyer-Olkin

NDP   - National Development Plans

PESTEL   - Political, Economic, Social, Technological, Legal, and Environmental

PM   - Project Manager

PMBOK   - Project Management Body of Knowledge

PPP   - Public-Private Partnership

SI   - Statutory Instrument

RTGS   - Real Time Gross Settlement

ZGCC4   - Zimbabwe General Conditions of Contract Fourth Edition

FIDIC   - Fédération Internationale Des Ingénieurs-Conseils

BS   - British Standard

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1 INTRODUCTION

Contract management is a key aspect in construction projects management and the success of projects. It is important for project managers to ensure strict adherence to contracts that they will be overseeing. It is also important for project managers to operate within the confines of the law. The introduction of SI142 of 2019 which basically abolished the use of multiple currencies has its effect on construction projects management and success of projects. The effect is perceived to negatively affect currently ongoing projects. SI142 of 2019 is also known as the Reserve Bank of Zimbabwe (Legal Tender) Regulations.

This research paper seeks to investigate the effect of SI142 of 2019 on currently ongoing construction projects contracts. The chapter gives a detailed background to the research subject matter by referencing the construction industry in Zimbabwe paying attention to the current ongoing projects. The chapter therefore is outlined in the following sequence; background of study, research problem, aims and objectives, assumptions of the study, significance of the study, scope of the study as well as limitations of the study as suggested by Wilkinson (1991).

1.1 Background of the Study

After having adopted the multi-currency regime through an Act of Parliament in 2009 the Government of Zimbabwe through the Reserve Bank of Zimbabwe introduced Statutory Instrument 142 of 2019 in which it was demonetising the multi-currency system. SI142 of 2019 has had negative effects such as price distortions as highlighted by the Zimbabwe Building Contractors' Association president Mr Francis Mangwendeza (Kuwaza, 2019). According to the same source introduction of SI142 of 2019 has also led to a compromise in contracts performance in the construction industry of Zimbabwe.

There are various forms of contracts that are used internationally in construction industry. However, with globalisation of markets and production, there has been a shift towards use of similar contracts internationally. Globalisation has assisted in the convergence of taste and preferences and the construction industry is not spared of that. Globalization refers to the shift toward a more integrated and interdependent world economy (Hill, 2013). In Zimbabwe the common form of contract is the Zimbabwe General Conditions of Contract Fourth Edition abbreviated as ZGCC4. Recent projects have seen the use of more internationally inclined contracts such as the FIDIC.

1.2   Statement of the Problem

The introduction of SI142 of 2019 has seen many construction projects being terminated or shelved due to unviability of local RTGS currency. It also has to be established the performance of contracts after the introduction of SI142 of 2019. In some contracts, contractors had performed their own bit of the contract and what was left was for the clients to meet their contractual obligation which is paying for the service rendered or product delivered.

1.3   Research aim and objectives

Overall objective: To establish the performance of Construction projects after the introduction of SI142 of 2019

The specific objectives of the study are as outlined;

1. To assess the effects of SI142 of 2019 on materials availability for Zimbabwe's Construction Industry.

2. To establish the effects of SI142 of 2019 to potential funding for projects in Zimbabwe's Construction Industry

3. To ascertain how technological transfer in the Construction Industry of Zimbabwe has been affected by the introduction of SI142 of 2019.

4. To assess the effects of SI142 of 2019 on employee motivation in the Construction Industry of Zimbabwe.

1.4   Major Research question(s)

These research questions form the foundation of the formulation of a questionnaire to be used in the study. Below listed are the guiding questions;

1. What are the effects of SI142 of 2019 on materials availability for projects in Zimbabwean construction industry?
2. Has project funding declined since the introduction of SI142 of 2019 for Zimbabwe's construction industry?

3. Has technological transfer in construction industry declined since the introduction of SI142 of 2019?

4. Has employee motivation gone down in Zimbabwe's construction industry since the introduction of SI142 of 2019?

1.5 Research hypothesis/ Proposition (Main Argument)

Overall Hypothesis H1. The introduction of SI142 of 2019 negatively affected performance of construction projects.

Specific hypothesis from H1

H1.1 The introduction of SI142 of 2019 has led to materials scarcity in the Construction Industry of Zimbabwe.

H1.2 Project funding has declined since the introduction of SI142 of 2019.

H1.3 Technological Transfer has been negatively affected since the introduction of SI142 of 2019

H1.4 Employee motivation has gone down since the introduction of SI142 of 2019.

1.6 Scope of research/Delimitation of the study

The research is basically limited to the construction industry of Zimbabwe with particular attention to civil and structural engineering projects. Special focus will be paid to Ministry of Energy and Power Development – ZPC Hwange Expansion Project contract in which the contractor is performing their contractual obligation and then currency changed midway into the project. This project is of interest because of its magnitude and nature. The project is a US$1,400,000,000.00 and any policy inconsistence can easily affect performance of the project.

Contract models have been developed and applied in many countries around the globe. However, the study will be limited by the fact of the uniqueness of different legislation in different countries not all models will be applicable to the Zimbabwean situation. The study therefore makes reference to applicable literature relevant to the subject matter. The study focuses on isolated projects in certain geographical locations and the applicability of existing contracts.

1.7   Limitations

- Access to critical information was limited since some of the information required was regarded as highly sensitive and confidential by the respondents. However, the researcher tried to explain the importance of the research as well as establish good rapport, which in other cases arouse the respondents to divulge the needed information.
- Time was a limiting factor. It was not be possible to study the whole population because the research itself has strict deadlines for academic purposes and as such its duration has to be within the confines of the University of Zimbabwe Semester Schedule. The researcher therefore used a sample that was small and manageable.
- The amount of money needed to finance the research was out of the reach of the researcher in terms of stationery, printing and data collection. However, in the interest itself, the researcher had to make do with the little resources available and at the same time not compromising the quality of the research itself.

1.8   Justification/Rationale or Significance of research

The study will be of importance to the following stakeholders

a) It will assist construction industry players to come up with strategies of how to manage contracts that are affected by SI142 of 2019 and establish the legality of thereof.

b) It will help address issues of contract breach and present a clearer understanding of the law with regards to contract management.

c) The study is also of great significance to the project management community and other project management professionals as the research will reduce the number of contract terminations.

d) The researcher will also benefit from the new knowledge they will gather as a result of the research. This will contribute to their continuous professional and academic development.

2   LITERATURE REVIEW

2.1   Introduction

This chapter provides an overview of previously researched literature on similar studies ranging from academic books, research papers to scholarly journals. The literature starts with the explanation of the search for the literature. This is followed by definitions of some of the terms closely associated with the research area. This chapter seeks to visit already existing literature in line with policy formulation and implementation with specific focus on SI142 of 2019 and its non-legal effects on the performance of construction industry projects in Zimbabwe. This chapter comprises of the underpinning theories, theoretical review, empirical review, conceptual framework and critique of the review. After reviewing the literature, research gap will be identified.

2.2   Explanation of the search strategy for the literature

In my literature review, special attention was paid to some of the most noteworthy scholars and writers in the area of study. Literature was filtered by credentials of the author, year of publication and significance to my research topic.

2.3   Definition of the phenomenon

2.3.1   SI 142of 2019

The title of the research is **Non-legal Effects of SI142 of 2019 on Construction Industry Projects Performance in Zimbabwe**. To develop discussion around the topic, it is important to first have an understanding of SI142 of 2019. SI142 of 2019 which may be referred to as the Reserve Bank of Zimbabwe (Legal Tender) Regulations, 2019 basically abolishes the use of multi-currencies. According to Section 2 of SI142 of 2019, the Zimbabwe dollar is to be the sole currency for legal tender purposes as from the 24th of June 2019. Section 3 however makes exceptions to the opening and operation of foreign currency designated accounts "Nostro FCA Accounts", the requirement to pay in any of the foreign currencies referred to in section 2(1) duties of customs in terms of the Customs and Excise Act [*Chapter 23:02*] that are payable on the importation of goods specified under that Act to be luxury goods, or, in respect of such goods, to pay any import or value added tax in any of the foreign currencies referred to in section 2(1) as required by or under the Value Added Tax Act [*Chapter 23:12*].

Further to the SI142 of 2019, SI 33 of 2019 (Amendment of Reserve Bank of Zimbabwe Act & Issue of Real Time Gross Settlement Electronic Dollars (RTGS Dollars)) through the Presidential Power was enacted into law. S.I. 33 of 19 expressly provides that all assets and liabilities, including judgment debts, denominated in United States dollars immediately before the effective date of 22 February 2019 shall on or after the aforementioned date be valued in RTGS dollars on a one-to-one rate. This position was further confirmed by the Supreme Court Judgement in Zambezi Gas v NR Barger SC 3/20, where it was upheld that RTGS payments before 22 February 2019 were taken on a 1:1 basis with the United States Dollar.

According to Madhuku (2010), in Zimbabwe, there are four recognised sources of law which are legislation, common law, custom law and authoritative texts.

Legislation is made through two ways which are through an Act of parliament or through Statutory Instruments. An Act of Parliament starts as a bill and debated in both the Lower House of Assembly and the Upper House of Assembly before being taken to the President for approval. This is regarded as primary law. Alternatively, law can be made by the executive through Statutory Instruments (SI), in which case it is called secondary law. It is generally thought that Statutory Law is achieved through planning, research and debated amongst experts. Charman (2007) asserts this as the advantage of a statute. An interesting dynamic of law is that even though it is made by Parliament, it still is fine-tuned by the courts of the land as it is their role to interpret law on a daily basis.

Having discussed about the meaning of SI 142, it is also important to establish what a project really is, as it forms a critical aspect of the research topic.

2.3.2 *Project Management*

The PMBOK defines a project as a temporary endeavour undertaken to create a unique product, service, or result. These can vary from a simple task such as preparing a meal to a complex one such as launching a satellite spaceship. BS 6079-2:2000 Project Management Vocabulary defines a project as a unique process, comprising of set of organised and monitored activities with time frames, done to achieve objectives in order to satisfy specific requirements, including constraints of time, cost and resources. We can deduct from both definitions that there is emphasis to uniqueness.

One other key term that comes in the last definition is 'motivation'. To that end, BS6079-2:2000 suggests that all resources can be in place but without sufficient motivation a project may never be realised. Biafore (2011) defines a project as a unique job with a specific goal, clear-cut starting and ending dates, and in most cases a budget. This definition suggests that projects have key deliverables and that leads us to the critical aspect of successfulness or unsuccessfulness of projects.

In all definitions this far, there is basically emphasis in one way or the other to time, cost and quality. So, it is important to manage schedule on a project, to manage time and scope for the intended use of the project. PMBOK Guide (2017) suggests that a project's success is influenced by two broad categories that are enterprise environmental factors and organisational process assets.

At this stage we focus on what exactly is termed the 'Construction Industry' in our study. The next subheading focuses on that.

2.3.3   *Performance*

The discussion above on project management leads us to the critical aspect of successfulness or lack of thereof of projects. In other words, it is the performance of contracts. In all definitions this far, there is basically emphasis in one way or the other to time, cost and quality. So, it is important to manage schedule on a project, to manage time and scope for the intended use of the project. PMBOK Guide (2017) suggests that a project's success is influenced by two broad categories that are enterprise environmental factors and organisational process assets. This discussion focuses on enterprise environmental factors.

These are further split into two categories that are enterprise environmental factors that are internal to the organisation. These include and not limited to

- **Organizational culture, structure, and governance style**. The vision, mission, cultural values, leadership style, ethics and code of conduct all fall in this category.
- **Geographic distribution of facilities and resources**. Factory locations, shared systems and cloud computing affect the performance of a project.
- **Infrastructure.** Information technology hardware and its utilization, availability of equipment and their condition, organizational communication channels all affect the performance of a project.

- **Information technology software**. Scheduling software tools, configuration management systems, web interfaces to other online automated systems all aid towards project delivery.
- **Resource availability.** Existence of purchasing and contracting restrictions affect project success.
- **Employee capability**. Availability of skilled labour with specialized knowledge areas aids to the completion of projects.

Factors external to the project include but not limited to:

- **Marketplace conditions**. Competition, market share and brand recognition affect the project performance.
- **Social and cultural influences and issues.** Political situation, cultural perceptions and general societal ethics influence project performance.
- **Legal restrictions**. Local laws and regulations related to security, data protection, business conduct, employment, and procurement.
- **Commercial databases**. Standardized cost estimating data, industry risk study information, and risk databases.
- **Academic research**. Industry studies and publications
- **Government or industry standards**. Regulatory agency regulations and standards related to products, production, environment, quality, and workmanship.
- **Financial considerations**. Currency exchange rates, interest rates, inflation rates, tariffs, and geographic location.
- **Physical environmental elements**. Working conditions, weather, and constraints

The factors above affect each other in one way or the other. For instance, legal restrictions can affect resource availability. According to PMBOK (2017), project success has been traditionally measured by metrics of time, cost, scope and quality. To this regard it is very important to complete a project within budget. Blowing out of budget might render the project unsuccessful especially if the cost of the project outweighs the benefits derived thereof. Similarly, completing a project outside schedule also affects the successfulness of a project. A typical case is the NSSA hotel in Beitbridge which was completed out of budget and didn't meet its scheduled time for completion. The hotel was supposed to be completed before the 2010 South Africa FIFA World Cup but eventually opening way after the event and thereby missing the target market. To that effect, the hotel operations became uneconomic to an extend the hotel had to close down.

2.3.4 Construction Industry

Saungweme (2011), identifies the building and construction industry as comprising of all companies that are involved in either the manufacturing or provision of construction materials and or services. Saungweme (2011), went on to suggest that these include and not limited to manufacturers of cement, paints, window and door frames, steel reinforcements; prefabricated structures, tiles, roofing materials and accessories (for example timber & asbestos, screws and nails), plumbing material. And obviously, building contractors, architects, civil, electrical and mechanical engineers are also part of service providers in the construction industry.

Construction industry in Zimbabwe dates as far back to pre-colonial era. Strangely, research shows that the same precolonial building style still typifies most rural building practices in the country (Chenga, 1986; Ndlovu and Umenne, 2008). This discussion leads us to the question of who exactly fits into the category of construction industry.

2.3.5 Contracts

At this stage we turn our focus on what exactly contracts are and how they are used in the Construction Industry in Zimbabwe.
According to Riches and Allen (2009), a contract is a legally binding agreement. There are two types of contracts which are speciality contracts and simple contracts. According to the same source, speciality contracts are also termed deeds. Simple contracts are informal contracts that may be made in any way. Simple contracts are with the exception of deeds.

For a contract to be valid, the following conditions need to be met.
- **Agreement**. An agreement is formed when one party accepts the offer of another.
- **Certainty and possibility**. The parties must show that their agreement is achievable and the parties have to be sure of delivery; each side must promise to give or do something for the other.
- **Intention**. The law will not concern itself with purely domestic or social arrangements. The parties must have intended their agreement to have legal consequences.
- **Form**. In some cases, certain formalities must be observed.
- **Capacity.** The parties must be legally capable of entering into a contract. For example, a contract may be deemed void if entered into with a minor.

- **Genuineness of consent.** The agreement must have been entered into freely and involve a 'meeting of minds'
- **Legality**. The purpose of the agreement must not be illegal or contrary to public policy.

In Zimbabwe's Construction Industry there are basically two main types of contracts that are mostly used namely The Zimbabwe General Conditions of Contract (ZGCC), and the National Joint Practice Committee (NJPC) Standard Contracts 2000 which are largely based on *Federation Internationale des Ingenieurs-Conseils* (FIDIC).

2.4 Underpinning theories

2.4.1 Materials Availability

According to Davies and Lam (2001), economic theories of consumer behaviour suggest that demand curve for an industry's product has a negative slope suggesting that consumers choose to purchase more of the product as its price reduces. On the other hand, it also suggests that less of a product will be consumed if the price goes up. If consumers feel that the price for a good is beyond their reach, they opt for substitute products, which in some instances will be inferior

There are four concepts that tend to explain consumer behaviour when it comes to acquisition of goods, which in this case are our resources for carrying out projects.

Utility theory suggests that a consumer derives an imaginary unit of utility called 'utils' by purchasing a product and the level of utils diminish with every additional purchase of good A at the expense of good B (law of diminishing marginal utility). It also then predicts that as the price of a good goes up, consumers tend to have less of it and go for the substitute product (Davies & Lam, 2001).

Indifference analysis theory suggests that consumers aim to maximize cardinally measurable utility and with budgetary constraints they just reduce the amounts of what they intend to buy moving to a lower indifference curve.

The revealed preference theory moves the notion that people have their preferences and these are basically revealed when budgetary constraints are removed. This on the other side suggests that consumers are forced to work within limiting budgets and what they then tend to get is not really their preferred choices but compromise options.

The characteristic approach suggests that what consumers are interested in are the characteristics of a product, not necessarily the brand name.

There is also a critical concept that is called command economy, where governments move in to regulate prices for basic commodities (Davies & Lam, 2001).

2.4.2 Project Funding

Funding, according to Wambui et al (2015) is the act of provision of financial resource to a project, program or need usually by government or an organisation. Funding can be in the form of money or other values such as effort or time. The same source went on to highlight that project funding could be from the institution's own account or could be outsourced. At the same time, it should be noted that funding cannot be separated with compensation or repayment of the facility.

2.4.3 Technological Transfer

Technology as explained by the Kondratiev Wave has over the years happened in waves that assume a sinusoidal cave starting from the steam engine, railway steel, electrical engineering and chemistry, petrochemicals automobiles to the current wave of information technology. According to Friedman (2014), technology is the number one factor driving industry. Technological advancements may be introduced using the Kondratiev Wave as depicted below.
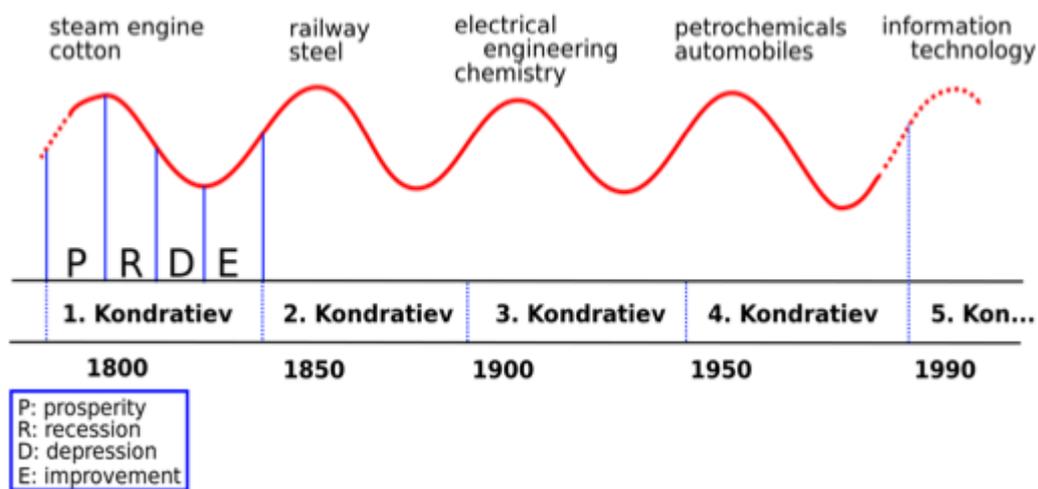
Fig 2.1: Kondratiev Wave

Technology is defined as the summation of techniques, methods or processes used in the production of goods, services, in the achievement of set objectives. Technology can be knowledge of techniques, processes, or it can be embedded in machines, computers, devices and

factories, that can be operated by individuals without full knowledge of their capacities. Karim and Marosszeky (2009) mentions that Technology has helped in the development of more advanced economies to advance and has facilitated the rise of a leisure class. Technology has supported the business industry to grow at a fast rate and achieve more within short periods of time and at within least budget. Efficiency and reliability are also major aspects of industry that have been addressed by Technology. Wambui et all, 2015 defined technological innovation as something original and more effective and, as a consequence, new, that "breaks into" the market or society. They further explained innovation as a process of translating an idea or invention into a good or service that creates value or for which customers pay for. Innovation involves application of information, imagination and initiative in deriving greater or different values from resources, and including all processes by which new ideas are generated and converted into useful products. Innovation is associated with risk-taking and organizations that create innovative products or technologies take on the greatest risk.

2.4.4   Employee Motivation

Employee motivation is brought about by the nature of management being employed at an organisation. Management itself is the process of designing and maintaining an atmosphere in which individuals, working together in groups efficiently accomplish selected aims (Wambui, Ombui and Kagiri, 2015). Management theories are basically implemented in a bid to increase organizational productivity and ensure service quality.

According to Henri Fayol, to manage is to forecast and plan, organise, command, co-ordinate and to control. On the other hand, theory of Scientific Management by Frederick Taylor focused on improving economic efficiency, especially through labour productivity. Taylor believed that what motivated people to work was money. He believed in fair compensation for workers. However, Elton Mayo's behavioural theory of management experiments showed that employees increased productivity by the psychological stimulus of being singled out, involved, and made to feel important. Having said all this, Wambui et al 2015, likened management to art; doing things in the light of the realities of a situation.

Max Weber's Bureaucratic Theory of Management believes that power draws obedience through force or threat of force, which encourages individuals to adhere to regulations.

2.5 Discussion of existing models and key concepts

2.5.1 Materials Availability

Keeping budget is of paramount importance when it comes to construction project success. So, it is important that construction projects are completed within the estimated cost of project.

The success of any project depends on availability and efficient utilization of the various resources. It is critical to note that materials are part of the five categories of resources required for construction projects. Preston (2006), divided resources required for construction projects into five broad classes as manpower, materials, time, space and equipment.

Materials are a key component in the construction industry. More so, material resource represents substantial proportion of total value of construction projects. It suggests that if there is shortage of material, delay in delivery or quality concerns the project's success will be at stake.

According to Wambui et al (2015) a material management system is required if project success is to be guaranteed. A material management system basically comprises the main functions needed in construction project, that is identification, acquisition, storage, distribution and disposal of materials.

In a construction setting, there are time related cost that are associated with the project whether there is progress or not. For instance, if plant is hired and there is no material to use, the plant still has to be paid for.

2.5.2 Project Funding

Wambui et al. (2015), suggests that for a project to be carried out successfully there has to be adequate funding allocated to finance the project from inception to completion. This suggests that funding accessibility plays a major role in ensuring project success.

In addition to availability, adequacy and accessibility of project funding, another key aspect of project management is the management of the finances themselves against schedule. PMBOK (2014), states that Project Cost Management includes the processes of estimating, budgeting and controlling costs so that the project is completed within budget. Cost estimation is the approximation of monetary resources required to meet the project requirements up to completion. The responsibility of project cost management lies with the project manager whilst the project sponsor is responsible for sourcing and ensuring availability of funds (PMBOK 2008).

According to USDOT Federal Highway Report 2017, project funding challenges affect project success in many ways and some reasons are legacy of traditional processes, limitation in public involvement, lack of innovation in design, non-linear process between decision making and design, fiscal constraint at the program level, inadequate planning at project level. Traditional process considered that there is always funding in the back office, it assumed that state funds based on taxes would be sufficient to cover the costs of projects identified on State plans.

On the other hand, new funding and procurement practices encourage project sponsors to involve the public at an earlier stage. In light of the resource constraints that confront major projects, it is prudent for public scrutiny of revenue, finance and procurement options. Public involvement is critical for public acceptance especially for major commitments such as tolling, bonding, borrowing and public-private partnerships.

Deloitte (2013), indicated that since the Global Financial Crisis (GFC) governments have resorted to the use of Public-Private-Partnerships (PPPs), as a way of getting projects off the ground by pooling finances from multiple levels of public and private support. In Zimbabwe, there are numerous projects that have been carried out as PPPs that include the Plumtree-Mutare Highway, Kariba South Extension Project and more recently the New Parliament Building and Hwange Expansion project which are currently under construction.

The common PPPs that are used world over are Build-Operate-Transfer (BOT), Build-Own-Operate-Transfer (BOOT) and Design-Build-Operate (DBO). The Build-Operate-Transfer (BOT) is usually used to develop a separate or new asset altogether rather than a whole network and is usually entirely new or Greenfield in nature. In a BOT project the project company or operator obtains its revenues through a fee charged to the utility/ government rather than tariffs charged to consumers (Worldbank 2016). This poses a challenge especially for the Zimbabwean situation as most private partners are foreign investors and use of RTGS as currency does not really interest them enough.

BOOT (build, own, operate, transfer) is a public-private partnership (PPP) project model in which a private organization carries out a large development project under contract to a public-sector partner, such as a government agency. This is usually a way of develop a large public infrastructure projects with private funding. The public-sector partner contracts with a private developer, typically a large corporation or consortium of businesses with specific expertise, in a view to design and implement a large project. The public-sector partner may provide limited funding or some other benefit say in the form of tax-exempt status. The private-sector partner

assumes the liability associated with planning, constructing, operating and maintaining the project for the specified time. During that time, the developer charges customers who use the infrastructure that has been built to realize a profit. Again, this involves a case of dealing directly with the end user, who in the Zimbabwean case will be obliged by law to pay for services in RTGS. At the end of the specified period, the private sector partner transfers ownership to the funding organization, either freely or for an amount stipulated in the original contract.

2.5.3   Technological Innovation

Construction industry, like all the other industries in the country needs to keep up with global technological trends if there ever is going to be any chances of survival. A concept of technological transfer (TT) is used to assist developing countries to catch up on trending technologies in developed countries. International technology transfer to developing from developing countries continues to stimulate exciting industrialisation and economic development globally, especially in fast growing industrialised countries (Waroonkun, 2007).

Lack of technology leads to numerous project challenges such as low productivity, serious wastage of materials, construction inaccuracies, construction reworks and straining tasks. In the most unfortunate instances, it may lead to accidents and fatalities. Price Water House Cooper's 2011 Growth reimagined survey finds that CEOs are focused on innovation as the top means of growth for their firms.

Apart from onsite technology which includes plant and equipment, there is offsite technology that aids in the successfulness of projects. Such technology includes computers, design software, construction monitoring software and reporting software. On that note, it is crucial to identify the requisite software that best suits the assignment at hand in order to perform tasks to the job's satisfaction and user interface satisfaction (Grevins et al, 2000).

It is common view that that the construction industry is labour-intensive, project based, and slow to adopt emerging technologies compared to other manufacturing industries (Vaha et al, 2013). The construction Industry is also considered a conservative innovator and late adopter of new technology and as a result, it is regarded as an old-fashioned industry. In design phase, methods such as Computer Aided Design (CAD), civil 3D designer, and Finite Element Method (FEM) have been adopted in contrary.

Internet of things systems such as Radio- Frequency Identification (RFID) is being used. In radio-frequency identification (RFID) radiofrequency is used to capture and transmit data from a tag embedded or attached to construction entities.

As part of evaluating project successfulness, quality of work is one critical factor that needs to be considered hence quality control measures should of high standard. As a definition, quality control is a procedure or procedures put in place to ensure that a manufactured product or delivered service adheres to a predefined quality criterion, or meets the requirements of the client or customer (Vaha et al, 2013). To achieve that, there are various tools, machines or equipment that need to be in place. RFID is used for progress monitoring of construction projects and to provide a visualisation aid for component status tracking.

2.5.4 *Employee Motivation*

In practice, construction project managers are the drivers of the project and the success of the project depend on their capability to take corrective actions appropriately (Wambui, Ombui and Kagiri, 2015). From the definition above we can conclude that employee motivation heavily lies in the capabilities of the project manager. There is a challenge here, the definition assumes a certain level of control on all resources required on the project including the human resource. What then happens if the project manager is left with semi-skilled staff or a group of employees that are demotivated by the obtaining macroeconomic environment.

When employees feel they are not remunerated fairly, or at least not getting value for their worth, they get demotivated.

2.6 Discussion of the key variables

Zimbabwe was once touted as the 'Jewel of Africa' at Independence in 1980 but has over the years acquired a bad reputation as the weak nation of the Southern Africa region, with disastrous economic policies, political instability and a peculiar inability to get itself out of often self-inflicted difficulties (Bayai & Nyangara, 2013). On the other hand, Ndebele (2016) suggests that Zimbabwe's Construction Industry is shrinking due to policy inconsistence and toxic prescriptions. The same writer speaks negatively of Indigenisation and Economic Empowerment Act of 2008 as one of the contributing factors towards the shrinkage of the economy. However, the Indigenisation and Economic Empowerment Act was amended in March 2018. Ndebele (2016) went on to move notion that economy is regressing due to stagnation, low productivity

and deflation. The construction industry in Zimbabwe has not been spared by the fragile economic environment prevalent in Zimbabwe.

The construction industry of Zimbabwe has a lot of importance to attainment of national socio-economic development goals as described in Zimbabwe's (October 2013-December 2018) economic blue-print, ZimAsset (Zimbabwe Agenda for Sustainable Socio-Economic Transformation). These include and not limited to construction of schools, housing, roads, hospitals, energy systems, agriculture systems, urban and rural water supply and sanitation systems construction and maintenance. It is supported by Khan *et al* (2014), as they argue that the construction industry is directly related to success of an economy. On the reverse side, how far true is that assertion? It can also be argued that how come other industries are doing quite well, for instance the Tourism Industry. To add on to that, other projects have actually taken off during the period of implementation of SI142 of 2019 such as the Hwange Expansion Project and the New parliament Building among other projects.

Attar *et al* (2012) argued that construction industry is a vital industry of national economy for many countries over the world. Traditionally it was known to take up a big chunk in many nation's overall employment statistics and its important contribution to national revenue.
ZimAsset growth projections show that the construction sector was expected to grow by as high as 15% (of GDP) by 2018, but up to this date, that growth hasn't been realised. Zimbabwe required about USD$15 Billion for infrastructure development in the period between 2011 and 2016 as noted by the Zimbabwean Independent (2011), a figure that has since gone upwards due to continued deterioration of infrastructure. The construction industry is an essential industry of the Zimbabwe's economy as was emphasized by Moyo & Chigara (2014) and subsequently by Bonga & Nyoni (2016). The construction industry is seen to provide ways of production for many other industries and goods to be consumed. Khan *et al* (2014), noted that the construction industry plays a vital role of creating wealth and setting a better quality of life to the nation that is critical for development of the nation. It however has to be noted that the construction industry's success relies on achieving set targets within stipulated budget and time constraints.

Reserve Bank of Zimbabwe (Legal Tender) Regulations 2019 was introduced on the 24th of June 2019. Prior to the abolishment of the multi-currency regime, Government of Zimbabwe had opened up to multi-currencies in February 2009 during the period of the government of national unity. The introduction of the multi-currency regime saw the curbing of hyperinflation that had dominated the economy. Between year 2000 and 2008, Zimbabwe's economy experienced macroeconomic imbalances that saw a monthly inflation of 79.6 billion % (Hanke & Kwok, 2009).

The National Budget Statement by Ministry of Finance also highlighted that real gross domestic product for many sectors grew from negative figures in 2008 to positive values from 2009 onwards implying that the introduction of multi-currency regime assisted in stabilizing the and to an extend grew the economy.

Table 2.1: Annual Real Gross Domestic Product (RGDP) by Sector Growth Rates

RGDP by Sector (%)	2008	2009	2010	2011	2012	Average*
RGDP	-14.8	5.7	8.1	9.3	9.4	8.1
Agriculture	-13.3	14.9	33.9	7.4	11.6	17
Mining &Quarrying	-33.4	8.5	47	25.8	15.9	24.3
Manufacturing	-17.1	10.2	2.7	3.5	6.0	5.6
Electricity & Water	-13.6	1.9	1.5	12.4	4.9	5.2
Construction	-8.5	2.1	1.5	1.0	1.5	1.5
Finance & Insurance	-27.9	4.5	0.5	24.0	23.0	13
Real Estate	-36.4	2.0	0.9	1.0	1.5	1.4
Hotels & Restaurants	2.8	6.5	0.5	10.3	13.7	7.8
Transport & Commu'n	5.4	2.2	0.1	5.5	6.0	3.5

Source: Central Statistics Office, National Budget Statement Ministry of Finance (2010,2012)

Other authors who wrote on multi-currency regime including Noko (2011), Hanke and Kwok, (2009), and Berrios, (2006) assert that dollarization leads to macroeconomic stability. By that statement, it can also imply that de-dollarization leads to macroeconomic instability.

It has to be noted that Zimbabwe is not the only country in the world to drop its currency in favour of the United States Dollar. The country of Panama has dollarized for over 100 years and the use of US$ has created significant economic stability and investor confidence (Moreno-Villalaz, 2005). This only proves that dollarization leads to economic stability and eventually growth of the construction industry

After the introduction of the United States dollar as an official currency in Zimbabwe in April 2009, the consumer price index was substantially reduced leading to inflation rates that remained within the range of single digits between 2010 and 2012: (3.1%, 3.5%, and 3.7% respectively)

(ZimStat, 2013). On the other hand, many studies on dollarization show that countries that adopt dollarization completely lose their sovereignty and the use of monetary policy, but gain stability in exchange rate and prices (Minda & Schuler, 2005). A country that adopts another country's currency does so at the risk of forgoing the use of own monetary policy (Burdekin, 2008), and thereby loosing seigniorage from printing money, which was the case with Zimbabwe between 2009 and 2019. The major question that then follows is how much of it was lost and to what extend was it going to assist in the development of the economy? Sole currency facilitated restoration of macroeconomic stability for countries facing misaligned macroeconomic policies and difficulties in controlling their monetary policy. The extent of the benefits of sole currency were alluded to by (Kokenye, Levy, & Veyrume, 2010), who argued that internationally, no recent examples of a multicurrency being reintroduced after having been completely withdrawn from circulation and replaced by domestic currency, is a demonstration of the strong force of controlling local monetary policies. Apart from guaranteeing policy formulation through restraint on other currency growth, SI 142 of 2019 could also promote financial deepening through increase in deposits in the financial system by individuals and corporate, as confidence improves. This lowers the transaction costs by eliminating currency converting costs (Armas & Levy Yeyati, 2006).

After a stable run on the economy for close to a decade, the Government of Zimbabwe through the Ministry of Finance abolished the multi-currency regime through SI142 of 2019. Immediate response from the economy is that the exchange rate started increasing between the RTGS currency and the United States Dollar. Inflation started creeping in again with the Reserve Bank of Zimbabwe trying to fix the exchange rate at 1:2.5. However, Former Finance Minister Dr Simba Makoni had a different view to the idea of command economics urging the government to allow free market forces to control (Financial gazette March 2019). On the contrary, SI 142 of 2019, apart from reducing exchange rate risks, enhances local investor confidence and boosts investment opportunities to local contractors and provides scope for portfolio diversification of residents (Kokenye, Levy & Veyrume, 2010). The main attraction of full sole currency is the elimination of the risk of a sudden, sharp devaluation of the country's local contractor opportunities to win tenders. This provides scope for sovereign countries to reduce the risk premium attached to its international borrowing, leveraging from higher level of confidence among international investors, and hence lower interest rate spreads on their local transactions, reduced fiscal costs and more investment and growth

Construction industries in many countries face different challenges as noted by Gale & Fellows (1990) and also separately by Ofori (1990). It however has to be noted that in developing countries such as Zimbabwe, the challenges are also influenced by the general situation of socio-economic challenges, failure to comply with laws and regulations, persistent resource misuse and inability to deal with critical matters (Ofori, 2000). UNIDO (1993) suggests that construction industry is among the first industries to feel effects of economic recessions. In the case of Zimbabwe, the construction industry was affected during the period leading to 2008 hyperinflationary era and soon after the introduction of SI 142 of 2019. During these periods, the construction industry was largely exposed to many business and financial risks that made development of the industry impossible.

The construction sector in Zimbabwe is characterized by perennial finance related problems such as high cost of financing and difficulty in getting loans. Employers in the construction sector continue to lament over high costs of production. This has been worsened by the current liquidity crisis coupled by both political uprising and gross macroeconomic mismanagement. Mhlanga (2016) noted that the cash crisis, high rental costs, and lack of funding are threatening the survival of Small to Medium Enterprises (SMEs) in the country so the problem in the construction industry is not only on the hardship but survival of the entire industry is at risk. On the other hand, Keith, (2009), argued that similar benefits also accrue to a local grouping that do embrace local currency by pegging to a currency with a maximum control and an effective monetary policy. This provides credibility as the option to print money and generate domestic inflation still exists. If a local currency is chosen as the within boarder's currency, it can encourage savings on transaction costs, stimulate trade growth, investment and support for local integration.

Zimbabwe, as noted by Mpofu (2016), is in the grip of a serious cash crunch, which has worsened gradually since December 2015 due to dwindling exports and weakening regional and local currencies. The construction industry relied on importation of goods and services from other countries. Goods imported for the construction industry include and not limited to reinforcement steel, plant and equipment, spare parts for plant and equipment, software and computers among other things. Now, the abolishment of the use of the USD has made importation difficult as the exchange rate continues to increase, whilst on the other hand companies are charging in RTGS.

Further to the discussion above, the abolishment of the USD has led to lost hope and lack of confidence in the future of Zimbabwean construction industry. Skilled labour within the industry has resorted to plying their trades in other countries where they feel they are remunerated fairly. Chigara & Moyo (2014) and Nyoni & Bonga (2016) found that lack of experienced labour is also a common problem in the construction sector in Zimbabwe. Loosing the few that were left will be a huge blow to the country. Moavenzadeh (1978) posits that although labour is abundant in developing countries (like Zimbabwe) there tends to be a shortage of skilled labour. Lack of highly skilled and trained workers in the construction industry in Zimbabwe could be attributed to high capital flight experienced in the country owing to economic-hardships. This has seen more workers crossing borders in search of greener pastures (Nyoni & Bonga, 2016). According to ZimStats (2013), the Building and Construction industry experienced 119 332 incidences of injuries and 307 fatalities in 2013 alone.

Awari et al, 2016 noted schedule delays in construction projects as one of the most common challenges leading to numerous negative effects on projects and participating parties. Taking the same line of argument, Ramya and Divya (2015), suggested that construction schedule delays are regarded to be among the most recurring challenges in construction industry and do have undesirable effects on project success in terms of time, quality, cost and safety. According to Awari et al (2016), companies would be able to avoid or minimize these delays if major contributing factors were identified and planned for in a timely manner. Assessing delays, as argued by Al-Khali & Al-Ghafly (1999), can provide insights for early planning to control these factors and improve project performance. In the same line of argument, Agu & Ibe (2016) agitate that delay factors are very crucial within a construction project and it is vital that all stakeholders must have certain knowledge regarding this issue in order for the project to be completed effectively and satisfactorily.

The lender of last resort is a necessary function of any central bank to smoothen transactions where the market happens to experience shortfalls. Under local currency, the central bank is capacitated to perform the lender of last resort function. This may result in solving liquidity crunch in the economy, and benefits the activities of the local financial system.

2.7   Conceptual framework

Independent variables   Dependent variable
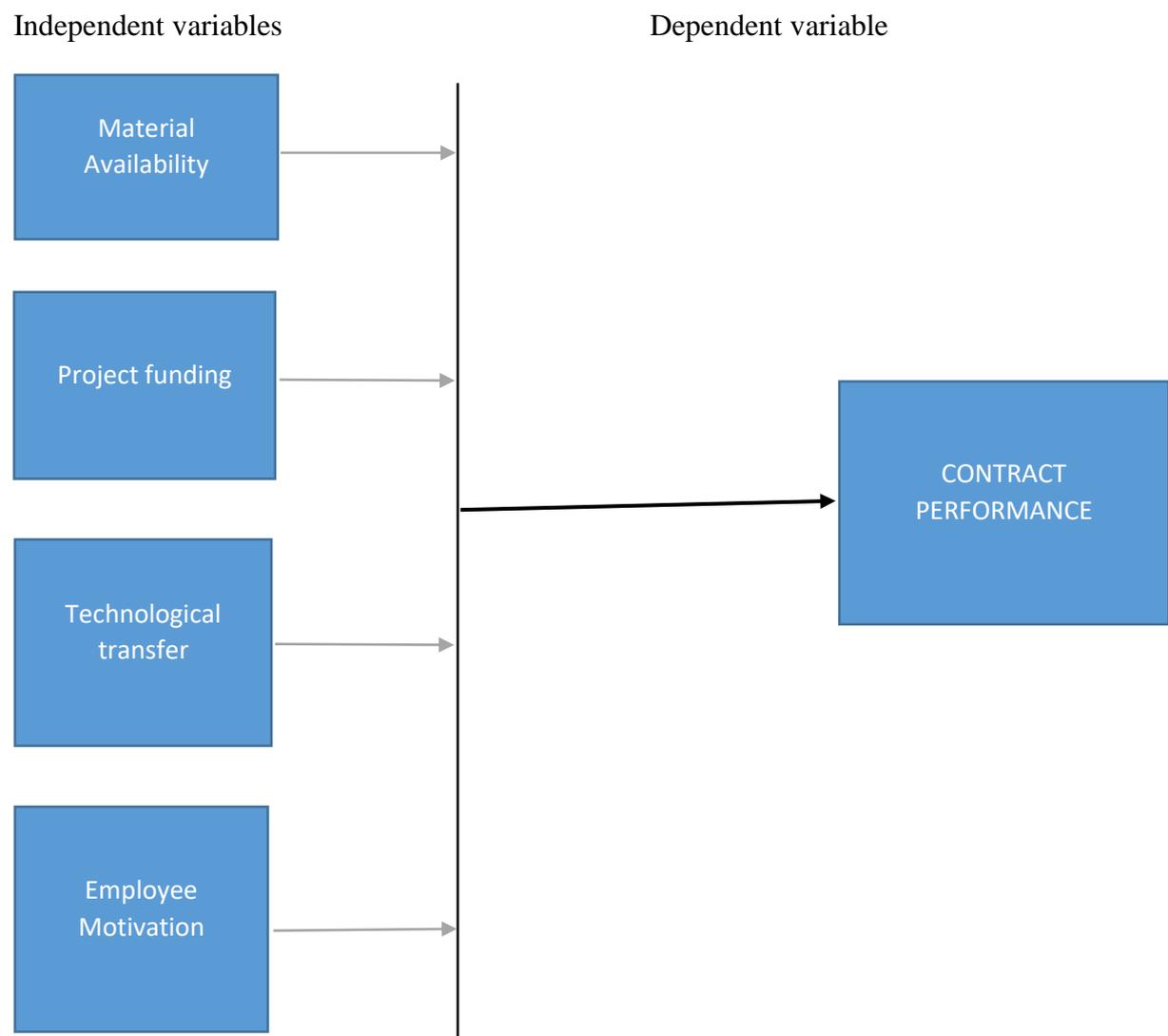
Fig 2.2: Conceptual Framework

2.8   Research Gap

Studies that have been reviewed previously have not adequately indicated extensively the non-legal effects of statutory instruments such as SI 142 of 2019 in construction industry in Zimbabwe. Most of these previous studies are limited to construction and leadership styles in construction industry in Zimbabwe. The previous studies have not indicated the importance of using the local currency in the sensitive industry such as construction industry. Pearman (2006) indicated that engineering and construction projects need project managers with qualities such as conscientiousness and ability to cope with the rules and regulations of the environment for

example the changes from multi-currency era to mono currency phase. These studies failed to highlight the challenges, benefits, the role of government and the effect of statutory instruments to construction projects Completion in Zimbabwe.

2.9   Chapter conclusion

The chapter covered the objectives of the study, the background of the study and relevant literature towards the area of the study. The research main purpose is to establish the effects of SI142 of 2019 on Construction Projects in Zimbabwe. The following chapter covers the methodology of the study.

3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter looks at the research methodology, which consists of a recap of research aim, objectives, questions, hypotheses; the main research philosophy; research design and the major data collection methods relevant to the research study. The chapter also covers the research instrument(s) to be used, the study population and selection of respondents, the limitations of the study, credibility as well as the ethical considerations of the research study.

3.2 Recap of Research Aim, Objectives, Questions And Hypotheses

3.2.1 Research aim and objectives

Overall objective: To establish the performance of Construction projects after the introduction of SI142 of 2019

The specific objectives of the study are as outlined;

1. To assess the effects of SI142 of 2019 on materials' availability for Zimbabwe's Construction Industry.
2. To establish the effects of SI142 of 2019 to potential funding for projects in Zimbabwe's Construction Industry

3. To ascertain how technological transfer in the Construction Industry of Zimbabwe has been affected by the introduction of SI142 of 2019.

4. To assess the effects of SI142 of 2019 on employee motivation in the Construction Industry of Zimbabwe.

3.2.2 Major Research question(s)

These research questions form the foundation of the formulation of a questionnaire to be used in the study. Below listed are the guiding questions;

1. What are the effects of SI142 of 2019 on materials' availability for projects in Zimbabwean construction industry?
2. Has project funding declined since the introduction of SI142 of 2019 for Zimbabwe's construction industry?

3. Has technological transfer in construction industry declined since the introduction of SI142 of 2019?

4. Has employee motivation gone down in Zimbabwe's construction industry since the introduction of SI142 of 2019?

3.2.3 Research hypothesis/ Proposition (Main Argument)

Overall Hypothesis H1. The introduction of SI142 of 2019 negatively affected performance of construction projects.

Specific hypothesis from H1

H1.1 The introduction of SI142 of 2019 has led to materials' scarcity in the Construction Industry of Zimbabwe.

H1.2 Project funding has declined since the introduction of SI142 of 2019.

H1.3 Technological Transfer has been negatively affected since the introduction of SI142 of 2019

H1.4 **Employee motivation has gone down since the introduction of SI142** of 2019.

3.3 Research Design

There are basically three types of research methods that can be employed. Exploratory research is designed to define and clarify the nature of the problem as well as getting insights where variables are not very clear. This is basically ideal for qualitative study. It helps determine the research design, selection of variables and data collection methods. However, it has to be noted that exploratory research studies are not conclusive in nature. A descriptive research is study that utilizes qualitative and quantitative research methodologies with the aim of describing things, events, practices and systems. It tries to answer the question "What is?" to increase knowledge of a certain subject matter, hence observations and surveys are employed to collect descriptive data. Descriptive research is conclusive in the sense that it gathers quantifiable information that can be used for statistical inferences on target population through data analysis.

An explanatory research is carried out to identify the nature and extent of cause-and-effect relationships. It is a study conducted to assess impacts of various processes or systems on a dependent variable. Explanatory research focuses on an analysis of a situation or specific problem to explain the patterns of relationships between independent and dependent variables.

An explanatory research was chosen for this dissertation, as it is a valuable means of assessing the impacts of SI142 on construction industry projects in Zimbabwe. Explanatory study is associated with greater levels of validity due to systematic selection of independent and dependent variables making this study replicable if necessity arises.

The shortcomings of this type of research are that while correlation between two or more variables can be determined, identification of which variable is a cause and which one is the impact can be a difficult assignment. It can be a challenge to reach conclusions on the basis of explanatory research findings due to the impact of a wide range of factors and variables in the environment under study. Hence inferences cannot be made with a high level of certainty.

3.3.1 Research Philosophies

Ontological Assumption

Ontology is focused on the nature of reality and raises questions assumptions the researcher has about the way the world operates and the commitment held to particular views (Saunders et all, 2008). The researcher adopted the objectivist position

Epistemological Assumption

In order to get responses from the respondents, the researcher administered a structured questionnaire. This ensures that meaningful and legitimate responses are derived from the respondents to obtain statistically useful information on the research topic. To curb influencing responses from the respondents the administration of the questionnaire was done in such a way to allow a distance from respondents. Therefore, there was a low level of involvement of the researcher and a representative sample of respondents.

Axiological Assumption

The researcher acknowledges that the nature of this research study involves respondents giving their responses to the researcher. Due to this fact, the respondents' responses are respected to allow use of quantitative tools of analysis since all questions are specifically constructed and asked using the same wording. The researcher's personal values i.e. respect, integrity, transparency, diligence and respect for ethical values are reflected throughout this study. This was achieved through data analysis to establish trends, patterns and relationships. The use of the

structured questionnaire has the advantage of a quick turnaround time of responses and there is respect of the wishes of respondents who do not want to be questioned face-to-face. Consideration of diverse intellectual capabilities were done to the target population and privacy and confidentiality was ensured since there was minimum interaction with the respondents. The researcher believes that involvement or interaction with respondents could introduce an element of bias.

3.3.2 Research Paradigms

Research paradigms explain my beliefs and how they influence the practical aspect of carrying out this research. These were instrumental in shaping my research strategy as well as to conclusions made based on the findings. Positivism, interpretivism and pragmatism are the main research paradigms. Since my research is of a quantitative nature, positivism research paradigm was selected and utilized. Positivism adheres to the understanding that facts that are obtained through observation and measurement are trustworthy. The role of the researcher was data collection through a structured questionnaire and interpretation of results through an objective approach. This means that results can be quantifiable and statistical analysis can be conducted to establish patterns, trends cause-and-effect relationships or correlations between one or two variables. Moreover, they will be reliability and representativeness of information.

Positivism agrees with the ontological assumption of seeking one truth from the cause-and-effect relationships that will be established by this study. Positivism approach means the researcher is independent and therefore the research has limited human interference. At the same time the researcher concentrated on facts (one truth), which led to use of a deductive approach to the research. Positivism involves the use of existing theory in order to develop hypotheses that would be tested by this research. The downside of positivism is that it relies on experience as a source of knowledge but however concepts such as time, cause and effect are not based on experience.

3.3.3 Research Approach

Deductive, inductive and abductive approaches are the three most common methods of research approaches to a study. Deductive approach is more objective and mostly used in to scientific researches. It is applied to quantitative researches as it uses numeric data and tests hypothesis. Further to that, it can explain how variables are related and make some statistical inferences. It

draws from general to specific conclusions and can be drawn from available theory (Saunders, 2007).

Inductive approaches are subjective and more inclined towards qualitative research studies. A researcher starts with specific to broader generalization with the aim of developing theory. The researcher seeks to explore and use words to explain the concepts of how variables are related.

Abductive approaches are a combination of deductive and inductive research approaches whereby a theory is developed and tested. Interpretation of data uses both numeric and descriptive data.

A deductive approach is conducted to assess the impact of SI142 of 2019 on construction industry projects performance. Hypotheses were developed from existing theory, which led to the design of a research strategy to test the hypotheses. Acceptance or rejection of the hypotheses allows conclusions to be drawn from the study. The hypotheses are tested against the actual observations or responses established from the study. A deductive approach was chosen for this study because there was sufficient literature and there was the advantage of short time availability to complete the study.

Deductive approach explores the research of an existing theory taking the reasoning from general to specific given the circumstances under study. Hypotheses were formulated by proposing relationships between two specific variables. The hypotheses are tested through application of relevant methods and the result of the test will accept or reject the hypotheses. The existing theory will be altered should the hypotheses be rejected. Deductive approach emphasizes on cause-and-effect relationships and commonly associated with quantitative research. Insight into in-depth matters since they are descriptive or explanatory in nature.

3.3.4 Research Strategy

Several research strategies can be used to collect research data. This can be achieved either through quantitative or qualitative approaches.

3.4 Data Collection Techniques

These are tools for data collection and the researcher has to ensure that the instrument chosen is valid and reliable. The validity and reliability of any research project depends to a greater extent on the appropriateness of the instruments. The table below shows the various research approaches and the research instruments that can be employed.

Table 3.1: Research Instruments

RESEARCH APPROACH	COLLECTION INSTRUMENTS
Qualitative	Un-structured questionnaires, in-depth interviews, focus groups, observations, and semi-structured interviews.
Quantitative	Structured questionnaires
Mixed Method	Researcher can combine structured and unstructured interviews/questionnaires.

3.4.1 *Questionnaire Development*

A structured questionnaire will be used for this case study where respondents will be provided with the questionnaires for a representative sample to gather the actual observations or responses. The structured questionnaire is suitable for this study since it is a systematically prepared document with a set of questions deliberately designed to elicit responses from the respondents for the purpose of collecting data. For a structured questionnaire some form of control or guidance will be given for the answer options so that the respondents select answers closer to their own opinions or views. The information gathered will provide an insight into the problem under study.

3.5 Population and Sampling Techniques

3.5.1 *Population*

The population for this study will consist of engineers, architects, quantity surveyors, land surveyors and other professionals in the Construction Industry of Zimbabwe. The sampling frame will therefore be the list of these mentioned members of staff.

3.5.2 *Sample Size*

Sample size refers to the number of individual pieces/elements of data collected in a survey. A sample size is important in determining the accuracy and reliability of the findings from the research study. A sample size will assist in drawing inferences about the population. Determination of the sample size will take into consideration the total size of the population under study; margin of error (reliability that the data collected will be accurate); confidence level (the probability that margin of error will be accurate) and standard deviation (measures how much the individual pieces of data vary from the average data measured).

This research study will use the simplified formula to calculate sample sizes developed by Yamane (1967). The formula considers the population size (N), sample size (n), level of precision (e) as derived from the confidence level (either 90%, 95% or 99%). The following formula and theoretical figures will be used to come up with the sample size:

$$n \quad = \quad \frac{N}{1 + N\,(e)^2}$$

Where: n = sample size

N = population size

e = level of precision

3.5.3 *Sampling Methods*

These are classified as either probability or non-probability sampling methods. Probability sampling method is one in which every unit in the population has a chance (greater than zero) of being selected in the sample, and this probability can be accurately determined. Non-probability sampling on the other hand is whereby some elements of the population have no chance of being

selected or where the probability of selection cannot be accurately determined. It involves the selection of elements based on assumptions regarding the population of interest, which forms the criteria for selection. The table below shows the sampling methods and techniques.

Table 3.2: Sampling Method and Techniques

RESEARCH APPROACH	SAMPLING METHOD	TECHNIQUES
Quantitative	Probability Sampling	Simple Random Sampling, Systematic Random Sampling, Stratified (proportional or disproportional) Sampling, Cluster Sampling.
Qualitative	Non-probability Sampling	Convenience Sampling, Purposive/Judgemental Sampling, Snowball Sampling, Quota Sampling

This research study will use probability sampling with a focus on stratified sampling. As the population will be large, it will be segmented into stratum groups by level in the organization. A sample size was calculated for the different stratum using the Yamane (1967) sample size formula. The method chosen made the study objective as all elements in the population had an equal chance of being selected. Furthermore, the samples were representative of the population and good information was obtained from the subgroups.

3.6   Data Processing Analysis

As this research study will be quantitative in nature, SPSS (a statistical product and services solutions package) was used.

3.7   Research Limitations

In conducting the research project, the researcher encountered some challenges. These will be outlined in this section and the corresponding mitigation measures taken.

3.8   Credibility Issues

Credibility issues in a research are affected by the response rate of respondents. Credibility basically queries the researcher to clearly link the research study's findings with reality in order to determine the truth of the research study's findings.

3.8.1   Pilot Study

To determine feasibility and worthiness of the study, a small-scale pilot study was conducted prior to the full-scale research study. The reason for the pilot study was to assess the suitability of the measuring instrument for the real field work, to note any unanticipated challenges with the instrument and appropriateness of the methodology. The pilot study gave the researcher the opportunity to make some modifications at low cost before the main study was conducted. Furthermore, it allowed the researcher to envisage an appropriate sample size and improve upon the study design prior to performance of a full-scale research study.

3.9   Reliability and validity tests

A Reliability test was conducted to ensure that the questionnaire could be depended upon to secure consistent results upon repeated application in future research studies. The procedure that was adopted in both validating the questionnaire as well as testing for its reliability is explained in the section below. The validity of the questionnaire was ensured through consulting practitioners and academicians in the field of strategic planning in order to check for relevancy or ambiguity in the wording of the questions. In addition, the questionnaire was also pilot tested to check for questions that were not clear or irrelevant. The two-stage verification process helped in the purification of the instrument.

The reliability of the scale is the degree to which a set of items measure the same construct (Hair et al, 2010). According to Malhotra (2007), a scale is considered to be reliable if the Cronbach`s Alpha values are equal to or exceed the recommended threshold of 0.70. From the computation of the Chronbach's Alpha, a significantly notable overall statistic was observed for the questionnaire, whilst the alpha statistics for the variables under study within the range of 0.70 at 0.715

3.10 Reliability Statistics

Table 4.6: Reliability Test

Cronbach's Alpha	N of Items
.715	20

Source: SPSS

3.11 Independent and dependent reliable testing

The independent dependent variable was tested. It also showed that all the variables were reliable with Cronbach alpha above 0.70, It was 0.711 on the dependent variable (contract performance) and 0.725 on benefits, 0.780 on effects to international companies and 0.774 on challenges and 0.701 on the role of government. Table below shows the results;

3.12 Item Total Statistics

Table 4.7: Reliability Scores

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Material availability	12.9176	1.431	.841	.725
Project funding	12.8059	1.675	.752	.780
Technological transfer	12.6118	1.700	.494	.774
Employee motivation	12.9471	1.320	.688	.701
Contract performance	12.0006	1.432	.437	.711

Source: SPSS

The table indicates that the reliability scores for all the variables under study were perfectly above 0.70 which imply that the scores were acceptable and the research instrument was reliable.

3.13 Normality Tests

The normality tests are conducted using either the Shapiro-Wilk test or Kolmogorov-Smirnov test. The decision on which test to use depends on sample sizes of the research study. Shapiro-Wilk test is mainly appropriate for small sample of less than 1000 whilst on the other side Kolmogorov-Smirnov is more appropriate for sample sizes larger than 1000 samples. Normality test is used for establishing data distribution. On normality test, p value greater than 0.05, **(p>0.05)** imply that the data is normally distributed.

A sample size of 250 was used for this study. Shapiro-Wilk test was seen appropriate for normality analysis.

3.13.1 Tests of Normality

Table 3.8: Normality Test

		Kolmogorov-Smirnov[b]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
Material availability	3.80	.285	204	.000	.550	204	.000
Project funding	4.57	.349	204	.000	.675	204	000
Technological transfer	4.73	.371	204	.000	.670	204	.000
Employee motivation	4.60	.370	204	.000	.665	204	.000
b. Lilliefors Significance Correction							

Source: SPSS

From the analysis, the p-values in the Sig. column portrayed that all the four (4) variables under study were less than 0.05 **($p<0.05$)**. Non-parametric statistical tests had to be used.

3.14 Ethical Considerations

Ethical considerations in research are critical as they are the norms or standards for conduct that distinguish between right (acceptable behaviors) and wrong (unacceptable behaviors). Ethical standards promote the pursuit of knowledge and truth which is the primary goal of research as well as preventing against the fabrication or falsification of data. The purpose of ethics in research is to ensure that no respondents suffer adverse consequences as a result of the research study.

The following ethical issues will be considered by the researcher.

Confidentiality-: the data which is collected from respondents and their identities will be held confidential by the researcher. Respondents will not be required at any stage to provide their names on the questionnaire.

Informed consent -: ensure that all respondents consent to take part in the study after all issues pertaining to the research and any potential risk have been explained to them and also ensuring that all participants are of consenting age.

Deception -: all information about the aims and objectives of the research will be disclosed to the respondents as the research has no concealed agenda.

Respect for human integrity and privacy -: the research will treat all respondents with respect and ensure that all questions do not cause any discomfort and tension. Respondents will be advised not to answer any questions they might find offensive. Their cultures, norms, beliefs and privacy will be fully respected.

3.15 Conclusion

This chapter discoursed the research methodology and design of the study by describing the research design, research philosophy and paradigms, research methodology, research approaches, data collection techniques, data analysis, target population and sampling methods, credibility of the study, validity and reliability issues of the research and finally, ethical considerations.

4 DATA ANALYSIS, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents results of the research and the discussion of the findings which are linked to the literature review from chapter two. The results were derived from the stakeholders of the construction industry. The main research objective of the study was to establish the performance of Construction projects after the introduction of SI142 of 2019. The chapter provides the sample analysis, response rate and demographic characteristics which are presented first in this chapter followed by detailed analysis of the data collected. Detailed analysis of the data collected presented reliability tests, validity tests, normality test and hypothesis testing as well as the regression analysis and conclusion of the study. The next section dwells on the results of the sample analysis.

4.2 Response rate

In this study, the researcher administered 250 questionnaires to the stakeholders in the construction industry. Of the 250 questionnaires administered, 204 were properly completed and collected back by the researcher for analysis. This represented 81.6 % response rate which is considered as high. Response rate between 50% and 92% is regarded as being high and sufficient to ensure validity of research findings (Saunders et al, 2010). The researcher self-administered the questionnaire which contributed to the increase of the response rate.

4.3 Demographics

This section provides the descriptive statistics on the demographic data of the respondents. The demographic information focuses on, age range, gender, education level, position, number of years in the construction industry.

4.4 Age range

The statistical table below has the different ages of the respondents who took part in the study of establishing the legality of construction projects after the introduction of SI42 of 2019.

Table 4.1: Age Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 20 years	12	5.9	5.9	5.9
	21-25 years	18	8.8	8.8	14.7
	26-30 years	30	14.7	14.7	29.4
	31-35 years	36	17.6	17.6	47.1
	36-40 years	42	20.6	20.6	67.6
	41-45 years	30	14.7	14.7	82.4
	46-50 years	18	8.8	8.8	91.2
	51 years and above	18	8.8	8.8	100.0
	Total	204	100.0	100.0	

Source: Primary Data

The table above show that respondents under the age of 20 years were 12 representing 5.9% of the total sample of the study, 21-25 years were represented by 18 participants (8.8%), 26-30 years had 30 participants which were 14.7% of the total sample, 31-35 years had 36 representatives who took part in the study, 36-40 years had 20.6% of the participants, 41-45 years were represented by 30 people, 46-50 years had 18 participants which was equal to those who were 51 years and above. The figure below supports the statistical table above in form of a bar graph.
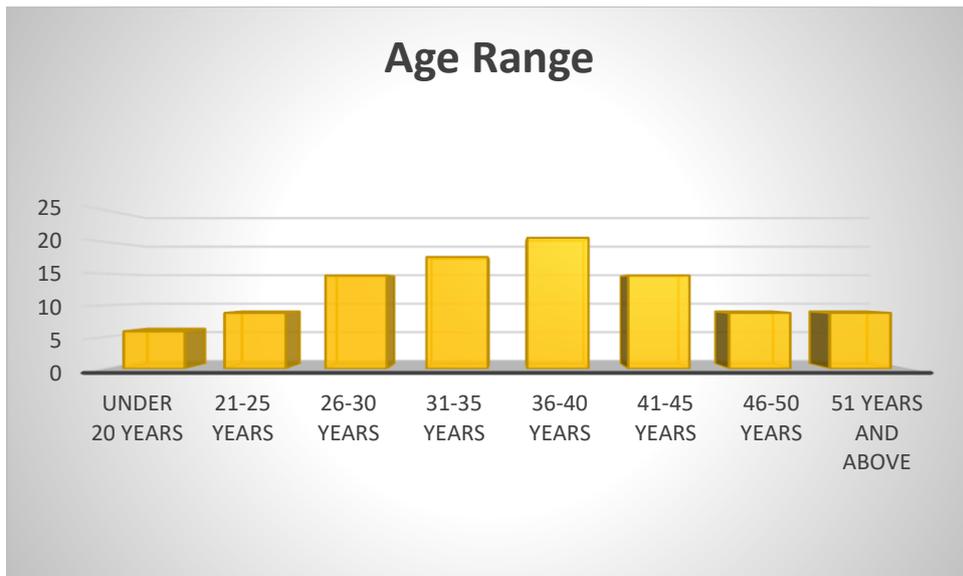
Source: Primary Data

Fig 4.1: Respondents Age Distribution

The graph above shows that all ages that can be able to work in construction industry were included in the study. Ages between 36-40 years had most of the participants in the study. The study show that the ages included were able to give valid responses which was an added advantage to the validity of the study.

4.5 Gender

The study had a sample population of both male and females. The table below shows the numbers of the respondents between male participants and female participants.

Table 4.2: Gender Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	114	55.9	55.9	55.9
	Female	90	44.1	44.1	100.0
	Total	204	100.0	100.0	

Source: Primary Data

The table above show that out of a total of 204 participants, 114 were male participants and 90 were female participants. 55.9% of the sample population were male while 44.1% of the sample population were female participants. The figure below compliments the descriptive table above.
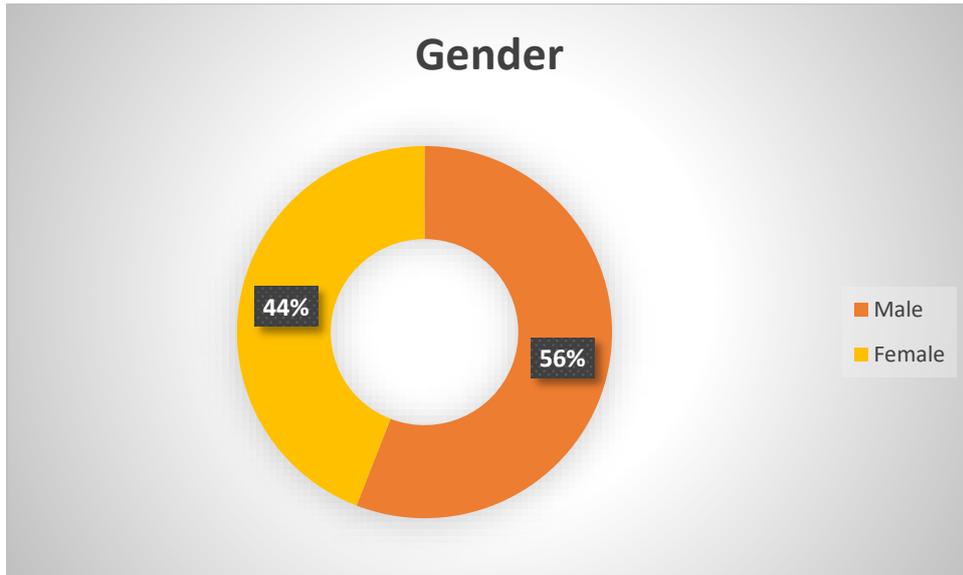
Source: Primary Data

Fig 4.2: Respondents Gender Distribution

The study included both male and female participants in order to have contributions from both genders which led the research to be more authentic. The number of female participants were quite large considering the participation of females in other industries and in male stereotyped roles such as construction industry.

4.6   Level of education

The study took level of education as one of the demographics, this was descriptively presented by the table below.

Table 4.3: Level of Education of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ZJC	12	5.9	5.9	5.9
	Ordinary level	18	8.8	8.8	14.7
	Diploma level	48	23.5	23.5	38.2
	Higher national diploma	42	20.6	20.6	58.8
	Honours Degree	48	23.5	23.5	82.4
	Masters degree	24	11.8	11.8	94.1
	Other	12	5.9	5.9	100.0
	Total	204	100.0	100.0	

Source: Primary Data

The study shows that there are participants who had a lowest level of education to as far as master's degree level of education. 12 participants (5.9%) attained ZJC (Zimbabwe Junior Certificate), 18 people who took part in this study had attained ordinary level, 23.5% or 48 participants had diplomas, higher national diplomas had 42 (20.6%) of the people who participated in the study, 48 participants (23.5%) had honours degrees, 24 participants (11.8%) had masters degrees while there were some participants who had attained other level of education such as professional courses and it had 12 participants (5.9%) of the people who participated in the study.
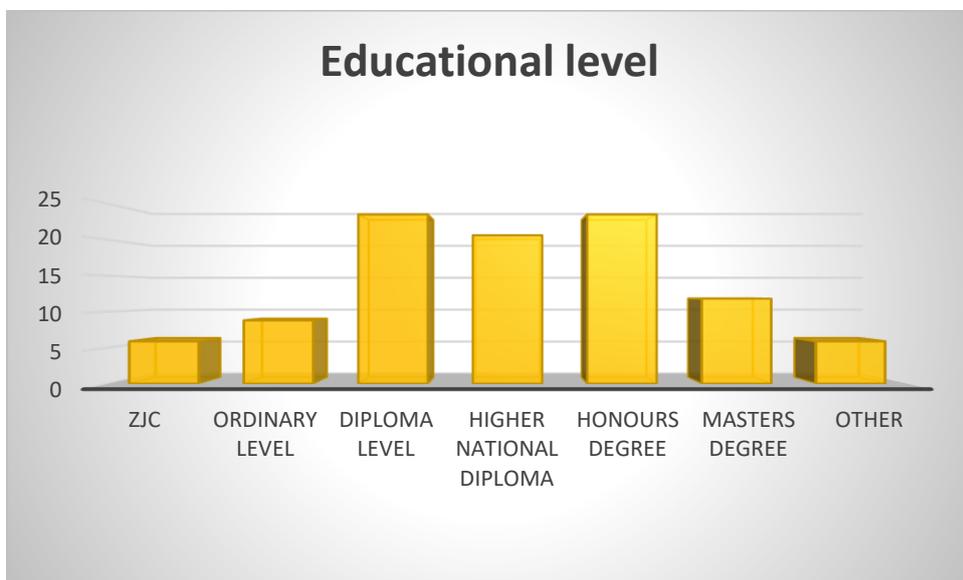
Source: Primary Data

Fig 4.3: Respondents Educational Background

The data above show that most of the participants had diploma levels going up to honours degrees levels. The respondents were educated enough to understand and interpret the effects of the statutory instrument (SI)142 of 2019 towards the contracts of construction companies.

4.7 Position

The table below shows frequency, percent, valid percent, and cumulative percent of the different positions of the people who participated in the current study.

Table 4.4: Professional Backgrounds of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Engineer	30	14.7	14.7	14.7
	Quantity Surveyor	48	23.5	23.5	38.2
	Contractor	48	23.5	23.5	61.8
	Architect	42	20.6	20.6	82.4
	Land Surveyor	36	17.6	17.6	100.0
	Total	204	100.0	100.0	

Source: Primary Data

The study show that 30 engineers took part in the current study, 23.5% were quantity surveyors, 48 participants (23.5%) were contractors, architects were 42 representing 20.6% of the total sample population, and land surveyors were 36. The statistics above were graphically presented as follows;

Source: Primary Data

Fig 4.4: Respondents Positions

The study had professional people and every participant who was included in the study was knowledgeable in his area of specialisation, which had been affected by the SI142 of 2019.

4.8   Work experience

The data below show the number of years the participants had in construction industry. The table shows that participants different work experience in the construction industry, this was shown the table below.

Table 4.5: Experience of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 1 year	18	8.8	8.8	8.8
	2-4 years	18	8.8	8.8	17.6
	5-7 years	18	8.8	8.8	26.5
	8-10 years	84	41.2	41.2	67.6
	10-12 years	60	29.4	29.4	97.1
	More than 12 years	6	2.9	2.9	100.0
	Total	204	100.0	100.0	

Source: Primary Data

The study shows that number of people who had under one year of experience was 18 which represents 8.8% of the total sample population, this was equal to the participants which had 2-4 years of experience as well as those who had 5-7 years of experience. 8-10 years had 84 participants which is 41.2% of the total sample population, 10-12 years of work experience had 60 participants which had 29.4% of the total population and the second most frequent class of work experience, and those who has more than 12 years of experience were 6, that is 2.9% of the total population sample.
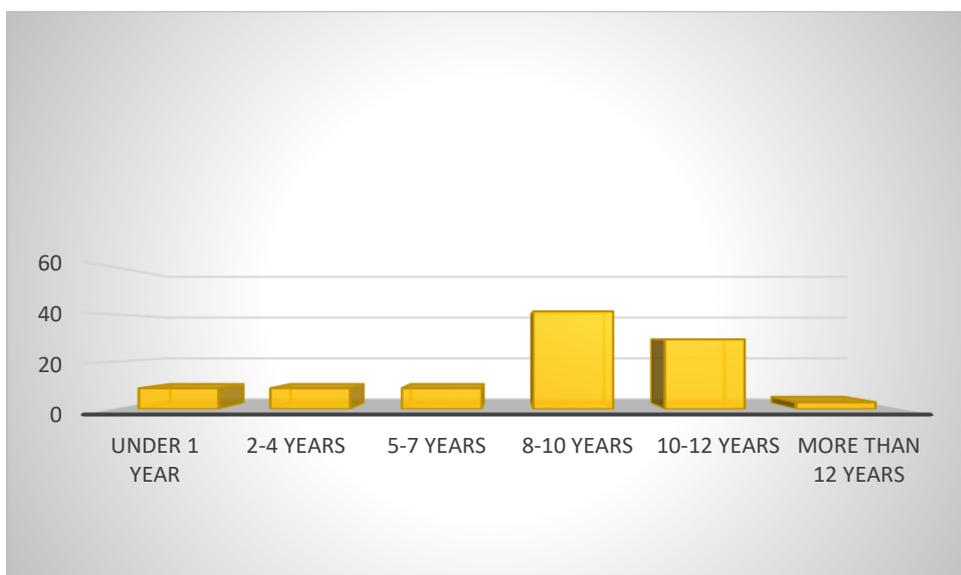
Fig 4.5: Respondents Work Experience

The work experience of the participants was largely varied, most of the participants had enough experience to understand the effects of the SI142 of 2019.

4.9   Objective 1; Material Availability to Zimbabwean construction industry

The following section discusses and looks at descriptive statistics of effects of SI142 of 2019 on material availability to Zimbabwe construction industry, the regression analysis, Anova, coefficient modes, and the discussion of findings.

Descriptive statistics

This section provides the descriptive analysis of the effects of SI142 of 2019 material availability to Zimbabwe construction industry. The descriptive analysis shows the level of agreement on the question items that describe effects of material scarcity to contract performance.   The Table below shows the findings

Table 4.9: Descriptive Analysis of Material Availability

	N	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis	Chi2(2)	Prob>chi2
The inconsistent price hikes of construction materials have been experienced since the introduction of the new Statutory Instrument	204	3.00	5.00	4.0735	0.67283	0.30	0.05	11.34	0.01
Quality of work delivered deteriorated to a larger extent and it resulted to poor quality material	204	2.00	5.00	3.8039	1.03666	0.42	0.03	10.09	0.01
The loss of schedule time due to reworks caused by material inferiority	204	3.00	5.00	4.3137	0.65058	0.34	0.07	10.39	0.00
Demoralized employees created artificial sick leaves and high levels of job turnover has been experienced	204	3.00	5.00	4.0441	0.77715	0.41	0.03	12.17	0.02
Delaying supply of imported of raw materials due to shortage of foreign currency resulted in failure to complete projects in time	204	3.00	5.00	3.7696	0.80690	0.46	0.02	10.30	0.01

Source: SPSS

Table above shows that respondents generally agreed on all questions that were asked on effects of SI 142 of 2019 on material availability. This indicates that respondents were aware of the challenges that affects the contract performance in the construction industry. The following figure presents the overall mean responses.

Histogram
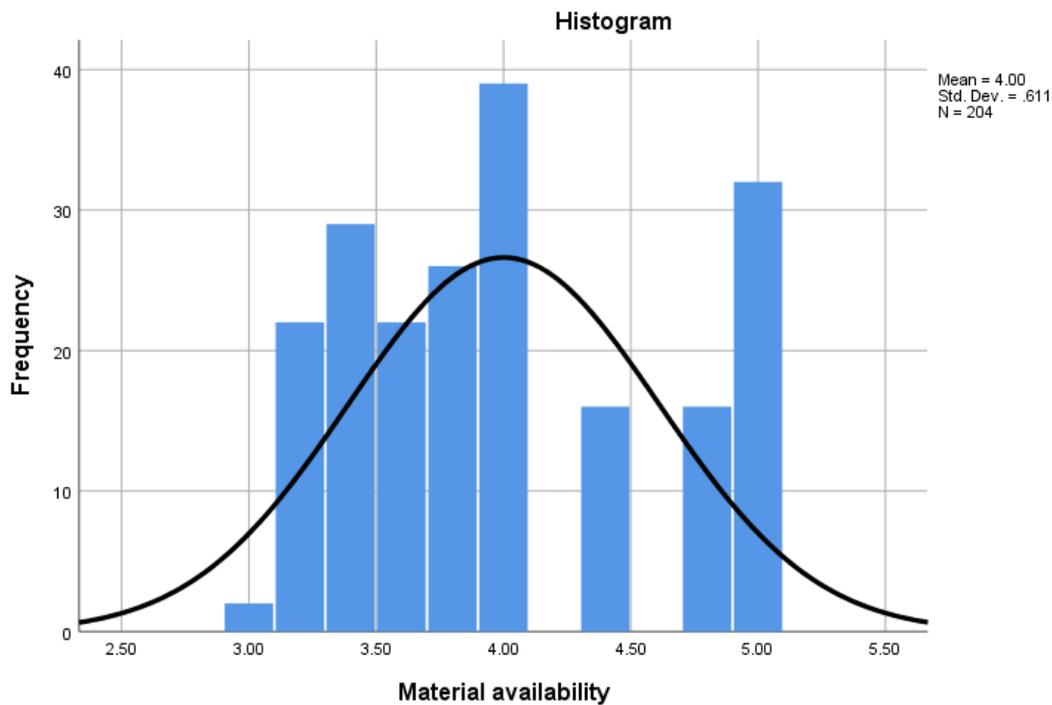
Source: SPSS

Fig 4.6: Material Availability Distribution Curve

The results from figure above show that respondents generally agreed with mean overall mean response of 4.00. The normal distribution curve is skewed towards agree (4.5). The standard deviation of 0.611 show that there is a variation of responses. Respondents generally shared similar views.

Regression analysis

Regression analysis was performed to test the predictive relationship between two sets of constructs; namely, material availability and contract performance measures. The Table which follows, presents the model summary of the regression analysis between challenges and contract performance

Model summary

Table 4.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709[a]	.503	.500	.28415
a. Predictors: (Constant), Challenges				

Source: SPSS

The results showed that the regression coefficient for the association of the challenges and contract performance was 0.503 whilst the corresponding R-square statistic was 0.500. The value of R-square (0.500) shows that the model is a moderate predictor of contract performance. This implies that material availability explains 50.0% of the variation in the contract performance. The other 50.0% is explained by other factors that were not included in the study. The table below shows the goodness of fit model

Analysis of variance

Table 4.11: ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.487	1	16.487	204.190	.000ᵇ
	Residual	16.310	202	.081		
	Total	32.797	203			
a. Dependent Variable: Contract performance						
b. Predictors: (Constant), Challenges						

Source: SPSS

The F-ratio in the ANOVA table above was used to test whether the overall regression model was a good fit for the data. It is given then that the independent variable was statistically significant in predicting the dependent variable, F (16.487) = 204.190, p < .05 (p=0.000). Therefore, the regression model was a good fit for analysing the effect of material availability on contract performance on construction companies. The table below shows the model coefficient and significance of the independent variable.

Table 4.12: Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.699	.181		9.373	.000
	Material availability	.574	.040	.709	14.290	.000
a. Dependent Variable: Contract performance						

Source: SPSS

One of the focal points of this study was to assess the effects of material availability due to SI142 of 2019 to Zimbabwe's Construction Industry. P-value for each coefficient was used to calculate

if there was a statistically significant relationship between the independent and dependent variable. The beta coefficients revealed that material availability have a significant impact to the contract performance of construction projects [$\beta = 0.709$, $p<0.05$ ($p=0.000$)]

4.9.1 Discussion of findings

The research findings showed that the respondents agreed that material scarcity due to SI 142 of 2019 affects the contract performance of construction industry projects. The regression showed that material availability is a predictor of contract performance of construction projects. There was a statistically significant relationship between material availability and contract performance as was indicated by the coefficient model. With beta=7.09 and p=0.00 to show and significant effect between material availability and contract performance of construction companies in Zimbabwe. Therefore, H1 was accepted. The findings were supported by UNIDO (1993), stated that construction industries have started facing challenges during economic recession, and in Zimbabwe the major effect of construction industry has been largely experienced during the 2008 era of hyperinflation and it has experienced some stability since the introduction of multi-currency system in 2009-June 2019. The introduction of SI 142 0f 2019 has revived the challenges experienced long back in 2008 during hyperinflation era. The construction industry in Zimbabwe has been facing finance related problems and the employers are facing high cost of production. This was worsened by political instability, coupled by current financial instability, and gross macro mismanagement. Mhlanga (2016) noted that cash crisis, lack of funding, high rentals have been threatening the survival of construction industry. The current research has found out that, the inconsistent price hikes of construction materials have been experienced since the introduction of the new Statutory Instrument, the findings concur with the notion made by Mhlanga (2016), the local currency is not stable since it has been introduced as the sole legal tender, which is resulting in the increase in prices of the raw materials required for construction industry. The participants of the study agreed that there is not price stability in the construction industry, since the introduction of the new instrument. The results were supported by the statistical measures used by the researcher in the study, which confirms that there are challenges of price instability in the construction industry.

Furthermore, quality of work delivered deteriorated to a larger extent and it resulted to poor contract performance. The research shows that due to price inconsistency, the quality of work in the construction industry has largely deteriorated which compromise the contract performance. (Awari et al, 2016) states that the raw materials are being delayed due to financial difficulties

hence the results such as high cost and poor quality has been experienced in the industry. The research concurs with (Awari et al, 2016), the findings shows that high quality of raw materials are less affordable which forces the contracting companies to purchase compromised quality of the materials needed in order to deliver work in different projects and contracts, the results of low quality services has largely affected the nature of contracts in the entire industry. The researcher found that the introduction of SI 142 of 2019 causes the contracting companies to face more negatives than positives.

The research compliments the literature of Divya and Ramya (2015) and (Awari et al, 2016), construction industry function in phases and the phases are pegged in time, however the delay of imported raw materials has largely affected the projected time frame of finishing the projects. Overally the construction industry has been facing the several challenges and some of them are not mentioned in the current study, such which includes corruption, loss of workshop tools, loss of big clients, loss of reliable suppliers and so on, these are believed to be caused by the introduction of SI 142 of 2019 and its legality framework.

4.10 Objective 2; Project funding for Zimbabwe Construction Industry Projects

The following section discusses and looks at descriptive statistics of effects of SI142 of 2019 on project funding to Zimbabwe construction industry, the regression analysis, Anova, coefficient modes, and the discussion of findings of benefits of SI142 of 2019 to Zimbabwe construction industry.

Descriptive statistics

This section provides the descriptive analysis of the effects of SI142 of 2019 on project funding to Zimbabwe construction industry. The descriptive analysis shows the level of agreement on the question items that describe effects of SI 142 of 2019 to contract performance. The Table below shows the findings.

Table 4.13: Descriptive Analysis of Project Funding

	N	Min	Max	Mean	Std. Dev	Skewness	Kurtosis	Chi2(2)	Prob>chi2
Government should assist in securing foreign currency for construction projects	204	3.00	5.00	4.2157	0.73112	0.36	0.062	.11.03	0.02
Government should revise tax regime for construction projects in order to attract foreign investors	204	3.00	5.00	4.2451	0.66490	0.32	0.072	12.11	0.01
Government should mobilise funding for projects so that the industry will not have to look for foreign investors	204	3.00	5.00	4.3627	0.63229	0.47	0.054	10.90	0.03
Introduction of new instrument gives a room for local companies to gain control over their operations	204	3.00	5.00	4.1569	0.69118	0.22	0.097	10.00	0.02
SI142 of 2019 created a room for the government to participate in subsidizing the construction industry whenever possible	204	3.00	5.00	3.9559	0.78972	0.08	0.090	13.45	0.01

Source: SPSS

Table above shows that respondents generally agreed on all questions that were asked on effects of SI 142 of 2019 on project funding. This indicates that respondents were aware of the effects on project funding due to the statutory instrument to the contract performance in the construction industry.   The following figure presents the overall mean responses.

Histogram
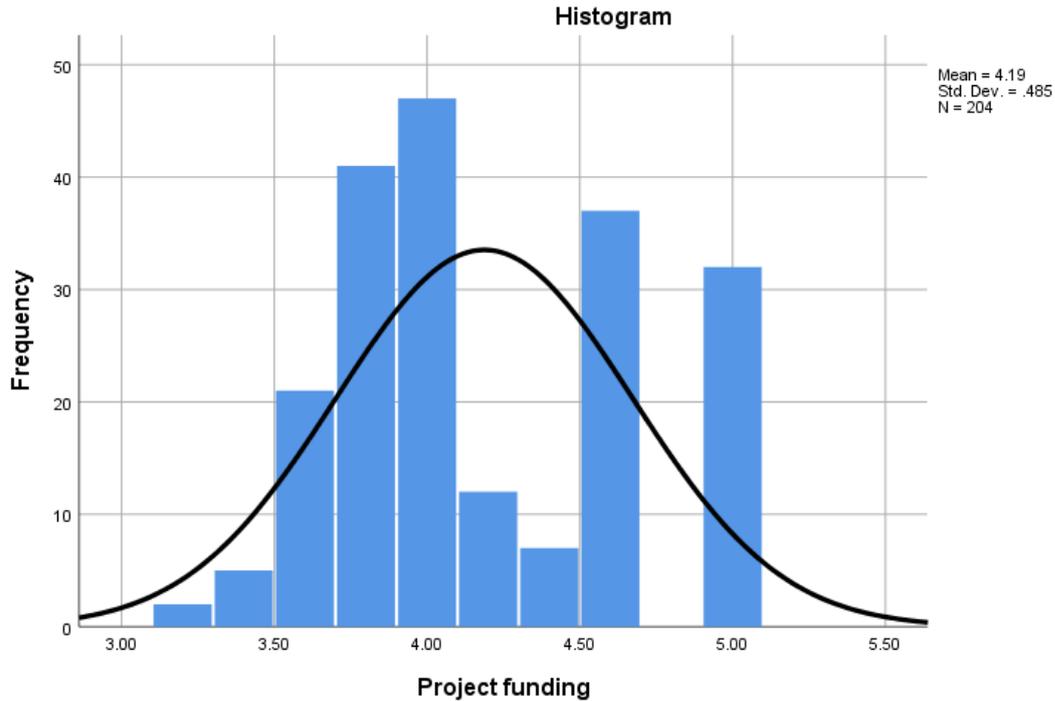
Fig 4.7: Project Funding Distribution Curve

The results from figure above show that respondents generally agreed with mean overall mean response of 4.19. The standard deviation of 0.485 show that there is a moderate variation of responses. Respondents generally shared similar views.

4.11 Regression analysis

Regression analysis was performed to test the predictive relationship between two sets of constructs; namely, project funding and contract performance measures. The Table which follows, presents the model summary of the regression analysis between benefits and contract performance.

Table 4.14: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.915a	.838	.837	.16219
a. Predictors: (Constant), Project funding				

The results showed that the regression coefficient for the association of the project funding and contract performance of construction industry was 0.838 whilst the corresponding R-square statistic was 0.838. The value of R-square (0.838) shows that the model is a strong predictor of contract performance. This adjusted R-square (0.837) implies that project funding explain 83.7% of the variation in the contract performance on construction projects. The other 16.3% is explained by other factors that were not included in the study. The table below shows the goodness of fit model.

The F-ratio in the ANOVA table above was used to test whether the overall regression model was a good fit for the data. It is given then that the independent variable was statistically significant in predicting the dependent variable, $F_{(7.483)} = 144.712$, $p < .05$ (p=0.000). Therefore, the regression model was a good fit for analysing the effects of project funding towards the contract performance on construction. The table below shows the model coefficient and significance of the independent variable.

Analysis of variance

Table 4.15: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.483	1	7.483	144.712	.000[b]
	Residual	5.314	202	.026		
	Total	32.797	203			
a. Dependent Variable: Contract performance						
b. Predictors: (Constant), Project funding						

Source: SPSS

One of the focal points of this study was to identify the benefits of SI142 of 2019 to Zimbabwe Construction Industry. P-values for each coefficient were used to establish if there was a statistically significant relationship between the independent and dependent variable. The beta coefficients revealed that benefits have a positive significant impact to the contract performance of construction companies [$\beta = 0.715$, p<0.05 (p=0.000)],

4.11.1 Discussion of findings

The research findings showed that the respondents agreed that project funding had negative effects on the contract performance of construction industry due to introduction of SI 142 of

2019. There was a statistically significant relationship between project funding and contract performance as was indicated by the coefficient model. With beta=7.15 and p=0.00 to show and significant relationship between benefit and contract performance of construction companies in Zimbabwe. Therefore, H1 was accepted. The findings were supported (Kokenye, Levy, & Veyrume, 2010), who alluded on the issue of putting in place the basic fundamentals of macroeconomic policies such as gaining control of the monetary policy and money in circulation.

These findings concur with Keith, (2009), he stated that introduction of statutory instruments is normally a move of demoralising international investors who has the motive of gaining large market share at the expense of local companies.

On the other hand, introduction of new Statutory instrument has created room for local construction companies to win tenders. SI 142 of 2019, apart from reducing exchange rate risks, enhances local investors' confidence and boosts investment opportunities to local contractors and provides scope for portfolio diversification of residents (Kokenye, Levy, & Veyrume, 2010). The main attraction of full sole currency is the elimination of the risk of a sudden, sharp strengthening of the country's local contractor opportunities to win tenders. The notion of SI 142 of 2019 promotes local contractors to win big tenders within the borders of Zimbabwe. However, the research found out that the introduction of the new statutory has more demerits to the local industry since these domestic organisations are still in the growth phase and lack capacity to handle major projects demands.

The introduction of SI 142 of 2019 has a positive effect to the local citizens and a negative effect to the international investors, since the international companies have a goal of trading in foreign currency and repatriate the profits to their home countries without meaningful development of benefits of the local citizens and their governments. The research found that most of the international companies were interested in offering their services in Zimbabwe since the nation had dollarized its economy since 2009-2019, this benefited more the companies than the general citizens and the owners of the land.

4.12 Objective 3; Technological Transfer for Zimbabwe's Construction Industry Projects

The following section discusses and looks at descriptive statistics of the effect of SI142 of 2019 on technological transfer to Zimbabwe's Construction Industry, the regression analysis, Anova, coefficient modes, and the discussion of findings of the effect of SI142 of 2019 to international companies investing in Zimbabwe's Construction Industry.

Descriptive statistics

The descriptive analysis shows the level of agreement on the question items on effects of SI142 of 2019 on technological transfer to Zimbabwe's Construction Industry. The Table below shows the results.

Table 4.16: Descriptive Analysis of Technological Transfer

	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis	Chi2(2)	Prob>chi2
Companies should invest in new technologies for effective operations	204	3.00	5.00	3.9559	0.78972	0.079	0.03	13.02	0.02
Companies should send personnel for training in other technologies	204	3.00	5.00	4.3137	0.57844	0.160	0.06	12.11	0.01
Companies should get assistance from government to acquire construction plant and equipment	204	3.00	5.00	4.2500	0.67412	0.347	0.08	13.65	0.01
Government should provide tax incentives for companies that invest in technology	204	3.00	5.00	4.2843	0.70714	0.468	0.09	10.49	0.02
Local companies should partner international companies for in order to get skills transfer and technological transfer	204	3.00	5.00	4.3922	0.72475	0.755	0.07	11.40	0.01

Source: SPSS

The table shows that the respondents agreed to all question items that were asked on the effects of SI142 of 2019 on technological transfer to Zimbabwe's Construction Industry. The mean responses ranges from 3.95-4.39 which indicate that respondents generally agreed. The overall mean responses are shown in the histogram in figure that follows.

Histogram
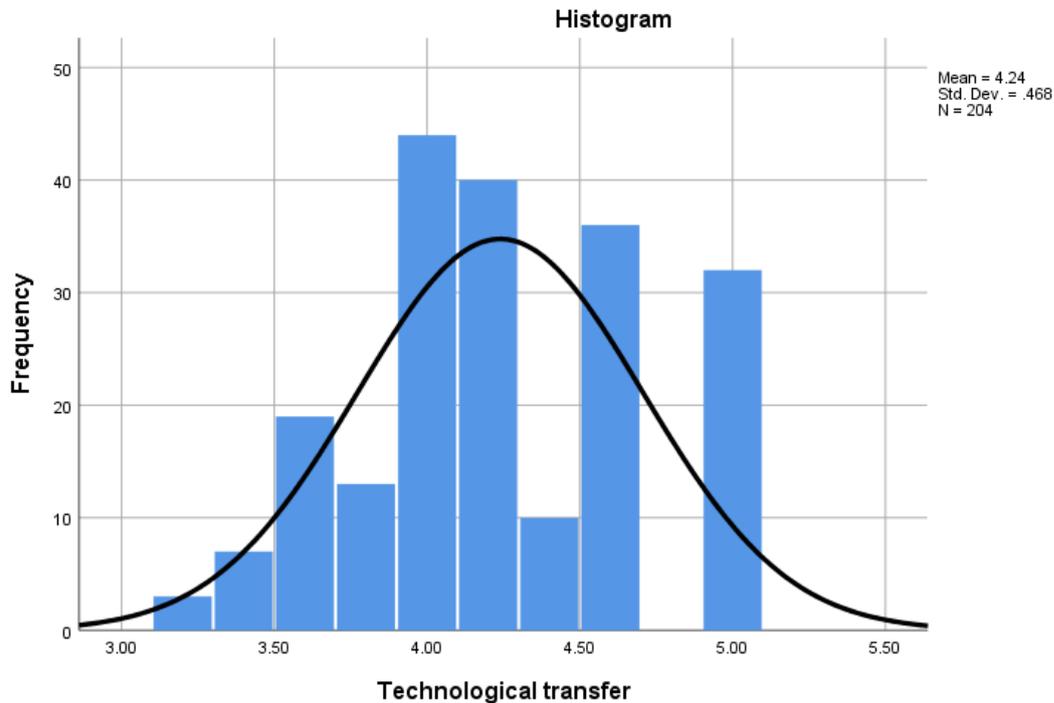
Source: SPSS

Fig 4.8: Technological Transfer Distribution Curve

The Figure above shows an overall mean score of 4.24 and the curve is skewed towards agree. There is a small variation in the responses with standard deviation of 0.468. The findings mean that the respondents were able to identify the effects of SI 142 of 2019 on technological transfer.

Regression analysis

Table 4.17: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847[a]	.718	.717	.21397
a. Predictors: (Constant), Technological transfer				

Source: SPSS

The results showed in table above highlight that the regression coefficient for effects of SI 142 of 2019 on technological transfer and contract performance was 0.718 whilst the corresponding R-square statistic was 0.717. The value of R-square (0.717) shows that the model is a predictor of the effect of technological transfer on contract performance. This implies that the effects of SI 142 of 2019 on international companies explain 71.7% of the variation in contract

performance of construction industry. The remaining 28.3% is explained by other factors that were not included in the study. The following section highlights the statistical significance of the regression model in table below.

Table 4.18: ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.549	1	23.549	514.335	.000ᵇ
	Residual	9.248	202	.046		
	Total	32.797	203			
a. Dependent Variable: Contract performance						
b. Predictors: (Constant), Technological transfer						

Source: SPSS

The F-ratio in the ANOVA table above was used to test whether the overall regression model was a good fit for the data. It is given then that the independent variables were statistically significant in predicting the dependent variable, F (23.549) = 514.335, p < .05 (p=0.000). Therefore, the regression model was a good fit for analysing the effect of SI 142 of 2019 on technological transfer in construction industry towards contract performance.

Table 4.19: Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.525	.166		3.161	.002
	Technological transfer	.874	.039	.847	22.679	.000
a. Dependent Variable: Contract performance						

Source: SPSS

P-values for each coefficient were used to establish if there was a statistically significant relationship between the independent and dependent variable. The beta coefficients revealed that SI 142 0f 2019 have a significant impact to technological transfer in construction industry [β = 0.847, p<0.05 (p=0.000)].

4.12.1 Discussion of findings

The findings showed that respondents agreed to all the effects of SI 142 of 2019 on technological transfer towards contract performance on construction industry. The findings implied that all the SI 142 of 2019 affected the international investors. This was further emphasised by the regression

analysis where it was highlighted that SI 142 of 2019 are a determinant of contract performance on international companies and the ANOVA showed that it is statistically significant as was also indicated in the coefficient model where the beta value of 0.847 and –p value =000. This implies that there is a significant effect between technological transfer and contract performance in construction projects. Hence H3 was accepted.

The respondents agreed to the questions asked in the study concerning the effect of SI 142 of 2019 on technological transfer and this was supported by the regression analysis and other inferential statistics that was used in order to come up with the results for discussion and conclusion purposes, concerning the introduction of the new instrument to the international companies.

4.13 Objective 4; effect of employee motivation on projects success.

The following section discusses and looks at descriptive statistics of effects of employee motivation on projects success, the regression analysis, Anova, coefficient modes, and the discussion of findings of the role of government in ensuring projects success.

Descriptive analysis

This section shows the respondents level of agreement on the employee motivation in ensuring projects success. The descriptive analysis is shown in table below.

Table 4.20: Descriptive Analysis of Employee Motivation

	N	Min	Max	Mean	Std. Dev	Skewness	Kurtosis	Chi2(2)	Prob>chi2
Availability of employee retention schemes	204	3.00	5.00	4.3137	0.65058	0.419	0.07	10.33	0.02
Availability of employee incentive schemes	204	3.00	5.00	4.2500	0.67412	0.347	0.08	10.39	0.02
Availability of employee hardship cushion allowances	204	3.00	5.00	3.7696	0.80690	0.444	0.03	11.00	0.02
Organizations should invest in employee health	204	3.00	5.00	4.2157	0.73112	0.360	0.06	10.08	0.01
Organizations should invest in employee safety at workplaces	204	3.00	5.00	4.2451	0.66490	0.321	0.07	12.26	0.01

Source: SPSS

The results show that respondents generally agreed that employee motivation has declined and could determine the success of construction projects with mean responses ranging from 3.76 to 4.31. The overall means response is presented in the table below

Histogram
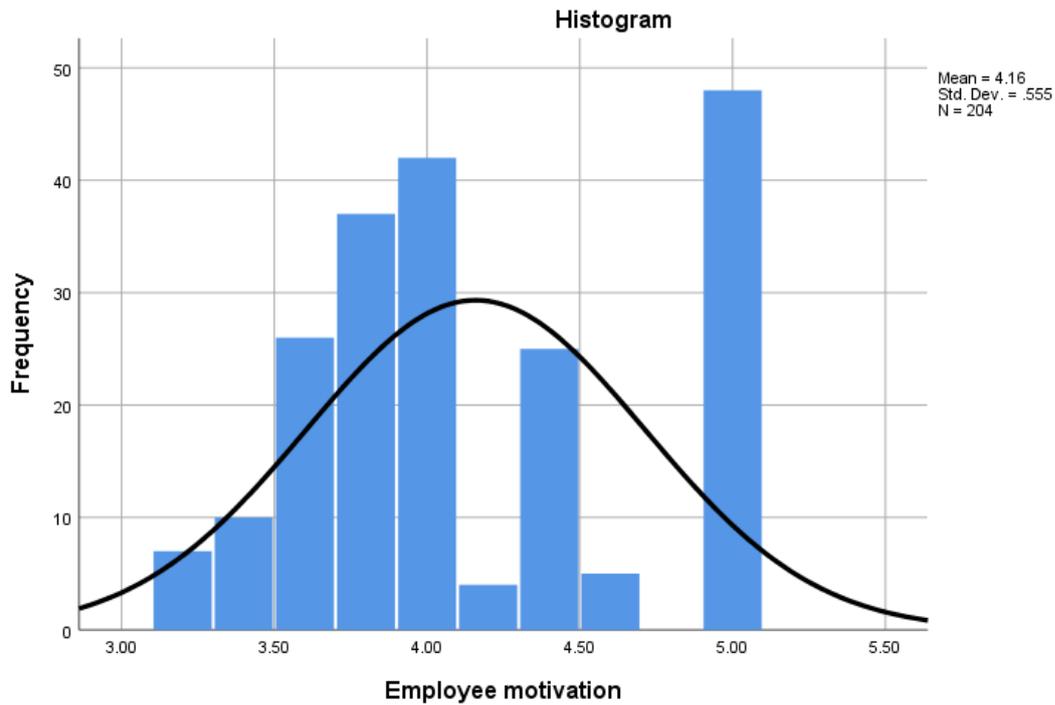
Source: SPSS

Fig 4.9: Employee Motivation Distribution Curve

The Figure shows an overall mean score of 4.16 and the curve is skewed towards agree. There is a variation in the responses with standard deviation of 0.555. The findings mean that the respondents were able to ascertain the effects of employee motivation on contract performance in construction projects.

Regression analysis

Table 4.21: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.855ᵃ	.731	.730	.20895
a. Predictors: (Constant), Employee motivation				

Source: SPSS

The results in Table above showed that the regression coefficient for the association of employee motivation and contract performance on construction projects was 0.731 whilst the corresponding R-square statistic was 0.730. The value of R-square (0.730) shows that the model is a strong predictor of contract performance. This implies that role of government explains 73% of the variation in the contract performance. The other 27% is explained by other factors that were not included in the study. The table below shows the goodness of fit model.

Table 4.22: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.978	1	3.978	49.195	.000^b
	Residual	8.819	202	.044		
	Total	32.797	203			
a. Dependent Variable: Contract performance						
b. Predictors: (Constant), Employee motivation						

Source: SPSS

The Table above presents the model of fit. The F-ratio in the ANOVA table above was used to test whether the overall regression model was a good fit for the data. It is given then that the independent variables were statistically significant in predicting the dependent variable, F (3.978) = 49.195, p < .05 (p=0.000). Therefore, the regression model was a good fit for analysing the effects of employee motivation on contract performance under construction industry.

Table 4.23: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.834	.105		17.440	.000
	Employee motivation	.588	.025	.555	23.435	.000
a. Dependent Variable: Contract performance						

Source: SPSS

One of the focal points of this study was to ascertain the role of government in ensuring projects success. P-values for each coefficient were used to establish if there was a statistically significant

relationship between the independent and dependent variable. The beta coefficients revealed that employee motivation has a positive significant impact to the contract performance of construction industry [$\beta = 0.555$, $p<0.05$ ($p=0.000$)].

4.13.1 Discussion of findings

The research findings showed that the respondents agreed employee motivation was critical in ensuring projects success of projects in construction industry. The regression showed that employee motivation is a predictor of contract performance of construction projects. There was a statistically significant relationship between employee motivation and contract performance as was indicated by the coefficient model. With beta=5.55 and p=0.00 to show and significant relationship between employee motivation and contract performance of construction companies in Zimbabwe. Therefore, H4 was accepted

Loss of key employees to neighbouring countries due to decrease in the real value of disposable income has affected construction industries as well. Brain drain has affected the entire industry since the skilled labour has been facing challenges of meeting basic needs while they go to work every day, this has forced most of the skilled workforce to abandon their works here and go to other countries such as South Africa, Kenya, Angola, Rwanda such to mention a few in search of greener pastures. The construction industry has been left with inexperienced workers who are trying to gain experience through working in their various companies. The issue of brain drain has costed construction companies to a large extent in terms of more wastages, compromised quality, failure to meet projects targets and so on. Nyoni & Bonga (2016) found that lack of experienced labour is also a common problem in the construction sector in Zimbabwe. The study agrees with the literature of Nyoni & Bonga (2016), lack of experienced labour has resulting in high cost of running construction companies since there is a need to sub contract other qualified and skilled labour from outside at a cost. The issue of brain drain was indirectly caused by the introduction of the new statutory instrument of 2019.

Table 4.24: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.542
Bartlett's Test of Sphericity	Approx. Chi-Square	526.661
	Df	6
	Sig.	.000

Source: SPSS

The Bartlett's Test of Sphericity was taken into consideration and gave a p-value =0.000. This value was significant in making factor analysis appropriate. According to SCS (2011) and Field (2009), p-value that is less than 0.05, is regarded significant showing that a significant correlation structure that makes factor analysis appropriate. In our case p= 0.000, signified a strong correlation showing that the R- Matrix is not an identity matrix.

Total variance explained

For these data SPSS output listed Eigenvalues in terms of variance explained, associated with each linear component before extraction, after extraction and after rotation. Table shows the items extracted which have Eigenvalues > than one (1) explaining relatively large amounts of variance. The variance explained had cumulative percentage of 94.432%. The squared loading explained variance of 40.477% for component one, 16.613% for component two, 13.439% for component three, 9.720% for component four, 7.962% for component five while 6.222% for component six.

Table 4.25: Summary of Eigenvalues

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.095	40.477	40.477	8.095	40.477	40.477
2	3.323	16.613	57.089	3.323	16.613	57.089
3	2.688	13.439	70.528	2.688	13.439	70.528
4	1.944	9.720	80.248	1.944	9.720	80.248
5	1.592	7.962	88.210	1.592	7.962	88.210
6	1.244	6.222	94.432	1.244	6.222	94.432
7	.615	3.073	97.505			
8	.266	1.331	98.835			
9	.175	.875	99.710			
10	.058	.290	100.000			
Extraction Method: Principal Component Analysis.						

Source: SPSS

From the above analysis, basing on a minimum eigenvalue threshold of 1.0, six out of ten components were extracted analysed from the benefits and the role of the government towards

the contract performance on construction companies and these were attributed to a cumulative variance of 94.432%.

Hypothesis testing

The following table shows the decisions made on the hypothesis. The coefficients in the table above were used to test the hypothesis of the study.

Table 4.26: Hypothesis testing

HYPOTHESIS	DECISION
H1: The introduction of SI142 of 2019 has led to materials' scarcity in the Construction Industry of Zimbabwe.	Hypothesis Accepted
H2: Project funding has declined since the introduction of SI142 of 2019	Hypothesis Accepted
H3: Technological Transfer has been negatively affected since the introduction of SI142 of 2019	Hypothesis Accepted
H4: Employee motivation has gone down since the introduction of SI142 of 2019.	Hypothesis Accepted

4.14 REGRESSION TESTS

Table 4.27: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.8222ª	.838	.837	0.48753	.485	25.605	1	202	0.008
a. Predictors: (Constant), Material_Availability,Project_Funding,Technological_Transfer,Employee_Motivation									

Source: SPSS

Table 4.28: Analysis of variance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std.Error	Beta			Tolerence	VIF
1	(Constant)	0.935	0.053		0.898	0.0372		
	Material Availability	0.197	0.072	0.207	2.159	0.0432	0.728	1.374
	Project Funding	0.146	0.178	0.094	0.751	0.0455	0.428	1.978
	Technological Transfer	0.182	0.147	0.139	1.353	0.0178	0.532	2.338
	Employee motivation	0.145	0.155	0.113	0.944	0.0348	0.663	1.507

Source: SPSS

The regression model established that taking all the independent variables into account notably; (X1) Material Availability, (X2) Project Funding, (X3) Technological Transfer and (X4) Employee Motivation at zero influences Construction Projects Success. The established model is as follows:

$Y = \beta_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + e,$

$Y = 0.935 + 0.207X_1 + 0.139X_2 + 0.113X_3 + 0.094X_4 + e$

Where Y is the dependent variable (Construction Projects Success); (X1) Material Availability, (X2) Project Funding, (X3) Technological Transfer and (X4) Employee Motivation. The results obtained also show that taking other independent variables at zero, a unit increase in Material Availability leads to a 0. 207 increase in Construction Projects Success; a unit increase in Technological transfer leads to 0.139 increase in Construction Projects Success; a unit increase in Employee motivation leads to 0.113 increase in Construction Projects Success and lastly a unit increase in Project Funding leads to 0.094 increase in Construction Projects Success. From the inferences made above it can be concluded that Material Availability, Project Funding, Technological Transfer and Employee Motivation Influences Construction Projects Success.

Model Comments:

Material Availability; significance = 0.0432 which is <0.05 therefore it is statistically significant with a positive impact.

Project Funding; significance = 0.0455 which is <0.05 therefore it is statistically significant with a positive impact.

Technological Transfer; significance = 0.0178 which is <0.05 therefore it is statistically significant with a positive impact.

Employee Motivation; significance = 0.0348 which is <0.05 therefore it is statistically significant with a positive impact.

Table 4.29: ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
591	Regression	27.483	1	7.483	144.712	.000ᵇ
	Residual	5.314	202	.026		
	Total	32.797	203			
a. Dependent Variable: Construction_Projects_Success						
b. Predictors: (Constant), Material_Availability,Project_Funding,Technological_Transfer, Employee_Motivation						

Source: SPSS

4.15 Chapter Conclusion

The chapter examined and assessed the responses to the investigation with the assistance of IBM-SPSS version 25 software. The outcome showed that the material availability, project funding, technological transfer and employee motivation have a significant relationship with contract performance. All the hypothesis formulated in the study were accepted. The following chapter provides the conclusions and recommendations of the research

5 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the conclusions and recommendations of the research based on the data analysed in the previous chapter. The achievement of the research objectives and the answer to the research questions were highlighted. The research contributes to theory, methodology and empirical, which were explored in this chapter to the contribution of the study. The recommendations of the study are directed to the management in the construction industry and the policy makers of the industry. Some limitations and areas of further study have been identified.

5.2 Achievement of Research Aim And Objectives

The aim of the study was to establish the non-legal effects of SI142 of 2019 on Construction projects. The research objectives of the study were to

- To assess the effects of SI142 of 2019 on materials availability for Zimbabwe's Construction Industry.
- To establish the effects of SI142 of 2019 to potential funding for projects in Zimbabwe's Construction Industry

- To ascertain how technological transfer in the Construction Industry of Zimbabwe has been affected by the introduction of SI142 of 2019.

- To assess the effects of SI142 of 2019 on employee motivation in the Construction Industry of Zimbabwe.

In order to achieve the research objectives, relevant literature both theoretical and empirical was reviewed in line with the research objectives aforementioned. The research objectives of the study were achieved. The research objectives were achieved by the perusal and thorough revision of the literature in various sources such as books, journal articles and other review sources in Chapter two. The literature discusses all the literature in line with the research objectives. The objectives were also achieved in the previous chapter, Chapter Four, where the descriptive analysis was done for all objectives and test of association to determine the strength of the relationship between the independent and the dependent variables.

5.3 Conclusion

This section provides conclusions in relation to research questions in Chapter one, each question shall be restated and conclusions are made in regards to that question as shown in the ensuing paragraphs.

5.3.1 Research question 1: What are the effects of SI142 of 2019 on materials availability for projects in Zimbabwean construction industry?

The research makes several conclusions in relation to material availability challenges due to introduction of SI 142 of 2019 and its effects on construction industry of Zimbabwe.

The research concluded that there are price hikes in the construction industry since the introduction of SI 142 of 2019. The use of local currency was a good idea but the researcher finds out that there is nothing that was used to back up the local currency in order for it to gain the basic functions and characteristics of money such as store of value, store of wealth, just to mention a few. The local currency currently in circulation has not been used as a means of measure of value since it does lose value every time and again. The research also concluded that if any company wins a tender and quotations are made in local currency the company suffers losses because it might use quotations basing on the current prices of the raw materials and the prices of raw materials changes because of the exchange rate between United States Dollar and Zimbabwean dollar. This causes the researcher to conclude that construction industries are facing a huge challenge of material shortages hence fail to meet contracts agreements and a great reduction in performance.

Quality of work has deteriorated in the construction industry since the introduction of SI 142 of 2019. The research found that many construction companies have been failing to meet the standards of work due to expensive raw materials and delays of the arrival of such raw materials from other countries. Expensive raw materials and delays has caused the companies to perform poorly as far as quality is concerned and resorting to inferior products. It is believed that for construction companies to gain a large market share or to experience customer loyalty, it comes from the quality of work delivered by a company, since the quality is now compromised because of the shortages of raw materials and expensive of these materials many companies has been facing a decrease in getting new tenders hence the contract performance has been poorly functioning. It is therefore concluded in the study that the introduction of SI 142 of 2019 has caused the quality of work in construction industry to be biased.

International companies used to import their raw materials from outside the country, the introduction of the SI 142 of 2019 has made the importation process difficult since they needed to trade in local currency and whenever they want to purchase raw materials from outside they would require to change the local currency into foreign currency. This has made the process difficult and costly at the same time. The researcher concluded that the introduction of SI 142 of 2019 became costly to the international companies.

The research concluded that materials scarcity due to introduction of SI 142 of 2019 in the construction industry has affected the contract performance of construction companies and that there is a strong association between material availability and contract performance in construction industry.

5.3.2 Research question 2: Has project funding declined since the introduction of SI142 of 2019 for Zimbabwe's construction industry?
The research made some conclusions based on the research question on the effects of SI 142 of 2019 on project funding on the construction projects contract performance. The research established that SI142 of 2019 affected the inflow of projects funding from especially international organizations.

The study concluded that there is a positive association between project funding and contract performance.

5.3.3 Research question 3: Has technological transfer in construction industry declined since the introduction of SI142 of 2019?

The researcher noted that several international companies in the construction industry have been negatively affected by the introduction of the SI 142 of 2019. It is believed that most international companies are profit oriented, however the introduction of the new instrument has caused them to realise losses in their operations which forces them to downsize their operation of vacate from Zimbabwe to other neighbouring countries that have stable currencies and better prospects of making adequate profits once they offer their construction services. The research found that due to this nature of change, construction companies are withdrawing their services including most of their plant and equipment from Zimbabwe and the few that are still offering their services are offering them to the elite and the ordinary citizens are suffering because they cannot afford exorbitant prices quoted by these companies.

The research concludes that most of the international companies came to offer their services during the period of dollarization where they used to charge in United States and other foreign currency denominations, which was profitable to them. The companies used to repatriate these profits to their countries, however the introduction of the new instrument has caused these companies to operate at high cost since they are no longer charge their services in foreign currency. The motive behind trading in Zimbabwe was to gain access to foreign currency that was used during the 2009-2019 period. The introduction of SI 142 of 2019 has affected these companies and it causes them to cease enjoying such benefits, and they ended up retrenching local employees and failing to deliver the contracts given in local currency.

Some conclusions were made based on the research question on the effect of SI 142 of 2019 to international companies. The research also concluded that the international companies were affected by the introduction of SI 142 of 2019 in the construction industry are experiencing hard times to cope up with the current statutory instrument.

5.3.4 Research question 4: Has employee motivation gone down in Zimbabwe's construction industry since the introduction of SI142 of 2019?

The companies in the construction industry are required to employ skilled and qualified personnel. The current trend in the industry is that skilled labour and qualified personnel are being paid salaries that do not meet their basic needs and that cannot tally with their experience and expertise. This has caused many of them to abandon their jobs in Zimbabwe and go to other countries in search of greener pastures. This has negatively affected the construction industry to a larger extent. Many of the employees who are currently working in the local construction companies are inexperienced and do not have adequate experience to work on projects and finish them in time. Huge losses in form of wastages have been experienced in many companies, many accidents in the workshops and on sites due to inexperienced personnel. The researcher has concluded that the introduction of SI 142 of 2019 has led to employee demotivation and has caused so much brain drain which is one of the most challenges faced by local construction companies.

Shortages of stable currency has caused employees to abscond work and to fake sick leaves which negatively affect the contract performance of construction companies.

5.4 Theoretical Contribution

This research adds to literature on the non-legal effects of SI142 of 2019 on of Construction projects. The factors that were found to have positive correlation with the SI 142 of 2019 were material availability, technological transfer, project funding and employee motivation. This study has contributed to theory for it was able to provide a tested theory that explain non-legal effects of SI142 of 2019 on contract performance in construction industry: The conceptual model after the research shows that these factors had a significant impact on the contract performance.

5.5 Methodological Contribution

While the researcher used the survey method in this study other research methods can be used in future studies to broaden the amount of data collection and accuracy of responses. Methods like interviews, can also be employed to gather more research data and capture emotions. The methods yield valid, verifiable and reliable data. Qualitative methods can also be employed in future research since the current study used quantitative analysis. However, the draw backs of qualitative analysis should be taken into consideration particularly lack of objectivity and also failure to generalise findings.

5.6 Empirical Contribution

The research study sought to provide meaningful practical and academic contributions to the existing body of knowledge on the non-legal effects of SI142 of 2019 that will lead to significant improvement in way contracts are handled and eventual improved contract performance. The study also thrives to present empirical evidence to support other prior researches that were conducted especially in Zimbabwe.

5.7 Managerial Recommendation

The research recommends that;

- The management must be innovative in their service offering so that they remain relevant in the market.

- Good quality services that enhance customer satisfaction and loyalty are important for SMEs

- The management of construction companies must scan the environment before they implement any strategy, strategic thinking is highly required in order to come up with sound and effective strategies for companies in the construction industry.

- The management must consider technology advancement of companies in construction industry in order to enhance efficiency in business operation which is a factor for contract performance

- The researcher recommends policy makers to assist in availing foreign currency for purchase of construction equipment, plant, spares and software.

- The researcher recommends government to act as guarantors to foreign investors in a bid to ensure that they can be able to collect their money from their investments.

- The research also recommends that there is need for research and development in order to promote manufacturing of local machines, plant and software required for construction industry

- In order to retain employees, managers are encouraged to invest in schemes that motivate their employees such as providing basic commodities on a monthly basis as incentives.

- Management is also encouraged to pay fees for employee dependents as a way of incentivising them and encouraging them to stay.

- By investing in technology and having a research and development department, companies in the construction industry can put themselves in a position to develop their products so that they can gain international acclaim whilst also meeting local demand.

5.8 Generalization of Findings

The research was limited to stakeholders of the construction industry in Hwange due to time, cost and distance constraints. The study assumed that, results of the study could be used as a benchmark by the construction industry of Zimbabwe on the contract performance. Noting that the construction industry plays a vital role in contributing towards economic development, it is inadequate to make conclusions basing on respondents in Hwange only. Generalisations of the results may need to be taken with caution. Having said that, I suggest that other researches be done in other parts of the country and see if similar conclusions can be drawn.

5.9 Limitations of The Study

This study advances and contributes to the literature on the strategies that influence contract performance in the construction industry. However, as with every study of this nature, the study was subject to certain limitations that may pave the way for further research opportunities. The limitations are discussed as follows:

The sample was drawn from people who are in the Town of Hwange. A broader national sample would have offered additional….. Responses from the policy makers would have potentially offered an additional perspective, but in this study, they were not included in the sample and, therefore, they could be included in future studies.

The study was based on a small sample due to financial constraints; therefore, the findings must be treated with caution when drawing conclusions. In this study only a quantitative approach was followed, which limits the information collected, however, a broader scope of information could have been acquired if this approach was mixed with a qualitative approach. The respondents, of their own accord, completed the questionnaire and the researcher had no control over the responses; therefore, the researcher had to rely on information supplied by the respondents.

5.10 Areas of Further Study

Despite the limitations, the findings of this study pointed to several useful insights, which may be used by other researchers for future research. The research recommended that in order to enhance the theoretical underpinning of this study, modern theories that explain the concept of strategy can further provide guidance on the impact of corporates strategies on company leadership.

This study only adopted quantitative research methods, a further study can be carried out using the qualitative research including the management of the companies in construction industry and the policy made, probably more detailed information will be explored.

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APENDIX A

SURVEY INSTRUMENT

SURVEY QUESTIONNAIRRE

SECTION A: DEMOGRAPHICS

Please tick appropriate Box

- Age Range

☐ under 20 years   ☐ 36 – 40 years

☐ 21 – 25 years   [☐ 41 – 45 years

☐ 26 – 30 years   ☐ 46 – 50 years

☐ 31 – 35 years   ☐ over 50 years

- Gender

☐ Male   ☐ Female

- Level of Education

☐ ZJC   [☐ Diploma

☐ Higher National Diploma   [☐ Degree

☐ Ordinary level   [☐ Masters

☐ A level   ☐ Other

- Position

☐ Engineer   [☐ Architect

☐ Quantity Surveyor   [☐ Land Surveyor

☐ Contractor

- Number of Years in Construction Industry

☐ under one (1) year   ☐ 2-4 years

☐ 5 – 7 years   ☐ 8 – 10 years

☐ more than 10 years

SECTION B: DATA COLLECTION

Effects of SI142 of 2019 on material

Instruction to respondent:

To complete this questionnaire you are requested to read the statement provided and put your response on the appropriate number which best describes your feelings, attitude, opinion, or beliefs against the statement.

		(1) Strongly Disagree	(2) Disagree	(3) Neutral	(4) Agree	(5) Strongly Agree
1.1	The inconsistent price hikes of construction materials have been experienced since the introduction of the new Statutory Instrument	**1**	**2**	**3**	**4**	**5**
1.2	Quality of work delivered deteriorated to a larger extent and it resulted to poor quality material	**1**	**2**	**3**	**4**	**5**
1.3	The loss of schedule time due to reworks caused by material inferiority	**1**	**2**	**3**	**4**	**5**
1.4	Demoralized employees created artificial sick leaves and high levels of job turnover has been experienced	**1**	**2**	**3**	**4**	**5**
1.5	Delaying supply of imported of raw materials due to shortage of foreign currency resulted in failure to complete projects in time	**1**	**2**	**3**	**4**	**5**

Effects of SI142 0f 2019 on project funding

Instruction:

Read the statements, variables below and give your response by circling an appropriate response which best describes your feelings, attitude or beliefs.

		(1) Strongly Disagree	(2) Disagree	(3) Neutral	(4) Agree	(5) Strongly Agree
2.1	Government should assist in securing foreign currency for construction projects	1	2	3	4	5
2.2	Government should revise tax regime for construction projects in order to attract foreign investors	1	2	3	4	5
2.3	Government should mobilise funding for projects so that the industry will not have to look for foreign investors	1	2	3	4	5
2.4	Introduction of new instrument gives a room for local companies to gain control over their operations	1	2	3	4	5
2.5	SI142 of 2019 created a room for the government to participate in subsidizing the construction industry whenever possible	1	2	3	4	5

Effect of SI142of 2019 on technological transfer

Instruction:

Read the statement, variables below and give your response by highlighting on the appropriate number which best describes your feelings, attitude or beliefs about the statement or variable.

		(1) Strongly Disagree	(2) Disagree	(3) Neutral	(4) Agree	(5) Strongly Agree
3.1	Companies should invest in new technologies for effective operations	**1**	**2**	**3**	**4**	**5**
3.2	Companies should send personnel for training in other technologies	**1**	**2**	**3**	**4**	**5**
3.3	Companies should get assistance from government to acquire construction plant and equipment	**1**	**2**	**3**	**4**	**5**
3.4	Government should provide tax incentives for companies that invest in technology	**1**	**2**	**3**	**4**	**5**
3.5	Local companies should partner international companies for in order to get skills transfer and technological transfer	**1**	**2**	**3**	**4**	**5**

Role of government in ensuring project success

Instruction:

Read the statements, variables below and give your response by highlighting on the appropriate number which best describes your feelings, attitude or beliefs.

		(1) Strongly Disagree	(2) Disagree	(3) Neutral	(4) Agree	(5) Strongly Agree
4.1	Availability of employee retention schemes	**1**	**2**	**3**	**4**	**5**
4.2	Availability of employee incentive schemes	**1**	**2**	**3**	**4**	**5**
4.3	Availability of employee hardship cushion allowances	**1**	**2**	**3**	**4**	**5**
4.4	Organizations should invest in employee health	**1**	**2**	**3**	**4**	**5**
4.5	Organizations should invest in employee safety at workplaces	**1**	**2**	**3**	**4**	**5**

Thank you for your corporation.