

# **Entrepreneurship Dynamics in Countries with Highly Volatile Economies: A Contextual Study of South Africa and Zimbabwe**

**Faustinah Magama**

**Supervisor: Dr Jose Barreira**

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## **ABSTRACT**

Entrepreneurship dynamics has been studied over the past years and until now, most questions remain unanswered and issues remain unresolved. The context of the study is mainly based on how entrepreneurs manage to operate successful ventures in volatile economies such as those of South Africa and Zimbabwe. Entrepreneurship dynamics research relating to highly volatile economies has not been done to a large extent. Certain research problems covered focus on certain aspects such as whether the ventures had been successful or were affected by the economic conditions of the country. A theoretical framework of entrepreneurship dynamics in highly volatile economies was developed. It analyses data across all industrial sectors in the above mentioned countries.

The study targeted only existing entrepreneurs mainly operating in the formal sector of the economy to obtain real entrepreneurial challenges and strategies, as well as opinions relating to entrepreneurial activities. The study used judgemental sampling to collect data from a sampling frame of 194 entrepreneurs based in South Africa and Zimbabwe.

The study used mixed methodology in order to analyse the data by performing both quantitative and qualitative studies. This was useful for the study as it managed to get open-end responses from entrepreneurs and how their businesses were affected by the countries' economic conditions. In the qualitative analysis, qualitative themes were obtained from the data and some useful facts stated by entrepreneurs were noted. In the quantitative analysis, multiple regression was performed after validity and reliability tests were performed and results showed significant relationships of challenges, factors, trading, survival strategies and informal and formal sectors to entrepreneurial activities.

Major findings consist of how highly volatile economies negatively impact entrepreneurial activities, how challenges have a negative impact on entrepreneurial activities and how the strategies implemented by entrepreneurs have a positive influence on entrepreneurial activities. Moreover, it has been perceived that due to highly volatile economies, people partake in entrepreneurial activities in the informal economic sector rather than the formal

economic sector. The results of the study show that there are were mixed responses from the entrepreneurs themselves with regards to which economical sector they prefer operating in, as the quantitative results showed that entrepreneurs prefer operating in the formal economic sector. The qualitative themes mainly stated reasons why entrepreneurs operate in their respective economic sector.

The study contributes in the area of entrepreneurship positively by adding on to the existing research. It also aims to provide reliable data that may be used in decision making by country officials, policy makers, educational institutions, traders, entrepreneurs, economists and traders. Economic volatility has had a great influence on entrepreneurship activities in certain countries. The contribution of the study is that of entrepreneurship research in terms of economic volatility's relationship with entrepreneurship. It adds to the level of determining how the economy affects a country's entrepreneurial activities.

# DECLARATION

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

Faustinah Petinah Tahwa Magama

Signed at .....

On the ..... day of ..... 2015

## **DEDICATION**

I would like to dedicate this research report to my dear husband Hilton Mukuwiri.

Without your love and support, I would not have reached this far.

## **ACKNOWLEDGEMENTS**

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# CHAPTER 1: INTRODUCTION

## 1.1 JUSTIFICATION OF RESEARCH

Entrepreneurship activity varies between certain countries even though it plays an important role. In some countries, entrepreneurship activities arise due to the opportunities identified or due to circumstances. Africa is comprised of countries that have highly volatile economies and this significantly affects entrepreneurship activity. Many issues influence entrepreneurship activities in all countries and these can include various factors such as political, macro-economic, social, natural, financial and currency volatility. Entrepreneurs play a vital role in terms of economic growth, particularly in the African economies. They go through a process of discovering, creating and profitably exploiting markets of goods and services (Klapper, Amit & Guillén 2010).

Entrepreneurship tends to vary in certain countries, as entrepreneurs go through certain processes. Some of these processes may be influenced by the state of the economy, such as the availability of loans from financing institutes. Certain developing countries usually experience high economic volatility. Volatility can be associated with the statistical measure of variance or standard deviation and can be used to measure risk and uncertainty (Gregorio 2004). Moreover, volatility in a country's economy can also be predicted by measures of country risk and some strategies that aid entrepreneurs to avoid downside risk may cause entrepreneurs to miss certain opportunities (Gregorio 2005).

Some of the factors that cause economic volatility in countries can be caused by shifts in investor attitudes, capital flow reversal and shortfalls caused by the government. These factors cause prices to go up and an unmanageable increase in expenditures (Erturk 2005). Sources of volatility can be identified by country risk analysis; however, according to Gregorio (2005), this type of measure has been unreliable in the past and limits managers and business owners to engage in international business ventures and also does not help managers to reduce

downside risk in the business ventures. Knowing the volatility of an economy is very important for people such as traders, economists, investors and entrepreneurs, as it impacts issues such as exports, prices and exchange rates (Klapper *et al* 2010).

The ways in which opportunities are identified and exploited is a very important aspect of entrepreneurship. Entrepreneurship is comprised of identifying opportunities by a particular person at a certain time and how they exploit the opportunities (Zahra & Dess 2001). Some entrepreneurship activities in developing countries develop as a result of an entrepreneur encountering a necessity (Shane & Venkataraman 2000). In countries with highly volatile economies, the major contributor to entrepreneurship activities may be necessity due to bad labour market conditions which consist of very high employment rates, such as that of Zimbabwe, which is between 80 to 90% (Chiumia 2014). However, there are certain factors associated with entrepreneurship activities and why people partake in entrepreneurship activities. Some of these are due to opportunities driven by high-growth potential businesses (Fairlie 2013).

Entrepreneurship activity in both volatile and non-volatile economies has been different across certain countries. Some non-volatile economies consist of opportunity entrepreneurs and volatile economies have more necessity than opportunity entrepreneurs (Brixiova 2010; Amorós & Bosma 2013). Entrepreneurship reacts to economic policies and conditions, and this is mainly encouraged by risk-bearing, regulation and development (Lee 1991). Furthermore, successful ventures contribute to the economic growth and to consumers in various ways as they competitively meet consumers' needs.

In non-volatile countries such as the United States, the economic growth rates can be related to high-expectation entrepreneurs exploiting national investments in knowledge creation and regulatory freedom (Valliere & Peterson 2009). The Consumer Price Index inflation for developed countries has been very low and monthly fluctuations have been very small. Examples of these countries are China with an Inflation of 2.42% in June 2014 with a difference of -0.10% since

June 2013 (Inflation.eu 2014). This is almost all the same as that of the United States which is 2.07% with a difference of 0.19% (Inflation.eu 2014). In 2011, African economies contributed less than 1% to the global GDP (Kshetri 2011), which reflects how much less developed some African economies are compared to a number of global economies. Entrepreneurship activities do not only happen in the formal sector, but also take place in the informal sector, and in highly volatile economies, entrepreneurship activities tends to be more.

A gap has been identified in entrepreneurship research of activities in countries with highly volatile economies such as South Africa and Zimbabwe. Therefore, there is a need to fill this gap by conducting further research. The main problem being addressed in this project report is investigating how successful entrepreneurship activity is in countries with highly volatile economies like South Africa and Zimbabwe. The problem addressed will analyse how much of an impact a country's economy has on the entrepreneurship activities in the country.

### **1.1.1 Aims and Objectives of the Study**

In order to cater for the gap identified in the literature, which is the absence of an understanding of the survival of entrepreneurship activities in highly volatile economies, the study aimed to undertake certain investigations such as:

- Investigating the strategies employed by entrepreneurs with ventures in countries with highly volatile economies.
- Investigating the highly volatile economic factors that shape entrepreneurship activities.
- Investigating the challenges faced by entrepreneurs with ventures in countries with highly volatile economies.
- Investigating trading activities in countries with highly volatile economies.
- Investigating whether countries with highly volatile economies support entrepreneurial activities more in the formal or informal sector.

Furthermore, the study has specific objectives and these are:

- To identify the factors, challenges and strategies that entrepreneurs face in highly volatile economies.
- To contribute to the area of research on how entrepreneurs survive in highly volatile economies.
- To explore how highly volatile economies affect trading activities.
- To determine if a highly volatile economy such as that of South Africa or Zimbabwe is able to sustain entrepreneurial businesses.
- To determine how safe it is for entrepreneurs to start ventures in countries with highly volatile economic conditions.

## **1.2 PURPOSE OF THE STUDY**

The literature of various elements that affects entrepreneurs is rich and many models have been formulated in order to identify the entrepreneurial processes. However, the literature related to the economic volatility of a country and how it affects entrepreneurship activities in affected countries is limited. As a result of poverty, unemployment and market-based reforms, African countries have small-scale entrepreneurs such as traders, street vendors, barbers and small shop owners (Azmat & Samaratunge 2009). The study will develop a theoretical framework of entrepreneurship dynamics in volatile economies such as those of South Africa and Zimbabwe.

Mukorera and Mahadea (2014) made use of the Vector Autoregressive Model to explain how entrepreneurship is linked to economic meltdown by using variables such as GDP, money supply and inflation. Chou and Liu (2010) aimed to identify what the economic value in volatility timing is by using the mean-variance framework. Major trends in literature on entrepreneurship dynamics and economic volatility have been difficult to identify as theoretical studies that focus specifically on those issues are rare. Murisa and Chikweche (2013) identified the nature of the challenges faced by entrepreneurs in extreme poverty circumstances and also give solutions to these challenges. Verhoeven (2013) explored the nature of strategic and entrepreneurship activities in the informal

economy by using a multi-dimensional approach which was based on economic developmental views. This study aims to contribute to filling the gap in the research that was identified. It will address issues such as trading, strategies, challenges and entrepreneurship activity as well as economic volatility in South Africa and Zimbabwe. These issues also form part of the variables in this study.

Entrepreneurship dynamics research relating to highly volatile economies has not been investigated to a large extent. There is a need to focus on the characteristics that contribute to business survival in countries that are affected by such economies. Not enough explanation on the growth of entrepreneurship activities in such economies exists; therefore there is a need to focus on the link between areas of entrepreneurship and the economy (Ligthelm 2010).

Having discussed all research aspects involved, the purpose of this study is to deliver practical and theoretical data that will illustrate how entrepreneurship activities are affected by high economic volatility in countries such as South Africa and Zimbabwe. It will analyse data across all industrial sectors in these countries and aims to provide reliable data that may be used in decision making by country officials and entrepreneurs themselves.

### **1.3 CONTEXT OF THE STUDY**

This section will mainly describe the cases of the previously mentioned countries, which have volatile economies and how entrepreneurship activity is affected by such economic conditions. The context of this study will mainly be based on how entrepreneurs managed to operate successful ventures in volatile economies such as those of South Africa and Zimbabwe. Moreover, whether these ventures been successful or were affected by the economic conditions of the country. These issues help determine why the rate of entrepreneurship activity is different in various nations. This study will mainly aim to examine new ventures and established businesses in Zimbabwe.



### **1.3.1 A Case of Zimbabwe**

Zimbabwe's economy began to head for disaster in 1991 and this led to a highly volatile economy, low production in various industries such as mining, manufacturing and agriculture, and job losses in 1997 (Juana & Mabugu 2010). The country has faced many changes over the past years and this caused a negative impact on its economy. The Government was declared bankrupt in 2008 and banks lost confidence in the currency, as a result, the Government went to the extent of printing notes from Z\$100 billion, Z\$20 trillion to Z\$1.5 quadrillion (The Times 2008). Main constraints to the economy include various factors such as poor Government incentives and excessive interference (Juana & Mabugu 2010). The Government's budget went to Z\$7 quadrillion in November 2007, this showed how highly volatile the economy was in that period which subsequently affected the economy to the present day. The GDP for Zimbabwe was US\$12.80 billion in 2013 (Trading Economics 2014a). Prices of commodities in Zimbabwe were stable in the first half of 2013 as a result of the increase in supply and less demand. Exports rose from US\$1,613 billion in 2012 to \$4.3 billion in 2013 (Mandizha 2013). Another example of factors that contributed to the downfall of Zimbabwe's economy is the politicisation of land reform, which aimed to resolve issues surrounding unfair distribution of land between white and black Zimbabweans (Degeorges & Reilly 2007).

Zimbabwe was once a wealthy nation with very good education and industrial sectors industrial sector and a stable economy, but then started experiencing corruption and gross economic mismanagement (Mbiriri 2010). Attempts to revive the economy have been made in terms of uniting the governing ZANU (PF) and its opposition MDC (Pilosof 2009). The transformation of Zimbabwe's economy made business hard for entrepreneurs such as those involved in trading, as people now paid for most of their goods and services in dollars and also started looking for the cheapest means of survival.

Economic destruction occurred in Zimbabwe and the poor emigrated. The country then experienced closure of certain industries and job losses as a result

people forming a vibrant informal sector as a means of survival. Unexpectedly, the informal economy has become a backbone of the economy. This economic sector serves an important role in supporting the country's economy.

Entrepreneurship activity in countries with highly volatile economies differs from that in developed and less volatile economies. According to Siqueira and Bruton (2010), there is a major difference in such countries due to greater resource constraints and higher levels of firm informalities. Many African countries with volatile economies primarily depend on factors such as food aid, support from Government and imports for survival (Pilossof 2009). One of the major problems that caused the economy to become highly volatile is uncontrollable hyperinflation whilst Zimbabwe aimed to keep the Zimbabwean dollar a sustainable unit of currency. Various ventures opened in 2009 after Zimbabwe adopted the American dollar when interest rates were high and during a period in which capital was also scarce.

Agriculture has been the main economic driver in Zimbabwe and in 2000 the Government tried to nurture economic growth by encouraging entrepreneurial activity in the agricultural sector (Juana & Mabugu 2005). This is a very important sector as it provides employment to approximately 70 percent of the population, 60 percent of raw materials required by the industrial sector and 45 percent of exports. In 2007, Zimbabwe's inflation rate was believed to be 15,000% and this caused losses for entrepreneurs in their businesses. Most shops closed and 2776 entrepreneurs were affected and incurred losses, as a result some were forced to shut down in order to avoid even larger losses (Ankomah 2007). Another issue that affects entrepreneurial activity in Zimbabwe is the unemployment rate which is currently over 80%. Currently the Government does not have sufficient funds to support small businesses, however, banks in Zimbabwe offer support to businesses by offering start-up loans that range from US\$2000 to US\$200 000.

Zimbabwe's Ministry of Small to Medium Enterprises (SME) and Cooperative Development exists and has several functions, which include formulating the SME development, implementing the SME policies, developing a legal and

regulatory framework for SME development, encouraging, managing and monitoring innovative financing schemes for SMEs (KuvakaZim 2014). Furthermore, the Ministry develops skills and management training to support entrepreneurship and small business growth and links the large-scale enterprises and SMEs (KuvakaZim 2014). In September 2014, the Minister of Small and Medium Enterprises Development, Sithembiso Nyoni encouraged the churches in Zimbabwe to start small-scale businesses (Shoko 2014). The Ministry's vision is to, "be the nerve centre for economic development and empowerment through the development of MSMEs and Cooperatives in Zimbabwe" (Small and Medium Enterprises and Cooperative Development 2014). The main aim for the Ministry is to build an entrepreneurial environment that will be able to support the growth of micro, small and medium enterprises and cooperatives. Additionally, it serves to promote small and medium enterprises and cooperatives. The Ministry provides a micro enterprise development fund and has certain selection criteria that aims to cater for microenterprises which contribute to the economic growth (Small and Medium Enterprises and Cooperative Development 2014). This Ministry plays a very important role in the development of entrepreneurship activities in Zimbabwe.

### **1.3.2 A Case of South Africa**

South Africa has experienced effective progress in terms of growth and forms part of the 'Southern engines of growth' which is comprised of other countries such as Brazil, China and India. Even though South Africa forms part of these Southern engines there is still a great need to understand entrepreneurship dynamics in a country such as South Africa to ensure that suitable policy measures are implemented (Ligthelm 2010). The townships in South Africa are mostly characterised by small informal businesses. The Global Entrepreneurship Monitor (GEM) report for 2013 shows a U-shaped relationship between the entrepreneurial activity in these countries and the level of development (Amorós & Bosma 2013). This is shown by the relationship between entrepreneurship and

GDP per capita representing a non-linear relationship between the level of entrepreneurship activity and economic development.

Furthermore, issues such as low levels of economic activity result in people in the country opting for self-employment which gives them low levels of profit. The people will resort to self-employment due to the lack of employment opportunities and sufficient wages. Higher levels of GDP per capita which is influenced by economic growth results in an increase in urban accumulation, growing markets and economies of scale and, as a result, an increase in paid-employment opportunities (Ligthelm 2010). On the other hand, the opportunity costs for self-employment increase along with a decline in the self-employment to wage-employment ratio, which results in a decrease in entrepreneurial activity. The economy has a huge impact on the curve as most of the factors that contribute to the movement of the curve are economic factors. The manufacturing and service sectors are also influenced, along with the adoption of technology in small businesses.

Entrepreneurs are seen as dynamic drivers of economic growth and development in South Africa. Approximately 91% of the formalised businesses in South Africa comprise of small businesses, these businesses provide 60% employment and an economic output of 34% of GDP (The Banking Association South Africa 2014). Small businesses in South Africa produce certain platforms of innovation and technology and are a very important contributor to the economic growth of the country. There are several factors that affect entrepreneurship in South Africa and it is important that entrepreneurs implement strategies in their businesses in order to remain established in a highly volatile economy.

In June 2014, the Consumer Price Index inflation rate for South Africa was 6.81%. It has been increasing monthly since November 2013 when it was 5.30% (Inflation.eu 2014). Trading in South Africa has been affected since the country adopted flexible exchange rates (Nyahokwe & Ncwadi 2013). This posed a risk to foreign trading that affected traders in the country.

Poverty and unemployment are the main issues that the ANC has been aiming to address since 1994. In 2013, the GDP for South Africa was US\$350.63 billion in 2013 and Zimbabwe's was US\$12.80 billion (Trading Economics 2014a). South Africa faces challenges with its economy which include price fluctuations in consumer goods, low consumer spending, high borrowing costs and high inflation rates. Traders and entrepreneurs have been primarily concerned with the exchange rates and the significant impact they have had on South Africa's export flows as well as goods and services (Nyahokwe & Ncwadi 2013).

In 2010, South Africa went through structural changes in household income patterns and certain environment such as retail. Some improvements in the lifestyles of communities were implemented to enhance the social class and household income (Ligthelm 2010). There has been growth in townships in South Africa and this has resulted in significant changes to the structure of the consumers' expenditure and household incomes. There is a need for more food, shelter, durable and non-durable goods giving a more diversified demand structure (Ligthelm 2010). Some rural areas experienced economic changes that led to an increase in consumer spending. In that year, there was an increase in entrepreneurial activities when entrepreneurs ventured in certain markets that were different to what they were used to (Ligthelm 2010). This gave entrepreneurs the opportunity to tap into different markets in order to identify opportunities. The entrepreneurs in the country also had to adapt to the changing economic circumstances so as to ensure the survival and success of their businesses in such economic conditions.

There has been a significant expansion of strategies that are used by entrepreneurs in the township areas. Furthermore, since 2005 there has been development of shopping centres and malls in areas such as Soweto and other township areas (Ligthelm 2010). This development has led to many changes in the shopping habits and patterns of consumers in these areas, as they tend to shop within their local township as well as in other townships. A case that highlights an increase in consumer expenditure and more entrepreneurial

activities was the increase in 2004 from 25% in retail spending to 81.2% in 2008 (Ligthelm 2010). This increased entrepreneurial activity and the level of competition amongst entrepreneurs as there was a large number of small businesses that were located outside the shopping malls, which continued to operate for a certain period of time. These businesses were mainly trading in the same sectors as the shops in the newly developed malls. This introduced increased competition between the entrepreneurs and the shops in those areas and consumers benefitted from a wide range of diverse goods. Ligthelm (2010) uses Porters forces to show how this type of competition improves economic conditions in such economies and how this pushes certain entrepreneurs to implement strategies to ensure they gain competitive advantage. In the third quarter of 2014, the country had a total of 15.1 million people with jobs and 5.2 million unemployed. Out of the total employed population, the formal sector was comprised of 10.8 million people and the informal sector 2.4million. The trading industry comprises 21% of the employed sector (Business Tech 2014b). The South African Government has developed frameworks for business development and support, including The National Small Business Act of 1996 and Khula Enterprise Finance. Some of the initiatives of the Banking Association SME development include the Financial Sector Charter and BBBEE, Financial Sector Program, Finance and Investment Committee, SME Financial Literacy and Stakeholder engagement (The Banking Association South Africa 2014).

### **1.3.3 Entrepreneurship activity in highly volatile economies**

Entrepreneurship activities do not only benefit the entrepreneurs themselves but also contribute to the country's economic growth as a whole. Therefore, it is imperative that countries examine how best the economy can foster and support entrepreneurship activities. Some authors argue that entrepreneurship is a very important aspect of economic growth and the lack of economic development is caused by the absence of entrepreneurs and the entrepreneurship spirit in that country (Solymossy 2005). There is a need for governments to promote entrepreneurial activities by introducing entrepreneurship fostering programs.

There are certain important entities that are required for entrepreneurship activity to take place. These are: “the individual, the business entity (an enterprise) and the environment in which it occurs” (Solymossy 2005:502). The success of the business venture occurs at different levels depending on the context in which it operates.

According to Chaston and Scott (2012), one of the effective strategies that organisations can use to survive in highly volatile economies is entrepreneurial orientation. Entrepreneurship activities lead to higher business growth, but the main questions are: Are highly volatile economies such as those of South Africa and Zimbabwe able to sustain the businesses? How do entrepreneurs survive in such economies? Is it safe for entrepreneurs to start ventures? For entrepreneurs to be successful in such economies there may need to be some form of incentive for them to be risk /take risks. Gregorio (2005), argued that entrepreneurship activities occurred more frequently when markets were volatile as the ideas in those environments provide a different and an effective perception of country risk. However, this was relative to the specific markets, as it depended on the type of entrepreneurship activities that were identified in certain markets. Despite the economic volatility, some entrepreneurs have existing businesses and are beginning new ventures in these countries.

Certain types of entrepreneurship activity takes place in such countries such as, productive, destructive and unproductive entrepreneurship. Productive entrepreneurship is “exploitation of profitable opportunities with inherent business growth perspectives” (Ligthelm 2010:137). On the other hand, unproductive entrepreneurship can be classified as unproductive in terms of contributing to the economic growth in the informal sector and undertaken for survival purposes, which may have resulted from unemployment and poverty. Survival appears to be the main reason why people partake in informal entrepreneurship which does not contribute to economic growth. In the 2013 GEM report, entrepreneurship in the formal sector was classified into opportunity entrepreneurs, which may relate to the productive entrepreneurs, and necessity entrepreneurship, which related

more to the unproductive entrepreneurship in the informal sector (Amorós & Bosma 2013). In most highly volatile economies, small formal businesses contribute greatly to the economic activities in those countries (Ligthelm 2010). This also shapes the economy to a degree as informal activities contribute to the GDP.

## **1.4 PROBLEM STATEMENT**

### **1.4.1 Main problem**

Whilst the literature aims to explore how countries with volatile economies survive, it does not completely answer important questions such as: How entrepreneurs survive in a highly volatile economy and whether there are any valuable entrepreneurship activities in these countries. As well as, whether there is more entrepreneurship in stable/non-volatile economies than in highly volatile economies, and what the factors are that contribute to entrepreneurship success in a volatile economy and what challenges entrepreneurs in these countries face?

This study aims to contribute to this area of study by addressing issues such as trading, strategies and challenges in entrepreneurship activity as well as economic volatility in South Africa and Zimbabwe. Various factors that have already been identified as factors affecting entrepreneurial activity in the Southern African Development Community (SADC) region include challenges such as poverty and price fluctuations in goods. Literature reviewed suggests that the main factors that influence entrepreneurship in these types of economies are: The business environment, socioeconomic conditions, cultural tradition, international and domestic pressures, customer reaction, contribution of civil society and media in the public-policy process. Some other challenges that were identified are a lack of finance, difficulty in raising capital, poor networks, corruption and poverty, seeking investors, training and critical point learning.



The main problem of this study is to determine how entrepreneurship activities survive in highly volatile economies by examining entrepreneurs in countries with such economies, such as South Africa and Zimbabwe.

#### **1.4.2 Research purpose, research question and aims of the study**

The purpose of this study is to determine what influences the success of entrepreneurship activities in countries with highly volatile economies. Ideal countries for this study that demonstrate the relationship between entrepreneurship dynamics and volatility would be South Africa and Zimbabwe. These countries were chosen as they are different in terms of their volatility levels. Zimbabwe has an extremely volatile economy and South Africa is now going through a period during which it is experiencing high unemployment rates as well fluctuating prices leading to a highly volatile economy.

The aim of this study is to identify the factors that influence entrepreneurial success in highly volatile economies. This will identify whether economies with high volatility foster entrepreneurship activities, to what extent these economies support entrepreneurship activities and how ventures survive in these types of economies.

As mentioned above, the purpose of this study is to analyse entrepreneurs currently operating in South Africa and Zimbabwe and their particular ventures. It aims to identify what factors and attributes contribute to their success and how the economic activities in the countries mentioned above affect their ventures. Moreover, the study will identify whether these entrepreneurs survived when the relevant country experienced high volatility challenges. This will help identify whether a highly volatile economy is good for entrepreneurship activities. The study will identify how entrepreneurs manage volatility and the strategies that they use to function in such an economy. It will also aim to identify how many of these ventures successfully survived the economic conditions of the country.

The research questions that this study aims to cover are as follows:

- What were the survival strategies in South Africa and Zimbabwe over the past five years?
- How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?
- What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries such as South Africa and Zimbabwe?
- How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?
- Do highly volatile economies promote entrepreneurship activities in the formal or informal sector?

### 1.4.3 Sub-problems

*First sub-problem: What were the survival strategies in South Africa and Zimbabwe during the past five years?*

**H<sub>0</sub>: Survival strategies used by entrepreneurs in highly volatile economic environments do not have a positive impact on entrepreneurship activities.**

**H<sub>1</sub>: Survival strategies used by entrepreneurs in highly volatile economic environments have a positive impact on entrepreneurship activities**

*Second sub-problem: How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?*

**H<sub>0</sub>: High economic volatility factors do not have a negative influence on entrepreneurship activities in countries with highly volatile economies.**

**H<sub>2</sub>: High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies.**

***Third sub-problem:*** *What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries as South Africa and Zimbabwe?*

**H<sub>0</sub>:** Challenges caused by high economic volatility do not have a negative impact on entrepreneurship activities.

**H<sub>3</sub>:** Challenges caused by high economic volatility have a negative impact on entrepreneurship activities

***Fourth sub-problem:*** *How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?*

**H<sub>0</sub>:** High economic volatility does not have a negative impact on trading activities in countries with high volatile economies.

**H<sub>4</sub>:** High economic volatility has a negative impact on trading activities in countries with high volatile economies

***Fifth sub-problem:*** *Do highly volatile economies promote entrepreneurship activities in the formal or informal sector?*

**H<sub>0</sub>:** Highly volatile economies do not promote more informal entrepreneurial activities than the informal entrepreneurship activities.

**H<sub>5</sub>:** Highly volatile economies promote more informal entrepreneurial activities than the formal entrepreneurship activities.

## **1.5 SIGNIFICANCE OF THE STUDY**

This study mainly contributes to the area of study on how entrepreneurs survive in highly volatile economies and aims to identify what type of survival strategies they use as these are different from the strategies that entrepreneurs in the developed economies employ. It mainly focuses on South Africa and Zimbabwe in order to investigate how entrepreneurs have survived as well as how they are able continue to operate in highly volatile economies under certain unfavourable conditions. The practical merit of the study aims to explore how entrepreneurs handled trading and what their survival strategies were over the past five years in South Africa and Zimbabwe.

Looking at the harsh and unfavourable conditions that this type of economy poses to entrepreneurship activities, the study provides guidance to entrepreneurs operating in similar types of economies on the most effective strategies to use depending on the market sector, how to deal with certain challenges that entrepreneurs operating in these economies face and what factors to consider when establishing a business in a highly volatile economy. It also gives country officials direction on how to enforce decisions and laws on entrepreneurs operating in both the formal and informal economy. Furthermore, the study aims to contribute to the research undertaken so far on entrepreneurship dynamics in the African context.

## **1.6 DELIMITATIONS OF THE STUDY**

The literature covered in this study takes into consideration entrepreneurship activity in other countries. However, there are certain limitations that are associated with this study. These limitations are:

- That the scope of this study will be limited to a sample in South Africa and Zimbabwe.

The justification for selecting these countries in the context of the study is covered in Section 1.3 and is also justified in the literature review.

- The study's sampling method is mainly based on judgemental sampling.

This type of sampling method is the best method to use in this case in order to identify and select only the entrepreneurs that have business ventures operating in these countries in all regions. It mainly focuses on firms operating in these countries that adhere to the following factors:

- The enterprise may have any number of employees and be a small, medium or large enterprise.

This may not be a major limitation as the study managed to cover a diverse range of ventures with different employee numbers. This is shown in Chapters Four and Five where the results are presented and discussed.

- Operating in any industrial sector or involved in the trading of goods and services

This is not a major limitation as it assisted the research to explore various aspects in different industries. This also contributed to the analysis in that the study revealed how different or similar certain industries are.

- Across all the areas in these countries

The scope of the literature review covers research in many countries and is not only limited to South Africa and Zimbabwe.

## 1.7 DEFINITION OF TERMS

**Entrepreneurship** can be defined as the creation of an economic organisation by dedicating the necessary time and effort under uncertain risky conditions (Ndiweni & Verhoeven 2013). Moreover, in context of this study, entrepreneurship can be linked to a “meta-economic event” that can cause key market changes (Chaston & Scott 2012:1163).

Taking the two definitions into account, **entrepreneurship activity in an economy** can be made up of discovery, evaluation and exploitation of opportunities that enable the individual(s) to present new goods and services as well as various ways of organising markets, processes and raw materials to produce an organised effort that previously did not exist.

**Small and Medium-sized Enterprise (SME)** can be defined as a company that employs less than a certain given number of employees (Mahembe 2011). The number of employees that a company has in order to be classified as an SME varies across countries such as 250 employees.

**Volatility** can be defined as a statistical measurement of variance or standard deviation and can be used to measure uncertainty and growth rate (Aizenman & Pinto 2005; Gregorio 2005). The volatility rates can be used by economists, traders and investors that need to identify market patterns.

**Economic volatility** can be used to measure practical variations or instabilities in environmental variables. Volatility helps to indicate how much and how fast the value of an investment, market or market sector changes (Farlex 2014). This article will focus on volatility related to the economy which arises from price behaviour related to daily trading activities that cause fluctuations over a short period of time. An economy is deemed to be highly volatile when prices fluctuate rapidly in a short space of time. On the other hand, the economy is deemed to have low volatility when prices fluctuate slowly over a longer period of time (The

Times 2014). This usually occurs in poor countries and has a high impact on the growth of the economy and the entrepreneurship activities in that country.

**Volatility** is also related to GDP. Aizenman and Pinto (2005:15) state that: “A higher volatility of real per capita GDP growth which is measured by the standard deviation of the growth rate is associated with lower average growth rates and greater income inequality”.

**A highly volatile economy** is an economy that is not stable due to rapid price fluctuations, unstable markets and investments in a short space of time.

## **1.8 ASSUMPTIONS**

The study consists of certain assumptions that may have an influence on the outcome of the research. Some of the assumptions stated are as follows:

- The respondents have an understanding of the constructs related to entrepreneurship activity.
- The respondents have an existing business in one of the countries, i.e. South Africa and Zimbabwe.
- The respondents have enough knowledge of the economic activities that affect entrepreneurs in the country in which they operate.
- The judgemental sample used for this study is used to represent the population in South Africa and Zimbabwe who have businesses currently running in either the formal or informal sector.

## **1.9 BRIEF OUTLINE OF THE RESEARCH REPORT**

Chapter One aims to provide an introduction to entrepreneurship activity in countries with highly volatile economies. It presents a justification of the research and discusses the aims and objectives. The chapter describes the gap identified in entrepreneurship research in this area and the context in which the study is based. In addition, it discusses the significance of the study as well as certain

limitations of the study. Following this introduction, the report will now provide more detail with regards to the study.

The structure of the research report will consist of the following research chapters. Chapter Two consists of the literature review which gives an overview of the theories that relate to entrepreneurship and the economy. It highlights the key areas of the research, such as a broad definition of the topic, how the economy is related to entrepreneurship activity and entrepreneurship in highly volatile economies. By highlighting these areas, it aims to give a theoretical overview of the study and areas that relate to the research problems. The literature reviewed was within the research questions and assisted in deducting the hypothesis that is used in the study from literature. It highlights the sub-problems and the key entrepreneurial issues that relate to the economy across other countries.

Chapter Three describes the research methodology and the research paradigms. This mainly describes the approach that the study used, how the data was collected and the sampling methods used. Additionally, the research methodology chapter describes the research methods used in the study. Research methods can be described as the methods or procedures that are used to conduct a research study, an example of such methods is how the data is recorded and processed (Kothari 2004). In the case of this study, an online survey and delivered hard copies were the methods used for data collection. The research methodology can be defined as a systematic or scientific way of solving a research problem (Kothari 2004). This chapter shows how the research methodology and methods were integrated into the study.

Chapter Four presents the results of the study. It describes all sections and units of analysis such as the entrepreneurs who took part in the study. The results are presented in detail in this chapter aided by the use of visuals in addition to the explanations. All aspects of the statistical analysis are covered in this chapter such as descriptive statistics and statistical tests conducted.



Chapter Five discusses the results and explains them giving an analysis of the findings. It aims to relate the results obtained to the literature reviewed in Chapter Two, as well as the research questions. The empirical results will also be discussed and how they relate to the hypothesis.

Chapter Six sets out the conclusions and recommendations of the study. This chapter will summarise and conclude the research, giving the empirical results obtained in the study. It relates the summary to the results obtained and provides recommendations to researchers, entrepreneurs, policy makers and incubators, which are the people that are potentially affected by the results of the research. Recommendations of further research are given as well as the implications of the study and any new questions arising from the study.

## **1.10 CONCLUSION**

The concluding chapter covers important aspects of the research report which include: The purpose, the context, and most importantly, the significance of the study. The significance of the study highlights the practical merit of the study and how it may impact research in the field of entrepreneurship. The research proves to contribute to a large extent to the existing research in the field of entrepreneurship, as it caters for two countries with different levels of volatility.

## **CHAPTER 2: LITERATURE REVIEW**

This study focuses on analysing entrepreneurship activities in highly volatile economies such as that of South Africa and Zimbabwe. This paper explores the means of survival and the problems that entrepreneurs face in such economies. The literature review aims to identify the problems that entrepreneurs in South Africa and Zimbabwe face and the effects of highly volatile economies on entrepreneurial activities, specifically in South Africa and Zimbabwe. Research on entrepreneurial activity in South Africa and Zimbabwe has been undertaken since 1991. Moreover, the literature review also examines research on other countries and how the experiences in these countries relate to the problem that is investigated in the study. What makes an entrepreneur successful in unfavourable economic conditions is a question that has intrigued many scholars.

This chapter has various sub-sections which cover the literature reviewed. Key terms that are covered in this section include high economic volatility, entrepreneurship and economic volatility. The major sections are:

- Introduction
- Definition of topic background discussion
- Entrepreneurial activity in countries with volatile economies
- Entrepreneurial challenges
- Entrepreneurship trading in highly volatile economies
- Survival strategies for entrepreneurs in countries with volatile economies
- Informal versus formal entrepreneurship activity

Following these sections is a summary that links all the sections together, which gives the hypothesis of the study and how it relates to the literature reviewed.

## 2.1 INTRODUCTION

There is various literature on entrepreneurship and the issues associated with it, however, there is less literature relating to entrepreneurship activity in highly volatile economies. Economic factors and conditions contribute to the success of entrepreneurial activity. Success in entrepreneurship also depends on high self-concept of entrepreneurs, which relates to what they do and their level of commitment to the venture. Within this literature review the researcher will focus on what entrepreneurship is and what an entrepreneur is and does. Furthermore, the review aims to establish a solid definition of a volatile economy and justify why South Africa and Zimbabwe are classified as having highly volatile economies. It will further consider the studies conducted in the past on entrepreneurship in highly volatile economies, the factors that affect such entrepreneurial activity and the problems that entrepreneurs face. By synthesising and evaluating the work of past researchers on these various factors, this study aims to provide a more structured, significant discussion and analysis of entrepreneurship strategies and factors that contribute to business survival in a highly volatile economy. Furthermore, the study aims to expedite an understanding of the critical success factors that influence entrepreneurial success and whether entrepreneurship activity is highly affected by the state of the economy.

The aim of this section is to establish an understanding that will justify research in the field of entrepreneurship and deduct the hypothesis used in this study. Understanding the definition of entrepreneurship is a good starting point for the research. Additionally, exploring what an entrepreneur does and what factors contribute to entrepreneurship success will help determine the critical success factors. Research has also shown that there is a significant relationship between the volatility of the economy and entrepreneurship activity.

## **2.2 DEFINITION OF TOPIC BACKGROUND DISCUSSION**

This sections aims to define and discuss the main topics covered in this study and the background in the following sub-sections.

### **2.2.1 What is Entrepreneurship?**

Entrepreneurship has always been a very important aspect of humanity and has been used for economic development. There are various definitions of what an entrepreneur is in the various literature examined. In terms of most definitions that can relate to this study, an entrepreneur can be defined as a person who starts a business or owns a business for a certain period of time and dedicates his or her time and effort under uncertain risky conditions (Williams 2011). Entrepreneurship can be defined as the meta-economic event which involves the creation of an economic organisation by an entrepreneur who dedicates the necessary time and effort under uncertain risky conditions and may cause key market changes (Ndiweni & Verhoeven 2013). These definitions of an entrepreneur and entrepreneurship will be adopted throughout the study.

### **2.2.2 What are Volatile Economies?**

Volatile economies can be classified differently depending on the context of the study. They can be used to refer to a number of factors depending on how a researcher is required to examine it. According to Aizenman and Joshua (2005:1), a volatile economy can come about as a result of, “unpredictable capital flows driven by a fickle market sentiment to emerging market countries”. An example would be the crumbling of the economic growth of a country, which causes fluctuations in business cycles for entrepreneurs.

Economic factors play a major role in developing an entrepreneurial environment (Gnyawali & Fogel 1994). This is comprised of the general environmental conditions for entrepreneurship, tax and other incentives and support for start-up entrepreneurs. Further to the definition provided in the definition section, this

study will define economic volatility as the negative changes in the economy that arise from price behaviour related to daily trading activities that cause fluctuations over a short period of time. Moreover, it will consider that high volatility refers to a scenario when prices fluctuate rapidly in a short space of time and the economy is termed to have low volatility when prices fluctuate slowly over a longer period of time (The Times 2014).

Understanding the nature of volatility is important for successful entrepreneurship activities as well as for policy makers in developing countries. In terms of entrepreneurial activity, some authors argue that such an activity is determined by characteristics such as internal locus of control, the ability of the individual to be innovative, need for high achievement and taking risks to create a business (Maphosa 1998). Most of the literature on entrepreneurship success refers to the factors and characteristics of successful entrepreneurship but does not necessarily address entrepreneurship in volatile economies. Although there is various research on how entrepreneurs are successful, the issue is whether the behaviour is the same in highly volatile economies.

There is a pressing need to develop an entrepreneurial environment in developing countries such as South Africa and Zimbabwe. Issues that may be addressed by doing this include, “fewer barriers to entry, less restriction on imports and exports, provision of bankruptcy laws, better procedures for registration and licensing of businesses, more institutions for entrepreneurs to report to, supporting rules and regulations governing entrepreneurial activities and laws to protect proprietary rights” (Gnyawali & Fogel 1994:44). Given the opportunity, women may contribute to economic development through entrepreneurship activities. Countries with a high number of female entrepreneurs have a high level of total entrepreneurial activity (Billore, Zainuddin, Al-Haj & Halkias 2010). Women possess certain attributes that help them to perform well in business ventures. Some women are viewed as having the ability to make strategic decisions, higher levels of confidence, readiness to

take up challenges, flexibility, willingness to learn, ability to absorb the most difficult entrepreneurial conditions, dedication and intelligence (Billore *et al*/2010).

### **2.3 ENTREPRENEURSHIP AND THE ECONOMY: A BROAD OVERVIEW**

An entrepreneur may be defined as a person who identifies and exploits an economic prospect (Carpenter 2012). Moreover, an entrepreneur then develops an idea or opportunity from the economic prospect. Entrepreneurship has a significant relationship with the economy. It can aid economic growth through legal means, for example intellectual property can be used to drive economic development (Carpenter 2012). However, entrepreneurs also lack certain things such as capital, the availability of which depends on the economy of a country. There are certain elements that contribute to the economy of a country that affect entrepreneurship, an example is a drop in value of the manufacturing and mining industries, which contribute a significant percentage to the GDP of certain countries (Carpenter 2012).

Entrepreneurship is believed to be at the heart of the economic activities due to the creation of ventures that are ideal for economic support (Stangler 2011). Ventures contribute to creating an economic structure and the structure also contributes to the ventures created. The reality of an economy is reflected in the levels of entrepreneurship. Fairlie (2013) argued that starting a business when there were weak economic conditions meant some start-ups may be successful. This may apply once entrepreneurs identified certain opportunities that would flourish in certain economies such as that of volatile economies. Entrepreneurs are engines for employment creation as small firms contribute to a significant percentage of job creation, which in turn contributes to economic growth and recovery (Stangler & Litan 2009). In any country certain sectors in the economy outperform other economic sectors and this also depends on the level of demand in the various sectors.

### **2.3.1 Entrepreneurship Activity and the Economy**

Some of the areas that have major implications on the economy and entrepreneurship include government policies, structural policies and business environments (Organisation for Economic Co-operation and Development 2004). Good economic conditions contribute to high entrepreneurship activity as economic growth results in an increase in potential business income, provision of credit and improved opportunities (Fairlie 2013). Economic growth has different effects on entrepreneurship activities as it also gives rise to improved wages and salaries for employees which may result in less business creation (Fairlie 2013). This shows how the rate of entrepreneurship activity differs due to the state of economic conditions.

Certain literature mentions how important entrepreneurial activity is to economic growth due to the venture creation that arises (Raposo & do Paço 2011). However, it is important for an entrepreneur to be able to adapt to any changes in the economy in order to ensure a successful venture. Entrepreneurs operating in the informal sector as well as small businesses operating in the formal sector significantly contribute to the economy of highly volatile and developing countries.

## **2.4 ENTREPRENEURSHIP AND COUNTRIES WITH HIGHLY VOLATILE ECONOMIES**

Most developing countries in African are classified as having highly volatile economies due to the state of the economy. Examples of such countries are Gaza, Sudan, Chad, Ivory Coast and Afghanistan and most of them are in Africa. This section discusses the two countries used in the study in detail. It gives certain reasons for why the two countries are classified as highly volatile countries.

### 2.4.1 Entrepreneurship Activity in Countries

Different countries experience different levels of entrepreneurial activity. Entrepreneurs contribute to the economic activities in a country, which affect the market and the human factors that in turn contribute to entrepreneurship activities (Solymossy 2005). Entrepreneurs evolve as they capitalise on opportunities and organise their resources to meet those opportunities (Solymossy 2013). When entrepreneurship affects the economy, it is in turn affected by the economy. Solymossy (2005) argued that entrepreneurship activities occur regardless of the conditions; however, entrepreneurship activities are more effective when the conditions are favourable. This is shown by the entrepreneurship activities that occur in non-volatile countries.

There is a need to create fertile environments for new ventures in countries such as those with highly volatile economies. The rate of entrepreneurship activity varies across countries and many authors have tried to explain why this is the case (Stenholm, Acs & Wuebker 2013). Some factors that have been mentioned include the environment in which entrepreneurship activity takes place as it is one of the main influencers of a successful or unsuccessful venture. Economic factors are one of the major causes that may reduce or raise entry costs and returns for entrepreneurs (Glaeser, Kerr & Ponzetto 2010). This can potentially attract entrepreneurs into doing business in certain areas of the country. Glaeser *et al* (2010) suggest that economic growth is highly associated with a lot of small-medium enterprises as well as entrepreneurial firms.

Entrepreneurship activity is highly influenced by the features of a country's economy. The economy has a great impact as it has factors which contribute to entrepreneurship activities such as the city's resources and human capital (Glaeser, Rosenthal & Strange 2010). Entrepreneurship has a high impact on local economic performance due to the returns that it has. Entrepreneurial activities are determined by factors such as economic situations, expenditure on activities such as start-ups. The degree of employment protection also has an effect on a person becoming an entrepreneur. For instance, strict employment



protection, start-up incentives and recession periods may encourage employees in a certain country to become entrepreneurs (Roman, Congregado & Millan 2013).

Entrepreneurship activity varies across countries due to a number of reasons such as the influence of the Government and education systems (Raposo & do Paço 2011). Moreover, the policy measures that a country has may influence the level of entrepreneurship activity and this may result when the Government influences the market structure as well as the entrepreneurship opportunities. Furthermore, a government may have an effect on entrepreneurship through its legislation. Entrepreneurship activity is important for the economic growth of a country as it contributes to effective structural changes in the economy and motivates certain businesses to change in order to become more productive (Raposo & Paco 2011).

There are also certain issues associated with entrepreneurial activity such as gender difference. Minniti (2010) claimed that there were fewer women entrepreneurs than men, however, there were no causes identified. Gender influences entrepreneurship activities, and males have a higher likelihood of starting a business than females, regardless of the GDP. Causes for the gender gap can be influenced by the GDP per capita. Men tend to think more positively than women in terms of having the required skills and knowledge to be entrepreneurs, having a positive attitude towards opportunities and not accepting the possibility of failure (Minniti 2010). The level of resources that a country has and provides to the entrepreneurial environment is very important and should include factors such as creating an environment that fosters entrepreneurial activities, “establishing institutions that support entrepreneurship activity and providing financial and non-financial support to enterprises” (Woolley & Rottner 2008:792).

## **2.4.2 Why South Africa is classified as a Country with High Economic Volatility?**

Volatility can also be caused by a change in supply and demand, which then leads to price fluctuations. Despite that South Africa is currently Africa's second largest economy, it had a high unemployment rate of 25.50 % in the second quarter of 2014 and this rate has averaged 25.27% from 2000 to 2014 (Trading Economics 2014b). These are some of the factors that determine the volatility of the country. Another factor that caused the country to be classified as one with a highly volatile economy was the adoption of flexible exchange rates in the mid-1990s which caused its currency to become volatile. It has remained so ever since as there has been depreciation of exchange rates, especially in December 2001, and appreciation thereafter (Nyahokwe & Ncwadi 2013). This has caused traders to worry about the uncertainty of payments and receipts in home currency terms. Nyahokwe and Ncwadi (2013) discuss how exchange rates have an impact on aggregate goods and services. South Africa has since looked for ways to minimise the excess volatility of the South African Rand by use of intervention policies.

South Africa has faced many negative changes in the economy and some of these include inflation, poverty and corruption. Price fluctuations have also occurred when the country's prices of products increased by 1.3% from February to March 2014 (Maswanganyi 2014). There has been high inflation, which was determined by increased food and fuel prices. The country also had higher borrowing costs during this time and this affected consumers as they would have had less money to spend and this accounts for 60% of spending, as a result, it caused harm to the economy (Maswanganyi 2014). South Africa reached its highest inflation rate in May 2014 with a monthly increase of 0.2% from July 2009 when it was 6.8% (Stats SA 2014).

In the third quarter of 2014, South Africa's economy grew by 1.4% after it had experienced negative growth of 0.6% in the first quarter and positive growth of 0.5% in the second quarter (Steyn 2014). Several industrial sectors have

contributed to the certain growth of the economy. Some of the sectors which contributed to growth in the third quarter were catering and accommodation with 0.5% growth, Government services with 0.3% growth, agriculture forestry, fishing, transport, storage and communication with 0.2% growth (Steyn 2014). The one sector that experienced negative growth of 0.4% was the manufacturing sector.

Several issues have affected the economic growth in South Africa and an example of these issues that arose in the fourth quarter is load shedding were by the normal supply of electricity is interrupted in order to avoid on a generating plant. This, however, did not cause a huge impact due to companies adapting to the festive season. Besides the low power supply, other factors that had a negative impact on the economy were lengthy strikes at the platinum mines and National Union of Metal workers of South African strikes. Household expenditure dropped by 1.5% in the third quarter from the previous quarter (Bishop 2014). These issues, along with other domestic issues, such as high interest rates, rising inflation and low demand have all affected the economic growth of South Africa and have contributed to it becoming a weak and highly volatile economy. Although economic growth for 2015 is expected to be around 5.1%, the World Bank has cut down the economic growth for 2014 from 2.6% to 2.1% (Maswanganyi 2014). Taking all the factors in account, South Africa can be considered to have a highly volatile economy.

### **2.4.3 Why Zimbabwe is classified as a Country with High Economic Volatility?**

Developing countries are more volatile than developed countries. Development is measured by factors such as: “per capita income, financial depth, trade openness and institutional development of the ability to conduct countercyclical fiscal policy” (Aizenman & Pinto 2004:15). According to Gregorio (2005), country risk analysis can also be used to measure volatility in certain environments although it is a poor predictor. The issue of entrepreneurship in these countries is relative to the type of ventures and opportunities available. Based on Australian

economics, there are more entrepreneurship opportunities when the economy is volatile (Gregorio 2004). However, the types of opportunities available for entrepreneurs vary and are determined by the extent to which the economy is volatile.

Some Zimbabwean entrepreneurs face problems such as shortage of capital and most of them mentioned that a lack of finance was the main inhibiting factor for entrepreneurship activity (Maphosa 1998). Some entrepreneurs argued that money is the biggest problem preventing them being like any other entrepreneurs in different countries. Entrepreneurship activity in Zimbabwe is relative and some individuals choose to work for an established company and perform entrepreneurship activities on the side whilst others choose to partake in entrepreneurship activities on a full time basis. The entrepreneurs who choose to work whilst partaking in a business venture on the side do so in order to sustain their businesses day-to-day needs. The main reasons why some entrepreneurs could not get finance from private commercial banks in Zimbabwe is because they did not have any collateral security and there was institutional racism (Maphosa 1998). Obtaining finance proved to be difficult for entrepreneurs as most of them did not undertake any form of production or economic activities that would have enabled them to make savings for their ventures.

Most entrepreneurs in Zimbabwe rent premises as they cannot afford to purchase them as well as obtain loans from the bank. This results in high rental costs as well as high taxation (Maphosa 1998). Some manufacturing companies use old technology that consumes large quantities of electricity (Moore, Kriger & Raftopoulos 2013). Other economic reasons that affect entrepreneurship activity in Zimbabwe is how African family life inhibits accumulation of capital as obligations to family members drain the entrepreneurs' resources and this can go further as an entrepreneur may use his or her business profits and savings to sustain extended family members (Maphosa 1998). In some countries such as Nigeria, family relations actually help one to be a successful entrepreneur and

family also assists in terms of financing the ventures. This could be a contributing factor to why Nigeria has a less volatile economy.

Entrepreneurship activity in Zimbabwe continues to exist despite the economic state of the country; however, entrepreneurship depends highly on the environment in which the venture operates. Entrepreneurship in Zimbabwe is a driver of economic development even in indigenous communities (Jongwe 2014). The informal economy in Zimbabwe contributed 59.4% of GDP in 2004 (Ndiweni & Verhoeven 2013). The informal economy seems to provide more entrepreneurship activities and jobs with smaller capital while the formal economy has more large-scale businesses that generate more capital.

Over the past three years, 4610 companies in Zimbabwe closed down leading to 55 000 job losses (Njikizana 2014). At the end of 2014, the economy still experienced issues that classified it as a highly volatile economy. Some of these issues are: liquidity shortages, cheap imports, high production costs, bank failures, company failures and fewer sales of primary consumer goods. In 2015, Zimbabwe's economy is expected to grow by 3.2% which is a number that has been revised from 6.4% with most of the budget allocated to public sector wages (Njikizana 2014). For the economy to have sufficient growth, there is need for extensive investments. The capital city of Zimbabwe, Harare had \$8.3 billion domestic and foreign debt (Njikizana 2014).

The economic issues have not been addressed, therefore, this deters investors from investing and a continuation of serious problems in the country. Zimbabwe continues to lack diplomatic economic relations globally which exacerbates some of the problems that the country has (Cross 2014). Zimbabwe continues to have a fragile economy in 2015 due to a lack of key strategies for economic turnaround. In order to improve the economy, entrepreneurs need to open businesses in Zimbabwe to activate Foreign Direct Investment (FDI) (Reporter 2014). Other contributing issues include good national and corporate governance, opening of companies in the private sectors and for Government to support the private sector by addressing certain areas such as taxation, tariffs and trade taxes, trade

logistics, labour, finance, electricity and water. The affected sectors that need attention from the Government are agriculture, mining and technology as well as the trade industry (Yan, 2014). Having discussed some of the issues that the country faces, Zimbabwe can be classified as having a highly volatile economy.

#### **2.4.4 Main Focus of the Study**

The main focus of this study is to identify the factors, challenges and strategies that entrepreneurs face in highly volatile economies and how they influence entrepreneurship activities. The following sub-sections will discuss the study in further detail and will present a hypothesis that will be used in the study.

### **2.5 SURVIVAL STRATEGIES FOR ENTREPRENEURS IN COUNTRIES WITH VOLATILE ECONOMIES**

#### **2.5.1 Entrepreneurship Strategies**

In order to ensure success, businesses need to have certain strategies in place that they follow in order to ensure that they meet customer expectations. Entrepreneurship in highly volatile economies is unlike that in developed countries. Countries that have these types of economies need to have adequate strategies in place. Small businesses operating in these types of economies need to implement means of survival, especially when they are in competition with well-established businesses (Ligthelm 2010). Bruton and Siqueira (2010) mentioned how investing relates to the success of an enterprise. Seeking investors is one of the strategies that entrepreneurs can use in order to cater for the challenges that they face relating to financing their ventures. Chinese entrepreneurs operate their enterprises in African countries by partaking in innovative strategies such as, “information and cost sharing, employing qualified labourers to work for them as well as productive interaction between producers, joint-training initiatives in order to pass down skills” (Gadzala 2009:207). These type of entrepreneurs have a distinct competitive advantage that enables them to successfully partake in

entrepreneurship activities in such countries. Hiemstra, Kooy and Frese (2006) mentioned three strategies that entrepreneurs would apply in order to be successful in such economies: Critical point planning, being opportunistic and reactive. These strategies have a high impact on the success of entrepreneurship activities.

Most entrepreneurs strategically construct ways to start up their new ventures. One of the keys strategies that entrepreneurs use is social ties that enable them to explore ideas and share narrative work. These social ties assist them to foster entrepreneurship activities (Phillips, Tracey & Karra 2013). One type of networks that is formed is called the homophily, which refers to networks amongst similar people with a high rate of trust, shared understanding and interpersonal attraction (Phillips, Tracey & Karra 2013). This type of network is important as it promotes a trust relationship amongst entrepreneurs and effective knowledge sharing. Strategy is very important in order to sustain organisational effectiveness, as well as to enhance entrepreneurship. These strategies involve key success factors such as environmental needs, culture and values. Entrepreneurship activity also provides strategic positions that are important for the organisation (Thompson 1999). Strategic positions promote the entrepreneur and encourage them to succeed in their businesses.

Moreover, strategy is important for the success of a business as it enables the company's resources, competencies and capabilities to be managed in order to meet the demands and the expectations that the business has for its stakeholders (Thompson 1999). An effective strategy involves a company positioning itself in a distinctive way to have unique products and services thus adding value to the business and to effectively manage costs (Thompson 1999). This enables an entrepreneur to have sustained success, continuous improvement and to create some form of distinctive and competitive advantage. Change in a business can be strategically managed on certain levels such as single-loop learning, which involves strengthening the existing positions, and double-loop learning which enables the entrepreneur to find new competitive high ground ahead of their

competitors (Thompson 1999). On both levels of learning, there is the need for strategic awareness and acquiring knowledge of the environment and the business itself. Entrepreneurship leadership is a very important aspect of the success of the business. Thompson (1999) suggests that entrepreneurs who are good leaders ensure that the organisation has a good organisational structure that defines clear goals and vision. There are certain roles that entrepreneurs may take on and these may include strategic planning, producing, innovation, integrating and implementing resource based strategies (Thompson 1999). These roles may be adapted at certain stages of the business when the need arises in order to ensure the success of the business.

There is a need for entrepreneurs to be efficient and effective in order to meet customers' needs and expectations in such economies. Some entrepreneurs use technology as a way for them to be different and gain competitive advantage (Regan 2012). This has a significant impact as it may lead to them having first mover advantage. One of the main ways to achieve this is by implementing innovation. Although innovation is associated with certain challenges such as high risk and ambiguity, it has had a high impact on entrepreneurial success in many businesses. Some innovation strategies can be inadequate for the company or may not necessarily meet the demands of the customers (Regan 2012). Some entrepreneurs ensure that there are quality control processes and informational technology processes as part of their value chain in order to provide a more effective value chain. In order to implement an effective innovation strategy, Regan (2012) mentioned that one should emphasise the value offered by the business and what value is perceived by the customer. For one to achieve this there is need for customer input in terms of product and process innovation and customer involvement is a very important aspect of product and process innovation and value creation. Other aspects which enable value creation are strong supplier and customer relationships that will be of value to both parties.

Entrepreneurs need to position their business strategically and this strategic direction has an effect on the long- and short-term performance of the business



(Regan 2012). Strategic direction is however affected mainly by the economy, the business's current position and the market environment. The entrepreneur needs to determine which direction to take, which will ensure success and which one will assist in gaining a competitive advantage (Regan 2012). It is also important for entrepreneurs to focus on value drivers and the potential impact that the business strategy will have on the values.

Entrepreneurial ideas are shared amongst networks as a way to enable the flow of ideas amongst people operating in the economy, this enables people to combine their own ideas with suggestions from other people. If people contribute suggestions to an idea it can grow and this forms an entrepreneurial chain. This also promotes trade, innovation and organising economic material in entrepreneurial activities (Glaeser *et al* 2010). It is important for business owners to be innovative and strive to do more than just to secure the survival of their company. Innovation is regarded as a very important strategy as it gives effectiveness rather than efficiency (Djordjevic 2013). Moreover, it is a strategy that provides competitive success for entrepreneurs and their business. Djordjevic (2013) stated how organisations which invest in innovation have a high return and success rates in their business and gain a first mover advantage as it brings forth something new for consumers to use. Some companies use imitations as a way of innovating their products and output as it leads to standardised processes and products.

Even though these countries have highly volatile economies, entrepreneurs may need to focus on how to maximise their economic returns as one of the strategies they employ. Some of these ways are mentioned by Regan (2012:195) and comprise of, "scanning capability, identification capability and reconfiguration capability". These enable an entrepreneur to operate successfully in a highly volatile economy when everyone else is struggling. Entrepreneurs continuously rely on certain strategies to acquire the resources that are necessary for them to be successful. Some of these ways include collaborating with others and generating value solutions for their communities (Griffiths *et al* 2013). Most

entrepreneurs in these types of economies have identified a unique set of strategies to follow as a way to maximise the resources available to them. There has been a significant increase in the number of women owning businesses and this encourages more women to participate in entrepreneurship activities.

Other strategies that help entrepreneurs create value in their businesses are the use of cross-functional teams in order to integrate new product ideas and having an entrepreneurial mindset (Djordjevic 2013). This is a very important aspect of the business, especially when products and services change due to technology. There is a need for entrepreneurs to compare the actual results with the performance standards of the business (Djordjevic 2013). These can be standards that the company has set for itself and when they are compared with results, the business is able to identify gaps where there is a need for improvement.

There are certain aspects of entrepreneurial strategies that some companies practise and these include “adapting to changing conditions, being proactive relative to market opportunities and entrepreneurial orientation” (Manev & Manolova 2010:209). Planning and managing human resources is also essential in order to successfully implement survival strategies. Institutional strategy has an impact on entrepreneurship in highly volatile economies, as it helps entrepreneurs to realise opportunities through institutional means (Jennings, Greenwood, Lounsbury & Suddaby 2013). Institutions play a very important role in terms of fostering entrepreneurship through education and research. This has a positive impact on entrepreneurial activities.

Certain survival strategies were investigated in South African townships:

*“compiling a business plan, regular updating of the business plan, marketing strategy for the business, risk analysis prior to starting the business, regular analysis of competitors, consideration of alternative business investments prior to starting the business, venturing into a new*

*business and willingness to partake in calculated risks” (Ligthem 2010:142).*

These are strategies that are used by most entrepreneurs during the start-up and the growth phase. Moreover, small businesses in these countries, particularly those that operate in the townships, use certain strategies that attract customers such as, “providing credit to its customers, longer and flexible hours , product offerings in smaller quantities and providing a more safe and secure environment” (Ligthem 2010:142). Customers are attracted, and become loyal, to a business that is able to provide them with services such as longer and flexible hours, as a result this attracts certain customers. There is a need to apply sound management principles to make strategic adjustments such as human development strategies, which are aimed to produce higher productivity, lower labour costs and a very strong focus on customer service. All these factors incorporated into entrepreneurial activity will ensure the survival of a business.

Some survival strategies used by entrepreneurs include technological innovation and commercialisation to develop their business (Woolley & Rottner 2008). Technological innovation plays a big role in the product generating process and development of businesses and this attracts customers to their products and services. Certain strategies can be determined or based upon competitors’ actions. Examples of these types of strategies would be offering their customers the same service as that of a competitor but providing it at a lower cost or a differentiation of services that are not available from the competitors’ business. In order for entrepreneurs in highly volatile economies to achieve some of these strategies, there is a need for them to analyse and understand the market conditions and the competitors (Ligthem 2010).

Ligthem (2010:145) suggests further strategies that have a highly positive influence on the business. Some survival strategies include “regular analysis of the competitors, ease of venturing into a new business, not worried about taking calculated risks”. These strategies can be adapted by the developing business so as to ensure positive growth. Such factors have a strong association with

entrepreneurship activities and have a high impact on the survival strategies of a business. Entrepreneurs need to leave room to change their business model to respond to the economic changes that take place in highly volatile countries. This is needed in order to ensure survival, especially in markets that have uncertain economic conditions. In light of the research in line with the main problem, the following sub-problem and hypothesis were formulated.

Entrepreneurship strategies are predicted to be strong predictors of entrepreneurial success. Entrepreneurs who are competent enough to practise strategies that relate to their business success performed better and were in better positions (Ahmad, Ramayah, Wilson & Kummerow 2010).

### **2.5.2 Sub-problem covered in this study**

*What were the survival strategies in South Africa and Zimbabwe during the past five years?*

### **2.5.3 Hypothesis 1**

The following null and alternative hypothesis was formulated:

**H<sub>0</sub>: Survival strategies used by entrepreneurs in highly volatile economic environments do not have a positive impact on entrepreneurship activities.**

**H<sub>1</sub>: Survival strategies used by entrepreneurs in highly volatile economic environments have a positive impact on entrepreneurship activities.**

## **2.6 ENTREPRENEURIAL ACTIVITY IN COUNTRIES WITH VOLATILE ECONOMIES**

This section will discuss the factors that influence entrepreneurship activities in countries with highly volatile economies. It will discuss the research questions and formulate a hypothesis for the study.

### 2.6.1 Entrepreneurial Factors

Entrepreneurs often adapt to the role of technical innovators depending on the stage of growth of their business, market controllers and the economy (Muller, Siemens & Volery 2012). Some factors that have already been identified in these African countries are a lack of capital and financial innovation. These countries have expensive borrowing rates and underdeveloped financial markets (Pennisi 2012). Entrepreneurs have limited access to finance and low savings; therefore, they use informal ways to get finance as well as using income from various jobs and businesses (Pennisi 2012). Azmat and Samaratunge (2009) stated that there are various factors that have a highly negative impact on entrepreneurial activity in developing countries such as South Africa and Zimbabwe. The contextual factors mentioned were comprised of the business environment, socioeconomic conditions, cultural tradition and international and domestic pressures.

Another factor that affects entrepreneurial activity is customer reaction as there is a need for best practices to be applied in order to establish customer loyalty and trust (Azmat & Samaratunge 2009). Cultural traditions also influence entrepreneurship in terms of business practices (Azmat & Samaratunge 2009). Another factor that influences entrepreneurship activities in these countries is international and domestic pressures, which can be in the form of immature civil society activities. Klapper *et al* (2010) mention the factors that influence entrepreneurship activity in areas such as product market and labour regulations. These are very important as they can create barriers to entry for entrepreneurs wanting to operate in certain markets. Literature also mentions how age can be a factor that determines and affects entrepreneurial activities. Johansen (2013) mentioned how the likelihood of starting a business before the age of 25 years was low and it is a phase whereby the degree is not completed. The GEM report for the year 2013, showed that a high percentage of entrepreneurs are found in the 35-44 age group (Amorós & Bosma 2013). This age group is likely to have acquired more experience about how to operate in such environments and this will have a positive effect on their entrepreneurial ventures. Kshetri (2011:9)

identified other negative factors such “as lack of sensitivity of raw agricultural products to international prices, poor infrastructure, lack of human and financial capital and government policies that are not entrepreneurship-friendly”. Change and stability are other factors that affect entrepreneurship, as many businesses seek stability, however, it leads to resistance to change as they seek to maintain their status and minimise any disturbing factors to the success of the business (Solymossy 2005). Many entrepreneurs seek forms of stability to avoid uncontrollable change.

There are also positive factors that influence entrepreneurship activities. One of the positive factors is the contribution of civil society and media to the public-policy process that helps to expose corruption and form public opinion and awareness (Azmat & Samaratunge 2009). Corruption is one of the issues that entrepreneurs in Africa face, therefore this factor contributes positively by exposing such issues. Entrepreneurs would want to be in the informal sector as a way to avoid burdens of bureaucracy and corruption (Klapper *et al* 2010). Roman *et al* (2013:153) mentioned how certain factors contribute to an individual becoming an entrepreneur, examples of certain factors are; “having relatives to work for you, cohabiting, membership associations and clubs, the number of children, the frequency to meet with friends”. These factors highly contribute to entrepreneurship activities. As a person seeks self-employment by having dependents such as children, membership in organisations and social capital such as the number of times one meets with his friends (Roman *et al* 2013).

This improves networking and knowledge sharing and encourages one to partake in entrepreneurial activities. Parents’ entrepreneurial activity is one of the factors that influences entrepreneurial activities in certain young adults (Johansen 2013). Parents’ entrepreneurial experience has a positive influence on the development of entrepreneurial activities. Entrepreneurship education programmes also contribute to entrepreneurship activity in certain countries, as students who have gone through such programmes have a high possibility of becoming entrepreneurs (Johansen 2013). These programmes mainly aim to shape the

confidence and increase the competencies of students and thus increase of start-up activities (Johansen 2013). Some economists have suggested positive factors impact businesses in countries. These may be categorised as economic shifters (Glaeser, Rosenthal & Strange 2010). Economic shifters are needed by entrepreneurs and can be in the form of supply of inputs such as material inputs, skilled labour, spread of knowledge, political and cultural forces and financing (Glaeser *et al* 2010). Some of the most important factors that affect the success of a business in highly volatile economies are the inputs and skills ideas (Glaeser *et al* 2010).

In countries such as Spain, universities provide support for entrepreneurial activity, however, in some countries there is no significant relationship between universities' entrepreneurship support and the entrepreneurial activities (Martínez 2008). Therefore, there is a need to create environments that foster entrepreneurship activities. These environments can be created by establishing institutions that support entrepreneurs, providing financial and non-financial assistance, improving the economic policies and procedures and developing a legal and institutional framework for the business sectors (Gnyawali & Fogel 1994). Woolley and Rottner (2008) explained how tangible infrastructure has a positive effect on entrepreneurship. Some infrastructures consist of: "institutional arrangements, such as the legitimation, regulation, and standardization of a new technology; resource endowments, such as basic research, financing, and skilled labor; and proprietary functions, such as research and development, manufacturing, and marketing" (Woolley & Rottner 2008:793).

Economic initiatives are very important and promote entrepreneurship infrastructure as well as innovation. Examples of economic initiatives include efforts to encourage an economic environment by providing financial resources to a specific technological area, developing partnerships amongst diverse parties, presenting network events and promoting legislation, funding the creation of institutions to legitimise, regulate and standardise technology (Woolley & Rottner 2008). Overall, the examples mentioned above show how economic initiatives

promote the expansion of institutions and resources necessary for the infrastructure of entrepreneurship. Moreover, they help to facilitate first-mover advantage for entrepreneurs.

Some factors influence entrepreneurial decisions and these may consist of market openness and economic freedom. These factors are important as they influence entrepreneurial decisions (Minniti 2010). Resources are a very important aspect of entrepreneurship activity as they are necessary to foster entrepreneurship and need to be effectively exploited as they also contribute to economic activities. Entrepreneurs look for resources to achieve their objectives (Solymossy 2005). On the other hand, resource inadequacies seem to be a very important factor that may negatively impact entrepreneurship. Therefore, an economy should have available resources which are distributed to entrepreneurs (Solymossy 2005). Efficient use of resources is also an important factor as certain countries have experienced the wasteful use of available resources.

Along with the resources, opportunities are very important factors that establish entrepreneurship activities. In certain economies, opportunities are more limited than in others and some ventures are established out of necessity rather than choice. Such ventures would be a good example to illustrate entrepreneurship activities in highly volatile economies (Solymossy 2005). Another very important factor is the individuals themselves and their ability to capitalise on a perceived opportunity. The characteristics of an entrepreneur are very important in establishing a successful business venture. Moreover, entrepreneurs consider factors such as profit and reward when pursuing business ventures. This produces economic profit which then contributes to “employment growth, increased tax revenue, increased production efficiency and increased resource base” (Solymossy 2005:507). Certain factors such as the institutional and political environment provide further insight to the economic activities of certain countries (Solymossy 2005). Some popular factors that influence the business include the macroeconomic environment, which involves interest and exchange rates.



In terms of financial support, the availability of financial resources is a very important factor that contributes to entrepreneurial activities. In order to foster such support, countries need to provide low-interest loans and government grants that facilitate government development. Large venture companies may also need to consider investing in new or small businesses, for instance private investors who may be attracted to investing in new and small companies as a result the government will then provide tax relief for the new equity investment by individuals in unquoted companies (Gnyawali & Fogel 1994). More factors that are important for entrepreneurial activity in countries are training and research assistance as these help entrepreneurs to know the market and environment in which they are operating and this helps them to prepare successful activities in their business (Gynawali & Fogel 1994).

Many economic factors in the entrepreneurial environment affect certain businesses and entrepreneurial activity. Examples of such economic factors are a “large number of economic development programs, the proportion of firms, extent of economic growth, diversity of economic activities, high sophistication of buyers, strong distribution channels, technically skilled labor force, various forms of start-up incentives (tax concession, exemption of custom duty) and intense rivalry among existing firms” (Gynawali & Fogel 1994:50). These certain factors have a big influence on entrepreneurship activities both negatively and positively. Entrepreneurs ought to investigate these factors upon entry into a market. More jobs are created by various small businesses in developing countries. Factors listed in this section have ways of interacting to form the core elements of successful entrepreneurship activities.

Countries with factors that attract entrepreneurs and contribute to entrepreneurial survival do not only provide entrepreneurs with innovative technology and resources but also encourage and legitimise commercial development (Woolley & Rottner 2008). Other key factors are technological innovation and commercialisation. Garcia-Muina and Navas-Lopez (2007) mentioned how technology is one of the factors that contributes to entrepreneurship success as

it gives competitive advantage. As the entrepreneurship activities generate innovation, innovation becomes the cornerstone for entrepreneurial activities, however, the policies that support innovation determine to what extent innovation will be a part of entrepreneurial activities (Woolley & Rottner 2008). Examples of innovation policies include, “supporting economic initiatives as well as science and technology developments in order to develop and commercialise ideas and ensure ongoing survival of the businesses” (Woolley & Rottner 2008:791). Certain policies should support entrepreneurship activities by introducing risk-taking investments and technological changes.

Certain governments have become actively supportive of entrepreneurial activities in their countries by, “fostering industrial clusters, technology transfer and high-tech start-ups” (Woolley & Rottner 2008:792). This encourages entrepreneurs to start businesses that promote innovation. Environmental munificence is an important aspect that influences entrepreneurial activity as it affects the resource dependence and organisational ecology (Woolley & Rottner 2008). It shapes the ventures in those environments and their ability to survive in highly volatile economies.

Institutions in these types of economies affect entrepreneurship activities. There is a need to have enough institutions that offer entrepreneurial training programmes. Manolova, Enunni and Gyoshev (2008) explored how institutions in certain emerging economies promote entrepreneurship activities. The institutional framework needs to be enhanced in order to support entrepreneurial activities. Most countries partake in strategic investments to enable institutions to encourage entrepreneurship role models to influence entrepreneurs who are in their start-up phase (Manolova *et al* 2008).

A factor such as education level is very important as it forms a positive relationship with self-employment. Ligthelm (2010) has explained how there is a very low level of entrepreneurship activity in the poorest income bracket of people who earn less than R1 000 per month. This also relates to their lack of sufficient education and skills. Table 1 below, adapted from Ligthelm (2010) shows an

analysis of how entrepreneurs relate to the total employed population which consists of people of eighteen years old and older.

**Table 1: Percentage of Self-employment**

Income category per month	% of self-employed to total employment	% of self-employed with a maximum of primary school qualification (%)	Some high school and matric (%)	Post matric (%)	Total (%)
R1-R1 000	5.9	42.2	56.5	1.2	100.0
R1 001-R2 500	17.8	25.2	71.2	3.7	100.0
R2 501-R5 000	11.1	12.1	77.5	10.4	100.0
R5 001-R10 000	16.2	9.3	53.9	36.8	100.0
R10 001-R20 000	24.3	0.4	52.4	47.2	100.0
R20 001-R40 000	39.2	0.7	33.7	65.6	100.0
R40 000+	60.5	0.0	35.2	64.8	100.0

Other factors that are determined by the business itself affect the growth and survival of the business. These factors can be based on “clear , positively motivated business intentions and actions on the part of the owner/manager to achieve desired outcome” (Jennings *et al* 2013:3). Without clear business intentions, most entrepreneurs struggle to succeed in their businesses. Furthermore, Jennings *et al* (2013:3) listed several factors that influence entrepreneurship activities in certain countries: “state strength, market development, legal formalization and accountability”. This shows how important the role of a country’s policies is and how they can cause a negative or positive impact on entrepreneurship activities. Examples would be some of the macro-level factors that impact entrepreneurship activities such as: “government corruption, GDP per capita and ease of doing business” (Robson, Wijbenga & Parker 2009:535).

There is a need for regional policies that will help promote value-added services and entrepreneurship activities (Rennie 2008). Entrepreneurship activities are

also affected by the environment, therefore there is a need for entrepreneurs to understand certain policies that exist in the environment in which they operate.

Reasons that cause entrepreneurs to start up a business may also be the factors that affect entrepreneurship activity. In a highly volatile economy, these reasons are mainly based on the conditions that the economy has placed on certain people. Such factors can be relief from unemployment, self-employment, lack of higher formal education, family business, shortage of fixed and working capital, lack of training and business skills, lack of collateral, free institutional support and lack of experienced and reliable employees (Islam 2009). In order to encourage successful entrepreneurship in highly volatile economies, financial institutions may need to assist entrepreneurs by providing them with loans at low interest rates without any collateral or mortgage, entrepreneurship education may need to be encouraged in institutions such as colleges, high school and universities in order to instill knowledge, confidence and innovation capabilities in potential entrepreneurs. In such economies, it is imperative that the government provides entrepreneurial support through guaranteed loans for entrepreneurs to purchase essentials for their businesses (Islam 2009).

In light of this research and in line with the first sub-problem of the research, i.e. the factors that have a negative impact on entrepreneurship activities in a country with a highly volatile economy such as South Africa and Zimbabwe, the following research question was formulated.

### **2.6.2 Sub-problem covered in this study**

The second sub-problem that is covered in this study would be:

*How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?*

### 2.6.3 Hypothesis 2

The following null and alternative hypothesis was formulated:

**H<sub>0</sub>: High economic volatility factors do not have a negative influence on entrepreneurship activities in countries with highly volatile economies.**

**H<sub>1</sub>: High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies**

## 2.7 ENTREPRENEURIAL CHALLENGES

This section will discuss the challenges that affect entrepreneurship activities in countries with highly volatile economies. It will discuss the research questions and formulate a hypothesis for the study.

### 2.7.1 Entrepreneurial Challenges in highly volatile economies

According to Azmat and Samaratunge (2009), some of the challenges that entrepreneurs face in such countries is corruption. This challenge remains as the most corrosive problem and also impacts economic development. Moreover, corruption also affects some of the rules that countries have and as a result, entrepreneurs lack confidence in such rules due to lack of accountability (Azmat & Samaratunge 2009). Furthermore, there are several challenges that entrepreneurs face in a country such as South Africa. Example of such challenges are:

*“crime, lack of adequate technology, low production capacity, lack of management skills, poor skilled labour, obtaining credit and finance, less access to markets and development of relationships with customers, less recognition by large companies and government bureaucracy, lack of knowledge and support for their role in the economic development and regular compliance”* (The Banking Association South Africa 2014).

These challenges have a high impact on entrepreneurship activities in highly volatile economies. Entrepreneurs need to focus on ways to overcome some of these challenges.

One of the main challenges that have a high impact on entrepreneurship activities that literature mentions is lack of finance for entrepreneurs. Krashinsky (2012) mentioned an existence of liquidity constraints for entrepreneurs. This creates economic inefficiencies, as there is a decline in wealth, venture capital funding and less credit given by banks to small enterprises. This is another major challenge that entrepreneurs face as it is difficult for them to raise capital (Azmat & Samaratunge 2009). These countries also have poor regulatory quality as there is no clarity on who makes the rules and how they are developed (Azmat & Samaratunge 2009). Entrepreneurs have to resort to other external sources to finance their ventures. Examples of these external sources are micro-financing organisations and finance from friends.

Gadzala (2009) mentions that some of the challenges that entrepreneurs in African countries face is the formation of weak networks that do not help them much in their entrepreneurship activities. These networks are formed mainly amongst themselves as a result as the entrepreneurs face similar challenges. Therefore, there is a need for entrepreneurs in these countries to form networks with other entrepreneurs in other countries with more stable economies. Some of the challenges are the economic conditions such as poverty and poor management of human resources (Krashinsky 2012).

Change is a main challenge that has a high impact on entrepreneurial activities. Entrepreneurs have to deal with change and part of the change consists of having to deal with strategic and structural changes that are required for growth in businesses. Examples of challenges that entrepreneurs face include failing to transition effectively, and as a result the business misses the right direction and momentum (Thompson 1999). Some challenges that firms face are barriers to communication, not adequately identifying the level of value that accommodates the customer–supplier relationship, negative legacy and institutional

embeddeness (Regan 2012). Female entrepreneurs face certain challenges such as lack of support, fear of failure and lack of competency (Johansen 2013). Gender difference seems to influence entrepreneurial activities in countries especially where women are less motivated and consider themselves as less competent to be successful entrepreneurs than men (Johansen 2013). Some of the factors that contribute to women facing this challenge consist of successfully operating in the role of an employee and an entrepreneur when the woman falls pregnant and other stressful conditions. Many people are not willing to take face the risks and insecurities that come with partaking in entrepreneurship activities. As a result female entrepreneurs tend to be under-represented and form smaller sized businesses than male entrepreneurs. This affects the rate of females partaking in entrepreneurship activities.

Some challenges include difficulties in obtaining institutional support, family support and securing finances (Johansen 2013). These challenges seem to affect a large number of entrepreneurs. Entrepreneurs face issues such as fear of failure, however, this type of challenge does not have a great effect on entrepreneurs (Johansen 2013). Chinese entrepreneurs in African countries pose a great competitive challenge in these countries, as they are a huge competition to the African entrepreneurs (Gadzala 2009). African entrepreneurs may have to re-examine their business strategies so that they can be successful in these countries.

Certain challenges that entrepreneurs face consist of barriers to entrepreneurial activities such as, “deficiencies in infrastructure, legal and regulatory framework, financial support and social systems” (Solymons 2005:510). These type of issues greatly affect entrepreneurship activities negatively. Certain challenges affect entrepreneurs’ businesses and these disturb the production of the required marketing products and services as part of the economic pyramid (Griffiths, Gundry & Kickkul 2013). Highly volatile economies experience the issues of resource-constrained environments, therefore, to overcome certain these challenges, entrepreneurs need to be creative so as to attract and utilise the

necessary resources to solve some of the challenges that they face (Griffiths *et al* 2013).

Challenges such as lack of working capital, difficulties in obtaining loans and seasonal fluctuations in cash flow highly impact most entrepreneurs in countries with a highly volatile economy such as South Africa and Zimbabwe. Gynawali and Fogel (1994:49) suggested that some of the major challenges in developing countries was the, “lack of government procured programs that help firms to grow faster and to develop competence in marketing and export related activities”. In most African countries, there is not enough business development assistance from government. As a result, entrepreneurs need to form networks that can cater for development assistance amongst entrepreneurs themselves.

Gynawali and Fogel, (1994:58) mentioned certain challenges such as, “lack of explicit links between the needs of entrepreneurs and the dimensions of the environment and lack of consideration of the needs of policy makers”. The environment needs to provide motivation for entrepreneurs to pursue opportunities and assist in providing favourable conditions for businesses, financial and non-financial assistance and support for entrepreneurs. One recent challenge that entrepreneurs in South Africa have been facing is the high costs of e-tolls. An e-toll is an electronic toll collection system which identifies the number plates of a vehicle that drive under the gantries (Gazette 2014). Every time a vehicle passes the gantries a toll is charged. These costs have led to some businesses closing down. However, some businesses have chosen to transfer some of these costs to their clients. In October 2014 the total costs for e-tolls for small businesses was R850 000 (Business Tech 2014a; Gazette 2014; Mail&Guardian 2014). This has caused a negative impact, especially on certain sectors such as those businesses in the Fast Moving Consumer Goods industry. This could also result in retrenchments and employees asking for salary increases or travel allowances that can assist them to pay e-toll fees. For some entrepreneurs, the e-tolls present a good opportunity for them to implement



software and technology-based businesses that can monitor the system (SimplyBiz 2014).

The challenges that entrepreneurs face in highly volatile economies tend to have a high negative impact on entrepreneurship activities. There is a need for entrepreneurs to get the support that they need to survive in such conditions. In light of the research and in line with the main problem, the following sub-problem and hypothesis were formulated:

### **2.7.2 Sub-problem covered in this section**

The following sub-problem will be covered in this study:

*What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries such as South Africa and Zimbabwe?*

### **2.7.3 Hypothesis 3**

The following hypothesis was formulated for this sub-problem is:

**H<sub>0</sub>: Challenges caused by high economic volatility do not have a negative impact on entrepreneurship activities.**

**H<sub>3</sub>: Challenges caused by high economic volatility have a negative impact on entrepreneurship activities**

## **2.8 ENTREPRENEURSHIP TRADING IN HIGH VOLATILE ECONOMIES**

This section will discuss the trading activities that affect entrepreneurship activities in countries with highly volatile economies. It will discuss the research questions and formulate a hypothesis for the study.

### **2.8.1 Traders in highly volatile economies**

Various forms of trading take place in highly volatile countries. Traders in highly volatile economies and across Africa make up approximately 73% – 99% of the informal employment sector (Gadzala 2009). In Kenya, many of the traders are involved in tailoring and dressmaking businesses and selling products such as bags, shoes, shoe polish and other similar products (Gadzala 2009). Certain trading activities involve Flea Market trading and street trading, and people involved in this type of trading are classified as trade-entrepreneurs (Nyakuwa 2011). Some of these people engage in informal trading and the type of challenges these entrepreneurs face is that of poor networks. Traders tend to face challenges similar to those of entrepreneurs.

Nyakuwa (2011) discussed some of the strategies that traders use in order to survive in highly volatile economies, such as that of Zimbabwe. In countries like India, trading and business ventures are handled by a few families who traditionally trade (Gammell 2008b). Trade policies have a high impact on trading activities. Entrepreneurship has been affected by lack of quality standards and inadequate trade policies and fluctuating exchange rates (Kshetri 2011). Therefore, the extent of trading activity varies depending on the policies.

The extent of trading activities in certain cities increases as the population increases as population size has an impact on trading. There is an uncertain relationship between the share of traded goods and the demand (endogenous entrepreneurship) (Glaeser *et al* 2010). Trading in countries with highly volatile economies such as Zimbabwe usually takes place in the informal sector. This sector provides basic commodities such as cooking oil, bread and vegetables. Over the years, the number of cross-border traders has increased with mainly survivalists who provide basic supplies such as clothes. The informal sector promotes cross-border trading in countries such as Zimbabwe. Such activities provide a means of survival for people and reduce poverty in this country. As a result, trading forms part of Zimbabwe's economic activity (Mbiriri 2010). Small-scale traders need to be mindful of existing economic opportunities that are

offered by the government as well as by non-governmental organisations (Islam 2009). In light of the research studies in line with the main problem, the following sub-problem and hypothesis were formulated:

### **2.8.2 Sub-Problem covered in this section**

***Fourth Sub-problem:*** *How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?*

### **2.8.3 Hypothesis 4**

The following hypothesis was formulated:

**H<sub>0</sub>: High economic volatility does not have a negative impact on trading activities in countries with highly volatile economies.**

**H<sub>4</sub>: High economic volatility has a negative impact on trading activities in countries with highly volatile economies**

## **2.9 INFORMAL VERSUS FORMAL ENTREPRENEURSHIP ACTIVITY**

### **2.9.1 Informal Sector**

This may also be called the shadow economy, and it plays an important role as an engine of growth in various countries in terms of contributing to the gross domestic product (GDP) and job creation in some African countries (Blunch, Canagarajah & Raju 2001; Klapper *et al* 2010). In countries such as Egypt, the informal sector was established early in the 1980s. Some literature defines the informal sector as;

*“irregular sector, marginal sector, black economy, hidden economy, unobserved economy, unregistered economy, extra-legal economy, underground economy, parallel economy, second economy, concealed*

*economy, moon-light activities, hot-sun sector, shadow economy, invisible economy or gray economy “*

(Abdelhamid & El Mahdi 2003:1).

This definition shows how the informal economy in some countries is perceived and defines what type of activities that people operating in that part of the economy undertake. It can be referred to as an underground and second economy, as some of it is illegal. In some cases the informal economy creates a double economy which is parallel to the formal economy. It is also used as a way for people to practise their business unobserved and irregularly so as to avoid tax registration, where people also feel it is easy to enter and exit. In terms of location, the informal economic sector is comprised of the “hot sun sector” that enables owners to run their businesses in the streets and unusual locations such as open areas (Abdelhamid & El Mahdi 2003). Other literature associates this particular sector with negative outcomes, implications and intentions by the use of terms such as, “marginal and black economy”. There are various characteristics of the informal economy and certain factors that are used to identify many businesses that operate in this type of a sector. Some of these characteristics involve an unregistered business that does not align to employment and trade union policies. Businesses operating in this sector do not provide any security as they are mostly operating on a temporary basis.

In context of this study, the informal sector is seen as the production of goods and services in the market which can be classified as legal or illegal and is not detected officially in the GDP estimates (Sookram & Watson 2008). In order to successfully operate in this sector and achieve high levels of production, an owner needs to have a dynamic entrepreneurial mindset and character for business.

The informal economy is related to the formal economic sector in that in most countries, the informal sector provides the formal sector with labour and also absorbs surplus labour from the formal economy. One of the advantages that the

informal sector provides for the community is a lower cost of goods and services needed in most low income groups (Abdelhamid & El Mahdi 2003:1). Small businesses operating in this sector employ a very small number of workers for their businesses, which is comprised of a greater number of one man businesses, or businesses with fewer than ten employees and fewer businesses with more than ten employees. Most households in African countries obtain their essentials such as food from the informal sector (Hitimana, Allen & Heinrigs 2011). This sector is poorly defined even though it forms a large part of the economy in these countries. In developing countries, the informal sector contributes an estimate of 20% to 70% to the GDP.

An example of a country with an informal economic sector dominated by small businesses would be Kenya. The country has small-scale activities that are unregulated and practised by traders, operators in certain locations such as open yards and market stalls (Abdelhamid & El Mahdi 2003). The Government put in place capital funding for start-ups in some cities, custom duty exemptions for purchases in some areas, apprenticeship systems, market incentives and a reduction of trade barriers faced by small-scale entrepreneurs (Abdelhamid & El Mahdi 2003). In addition, banks in this country have offered help by assisting start-up and existing entrepreneurs with credit. Countries such as Kenya have gone to the extent of establishing entrepreneurial training programs, workshops and seminars to give guidance to entrepreneurs in their start-up phases as well as in their developing phases. Other countries such as Columbia developed plans to promote the informal sector by introducing financial means and training to assist entrepreneurs operating in this sector.

The informal sector is mainly characterised by micro, small and medium enterprises with low productivity. It contributes to economic growth of the country as well as the country's development. Most countries with highly volatile economies experience entrepreneurship in the informal sector. Many countries have a substantial small business sector which contributes to the economic growth. The small informal business sector in countries with high economic

volatility is mainly comprised of people such as petty traders, unlicensed small producers, service providers, kiosk owners and retail and wholesale traders (Abdelhamid & El Mahdi 2003).

Some entrepreneurs that choose to make their ventures small and informal may face the challenge of their businesses not reaching their full potential. Klapper et al (2010) examined the growth of formal businesses in the private sector and the informal sector as well as the factors that encourage entrepreneurship activities. There is a fair amount of informal activity in South African townships, but these bring about a low income and tend to be less productive businesses. Some of the entrepreneurs perform the same activities as entrepreneurs operating in the formal economy, such as in the areas of innovation, formulating successful business strategies and providing employment opportunities for workers especially in their communities. One of the most important elements that informal and formal entrepreneurs have in common is the economic issues that affect their businesses.

The informal economy concept was introduced in 1972 and it mainly referred to some urban activities which took place in the illegal framework of the government. Efforts to establish a clear-cut definition have been attempted over the past decades in countries (Hitimana *et al* 2014). This study also considers entrepreneurship in the informal economic sector as an economic activity which does not conform to the obligations to register, keep accounts and pay taxes (Hitimana *et al* 2014). These economic activities aim to distribute products and services to the community.

Some of the issues that entrepreneurs face are influenced by the entry regulations enforced by the government. The main difference between entrepreneurs operating in the informal economic sector to those operating in the formal economic sector is that the entrepreneurs operating in the former choose not to operate formally so as to avoid some of the procedures and regulations (Abdelhamid & El Mahdi 2003). Furthermore, the informal economic sector consists of different behavioural patterns and activities. It is diverse across

countries and also successful in specific locations relating to it. There is a need for governments to introduce more supportive policies and strategies for entrepreneurs operating in developed countries. In certain countries, small businesses in the informal sector support trading, boost the employment rate and investment activities. In certain countries such as Egypt, the businesses operating in the informal economy contribute to 99.7% of dynamic units in the national economy, increase the GDP, provide 77% of the jobs in the non-agricultural private sector and create 80% of value in that sector (Abdelhamid & El Mahdi 2003). Egypt's informal economy is predicted to provide employment to 50% of the labour market (Abdelhamid & El Mahdi 2003).

The informal sector in some developed countries such as the USA generates close to US\$9 trillion, but part of the global GDP does not include this amount. It is likely that in countries with highly volatile economies, many people would do business in the informal sector and pursue necessity entrepreneurship, which is driven by the need for survival (Ligthelm 2010). Some of this type of informal entrepreneurship activity is unproductive as it is driven by needs such as payments of rent and bills. Most entrepreneurs operating in this economic sector tend to continuously look for appropriate wage-paying employment causing a decline in the small businesses which operate informally (Ligthelm 2010).

There is a need for government to promote informal businesses to develop and become formal and to develop support strategies for them to grow (Ligthelm 2010). This will also help turn the small informal businesses into larger formal businesses. However, certain challenges do arise and competition occurs between formal and informal organisations.

Some West African countries obtain their income from the informal sector together with the food (Hitimana *et al* 2011). Countries such as Zimbabwe have such a large informal economy due to the economic meltdown resulting in termination of certain industries and job losses (Mbiriri 2010). The formal economy lacked space for employment and many Zimbabweans struggled to make a living. Currently the informal economy contributes to half of the country's

employment. Many businesses operating in the formal sector closed down due to the economy's meltdown and economic uncertainty.

Various entrepreneurs see the harsh economic conditions as an opportunity to practise their business in the informal sector and as a result they avoid state regulations. Entrepreneurial activities in the informal economy seem to be a means of survival for the unemployed in countries with highly volatile economies. Economic conditions have forced most people to seek survival through informal activities. Moreover, people in affected countries have used the informal sector to acquire wealth, which as a result helps to grow and develop the economy (Mbiriri 2010).

In order for the informal economy to contribute to the growth of a country's economy, there is a need for government to implement strategies that support entrepreneurial activities that stir up employment and economic growth. A government always faces challenges about how it can cultivate certain policies that support the informal economy and its activities (Mbiriri 2010). In most countries, the government has sought the appropriate policies that will help to increase or reduce the informal sector. The main challenge for entrepreneurs with small businesses is increasing tax rates. High tax rates contribute to some of the main reasons why entrepreneurs operate informally. In highly volatile countries such as Zimbabwe, there are less effective macro-policies because of the existence of the established informal economy, and this causes a weaker relationship between the entrepreneurs and areas such as the banking sector and capital markets. This also has a negative influence on the monetary policies and fiscal policies and will cause less formal enterprise growth (Abdelhamid & El Mahdi 2003). Another situation that has arisen in Zimbabwe is an increase in employment rates which do not reflect the true growth of employment and is continuously increasing the employment rate in the informal sector.

Another challenge that entrepreneurs operating in the informal economy face is that of gaining access to capital markets and investments as investors would prefer guaranteed secure returns (Abdelhamid & El Mahdi 2003). Certain



challenges occur with entrepreneurs and these can be ways and means of avoiding licensing and tax, obtaining public services through the private sector, high costs of production and time spent bribing (Abdelhamid & El Mahdi 2003). As a result, small enterprises operating informally lack the growth potential to become medium or large enterprises due to lack of capital. Entrepreneurs in this sector tend to face a lot of challenges related to legal issues, administrative challenges through high costs if they decide to go through formal procedures, social accountability challenges and informational challenges.

Entrepreneurs operating in this sector encounter barriers such as sanctions and policies from the government. On the positive side however, the Government may also provide low tax rates so as encourage entrepreneurship in the formal economic sector and working with certain workers' unions. Italy is an example of a country that introduced measures against private work managed to limit informal entrepreneurship activities and has introduced workers' unions. Some countries such as Italy have introduced benefits for entrepreneurs to get more tax credits for hiring people to work for them (Abdelhamid & El Mahdi 2003). Further examples include countries like France, which introduced a fight against informal entrepreneurship activities by reducing the demand and supply in this sector by use of campaigns, public awareness and labour regulations (Abdelhamid & El Mahdi 2003). In developing countries, an attempt to formalise certain businesses operating in the informal sector have been put in place. An example of such a country is Peru, which tried to formalise the informal businesses into a legal system. In order to achieve this, operating costs for the entrepreneurs in the informal sector were lower than that of those in the formal sector, and several procedures to formalise a business such as obtaining a licence were cut down by 75% so as to encourage entrepreneurs to register their businesses (Abdelhamid & El Mahdi 2003). Some governments provide an environment that was conducive for entrepreneurs to practise their ventures as formalised businesses.

On the other hand, some countries actively support entrepreneurship activity in the informal economic sector as some literature argues how this continues to

foster economic growth. Government may also look into increasing learning, marketing and credit opportunities for entrepreneurs operating in the informal sector. Some countries such as Burkina Faso aim to identify the rate of informal economic activities in each industrial sectors such as agricultural sector particularly by measuring informal production units and employment (Hitiman *et al* 2014).

There has been a negative perception of informal economic activities as it is seen as an underdeveloped sector and harmful to the country's economy. Certain governments implement hostile policies towards this economic sector. Most African countries began to take the informal economy into consideration in the 1990s giving attention to certain industries such as craft and agricultural industries which formed part of the informal sector (Hitimana *et al* 2014). Trade activities also formed part of the informal sector and these proved essential to the supply, storage and distribution of goods. There is a need to formalise the informal sector so as to encourage entrepreneurship activities in highly volatile countries. Governments have implemented policies to govern the informal sector and introduce apprenticeship, innovation and creativity (Hitimana *et al* 2014).

Literature points out that most small-business owners are inclined to participate in the informal sector when there are too many strict government regulations in the formal sector and a low risk of being detected by the tax authorities (Sookram & Watson 2008). Furthermore, it shows how countries with high economic volatility rates influence informal entrepreneurship activities in certain countries.

### **2.9.2 Formal Sector**

For formal entrepreneurs to survive in highly volatile economies, there is a need to consider some initiatives such as reviewing tax and labour issues and regulations, promoting registration and licencing processes, improving availability of credit, providing a platform for entrepreneurs to express themselves more openly, increasing training opportunities and encouraging sharing of knowledge and technology (Abdelhamid & El Mahdi 2003). The entrepreneurs operating in

the informal economy compete with the ones in the formal economy as they aim to provide cheaper goods and services as they do not pay tax Value-Added Tax (VAT) (Abdelhamid & El Mahdi 2003). As a result they can afford to make a profit on a cheaper price for their goods and services. This is a great challenge for certain entrepreneurs operating in formal economies.

Some countries have structures that combine the formal and the informal economy in order to support the growth of urbanisation. An example would be the informal farmers who supply to the shops to sell their products, they also obtain loans from investors and purchase consumer goods and inputs. Other traders help control markets as well as manage the product industries combining the wholesale trade in food imports and exports (Hitimana *et al* 2014). Traders also become formal when they operate on a larger scale and obtain government links to control the regional and continental trade on certain goods. An example of such goods would be wheat and rice. The issue lays in how to formally integrate the formal and informal economic sectors so as to encourage entrepreneurship activities and economic development. It is important for governments to develop an understanding of how entrepreneurs operating in the formal sector are affected by those in the informal sector and how to establish policies that support entrepreneurship activities in formal sectors so as to encourage economic growth.

Entrepreneurs with businesses in South Africa go through five procedures to successfully register their businesses. The first procedure that they go through is registering at the Companies and Intellectual Property Commission (CIPC) agency, opening a bank account, registering for income tax, VAT and employee withholding tax at the South African Revenue Services, registering for unemployment insurance at the Department of Labour and then registering with the Commissioner as the final stage. In terms of starting a formal business in Zimbabwe, there are certain procedures that entrepreneurs must go through as well as expending time and a fee that an entrepreneur has to pay in order to ensure the successful start-up of a formal business. In order to register for a

business in Zimbabwe, entrepreneurs go through nine procedures to successfully register their business and some of these procedures involve registering with the tax authorities for income tax, VAT and Pay As You Earn (PAYE) (World Bank Group 2014). Procedures in highly volatile economies tend to push entrepreneurs to establish businesses in the informal economies to avoid formal operating costs and certain government policies. In light of the research the following sub-problem and hypothesis were formulated:

### **2.9.3 Sub-Problem covered in this section**

The following sub-problem will be covered in this study:

***Fifth sub-problem:*** *Do highly volatile economies promote entrepreneurship activities in the formal or informal sector?*

### **2.9.4 Hypothesis 5**

The following hypothesis was formulated:

H<sub>0</sub>: Highly volatile economies do not promote more informal entrepreneurial activities than the formal entrepreneurship activities.

H<sub>5</sub>: Highly volatile economies promote informal entrepreneurial activities than formal entrepreneurship activities.

## **2.10 CONCLUSION OF LITERATURE REVIEW**

Success of entrepreneurship is determined by several things. Some of the entrepreneurial strategies are strong predictors of success. There is a need to determine how strongly related these strategies are with entrepreneurship in countries with highly volatile economies. The literature reviewed suggests that the main factors that influence entrepreneurship in these types of economies are the business environment, socioeconomic conditions, cultural tradition,

international and domestic pressures, customer reaction, technology and contribution of civil society and media in the public-policy process (Garcia-Muina & Navas-Lopez 2007). Other factors consist of lack of capital, financial innovation, expensive borrowing rates, underdeveloped financial markets, business environment, socioeconomic conditions, cultural tradition, international and domestic pressures and the ability to establish customer loyalty and trust (Azmat & Samaratunge 2009; Pennisi 2012). Key factors are said to have an impact on entrepreneurship. These are comprised of technological innovation and commercialisation, strategic investments, state strength, market development, legal formalisation and accountability, government corruption and GDP per capita (Robson, Wijbenga & Parker 2009; Jennings *et al* 2013).

Age is also one of the factors that influences entrepreneurship activity in some countries as the 2013 GEM report showed (Amorós & Bosma 2013). A high percentage of entrepreneurs are found in the 35-44 age bracket. Johansen, (2013) mentioned how the likelihood of starting a business before the age of 25 years is less and it is a phase whereby the degree is not completed and the companies formed are mainly SMEs (Small and medium-sized enterprises). Some economists have mentioned certain factors such as economic shifters in the form of supply inputs such as material inputs, skilled labour, spread of knowledge, political and cultural forces and financing (Glaeser, Rosenthal & Strange 2010). Countries with highly volatile economies make it difficult for entrepreneurs to establish their own ventures due to the mostly negative factors that are mentioned above, therefore it is certain that there are factors caused by highly volatile economies that highly impact entrepreneurial activities.

Some of these factors are challenges that entrepreneurs face in such economies, which are negatively related to entrepreneurship activities. Challenges contribute to certain factors that highly impact entrepreneurial activities. Gadzala (2009) mentioned the formation of weak networks; therefore, there is a need for entrepreneurs in these countries to form networks with other entrepreneurs in other countries with non-volatile economies. Some of the challenges are

economic conditions such as poverty, poor management of human resources, deficiencies in infrastructure, legal and regulatory framework, lack of financial support and social systems (Krashinsky 2012; Thompson 1999). Businesses face certain challenges such as, failing to transition effectively and business development assistance, and as a result the business misses the right direction (Solymons 2005; Gynawali & Fogel 1994). Female entrepreneurs face certain challenges such as lack of support, fear of failure and lack of competency (Johansen 2013). Challenges have a highly negative impact on entrepreneurial activity in highly volatile economies.

Traders in highly volatile economies and across Africa consist of approximately 73% to 99% of the informal employment sector and are involved in tailoring and dressmaking businesses and selling products such as bags, shoes, shoe polish and other similar products (Gadzala 2009). There are various trading activities that take place in these countries such as flea markets and tuck-shops. In countries like India, trading and business ventures are handled by a few families who traditionally trade (Gammell 2008b). Trade has been negatively affected by lack of quality standards and inadequate trade policies (Kshetri 2011). Trading in countries with highly volatile economies such as Zimbabwe usually takes place in the informal sector and forms part of Zimbabwe's economic activity (Mbiriri 2010). The informal sector promotes cross-border trading in countries such as Zimbabwe, however, this does not necessarily encourage trading activities to take place.

In order to ensure success a business needs to have certain strategies in place to ensure that it meets the expectations of its customers and these strategies have an impact on entrepreneurship activities. Some of the strategies implemented are: Critical point planning, being opportunistic and reactive, using social ties, managing change in a business, use of technology, innovation, quality control, strategic awareness, acquiring knowledge of the environment and the business itself, cross-functional teams, focusing on value drivers, strong supplier and customer relationships, creation and maintenance of a business plan and

analysis of market conditions and competitors (Thompson 1999; Hiemstra, Kooy & Frese 2006; Glaeser *et al* 2010; Ligthem 2010; Regan 2012; Djordjevic 2013).

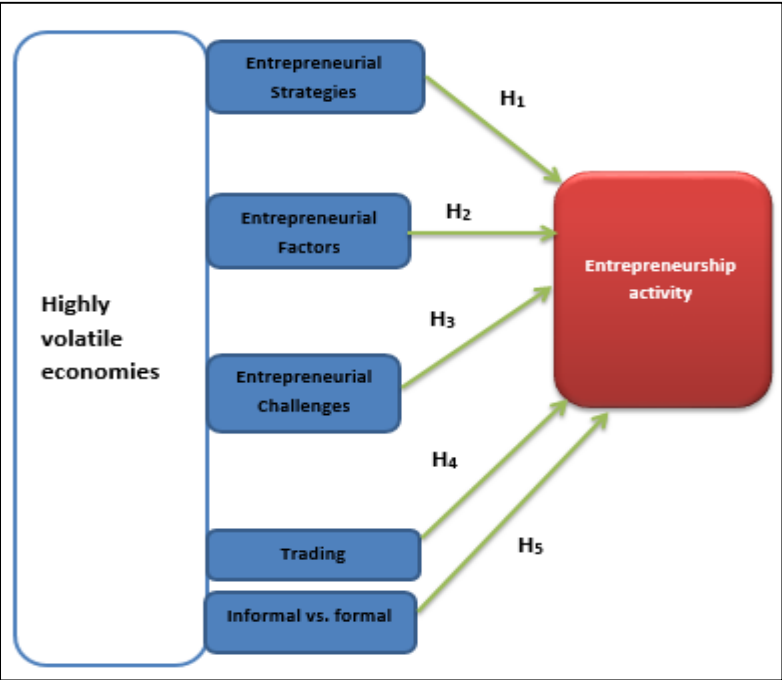
In the previous sub-section, there were certain aspects of entrepreneurial strategies that some companies practise such as, “adapting to changing conditions, being proactive relative to market opportunities and entrepreneurial orientation” (Manev & Manolova 2010:209). Planning and managing human resources is also essential to successfully implement survival strategies. Institutional strategy has an impact on entrepreneurship in highly volatile economies, as it helps entrepreneurs to realise opportunities through institutional means (Jennings, Greenwood, Lounsbury & Suddaby 2013). Ligthem (2010:145) suggested that some of the strategies had a positive influence on the business. Strategies do have a positive impact on entrepreneurial activities in highly volatile economies.

The informal sector is seen as the production of goods and services in the market which can be classified as legal or illegal and is not detected officially in GDP estimates (Sookram & Watson 2008; Klapper *et al* 2010). In order to successfully operate in this sector and achieve high levels of production one needs to have a dynamic entrepreneurial mind-set and character for business to operate in this sector. There has been a negative perception towards informal economic activities as it is seen as an underdeveloped sector and harmful to the country's economy. There is a need to formalise the informal sector so as to encourage entrepreneurship activities in highly volatile countries as informal activity seems to be increasing as the economy remains highly volatile. Hitimana *et al* (2014) have shown how highly volatile economies promote informal economies and how the government aims to implement policies to encourage entrepreneurs to move to the formal economy. This shows how highly volatile economies foster more informal entrepreneurial activities.

In terms, of trading, these countries have more trading activity in the informal economy than in the formal economy. Some of the strategies used by entrepreneurs in these particular types of economies are: seeking investors,

information and cost training, critical point planning, being opportunistic and reactive and joint training initiatives as productive interaction between producers in these countries tend to operate in the informal sector rather than the formal sector. This study mainly aims to look at the informal and formal sectors as both of these sectors contribute to the growth of the economy and survival of the families and communities. The study aims to identify how entrepreneurship is impacted and how these variables relate to entrepreneurship activities.

Figure 1 shows a model that has been adopted for this study. This model aims to investigate these various elements to answer the sub problems formulated. The model of entrepreneurship in highly volatile economies was developed by guidelines that were found in the reviewed literature. The model aims to clearly define variables and integrate clear streams of research and theories. It includes environmental and individual level variables as well as moderator effects. The independent variables are challenges, trading and strategies and the dependent variable is entrepreneurship activities. The construct of this study is the entrepreneurial activity in these countries as it is the underlying concept of what the report is trying to measure. Entrepreneurial activity can also serve as a focal construct as it is important and will need to be measured viably.





### **Figure 1: Model for Entrepreneurship study**

Having summarised all the sections of the literature reviewed, the following key elements and sub-problems were covered and hypotheses were deduced.

#### **2.10.1 Key elements of literature reviewed and sub-problems**

Key aspects covered in the literature review include high volatility economic factors that affect entrepreneurship activities. Some of these factors have a positive or negative impact on entrepreneurship activities in countries with highly volatile economies. The challenges and survival strategies that entrepreneurs with companies in these types of economies were also discussed in detail in the literature review. The study also covers key elements in terms of trading in countries with this type of economy. Lastly the study analyses entrepreneurship activities in the formal versus the informal sector.

## **CHAPTER 3: RESEARCH METHODOLOGY**

This section discusses the research methodology and methods that were used in the study. It describes the research design in detail as well as the population, sample and instrument used.

### **3.1 INTRODUCTION**

The introduction and the literature review linked entrepreneurship with highly volatile economies. The study has a research aim to identify the factors that influence entrepreneurial success in highly volatile economies. In order to achieve this, it identified, to what extent economies with high volatility foster entrepreneurship activities, whether they support entrepreneurship activities and how ventures survive in these types of economies. This was done through the research aim is represented by research questions stated in the introduction.

As mentioned earlier, the purpose of this study is to analyse current entrepreneurs in South Africa and Zimbabwe and their particular ventures. This chapter aims to link the research to the literature reviewed according to the research paradigms. In order to answer the research questions, the research questions are put into five hypotheses to cater for each question. The hypotheses are then tested so as to provide the answers to the research questions. These tests help to obtain answers to the research questions by identifying the relationships to identify the significant tests of the variables.

This chapter describes the research methodology along with the methods used in the study. It aims to explain the research approach, design, population, sample and the sampling method that this study used. Moreover, this section aims to justify why the research methodology was used. A discussion of the validity and reliability of the study will be covered in this section. For the purposes of this study, quantitative research was conducted as it attempts to capture findings based on the representatives of the sample and the validity of the design (Cooper & Schindler 2011). It makes use of the deductive approach in order to formulate

hypotheses and aims to describe the phenomena that the observations reflect. The quantitative approach enables testing of the theory and assists in measuring multiple variables according to the entrepreneurs' responses.

A quantitative approach helps to address the research questions that were discussed in the literature review to give the best possible solutions to the questions. It is useful in terms of measuring such factors. This particular strategy is appropriate for this study because it gives clear analysis and numerical measurements of the factors discussed in the literature review.

The structure of this section consists of the following sub-sections:

- Research methodology/paradigm
- Research design
- Population and sample
- Research Instrument
- Procedure for data collection
- Data analysis and interpretation
- Validity and reliability of research
- Limitations of the study

### **3.2 RESEARCH PARADIGM**

Research uses a methodical investigation when it collects, analyses and interprets data (Mackenzie & Knipe 2006). This is a very important process as it helps the researcher to understand the subject at hand and one is able to describe the phenomenon. Therefore, the researcher must understand the methods in order to apply them accurately when conducting research. In order to ensure rigorous analysis, a researcher makes use of a paradigm which allows him or her to analyse a topic scientifically. Paradigms are mainly shaped by beliefs and practices, which are shaped by researchers. It can be defined as related assumptions that provide a conceptual framework for the study (Ponterotto 2005). It is important to identify a suitable framework for the research

to determine relationships between the constructs so as to conduct an investigation (Krauss 2005; Mackenzie & Knipe 2006). This framework consists of theoretical research paradigms which are used in this study.

Paradigms that can be used by researchers consist of positivist/post-positivist, interpretivist/constructivist, transformative and pragmatic paradigms. The research questions and the paradigm determine the most appropriate methods the study uses for analysis. Paradigms can be categorised by certain philosophies such as ontology, epistemological and methodological differences (Ponterotto 2005; Pezdek & Lam 2007; Bunniss & Kelly 2010). These paradigms are discussed below:

- Ontology

Ontology identifies the nature of reality and the being as well as giving insight into what can be known about the future. When linking the philosophy to paradigms, positivists state how there is one true reality that is identified and measured which is called naive realism. Post-positivism take the true reality which is apprehended and measured and called critical realism. Constructivists/interpretivists consider that there are multiple realities where reality is subjective which can be constructed and is called relativist position (Ponterotto 2005).

- Epistemology

Epistemology considers the relationship between the research participant and the researcher. When linking this philosophy to the paradigms positivists highlight dualism and objectivism where the researcher and the research participant are independent of each other in order to avoid bias. This philosophy enables the researcher to study the participants without influencing them. Post-positivism takes into account the influence that the researcher may have on the research study, however dualism and objectivism are very important aspects that exist. Constructivists/interpretivists focus on taking the life experience of the research participant and the relations between the researcher and the research participant are subjective.

- Axiology

Axiology takes into consideration the role of the researcher values in the scientific research process. In this philosophy the positivists and the post-positivists have no values in the research process. In terms of constructivists/interpretivists, the researchers' values as well as lived experience are maintained (Ponterotto 2005). Certain paradigms were examined in order to select a suitable paradigm for the purposes of the research. These paradigms are discussed in the following sections:

### **3.2.1 Constructivism/ Interpretivist Paradigm**

This paradigm considers multiple diverse interpretations and perceptions of a reality (Bunniss & Kelly 2010). Moreover, it aims to build a comprehensive picture which shows how understanding of a phenomenon is influenced by personal experience. This type of paradigm may illustrate conflict in certain research discussions. When a study uses the interpretivist paradigm the reality tends to be subjective. There is a need to develop a possible form of truth. This type of paradigm makes use of quantitative and qualitative methodology which may use several methods such as surveys, interviews and focus groups (Bunniss & Kelly 2010). Several interpretations can be gathered in order to construct meaning.

### **3.2.2 Post-positivism Paradigm**

This type of paradigm develops knowledge from a false hypothesis (Bunniss & Kelly 2010). It makes use of quantitative and qualitative methodologies. Certain methods are used, such as analysing data from surveys and semi-structured interviews that link to the literature and focus groups. The study derived the hypothesis from existing theory.

### 3.2.3 Positivist Paradigm

In the positivist paradigm, the knowledge is acquired from research studies and the researcher obtains data from respondents (Krauss 2005). It is seen as the “received view” (Ponterotto 2005) and considers a single existing reality. It has certain assumptions such as discovering that leads to explanations and prediction, that social sciences have hypothetico-deductive method, certain perceptions should be defined by empirical categories and consistency of nature (Ponterotto 2005). By using this method, the researcher takes into account the use of inferential statistics to test the hypotheses as well as to interpret the statistical results based on the existing theory.

### 3.3 THE RESEARCH HYPOTHESIS

The five hypotheses were derived from the existing theory. The alternative hypothesis supports existing theory and what the study intends to establish. Testing these hypotheses will help to provide answers to the research questions by determining the significance of the relationships between the variables being tested. The hypotheses being tested are outlined as follows:

***First Sub-problem:*** *What were the survival strategies in South Africa and Zimbabwe during the past five years?*

**Null hypothesis 1:** Survival strategies used by entrepreneurs in highly volatile economic environments do not have a positive impact on entrepreneurship activities.

**Alternative hypothesis 1:** Survival strategies used by entrepreneurs in highly volatile economic environments have a positive impact on entrepreneurship activities

***Second Sub-problem:*** *How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?*

**Null hypothesis 2:** High economic volatility factors do not have a negative influence on entrepreneurship activities in countries with highly volatile economies.

**Alternative hypothesis 2:** High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies.

**Third Sub-problem:** *What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries such as South Africa and Zimbabwe?*

**Null hypothesis 3:** Challenges caused by high economic volatility do not have a negative impact on entrepreneurship activities.

**Alternative hypothesis 3:** Challenges caused by high economic volatility have a negative impact on entrepreneurship activities

**Fourth Sub-problem:** *How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?*

**Null hypothesis 4:** High economic volatility does not have a negative impact on trading activities in countries with highly volatile economies.

**Alternative hypothesis 4:** High economic volatility has a negative impact on trading activities in countries with highly volatile economies

**Fifth sub-problem:** *Do highly volatile economies promote entrepreneurship activities in the formal or informal sector?*

**Null hypothesis 5:** Highly volatile economies do not promote more informal entrepreneurial activities than the informal entrepreneurship activities.

**Alternative hypothesis 5:** Highly volatile economies promote more informal entrepreneurial activities than the formal entrepreneurship activities.

### **3.4 RESEARCH METHODOLOGY**

A methodology can be defined as a collection of rules or processes and methods or procedures used to undertake a certain research (Ponterotto 2005; Mackenzie & Knipe 2006). There are certain methodologies that are associated with the paradigms and a researcher needs to have knowledge of the certain types of paradigms available and the types of methodologies that are used. Research methods can be defined as procedures and systematic modes that are used to analyse data. These aspects of the research are crucial, therefore, it is important for them to match and relate to one other.

Various epistemological differences of quantitative and qualitative research paradigms exist. Epistemology is related to the methodology and focuses on acquiring knowledge. It aims to raise certain questions such as: What knowledge is and how it is acquired and the relationship between what is known and the person who has the knowledge (Krauss 2005).

#### **3.4.1 Qualitative methodology**

The qualitative methodology used certain epistemological assumptions such as taking an occurrence and analysing it by being part of it in order to experience it (Krauss 2005). When a researcher uses qualitative research, the questions may change as more knowledge is acquired. This methodology is based on certain aspects such as a relativistic/constructivist ontology. When researchers use qualitative research, they also recognise some of their previous research and observations as well as the current expectations (Ponterotto 2005). Themes allow the data to be jargon free and give thematic categories to assist in identifying important categories and relating these to previous research and theoretical themes and concepts (Ryan & Bernard 2003). They fulfil an important role in the analysis phase as well as identifying interrelated themes. In order to identify a theme, these help to answer the question. Another element used by the study to



identify themes was repetition of the words and topics discussed by the respondents.

Qualitative research may fall under anthropology, sociology, education, psychology, history, literature and can have various multiple paradigms. The study used quantitative themes to analyse open-ended questions in the survey. This method of analysis helped to identify major categories and themes from the data. Another way the study identified the themes was through the examination of similarities and differences in the data by making certain comparisons systematically across the data (Zhang & Wildemuth 2009). Answers from different entrepreneurs were coded and grouped into themes to determine the outcome and responses from the entrepreneurs. Associated concepts describing the responses were then identified and stated in a table.

### **3.4.2 Quantitative methodology**

The study also made use of the quantitative methodology. It used the positivistic paradigm which is consistent with quantitative research and it allowed for clearly defined variables, an empirically testable hypothesis and will make use of statistics. Epistemology philosophies were used to properly consider the views to produce knowledge that is arguable (Flower, 2009). The positivist paradigm approach was used to deduct the research questions that were discussed in the literature review to give the best possible solution.

Therefore, the quantitative research approach is useful in terms of measuring such factors. Most importantly, it helped maintain a clear distinction between facts and judgements and helped test the data using statistics (Cooper & Schindler 2011). This particular strategy is appropriate for this study because it gives clear analysis and numerical measurements of the factors discussed in the literature review. The quantitative approach is important in order to establish the relationship between the variables where relationships exist in the literature. These variables are: entrepreneurship activity, strategies, challenges, factors, trading, informal sector and formal sector.

The advantages of this approach are that the method caters for a large sample size in order to provide accurate results; it provides precise and quantitative numerical data. The strategy also enabled the researcher to simplify a research finding in a case where it had been replicated in different populations of entrepreneurs based on age. Most importantly, the quantitative approach will help maintain a clear distinction between facts and judgements and test the data using statistics (Cooper & Schindler 2011).

The disadvantages of this strategy are that assumptions cannot be made outside the scope of the sample and the sample needs to be large in order to get accurate results. The hypothesis derived from the literature allowed the variables to be quantitatively measured. Once data was collected, the use of statistical analysis determined the outcome, which then allowed for the report to corroborate the theory or give recommendations.

### **3.5 RESEARCH DESIGN**

The research design is a plan that is based on the research questions and serves as a guide to select sources and types of information (Cooper & Schindler 2011). The research was designed in such a way that it was a cross-sectional research study and made use of a survey that was distributed to current entrepreneurs in the countries either online or by hand delivery. The main aim of the online survey was to reach as many entrepreneurs in these two countries as possible.

The survey requested for interval data and made use of a seven-point Likert scale set of data as well as an open-end question at the end of each section to obtain additional information for the study that the scale did not necessarily cover. The data consists of quantitative responses from participants which was coded, categorised and reduced to numbers. These numbers were used for statistical purposes and the researcher made use of SAS software to perform statistical calculations. The statistical calculations were used to identify meaningful analysis that assisted in investigating the factors that influence entrepreneurship activity

in highly volatile economies by making use of Cronbach's alpha. The Cronbach's alpha determined whether the sub-items of constructs would be aggregated.

### **3.5.1 Scope of the study**

The study takes into account a certain scope that relates to the design of the research. The sizes and areas covered in the study are shown in the following sections. The study focuses on the two countries that have been discussed in Chapter Two. These countries have different volatility levels which is good for the study to analyse the result from each of the countries. The study looks at entrepreneurship activities in the two countries and takes into account SMEs and larger organisations. The particular scope of the study relates to the design of the specific tests of the study in relation to entrepreneurship.

## **3.6 POPULATION AND SAMPLE**

This sub-section describes the population and the sample of the study. The sampling methods are also discussed to illustrate how the study sample was collected and what methods were used.

### **3.6.1 Population**

The research population was comprised of existing entrepreneurs in South Africa and Zimbabwe. The study took into account all types of entrepreneurs, whether their business was operating successfully or failing. The research mainly considered entrepreneurs with businesses that have been running for five years or more, however, this was a limiting factor in identifying entrepreneurs needed for the study, therefore, the study considered entrepreneurs with businesses that have been operating for fewer than five years. The study was not restricted to specific types of entrepreneurs but all types of entrepreneurs.

### **3.6.2 Sample and Sampling Method**

The research study aimed to identify 240 or more entrepreneurs in South Africa and Zimbabwe through a method of judgemental sampling to identify the entrepreneurs only. After the data collection process, the total number of responses that could be used was 194. This number is appropriate as the quantitative approach allows for a sample size that will have a direct influence on the accuracy of the research findings. It focused on the judgemental sampling as this method seems appropriate when selecting entrepreneurs that conform to the type of entrepreneurs who are related to the study so as to avoid data distortion (Cooper & Schindler 2011). The judgemental sampling method also allowed the selection of people that are related to the topic so as to avoid distortion of data. One survey was prepared and circulated online and hard copies were also made and delivered to certain companies. The study aims to get more if possible; however, the target population is only the entrepreneurs with current businesses operating in these countries.

The research participants are various entrepreneurs of different age groups, as age has a certain influence on entrepreneurial activity in South Africa and Zimbabwe. The 2013 GEM report shows that a high percentage of entrepreneurs are found in the 35-44 age bracket (Amorós & Bosma 2013). The sample frame consists of certain sources such as, a database obtained from the SME Association of Zimbabwe, a database obtained from Awethu, South African traders, Wits Centre for Entrepreneurship and the WITS Innovation hub. The databases covered different industries so as to ensure there was no duplicating of respondents. For the pilot study, 500 emails were sent out and this gave a total of total of 40 respondents which were complete. For the study, 2400 surveys were sent out using the online method and hard copies were delivered to companies. This allowed the researcher to get 194 respondents. The profiles of respondents consist of entrepreneurs operating in the formal and informal sector, business owners and traders. This is shown in the presentation of results section. The research project had a pilot study based on 40 respondents and these

respondents were not used in the final research sample as including these respondents might have potentially diluted the results.

### **3.7 THE RESEARCH INSTRUMENT**

The data was collected using a structured survey that had various categories of questions based on a seven-point Likert-type scale with options from strongly disagree to strongly agree (Cooper & Schindler 2011). The seven-point Likert scale questions are based on constructs or variables that are strategies, trading, challenges, economic volatility and entrepreneurial activity variables with an ordinal type of data. The first section has demographic questions; the second section has questions based on investigating the relationship between economic volatility and factors that affect entrepreneurship activity and the third section has questions based on investigating the relationship between economic volatility and challenges that affect entrepreneurship activity. The fourth section has questions based on the relationship between economic volatility and trading. The fifth question focuses on economic volatility and the effects it has on informal and formal entrepreneurship activities. The last section measures entrepreneurship activity in these countries. Each section has an open-ended question that enables the respondent to specify any other information that relates to the section. The responses from these questions were coded and statistically analysed.

All these instruments were already established in previous research; therefore, the researcher had to select which questions applied to each section. The advantage of using existing instruments is that they have already been tested for validity. The advantage of the survey is that it was a practical instrument and enabled participants to select the strength of their agreement or disagreement. The fact that the survey had a wide range of options to choose from on the seven-point Likert scale enabled a variety of responses when a user was answering the questions. The actual instrument and the cover letter that were sent to respondents are included in the appendix A section.

### **3.7.1 Scale editing**

The research instrument was altered after the pilot study results analysis. Some of the research questions that proved to be unreliable in the various sections of the instrument were removed after the tests. This adjustment managed to accommodate the required data. The scales were kept to closed statements and the open-ended questions to formulate the final instrument. All sections were tested for normality in the distribution. The dependent variable used was entrepreneurship activity and the independent variables were strategy, challenges, factors, trading and informal sector versus formal sector.

### **3.7.2 Demographic Data**

In research, data can be defined as information that researchers obtain about research subjects. Demographic data consists of the features of the subjects that can be statistically analysed (Fraenkel, Wallen & Hyun 1993). These characteristics can be age, gender and education level. The demographic data covered in this study consisted of gender, age, industrial sector, number of employees, type of business, business status, and number of years of work experience. Demographic data in the study helped to identify more information about the respondents. Certain features helped identify other issues that related to the study such as the effect of age, gender, qualification on entrepreneurship activities.

### **3.7.3 Strategy**

The third section consists of statements related to the strategies used by entrepreneurs. Entrepreneurs make use of various strategies depending on the nature of their business. In terms of the strategy scale, the scale used to analyse business success in small and medium enterprises was used (Ahmad *et al*/2010). The study showed that entrepreneurial competencies can be important strategies that entrepreneurs use in order to successfully operate their businesses. As in

the factors section, all items in the scale returned a Cronbach's alpha value of greater than 0.7 and composite reliabilities were above 0.7 showing reliability in the construct. The inter-correlation analysis done in the study showed that the variables were reliable and valid and could be used to test the model.

#### **3.7.4 Factors**

For the factors section, the instrument adapted by Islam (2009) will be used. In this section, the respondents were asked to indicate whether they disagree or agree in a seven-point Likert scale and the following sub-sections will briefly describe the research instrument. The scale adapted for this sub-section motivates the factors that affect entrepreneurship activities (Islam 2009). The scale adapted was proven to be reliable and valid.

#### **3.7.5 Challenges**

The fourth section consists of statements that are related to challenges faced by entrepreneurs in countries with highly volatile economies. The challenges scale also formed part of the study conducted by Islam (2009).

#### **3.7.6 Trading**

In terms of trading, there is need for the economy to support trading activities for small and medium enterprises as well as to encourage fair trade. The scale for trading was adapted from the study of entrepreneurship and fair trade (Khanapuri & Khandelwal 2011). The study gives a full analysis of fair trade in certain countries, particularly India, as well as how technology supports trading activities in terms of communication. Challenges of trading are addressed and these were applied in the scale and the scale items were proved to be reliable.

### **3.7.7 Entrepreneurship Activity**

Certain entrepreneurship activities have an impact on company growth even after start-up. The scale for this section was used in a study of entrepreneurship strategic dimension that affects firm growth, particularly entrepreneurial management and orientation (Gürbüz & Aykol 2009). In the factor analysis of this study, three factors emerged. These factors included the risk taking, innovation and proactiveness and had high factor loadings.

### **3.8 PROCEDURE FOR DATA COLLECTION**

The survey was designed in Google drive using Google documents and was emailed along with a formal letter to the participants. In line with the research ethics, the respondents were informed that it was voluntary to participate and that they were allowed to withdraw their responses at any time should they see fit to do so. The demographics section consists of the following information about the participants: their gender, age, entrepreneurial training and their specific area of business. There were also questions which related to the participants having been exposed to entrepreneurship or some training programs previously. The sections that followed had questions relating to factors, challenges, strategies, trading, the informal and formal sector and entrepreneurship activity. The survey allowed the participants to select the factors that influenced them to engage in entrepreneurial activity. The entrepreneurs were allowed to complete the survey anonymously to maintain confidentiality. The proposed time to complete the survey was not longer than 10 minutes. When the responses returned, they were downloaded from the Google drive to Microsoft Excel to prepare for analysis.

### **3.9 DATA ANALYSIS AND INTERPRETATION**

As mentioned in the previous section, the data was collected using a structured survey that has various categories of questions based on seven-point Likert scale with options from strongly disagree to strongly agree. The main aim of this data is for it to have a high level of credibility, as it aims to improve impartiality and objectivity as well as aims to identify casual explanations (Easterby-Smith,



Thorpe & Jackson 2008). Statistics is important to measure relationships between concepts as they help summarise relationships between variables (Lee 2014). Missing data, abnormal data and outliers were checked in SAS so as to eliminate any possible outliers. Cronbach's alpha was calculated using SAS software. It helped to determine whether the sub-items of constructs were to be aggregated as well to investigate the variables, therefore, it was to be done before the regression and explanatory factor analysis. Bootstrapping was used in order to create a different version of the sample; this helped to redo the same statistics and created weighted different samples. The intervals are more accurate as it helps to remove some issues that the data may have (Lee 2014). Control variables were included in the analysis; these were company age, company size and success of venture (successful, average and unsuccessful). As mentioned earlier, the study considered all types of entrepreneurs whether their ventures are successful or struggling.

The descriptive statistics were calculated, the population parameter was estimated and inferential tests were performed. This helped to determine whether the obtained critical factors were actually more than expected (Myers, Well & Lorch 2010). The analysis was performed in SAS to produce an output of the quantitative analysis results. SPSS software was used to verify some of the results obtained to ensure accuracy. SAS was an appropriate tool for data analysis for this study. It generated representative data and relationships between variables and performed explanatory factor analysis (Lee 2014). The results contain the means and standard deviations of all the questions. This helped to measure centrality of the continuous variables such as strategies, and for categorical variables such as the female versus the male entrepreneurs. The standard deviations assessed how the data spreads away from the average.

In terms of demographics, analysis was done in terms of gender to determine the frequency, percentage, valid percentage and cumulative percentage to show whether there is a balance between the male and female entrepreneurs. The outcomes of the analysis are presented in tables, words and graphs in Chapter

Four. These results are discussed in Chapter Five. Regression analysis was undertaken in certain regression models which comprise of the five hypotheses with a continuous outcome variable; the entrepreneurial activity. Regression analysis requires a continuous outcome variable, which is the entrepreneurial activity. It can be used on variables such as strategies where the total coefficient for the model for hypothesis 1 shows the link between strategies and entrepreneurial activity. In order to get final measures of constructs the use of multi-item scales was required with the use of correlation. The final result shows a correspondence or convergence between similar constructs or to discriminate between dissimilar constructs (Zikmund 2009).

The shape of the variable's distribution as well as the spread of the data was assessed, this helped to analyse whether the statistics were suitable for the variables in that particular distribution (Lee 2014). Moreover, the shape of the variable's distribution was used to analyse the spread to determine whether the data is normally distributed, uniformly distributed or falls under lognormal distribution or bimodal distribution (see appendix C). Correlations will be used to evaluate the relationships between the sets of data. A correlation statistic (coefficients) was between -1 and +1. This helped to identify the linearity association. The use of co-variances was employed to assess whether the values were within a particular range. Determining pattern was very important as it determined the fit of the data to a certain pattern such as a curve or straight line. This was done through graphical means. The regression analysis aimed to find the positive or negative correlations through the regression slope. There was a need to link categorical variables together such as the age and gender of the entrepreneurs or entrepreneurs working in the formal versus informal sectors. This created crosstabs which helped in analysing and comparing the variable associations (Lee 2014). The results are discussed in the following chapters. A summary of the analysis done is as follows:

- *Descriptive analysis for means, standard deviations and variance*
- *Exploratory factor analysis to assess outliers and control variables*

- *Reliability checks*
- *Correlation*
- *Normality and Skewness*
- *Multiple regression analysis to test hypothesised relationship*
- *Stepwise regression*

The results of the hypothesis may show one of the two hypothesis as presented in section 3.3.

### **3.9.1 Hypothesis Testing**

The hypothesis testing is in relation to the theory reviewed in the literature and how it relates to the research questions. The study presented research questions that developed from the certain factors identified in the literature. The hypothesis testing in the study is linked to the five research questions provided. Hypothesis testing was done through statistical means and the results are presented in Chapter Four and interpreted in Chapter Five. This process is very important to the study as it establishes a statistical relationship and determines the findings.

### **3.9.2 Statistical Relationship**

Measuring the statistical relationship is a very important aspect of the research as it determines the strength of the relationship between the dependent and independent variables. Statistical analysis will be used in this study to determine the statistical relationship. Various statistical tools are used to establish a statistical relationship. This study used the SPSS software to make use of methods such as multiple regression, bivariate correlation and stepwise regression.

### **3.9.3 Determining the Relationship**

There are several methods that assist in determining statistical relationships. Regression method is the one used in this study. It is a way that enables the

investigation of relationships between variables. Often, it shows the effect of one variable upon another (Sykes 1993). The strength of the relationship can also be measured by changing the independent variable to determine the relative change in the dependent variable.

### **3.10 PILOT STUDY**

A pilot study was conducted and one of the main expectations of the sampling frame was to obtain responses from an equal number of entrepreneurs in both countries. The pilot study managed to obtain a 50-50% of respondents from both countries, which was expected. The split was 20 from South Africa and 20 from Zimbabwe. Statistical analysis was done on the data obtained from these respondents. The demographic profiles of the respondents were analysed and Cronbach's alpha for the pilot study was obtained. Certain results were obtained in the pilot study and showed that the study can be analysed further with more.

- Demographic profile of respondents

In terms of company size: More than half of the respondents had a small number (50 or less number) of employees. This relates to the literature in that most of the entrepreneurial companies in highly volatile economies are comprised of many small companies (Johannes 2013). For company industry: Many sectors have low entrepreneurship activity. 23% consists of manufacturing/operations industry and 18% of the entrepreneurs are in the retail industry. In terms of gender, 35% of the respondents in the pilot study were female. This goes back to the issue of how countries with volatile economies have fewer female entrepreneurs as they face challenges such as a lack of support, fear of failure and lack of competency (Johansen 2013). In terms of successful ventures, 45% have average businesses and 28% have successful businesses. In terms of the business being successful, 45% of the entrepreneurs stated that their businesses are average and 28% stated that their businesses are successful, which related to one of the questions

raised in the literature about whether businesses operating in such economies are successful. This is indeed in line with the expectations of the research.

- Research Instruments and Design

Use of the ordinal scale was implemented to construct the survey and scale types. The Cronbach's alpha, which was obtained for the study for the tests ranged between 0.602886 (standardised 0.604708) and 0.764017 (standardised 0.770730) for the five constructs. During the tests a few of the questions proving to be unreliable and these questions were removed and new variables were created. However, the size of the sample was also a contributing factor. The pilot study managed to assist in refining the research instrument and design.

### **3.11 VALIDITY AND RELIABILITY OF RESEARCH**

Discriminant validity is the extent to which scores on a scale do not correlate with the scores from other scales that focus on measuring other constructs' validity (Cooper & Schindler 2011). The research aims to have discriminant validity by considering all the entrepreneurs and categorising them by control variables based on their business status and age. This research involves validating already constructed theories that were identified in the literature reviewed. The study also focused on issues with the reliability and validity of the research, taking into consideration the data collected in the study and the testing processes. It is important to test the validity of the research scale as it helps to determine if each of the questions contribute to the dimensions.

There were certain steps that need to be taken in order to determine the factors that will describe the variability of the variables. There is a need to determine if factor analysis can be done on all the items in the scale and the number of factors. The p-value for Bartlett tests was done, and if the p-value was smaller than 0.05, the building of the construct was valid enough to conduct a factor analysis. A number of factors were determined in order to consider using some factors. The

process also involved determining a rotation method in terms of the orthogonal method.

Communality was also estimated to indicate the proportion of an item's variance that is common with the other items in the factor structure. This helped to determine the extent to which an individual item related to the factor structure and the rest of the items. Items with a very low communality of under 0.2 or lower were considered for removal and repeating for the explanatory factor analysis.

### **3.11.1 External validity**

External validity assesses the possibility of whether the findings that will be obtained in this study apply in other contexts and situations (Cooper & Schindler 2011). The research findings comprise of entrepreneurs from various sectors of Zimbabwe and South Africa. The use of a wider group ensured that external validity of the research was improved. The study aimed to include all main groups of entrepreneurs in the sample. The ability to generalise the research findings was supported due to the sample size. External validity determines whether there is any observed fundamental relationship and if this relationship should be generalised through the different measures (Calder, Phillips & Tybout 1982).

### **3.11.2 Internal validity**

Internal validity is associated with determining if an observed co-variation should be considered as a causal relationship (Calder *et al* 1982). In this research study, internal validity was examined for the extent to which the research findings can be attributed to the factors considered in the study. The assumption made by this study is that the entrepreneurs were honest and truthful in their responses, which were based on actual behaviours and factors, and not based on ambition. One of the ways to ensure internal validity for this research is that no observer was present whilst the entrepreneur answered the survey. The survey was designed in such a way so as to ensure a logical flow and followed academic literature so

that the participants would understand the questions that conformed to academic reasoning to strengthen the validity of the research. Another way that was used to ensure validity of the content applied in the survey was to pilot the survey. The pilot consisted of 40 responses and produced results that were analysed before the final survey was distributed. However, the research was correlational and not casual; therefore, this may have affected internal validity.

### **3.11.3 Construct validity**

Construct validity ensures the operational variables used can be interpreted in terms of theoretical constructs (Calder *et al* 1982). Methods and tools used to measure this type of validity can be Confirmatory factor analysis as well as Explanatory factor analysis. It is critical to determine this type of validity as it assists in determining the theoretical concept as well as measurement error in order to avoid problems in research analysis (Bagozzi, Yi & Phillips 1991). Construct validity can determine the extent to which a variable measures the concept that it is supposed to measure.

### **3.11.4 Reliability**

Reliability of the research is the extent to which the research can be replicated at a later stage in future and produce similar results (Cooper & Schindler 2011). It can also be considered as the consistency of one's measurement, determined by the degree of the instrument's measurement when used under a certain condition which may be similar on the same subjects (Gerber 2014). Given that the researcher used a well-structured questionnaire consisting of well-defined questions, this gave an opportunity to provide consistent results proving any later research to be reliable provided the researchers follow a similar approach. The steps of the study will be carefully documented to ensure that the study can be repeated if necessary. The survey aims to produce consistent results under different circumstances and at different times.

### **3.12 LIMITATIONS OF THE STUDY**

There are certain limitations that the study has. These are:

- The sample was selected using the judgemental sampling method to select only entrepreneurs that fit the profile; this limited the number of responses required and the time taken to collect responses.
- There were some out-dated email lists provided by some entrepreneurial organisations; as a result, no responses came from those entrepreneurs, and obtaining respondents' trust in terms of opening the email to participate in the survey.
- It is also likely that the sample had entrepreneurs which were mainly based in Gauteng, Harare and Bulawayo.

### **3.13 CONCLUSION**

This chapter explained the research methodology and methods in detail. It defined the quantitative approach that the study used and the supporting methods applied. Pilot study results were significant and gave guidance on how the scale should be edited and which questions were useful in certain sub-sections. Certain methods discussed in this chapter will certainly give guidance in the next chapter for data analysis.



## **CHAPTER 4: PRESENTATION OF RESULTS**

This chapter aims to present the results obtained from the statistical analysis. Furthermore, it aims to describe the results of the study to give a thorough explanation of the results.

### **4.1 INTRODUCTION**

The results obtained from this study are comprised of the demographic characteristics of the respondents. Additionally, the results consist of the description of the results obtained in the various sections of the five hypotheses. In order to produce good quality results, tests were performed on the results obtained from the respondents and some of these were reliability tests using the Cronbach's Alpha. The data was then analysed and the results display the statistical analysis performed. A conclusion follows which explains the strength and relationships of the variables and constructs in the hypotheses. This is explained in Chapter Five. The following sections will now report on the summary of statistics.

### **4.2 RESPONDENTS' CHARACTERISTICS**

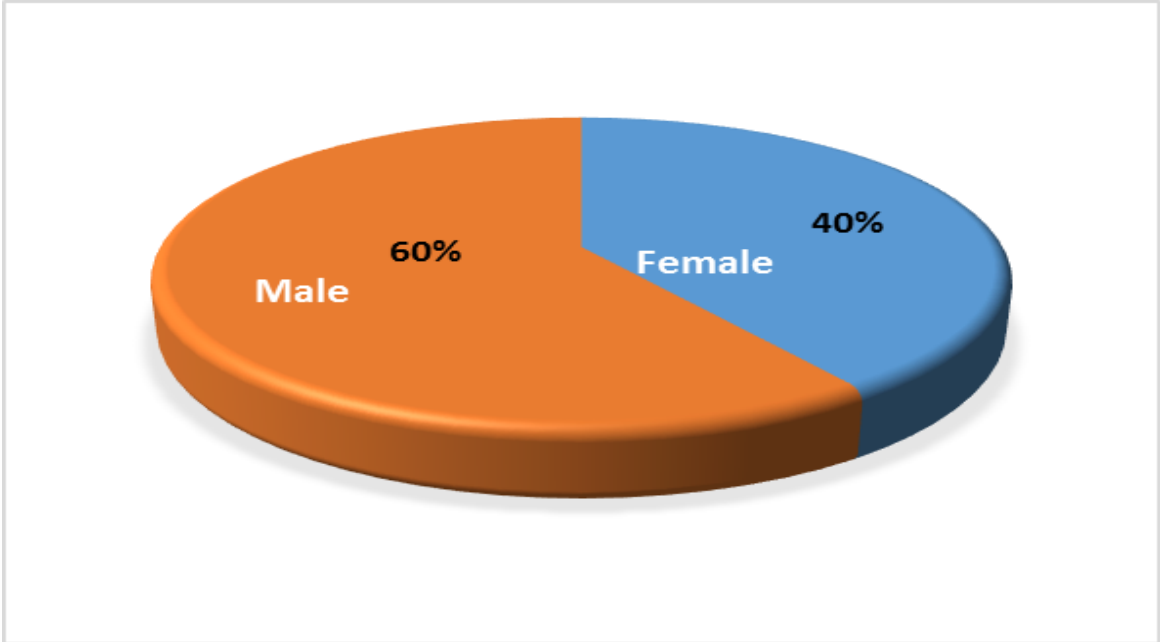
The first section of demographics will present the data pertaining to the respondents. It aims to present the respondents characteristics in relation to entrepreneurship activities.

#### **4.2.1 Gender of Respondents**

In terms of gender, a summary is shown in Table 2. The pie chart in Figure 2 shows the distribution of the 60% of the entrepreneurs that were male and the 40% that were female. The majority of the entrepreneurs were male and this totalled 20% more than the female entrepreneurs.

**Table 2: Respondents characteristics: Gender of respondents**

<b>Gender</b>	<b>Female</b>	<b>Male</b>
<b>Frequency</b>	78	116
<b>Percentage</b>	40%	60%

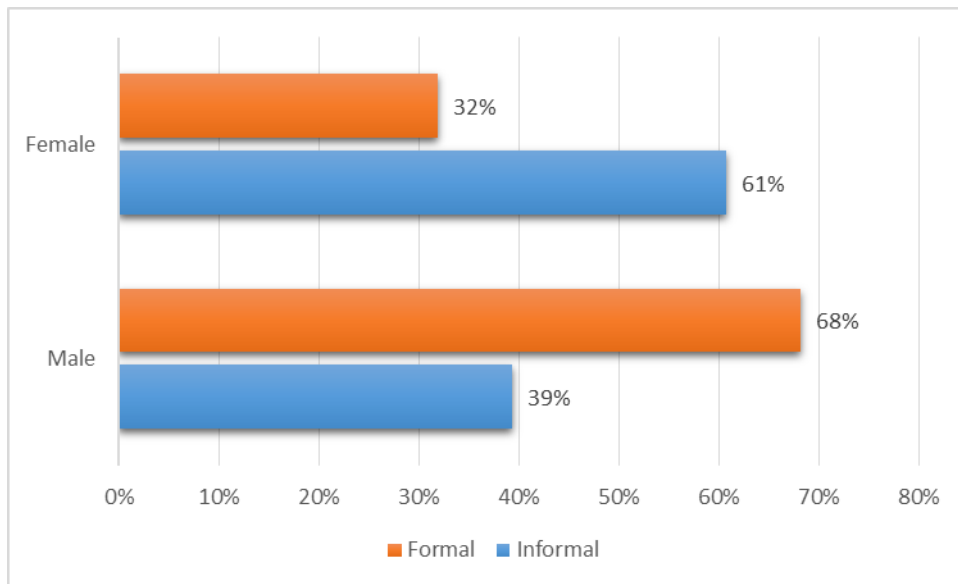


**Figure 2: Respondent characteristics – Gender**

In terms of the informal sector versus the formal sector, Table 3 shows how the two are split to show the frequency of gender separately. In terms of the highly contributing variables, 68% of the formal sector consisted of male respondents and 61% of the informal sector were female respondents.

**Table 3: Informal vs Formal - Gender**

	<b>Informal</b>		<b>Formal</b>	
	<b>Frequency</b>	<b>% of sector</b>	<b>Frequency</b>	<b>% of sector</b>
<b>Male</b>	22	39%	94	68%
<b>Female</b>	34	61%	44	32%



**Figure 3: Informal vs Formal - Gender**

### **4.3 DEMOGRAPHIC PROFILE OF RESPONDENTS**

The study obtained a total of 194 responses by using a judgemental sampling method, which was described in Chapter Three. This method was useful to only obtain responses from entrepreneurs who have existing companies in South Africa and Zimbabwe. 2400 surveys were sent out by using both an online survey and a manual survey. This aimed to obtain a response rate of 10% to achieve a total of 240 responses. However, a response rate of 8.1% was obtained in this study with 194 useable responses.

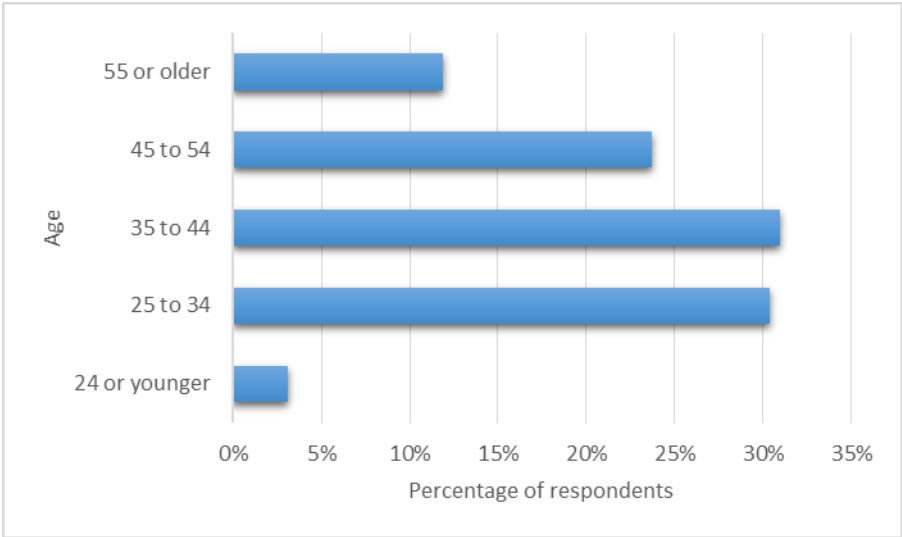
This section describes the information relating to the entrepreneurs and their companies. The demographic sections consists of questions relating to the structure of the company, state of the company, size of the company and the industry and sector in which the company operates. There are also questions that relate to the entrepreneurs themselves and these consist of the gender, age and education level. A cross tabulation of age and education level was done to show which age range had completed or reached a specific educational level. The first section of the survey was used to collect demographic data.

**4.3.1 Age of Entrepreneurs**

A summary of the entrepreneurs' age is shown in Table 4 where the number of entrepreneurs and the percentages for the age bands is outlined. The distribution of age is further illustrated in Figure 4. The majority of the respondents were between the ages of 25 and 34 years (30%) and 35 and 44 years (31%). Fewer respondents were 24 years or younger.

**Table 4: Respondents characteristics: Age of respondents**

Age	24 or younger	25 to 34	35 to 44	45 to 54	55 or older
Frequency	6	59	60	46	23
Percentage	3%	30%	31%	24%	12%

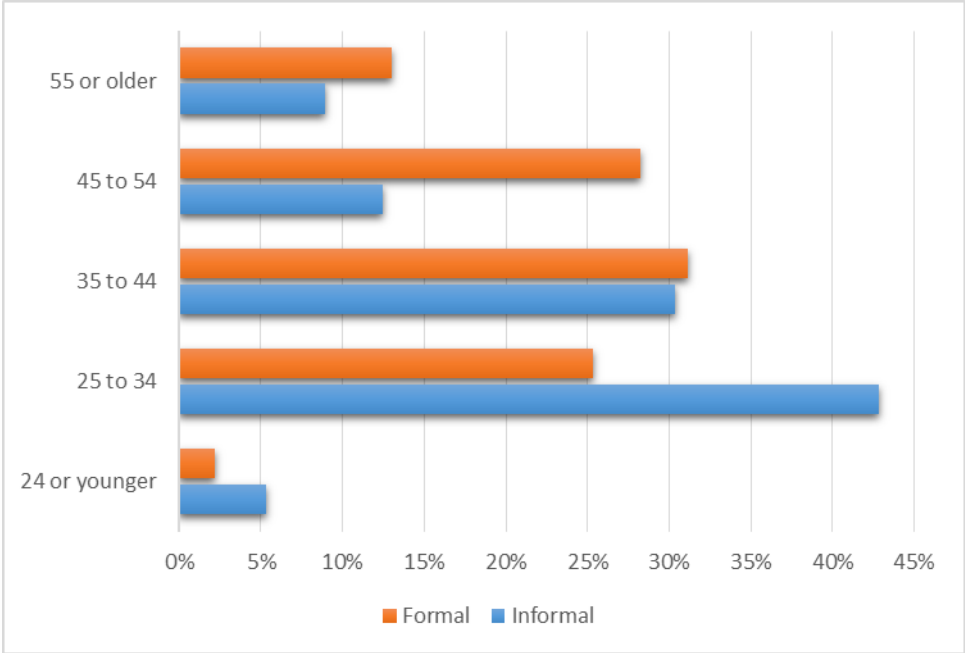


**Figure 4: Respondents characteristics: Age of respondents**

Looking at the formal and informal sectors separately, the age range of 25 to 34 has the highest percentage (43%) in the informal sector followed by respondents between the ages of 35 and 44 (30%). The age range of 35 to 44 has the highest percentage (31%) in the formal sector followed by 45 to 54 (28%).

**Table 5: Informal vs Formal - Age**

Age	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
24 or younger	3	5%	3	2%
25 to 34	24	43%	35	25%
35 to 44	17	30%	43	31%
45 to 54	7	13%	39	28%
55 or older	5	9%	18	13%



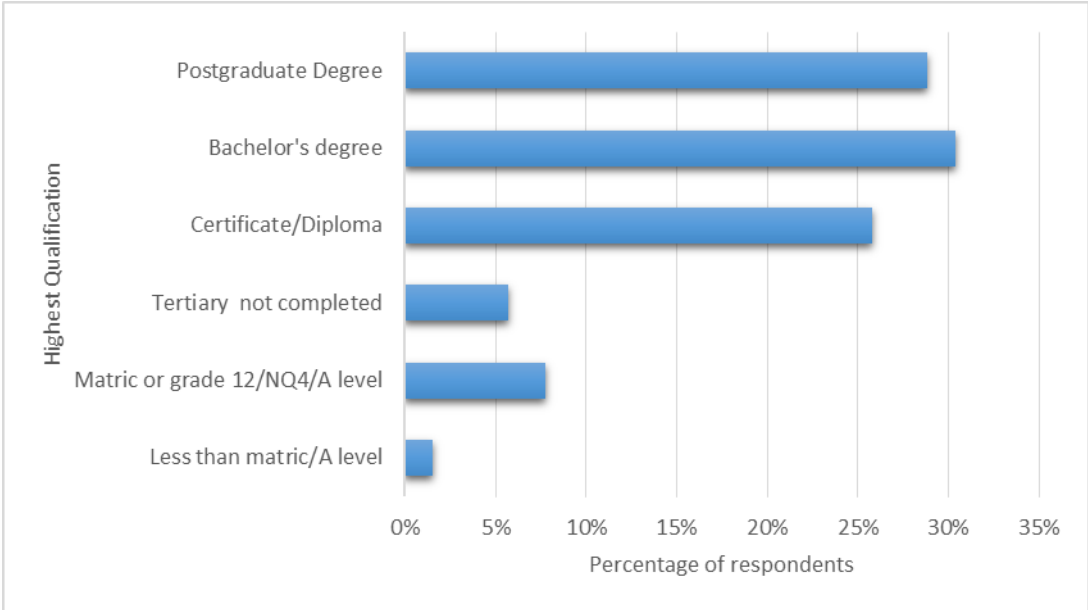
**Figure 5: Informal vs Formal - Age**

**4.3.2 Highest Qualification of Respondents**

In terms of the highest level education that the entrepreneurs achieved, the highest level of education many respondents completed is a Bachelor’s degree (30%), followed by a Postgraduate degree (29%) and a Certificate/Diploma (26%). Only 2% of the entrepreneurs had less than Matric/A-level.

**Table 6: Respondents characteristics: Highest qualification**

Qualification	Frequency	Percentage
Less than matric/A level	3	2%
Matric or grade 12/NQ4/A level	15	8%
Tertiary not completed	11	6%
Certificate/Diploma	50	26%
Bachelor's degree	59	30%
Postgraduate Degree	56	29%

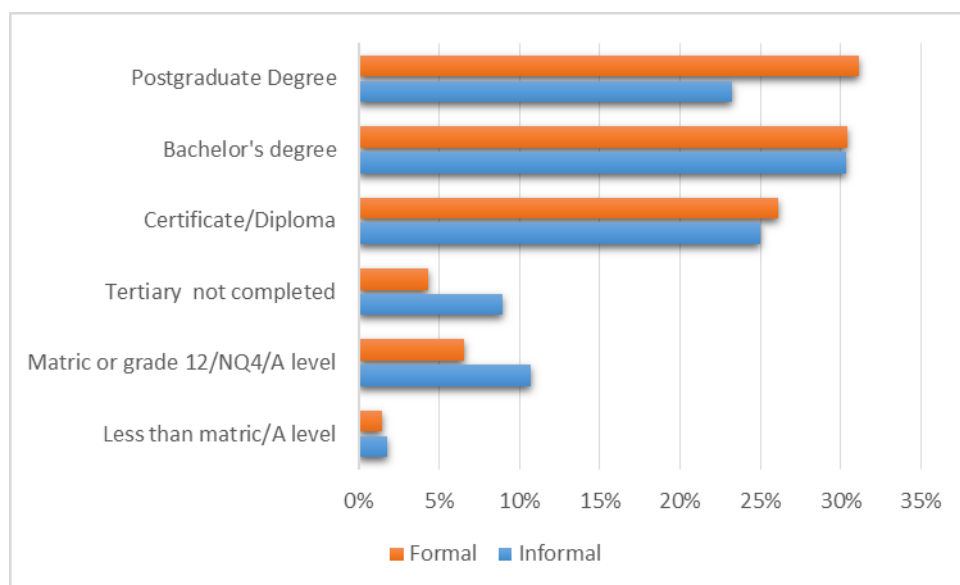


**Figure 6: Respondents characteristics: Highest Qualification**

Splitting between the formal and the informal sector, 30% of the respondents who operate in the informal sector have a Bachelor’s degree, 25% have a Certificate/Diploma and 23% have a Postgraduate degree. In the formal sector, 31% of the respondents have a Postgraduate degree, 30% of the respondents have a Bachelor’s degree and 26% of the respondents have a Certificate/Diploma.

**Table 7: Informal vs Formal – Highest Qualification**

Qualification	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Less than matric/A level	1	2%	2	1%
Matric or grade 12/NQ4/A level	6	11%	9	7%
Tertiary not completed	5	9%	6	4%
Certificate/Diploma	14	25%	36	26%
Bachelor's degree	17	30%	42	30%
Postgraduate Degree	13	23%	43	31%



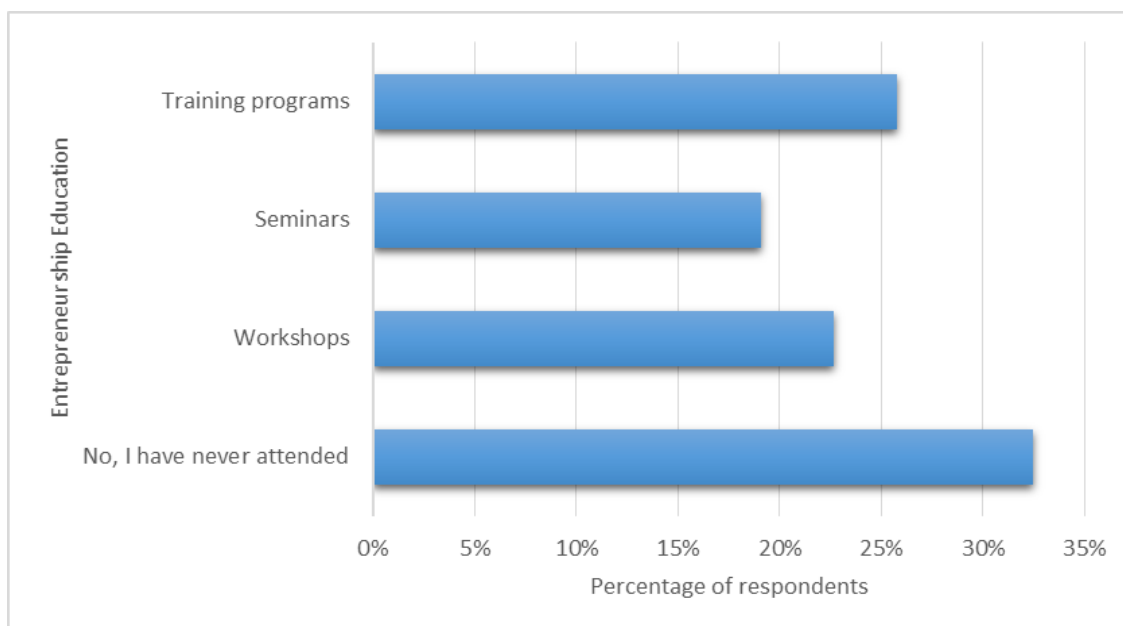
**Figure 7: Informal vs Formal – Highest Qualification**

### 4.3.3 Entrepreneurship Programs

A summary of entrepreneurs who have attended training programs is shown in Table 8. 32% of the respondents have never attended any entrepreneurship program such as a seminar, workshop or training program.

**Table 8: Respondents characteristics - Entrepreneurship training**

Training	No, I have never attended	Workshops	Seminars	Training programs
Frequency	63	44	37	50
Percentage	32%	23%	19%	26%



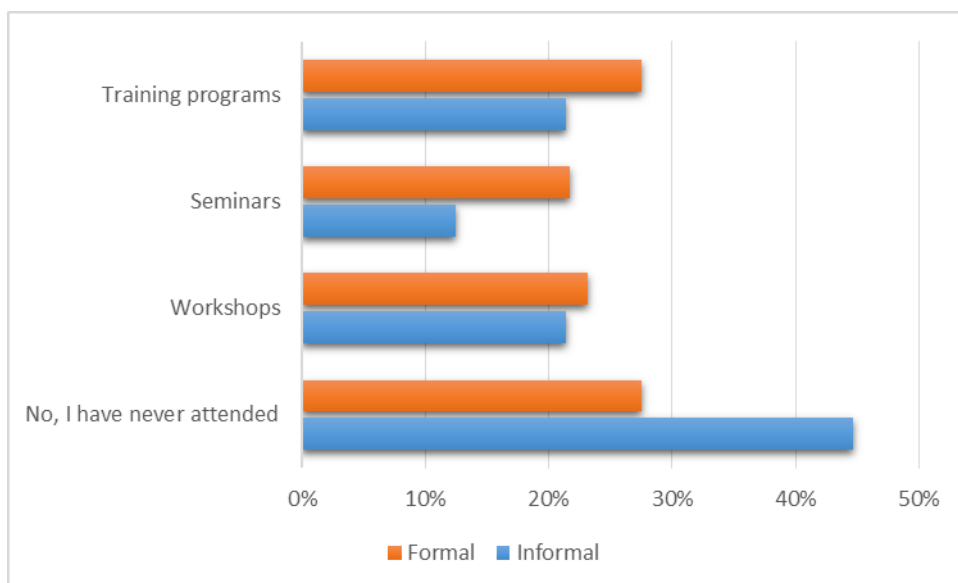
**Figure 8: Respondents characteristics - Entrepreneurship training**

Of the respondents who operate their business in the informal sector, 21% have attended entrepreneurship workshops and training programs. In the formal sector, 28% of the respondents have attended training programs and 28% have not attended any entrepreneurship programs before. Table 9 shows the percentages and the frequencies obtained from the data. Figure 9 shows the distributions of the results obtained.

**Table 9: Informal vs Formal – Entrepreneurship programs**

	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
<b>Training</b>				
<b>No, I have never attended</b>	25	45%	38	28%
<b>Workshops</b>	12	21%	32	23%
<b>Seminars</b>	7	13%	30	22%
<b>Training programs</b>	12	21%	38	28%





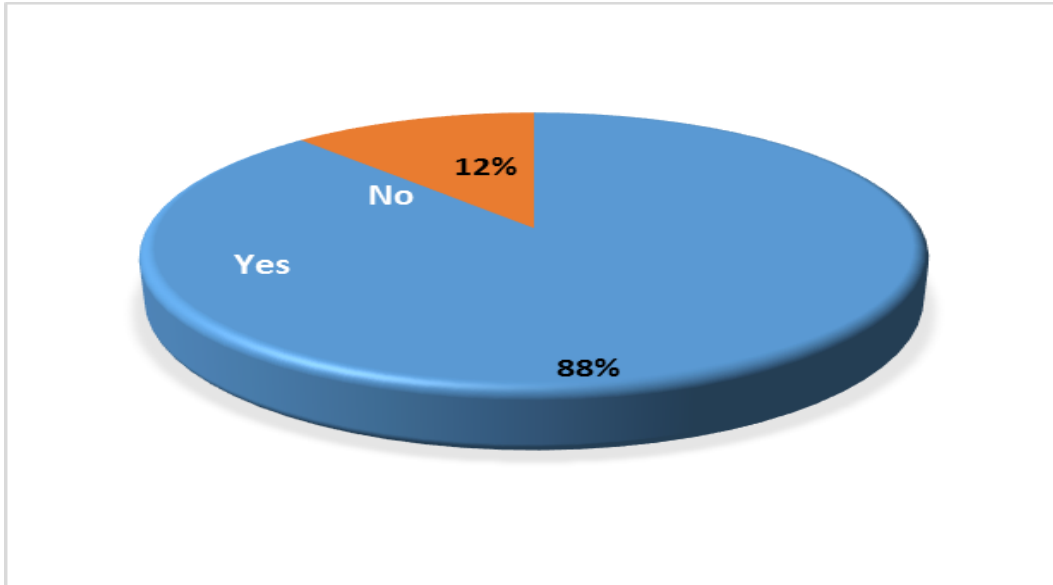
**Figure 9: Informal vs Formal – Entrepreneurship programs**

#### 4.3.4 Bank Account

In terms of a bank, a summary of the entrepreneurs who have bank accounts and the ones with no bank accounts is given in Table 10. Figure 10 shows a distribution of the respondents in a pie chart. 88% of the respondents have a bank account, 12% do not have a bank account.

**Table 10: Respondents characteristics – Bank Account**

Bank Account	Yes	No
Frequency	171	23
Percentage	88%	12%

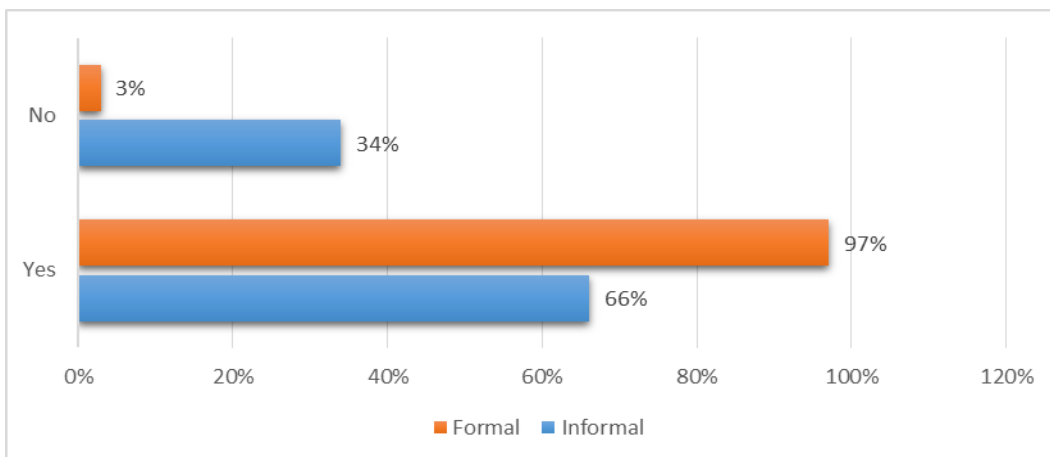


**Figure 10: Respondents characteristics – Bank account**

In terms of the separate sectors, 66% of the entrepreneurs operating in the informal sector have a bank account and 9% of the entrepreneurs operating in the formal sector have a bank account as shown in Table 11 and Figure 11 respectively.

**Table 11: Informal vs Formal – Bank Account**

	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Yes	37	66%	134	97%
No	19	34%	4	3%



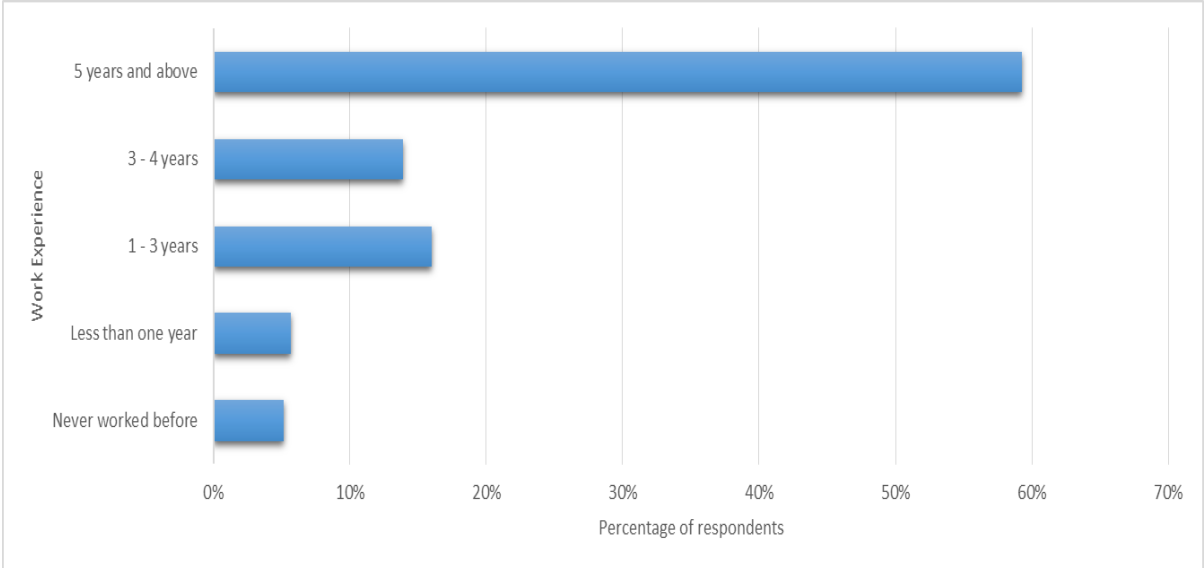
**Figure 11: Informal vs Formal – Bank account**

**4.3.5 Respondents’ work experience**

Respondents’ work experience is shown in Table 12, which shows that the highest percentage (59%) of entrepreneurs have five or more years of experience before starting a business. A summary of the distribution is also shown in Figure 12.

**Table 12: Respondents characteristics – Work Experience**

Work Experience	Never worked before	Less than one year	1 - 3 years	3 - 4 years	5 years and above
Frequency	10	11	31	27	115
Percentage	5%	6%	16%	14%	59%

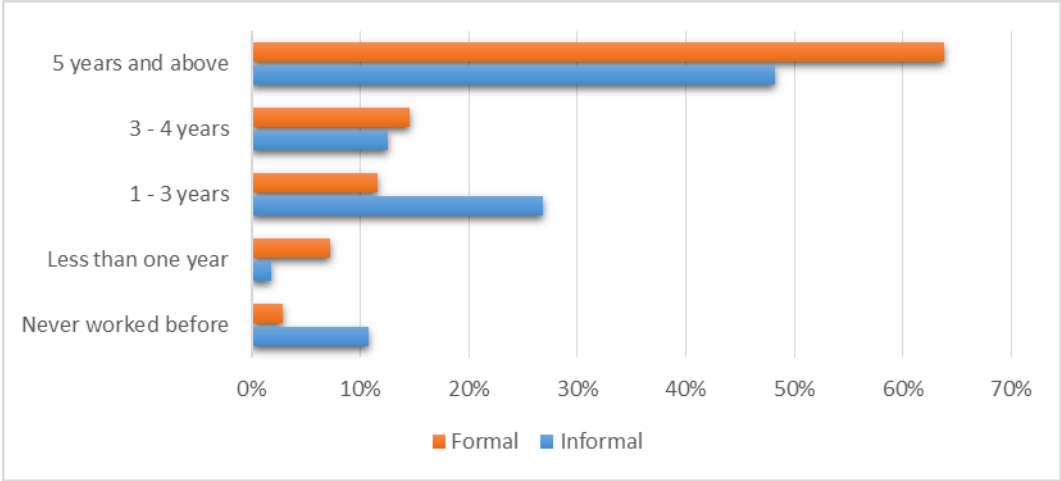


**Figure 12: Respondents characteristics - Work Experience**

Of the entrepreneurs operating in the informal economy, 48% have five years or more worth of work experience and 27% have one to three years’ work experience. In the formal economy, 64% of the respondents have five years or more worth of work experience. The summary is given by table and the distribution is shown in Figure 13.

**Table 13: Informal vs Formal – Work Experience**

Work Experience	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Never worked before	6	11%	4	3%
Less than one year	1	2%	10	7%
1 - 3 years	15	27%	16	12%
3 - 4 years	7	13%	20	14%
5 years and above	27	48%	88	64%



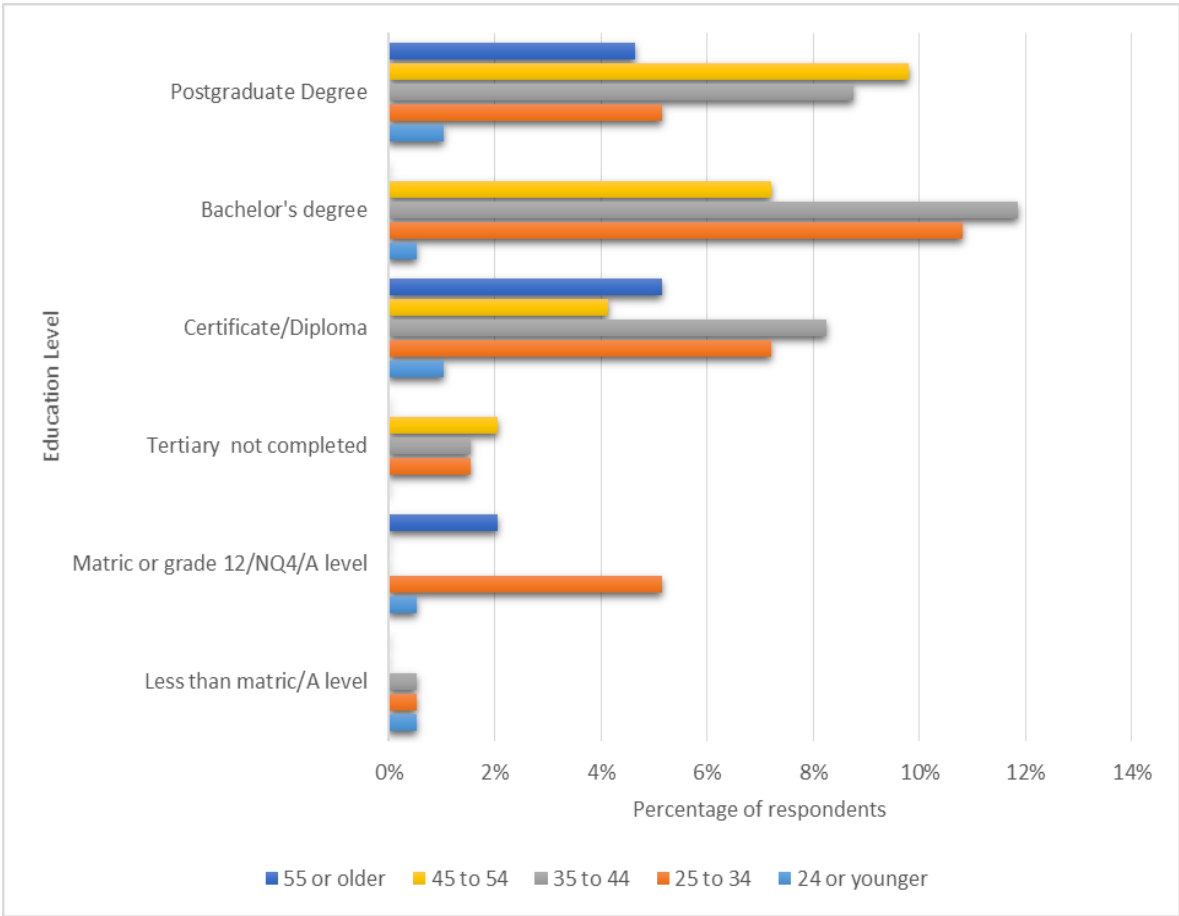
**Figure 13: Informal vs Formal – Work Experience**

**4.3.6 Cross tabulation of Age and Education level**

A cross tabulation is provided in Table 14 to give room for a cross-sectional analysis of the age in relation to the level of education. 12% of entrepreneurs between the ages of 35 and 44 have a Bachelor’s degree as their highest qualification followed by 11% of entrepreneurs in the 25 to 34 age range with the same qualification. 10% of the entrepreneurs between the ages of 45 and 54 hold a Postgraduate degree.

**Table 14: Respondents characteristics- Age and Qualification**

Qualification	24 or younger	25 to 34	35 to 44	45 to 54	55 or older
Less than matric/A level	1%	1%	1%	0%	0%
Matric or grade 12/NQ4/A level	1%	5%	0%	0%	2%
Tertiary not completed	0%	2%	2%	2%	0%
Certificate/Diploma	1%	7%	8%	4%	5%
Bachelor's degree	1%	11%	12%	7%	0%
Postgraduate Degree	1%	5%	9%	10%	5%



**Figure 14: Respondents characteristics- Age and Qualification**

## 4.4 COMPANY CHARACTERISTICS

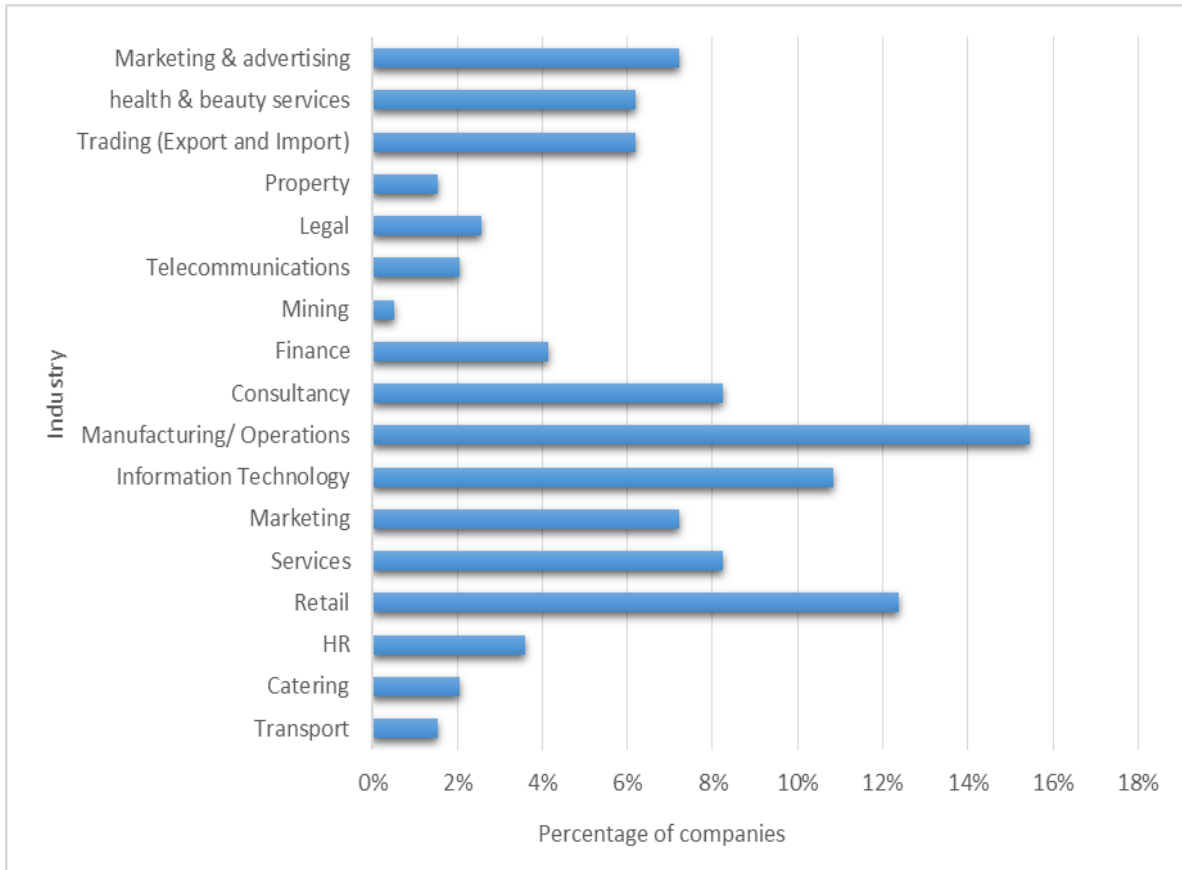
This section will present the data relating to the companies' characteristics as well as show the split between the informal and the formal economy. The tables will show the summary obtained from the data and will consist of graphs showing the distribution.

### 4.4.1 Company Industry

The industrial sector is summarised in Table 15. Most of the entrepreneurs operate in Manufacturing/Operations (15%) and Information Technology (11%). Figure 15 shows the distribution of the certain industries represented in the study.

**Table 15: Company characteristics – Industry**

Industry	Frequency	Percentage
Transport	3	2%
Catering	4	2%
HR	7	4%
Retail	24	12%
Services	16	8%
Marketing	14	7%
Information Technology	21	11%
Manufacturing/ Operations	30	15%
Consultancy	16	8%
Finance	8	4%
Mining	1	1%
Telecommunications	4	2%
Legal	5	3%
Property	3	2%
Trading (Export and Import)	12	6%
health & beauty services	12	6%
Marketing & advertising	14	7%

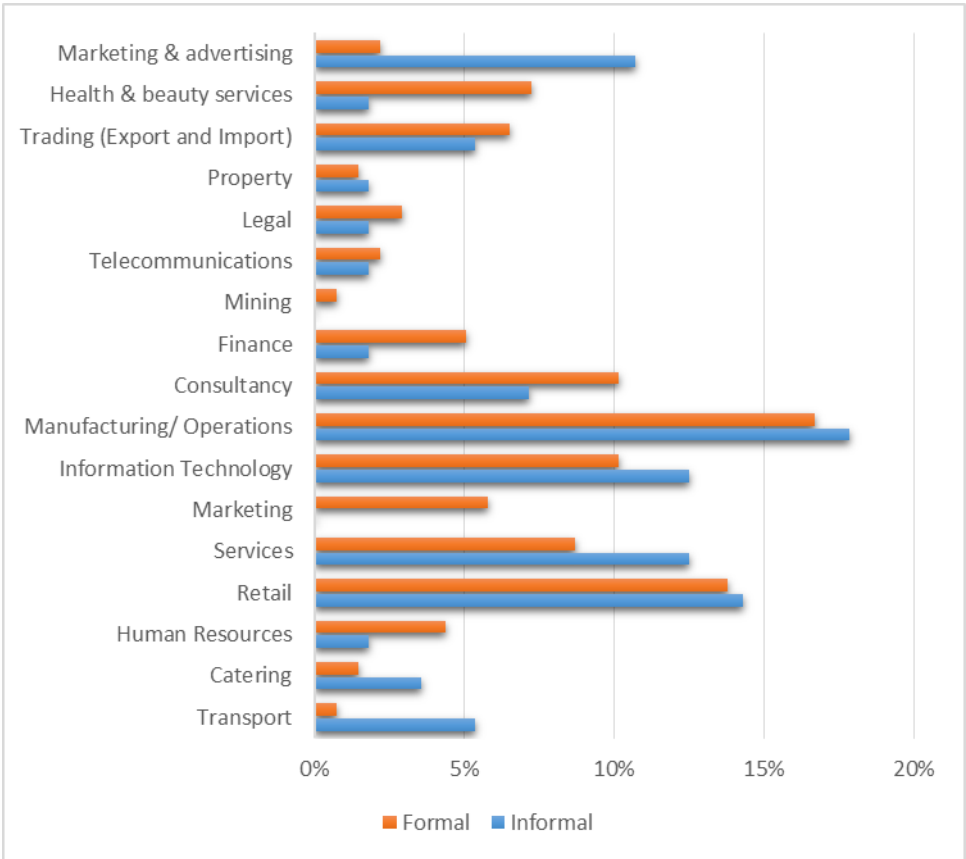


**Figure 15: Company characteristics – Industry**

In terms of the informal sector, the highest number of respondents operates in the Manufacturing/Operations (18%) and Retail (14%) sectors. In the formal sector, the highest number of respondents operates in the Manufacturing/Operations (17%) and Retail (14%) as well.

**Table 16: Informal vs Formal – Business Industrial Sector**

Business Sector	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Transport	3	5%	1	1%
Catering	2	4%	2	1%
Human Resources	1	2%	6	4%
Retail	8	14%	19	14%
Services	7	13%	12	9%
Marketing		0%	8	6%
Information Technology	7	13%	14	10%
Manufacturing/ Operations	10	18%	23	17%
Consultancy	4	7%	14	10%
Finance	1	2%	7	5%
Mining		0%	1	1%
Telecommunications	1	2%	3	2%
Legal	1	2%	4	3%
Property	1	2%	2	1%
Trading (Export and Import)	3	5%	9	7%
Health & beauty services	1	2%	10	7%
Marketing & advertising	6	11%	3	2%



**Figure 16: Informal vs Formal – Business Industrial Sector**

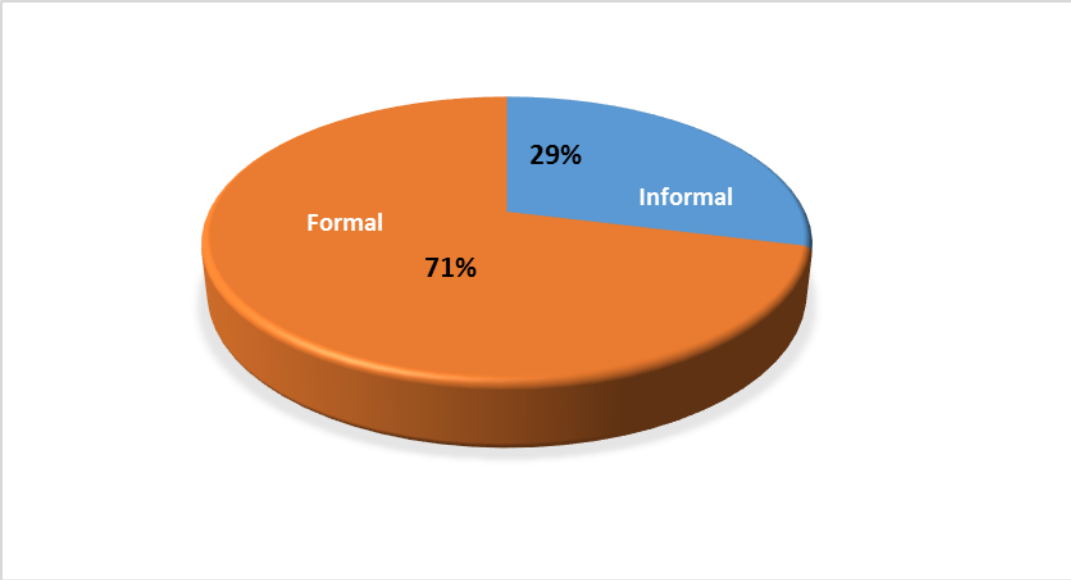


**4.4.2 Economic Sector**

A summary of the economic sector is presented in Table 17 It shows that 71% of the entrepreneurs operate in the formal economic sector and 29% of the entrepreneurs operate in the informal sector. The distribution is shown in Figure 17.

**Table 17: Company characteristics – Economic sector**

Economic Sector	Informal	Formal
Frequency	56	138
Percentage	29%	71%



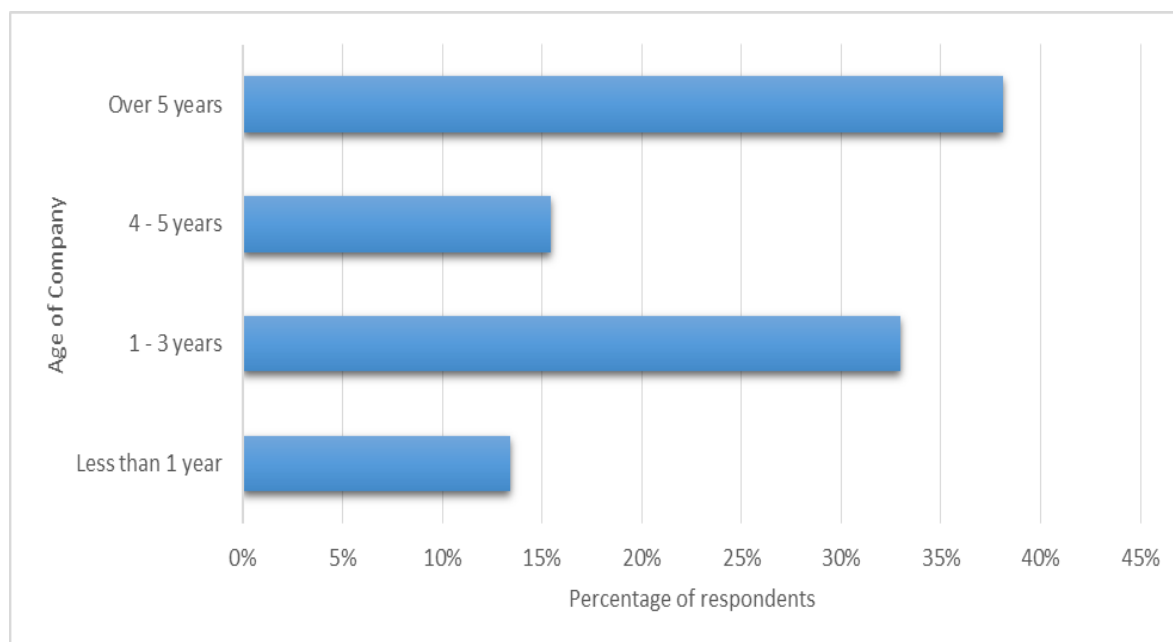
**Figure 17: Company characteristics – Economic sector**

**4.4.3 Company Age**

The company age for the respondents is summarised in Table 18. Many of the companies (38%) were founded before 2009 and are over five years of age. Other companies (33%) were founded between 2011 and 2013 and are one to three years of age. The distribution of the age of the businesses is shown in Figure 18.

**Table 18: Company characteristics - Company Age**

Company Age	Less than 1 year	1 - 3 years	4 - 5 years	Over 5 years
Frequency	26	64	30	74
Percentage	13%	33%	15%	38%

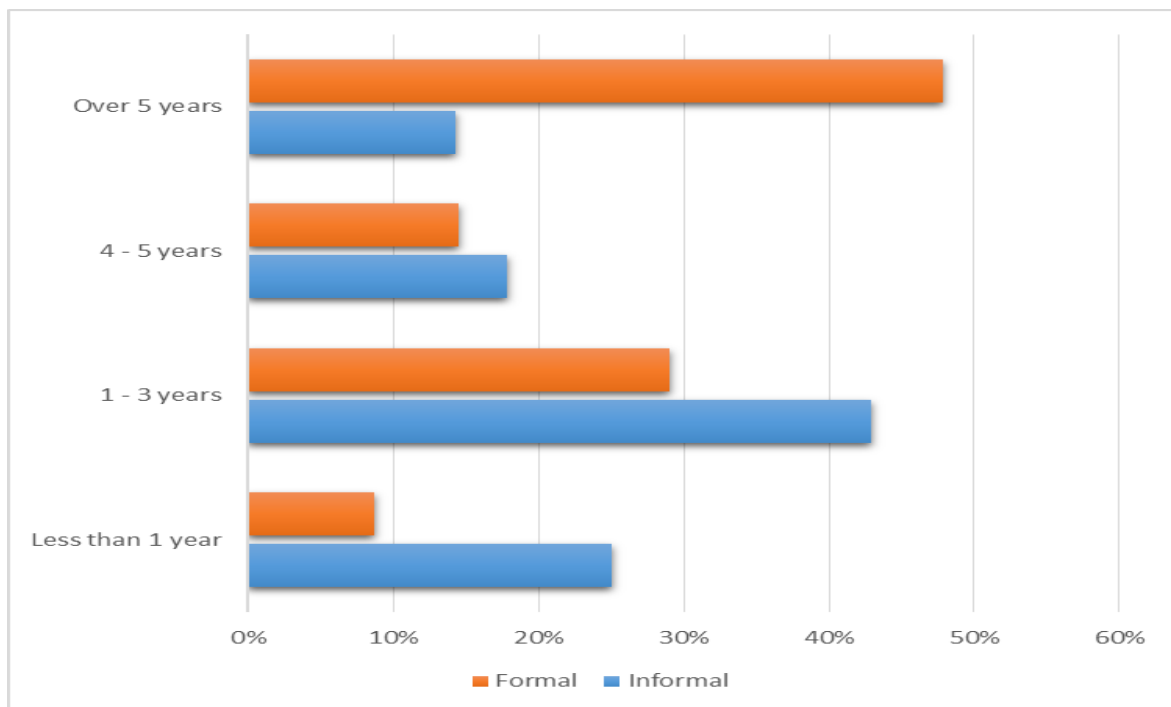


**Figure 18: Company characteristics - Company Age**

The entrepreneurs with their businesses in the informal economy mostly have companies that have been operating for between one and three years (43%) and 25% have companies that are less than one year old. The formal economy has many respondents with companies that are older than five years (48%) followed by companies ranging from one to three years of age (29%). Table 19 shows the frequency and percentage of the responses and Figure 19 shows the distribution.

**Table 19: Informal vs Formal – Company Age**

Company Age	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Less than 1 year	14	25%	12	9%
1 - 3 years	24	43%	40	29%
4 - 5 years	10	18%	20	14%
Over 5 years	8	14%	66	48%



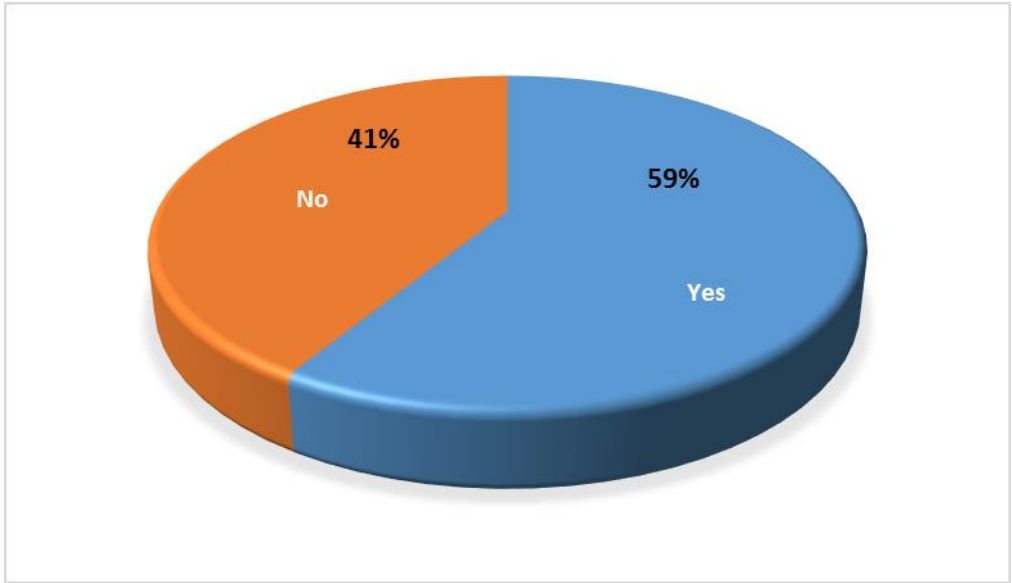
**Figure 19: Informal vs Formal – Company Age**

#### 4.4.4 Number of companies

A summary of whether an entrepreneur’s current business is his or her first business or not is displayed in Table 20. 59% of the entrepreneurs have the current business as their first one and the rest have had businesses before or have more than one. The distribution of these responses is shown in Figure 20. 41% of the respondents have had more than one company.

**Table 20: Company characteristics: First business**

1st Business	Yes	No
Frequency	114	80
Percentage	59%	41%

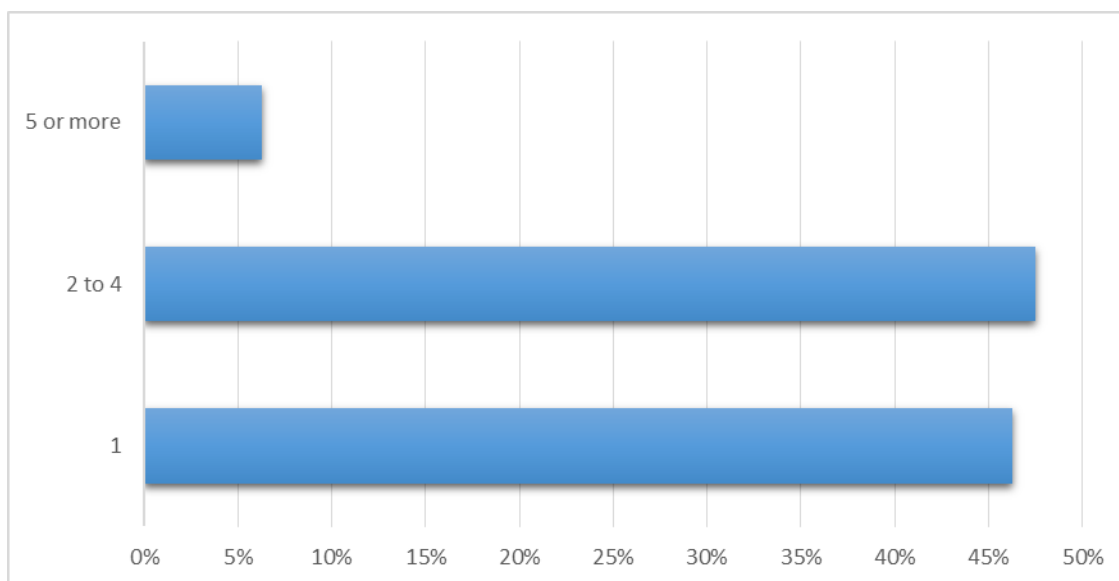


**Figure 20: Company characteristics: First business**

Of the 41% of respondents that have had or currently have more than one company 48% had two to four companies and 46% had one business.

**Table 21: Company characteristics – No. of previous/current companies**

No. of Businesses	1	2 to 4	5 or more
Frequency	37	38	5
Percentage	46%	48%	6%



**Figure 21: Company characteristics – No. of previous companies**

The respondents who had their current business as their first business at the time of the study in the informal sector were 66% and 55% in the formal sector. 34% in the informal sector and 45% in the formal sector have had businesses before. Of those respondents in the informal sector who have had businesses before, 47% had operated one business so far and 53% had two to four businesses so far. In the formal economy, 46% have had one and another 46% have had two to four businesses so far. Tables 22 and 23 show a summary of the responses obtained from the respondents.

**Table 22: Informal vs Formal - 1<sup>st</sup> Business**

1st Business	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Yes	37	66%	76	55%
No	19	34%	62	45%

**Table 23: Informal vs Formal – Number of previous businesses**

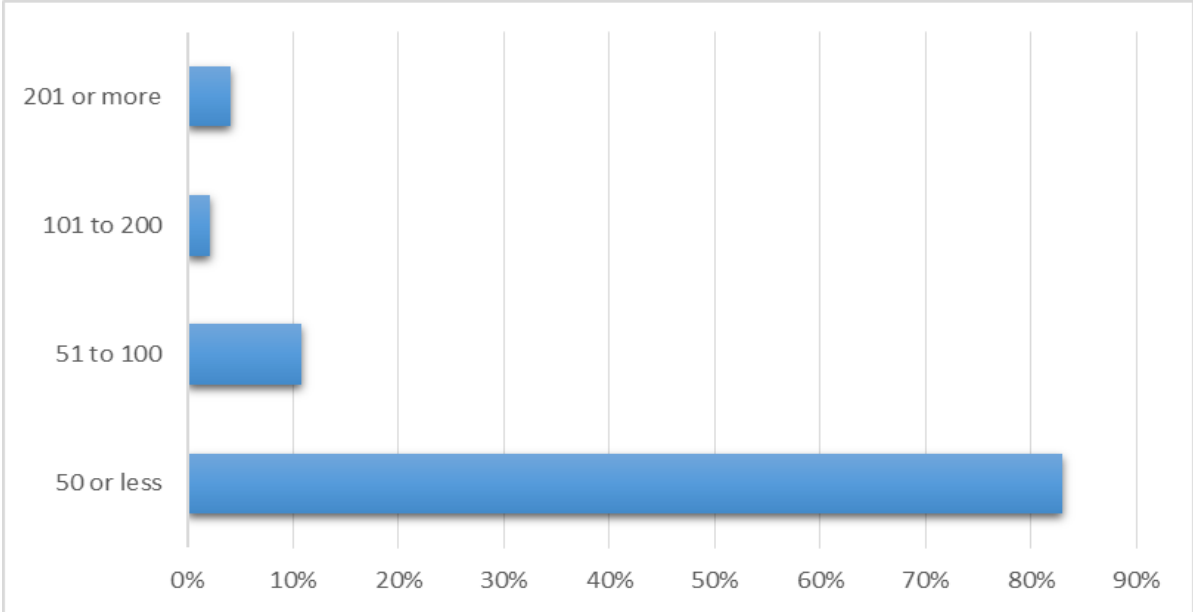
No. of Businesses	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
1	9	47%	28	46%
2 to 4	10	53%	28	46%
5 or more			6	8%

**4.4.5 Number of employees**

The summary of the number of employees that each company has is summarised in Table 24. Figure 22 shows the distribution of the summary. A large percentage (83%) of respondents has small and medium businesses which have 50 or fewer employees.

**Table 24: Company characteristics – No. of Employees**

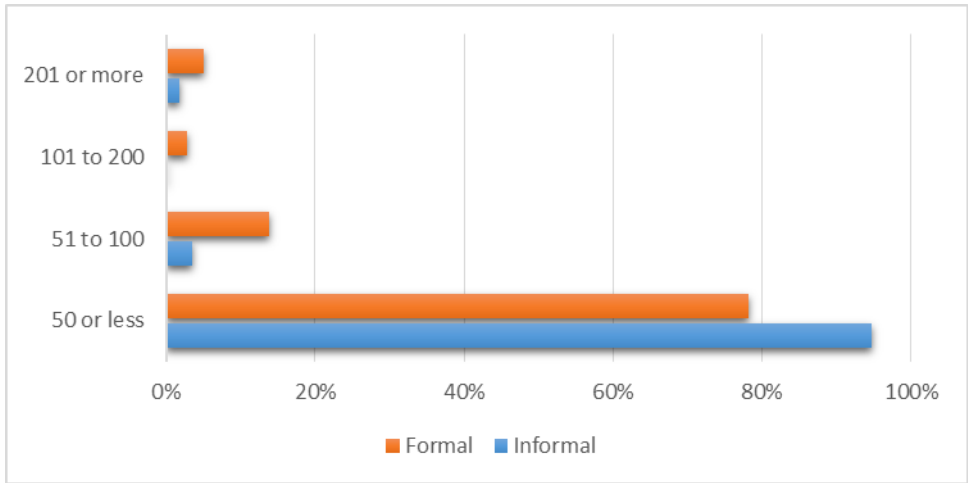
No. of Employees	50 or less	51 to 100	101 to 200	201 or more
Frequency	161	21	4	8
Percentage	83%	11%	2%	4%



**Figure 22: Company characteristics – No. of Employees**

**Table 25: Informal vs Formal – Number of Employees**

No. of Employees	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
50 or less	53	95%	108	78%
51 to 100	2	4%	19	14%
101 to 200		0%	4	3%
201 or more	1	2%	7	5%



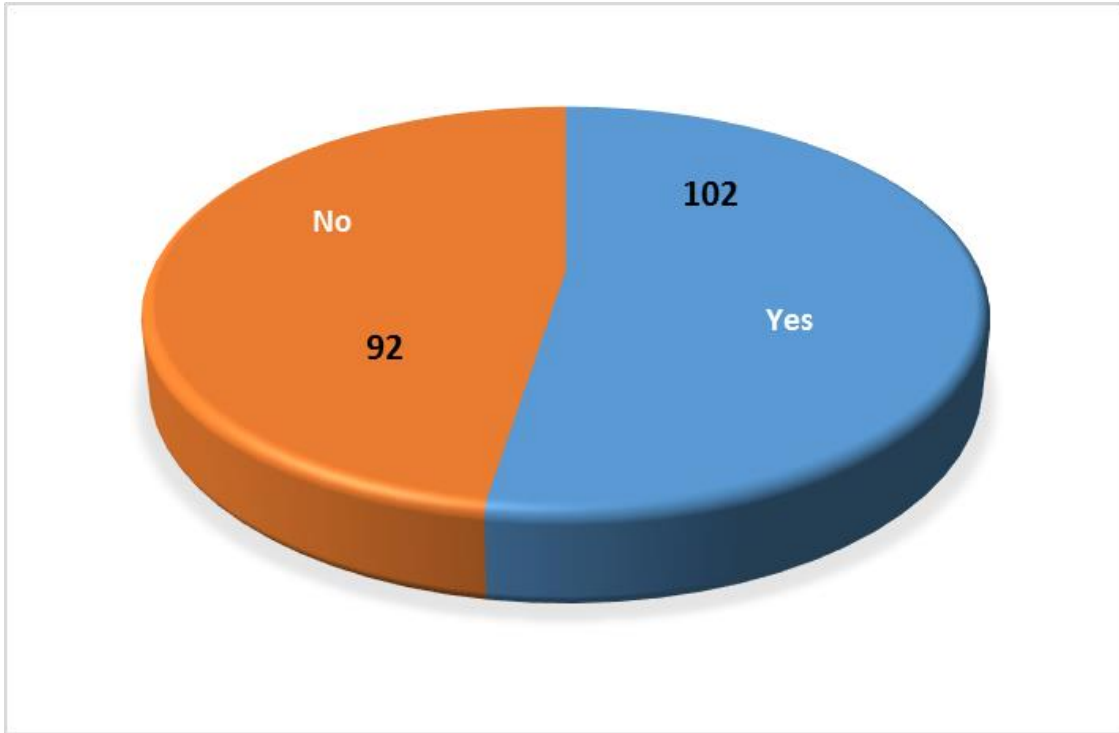
**Figure 23: Informal vs Formal – Number of Employees**

**4.4.6 Job field**

Respondents were asked if they started their businesses in the same field in which they worked previously. A summary of the answers are shown in Table 26 and Figure 24.

**Table 26: Company characteristics – Company in similar field as work**

Job Field	Yes	No
Frequency	102	92
Percentage	53%	47%



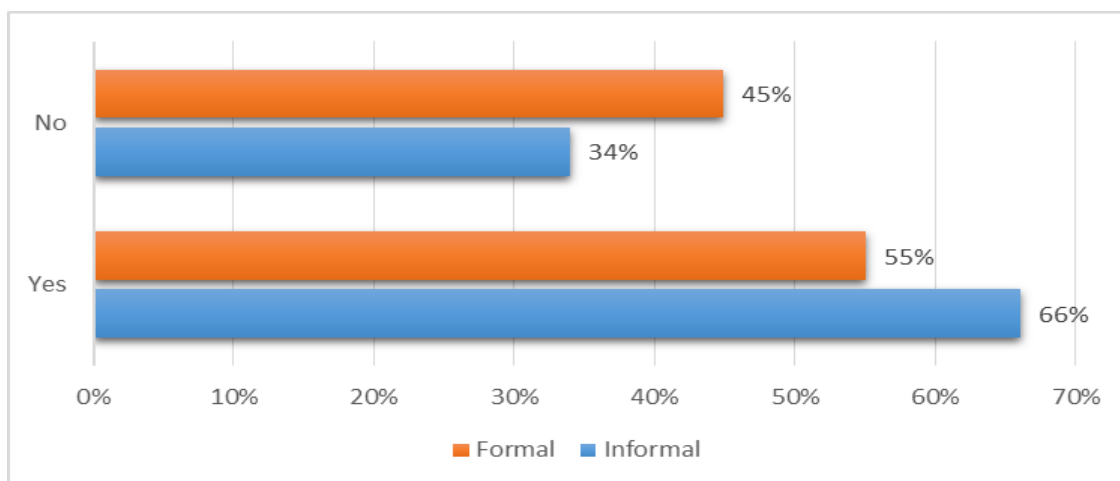
**Figure 24: Company characteristics – Company in similar field as work**

In terms of the informal sector, the number of respondents who started their company in the same field as their work was 45% and in the formal sector, it was 56%.

**Table 27: Informal vs Formal - Company in similar field as work**

Job Field	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Yes	25	45%	77	56%
No	31	55%	61	44%





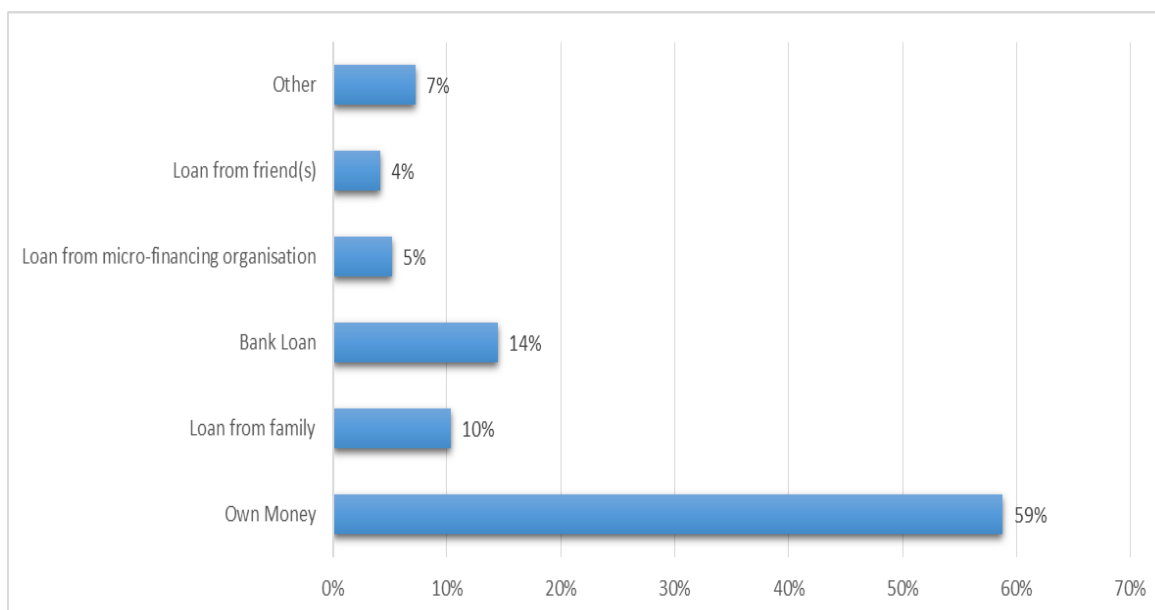
**Figure 25: Informal vs Formal -Company in similar field as work**

#### 4.4.7 Finance to Start-up business

In terms of how the entrepreneurs financed their businesses, a summary is shown in Table 28. Most of the entrepreneurs financed their business with their own money (59%) and others used bank loans (14%). A distribution of these percentages is shown in Figure 26.

**Table 28: Company characteristics – Business Finance**

Finance of Business	Frequency	Percentage
Own Money	114	59%
Loan from family	20	10%
Bank Loan	28	14%
Loan from micro-financing organisation	10	5%
Loan from friend(s)	8	4%
Other	14	7%

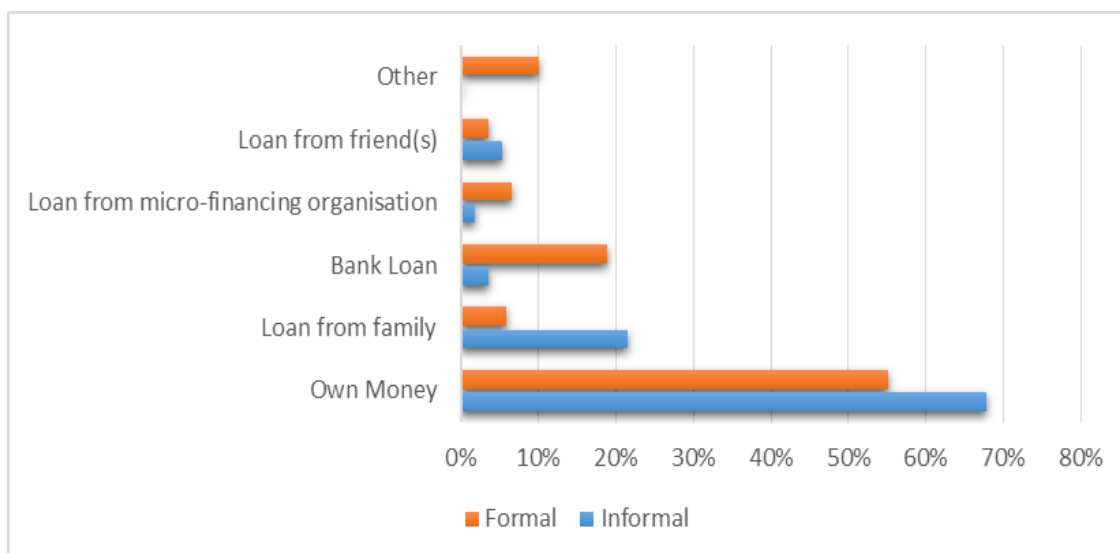


**Figure 26: Company characteristics – Finance for Business**

In terms of the informal sector, 68% of the respondents operating in the informal sector started their businesses with their own money, 21% of the respondents started their businesses with a loan from family. In the formal sector, 55% of the respondents started their businesses with their own money, 19% of the respondents started their businesses with finance from a bank.

**Table 29: Informal vs Formal – Finance of Business**

Finance of Business	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Own Money	38	68%	76	55%
Loan from family	12	21%	8	6%
Bank Loan	2	4%	26	19%
Loan from micro-financing organisation	1	2%	9	7%
Loan from friend(s)	3	5%	5	4%
Other		0%	14	10%



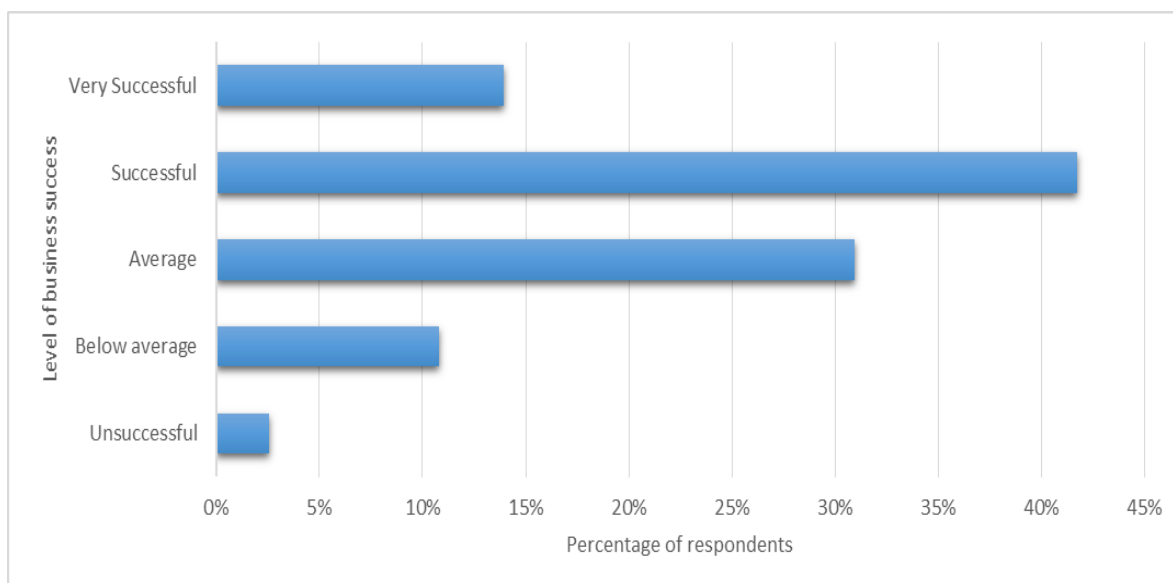
**Figure 27: Informal vs Formal – Finance of Business**

#### 4.4.8 Company Status

The summary of the company status is shown in Table 30. 42% of the businesses in the study are successful, followed by 31% of businesses which are average. A very low percentage of businesses are unsuccessful. Figure 28 shows the distribution.

**Table 30: Company characteristics – Company Status**

Success Status	Unsuccessful	Below average	Average	Successful	Very Successful
Frequency	5	21	60	81	27
Percentage	3%	11%	31%	42%	14%

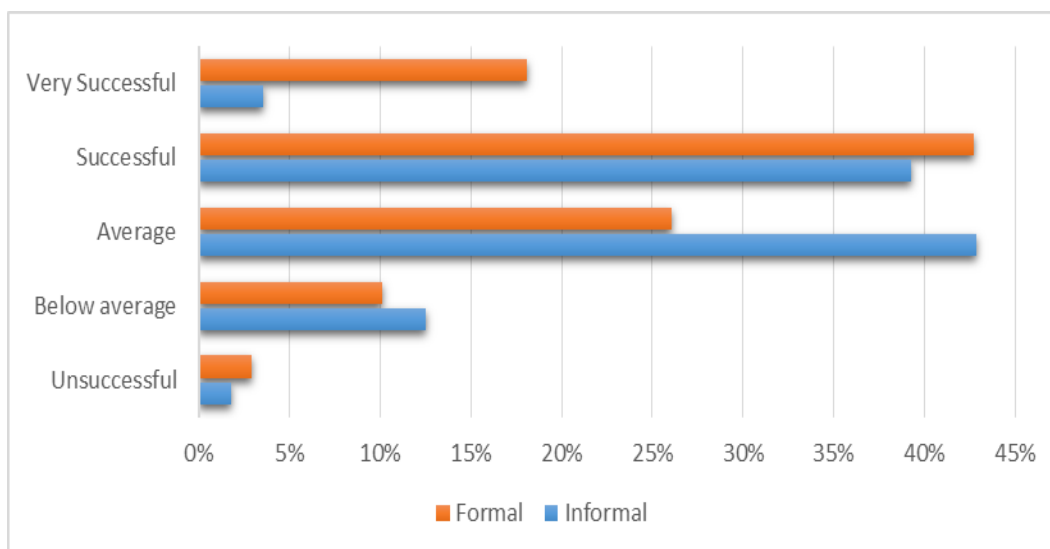


**Figure 28: Company characteristics – Company Status**

In the informal sector, 43% of the respondents rated their businesses as average in terms of success, 39% of the respondents rated their businesses as successful. In the formal sector, 43% of the respondents rate their businesses as successful; this is 4% more than the respondents in the informal sector. 26% of the respondents rated their businesses as average in terms of success.

**Table 31: Informal vs Formal – Company Status**

Success Status	Informal		Formal	
	Frequency	% of sector	Frequency	% of sector
Unsuccessful	1	2%	4	3%
Below average	7	13%	14	10%
Average	24	43%	36	26%
Successful	22	39%	59	43%
Very Successful	2	4%	25	18%



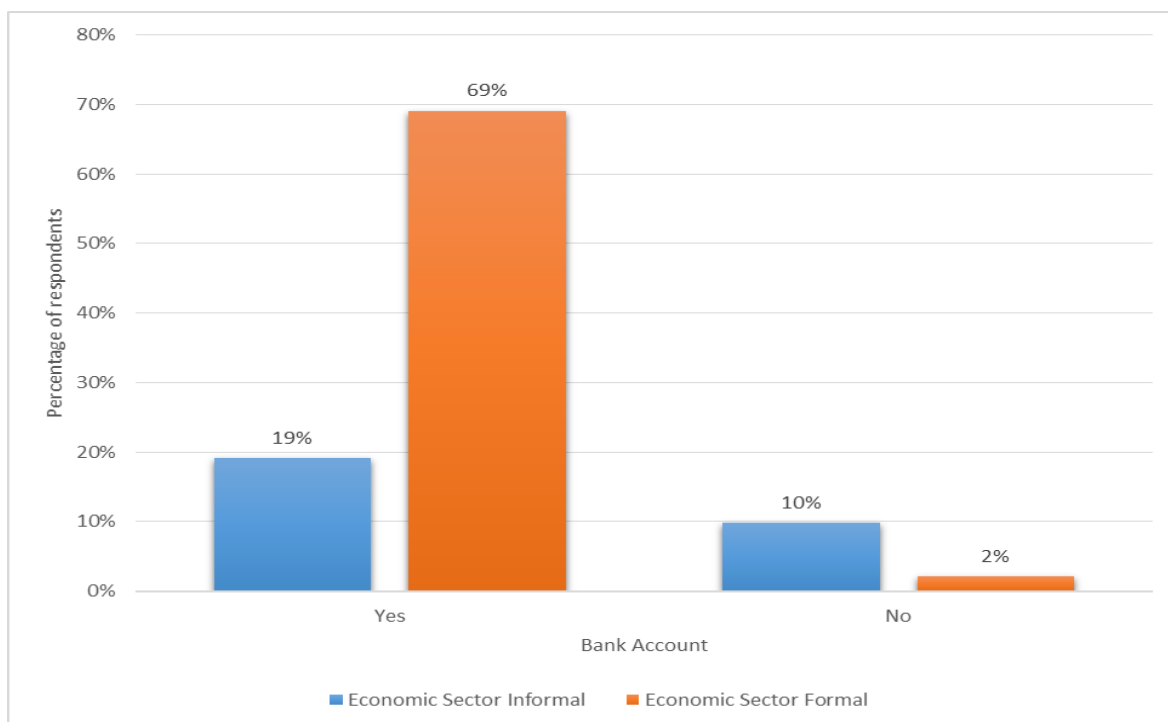
**Figure 29: Informal vs Formal – Company Status**

#### **4.4.9 Cross tabulation of Economic sector and respondents with bank account**

A cross table showing the relationship between the economic sectors in which the businesses operate and the whether the entrepreneur has a bank account is shown in Table 32. 69% of the entrepreneurs who operate their businesses in the formal sector have a bank account. Only 2% of the entrepreneurs in the formal sector do not have a bank account.

**Table 32: Company characteristics – Cross table: Economic sector and bank account**

Bank Account	Economic Sector	
	Informal	Formal
<b>Yes</b>	19%	69%
<b>No</b>	10%	2%



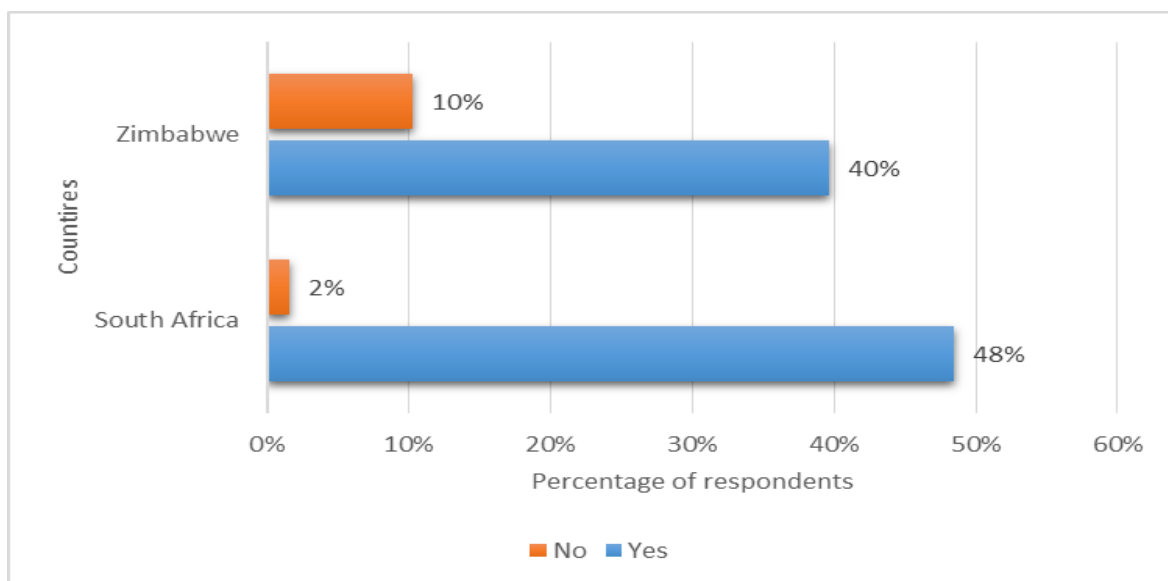
**Figure 30: Company characteristics – Cross table: Economic sector and bank account**

#### 4.4.10 Cross tabulation of country and entrepreneurs with bank account

A summary of how many entrepreneurs in a specific country have a bank account is shown in Table 33. 48% of the entrepreneurs in South Africa have a bank account and 40% of the entrepreneurs in Zimbabwe have a bank account. Zimbabwe has the most entrepreneurs (10%) that do not have a bank account.

**Table 33: Company characteristics – Cross table: Bank Account and Country**

		Country	
		South Africa	Zimbabwe
Bank Account	Yes	48%	40%
	No	2%	10%

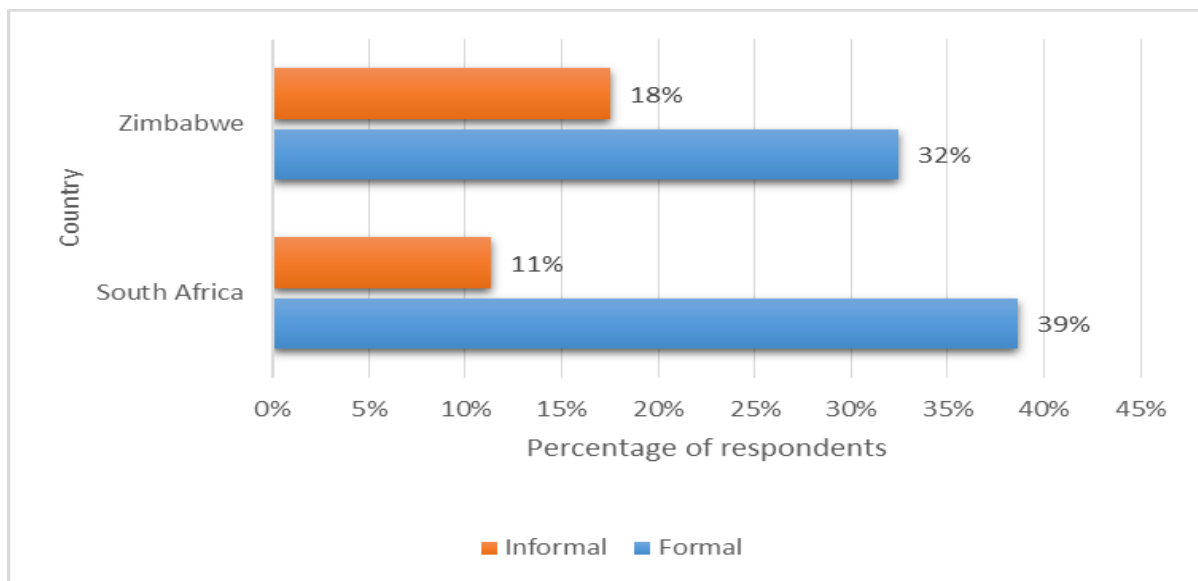


#### 4.4.11 Cross tabulation of country and economic sector

Table 34 shows a summary of how many entrepreneurs operate in the formal and informal economic sectors for a particular country. 39% of the respondents in South Africa and 32% of the respondents from Zimbabwe operate in the formal sector. 18% of respondents operate in the informal sector in Zimbabwe.

**Table 34: Company characteristics – Cross table: Economic Sector and Country**

		Country	
		South Africa	Zimbabwe
Economic Sector	Formal	39%	32%
	Informal	11%	18%



**Figure 31: Company characteristics – Cross table: Economic Sector and Country**

## 4.5 VALIDITY

This section presents the tests done such as those of validity. This study made use of explanatory factor analysis in order to determine the structure of the scales. This structure helps to confirm each of the theoretically derived scales and the correlation of the variables. Patterns are shown among the variables when factor analysis is done. Factors are the variables that relate to each other to form a correlation, which is revealed in these patterns.

Convergent validity was tested to determine if the variables had high or low factor loadings on the factors. If variables converge well they are likely to have high factor loadings such as 0.85. Divergent validity was also checked in cases whereby certain variables that load high on one factor that loads high on other factors. The factors are constructed and are ruled on their strength. High factor loadings indicate a strong relationship between the factor and the variables thus explaining certain variations in the data.

The research used existing scales from different theoretical areas and combined them in this study and added minimal information. The scales that provided high



levels of validity are mainly considered in this sub-section and discussed in the rest of the analysis.

#### 4.5.1 Independent variables

This sub-section represents the results obtained from the validity tests done.

##### 4.5.1.1 Strategy

Ten items were considered in order to measure strategy in relation to entrepreneurship activity. The Kaiser-Meyer-Olkin (KMO) was made use of to measure sampling adequacy. Each of the items in the sub-scale. The KMO measure of sampling adequacy was high at 0.763 and Barlett's test of sphericity was significant ( $p < 0.001$ ). Table 35 shows these values done for the tests of assumptions of factor analysis.

**Table 35: The KMO value for Strategy items**

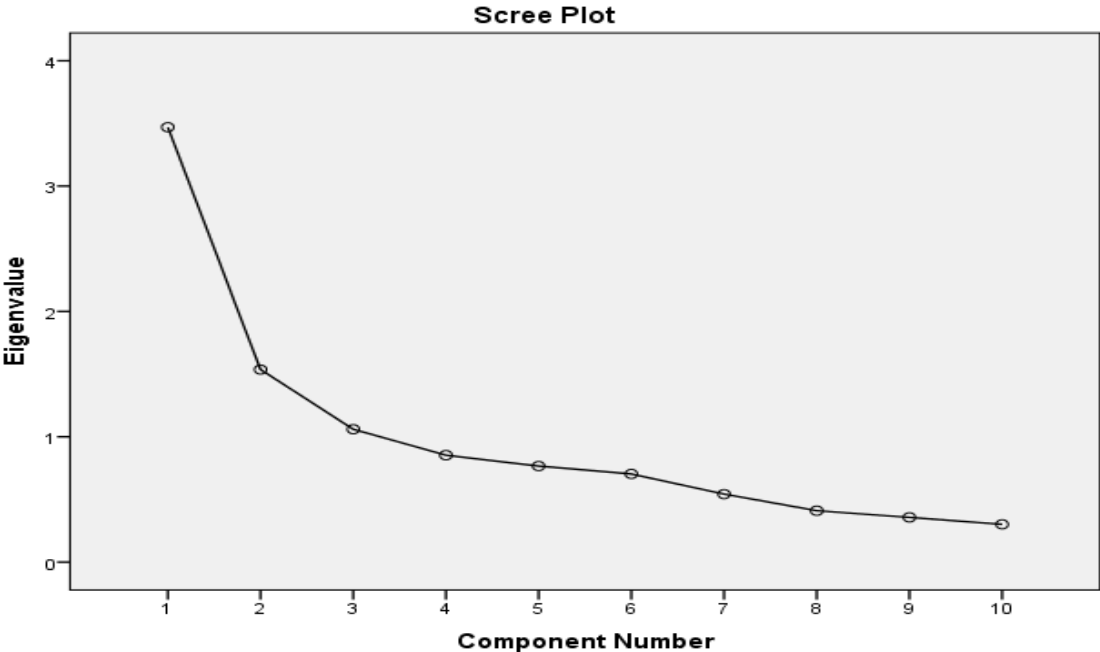
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.763
Bartlett's Test of Sphericity	Approx. Chi-Square	524.568
	df	45
	Sig.	.000

The eigenvalues for the strategy scale are shown in Table 36. The table shows a three-factor solution explaining a 60.664% cumulative variance. The three factors have eigenvalue of values that are larger than 1. This indicates that a three-factor solution is appropriate to determine the factor structure of the scale. The number of constructed variables that were in line with the existing theory where the constructed scale was three. The cumulative variance of 60.664 is just above the recommended 60%.

**Table 36: Strategy-Eigenvalues and cumulative variance explained by the factors**

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.470	34.698	34.698	3.470	34.698	34.698	2.478	24.778	24.778
2	1.537	15.366	50.064	1.537	15.366	50.064	1.877	18.767	43.545
3	1.060	10.600	60.664	1.060	10.600	60.664	1.712	17.118	60.664

The scree plot for the factors is shown in Figure 32 and it shows a significant difference amongst the first three factors.



**Figure 32: Scree plot for Strategy**

Table 37 shows the factor loadings of 0.54 and greater. These can be interpreted as significant as they significantly correlate with the particular factors. The eigenvalue is 3.4, which shows how well-defined the factor was and accounted for 34.7% of variance. The first factor represents values between 0.605 and 0.667 with an average of 0.64.

The second factor represents three items with values from 0.55 to 0.844 representing an average of 0.721. The eigenvalues for this factor was 1.53

representing a variance of 15.366 and a cumulative percentage of 50.1%. The third factor has two items of the values 0.64 and 0.891 with an average of 0.766. The Strategy 3 item has a fairly high loading on factor 1 and 2 showing cross-loading. The item makes was inspected and made logical sense in factor 2.

**Table 37: Strategy Factor loadings**

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Strategy10	<b>.667</b>	-.185	-.006
Strategy9	<b>.663</b>	.016	-.052
Strategy6	<b>.647</b>	.216	.379
Strategy5	<b>.625</b>	.321	.382
Strategy4	<b>.605</b>	.290	.430
Strategy2	.045	<b>.844</b>	-.072
Strategy1	-.056	<b>.771</b>	.059
Strategy3	.481	<b>.548</b>	.146
Strategy7	-.090	.000	<b>.891</b>
Strategy8	.416	-.038	<b>.640</b>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

These results present the 3 factors have eigenvalues greater than 1 meaning that the items can be reduced to 3 factors. The study used the orthogonal method to ensure that the rotated components of factors are not correlated to each other. This then allows for regression to take place. The third factor is weak as it loads with only two items. After extraction and rotation of the factors, the communalities and factor loadings output was as follows in Table 38.

**Table 38: Strategy communality extraction estimates**

Final Communality Estimates	Extraction
My ability to produce a business plan has contributed to the success of my business	.601
My business and managerial skills have been a contributing factor in the success of my business	.719
I monitor progress towards strategic goals for my business.	.553
I constantly redesign my business to better meet long-term objectives due to the changes in the economy.	.635
I evaluate results against strategic goals.	.640
As I define the business strategies I am driven by my perception of opportunity.	.609
I am not constrained by the resources at or not at hand.	.803
I adapt freely to changing circumstances without much concern for past practices	.585
The resources that we have significantly influence my business strategies.	.442
Some of the strategies that I apply in order to ensure the success of my business in my country are critical point planning, being opportunistic and reactive.	.479

#### 4.5.1.2 Factors

Twelve items were considered in relation to factors that influence entrepreneurship success. The Kaiser-Meyer-Olkin (KMO) was made use of to measure sampling adequacy. Each of the items in the sub-scale. The KMO measure of sampling adequacy was high at 0.741 and Barlett's test of sphericity was significant ( $p < 0.001$ ). Table 39 shows these values done for the tests of assumptions of factor analysis.

**Table 39: The KMO value for Factors items**

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.741
Approx. Chi-Square	650.572
Bartlett's Test of Sphericity	df
	66
	Sig.
	.000

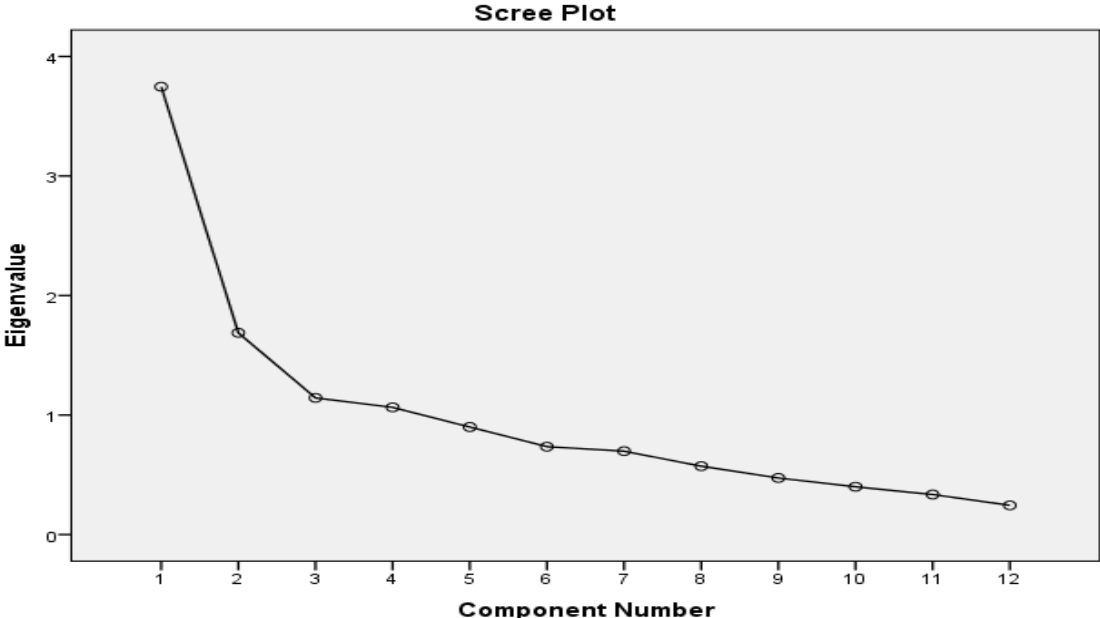
The eigenvalues for the strategy scale are shown in Table 40. The table shows a 3-factor solution explaining a 54.8% cumulative variance. The four factors have eigenvalue of values that are larger than 1. This indicates that a four-factor solution is appropriate to determine the factor structure of the scale. The number of constructed variables that were in line with the existing theory on the

constructed scale was three. The cumulative variance 54.817% is just slightly below the recommended 60% as this is a three-factor solution.

**Table 40: Factors-Eigenvalues and cumulative variance explained by the factors**

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.747	31.223	31.223	3.747	31.223	31.223	2.872	23.932	23.932
2	1.688	14.066	45.289	1.688	14.066	45.289	2.009	16.740	40.672
3	1.143	9.528	54.817	1.143	9.528	54.817	1.697	14.145	54.817

The scree plot for the factors is shown in Figure 33 and it shows a significant difference amongst the first three factors.



**Figure 33: Scree plot for Factors**

Table 41 shows the factor loadings of 0.40 and greater. These can be interpreted as significant as they significantly correlate with the particular factors. The eigenvalue being 3.754 which shows how well-defined the factor was and accounted for 31,223% of variance. The first factor represents items between 0.412 and 0.739 with an average of 0.62.

The other second factor represents three items with values from 0.402 to 0.85 representing an average of 0.694. The eigenvalues for this factor was 1.69 representing a variance of 14.066 and a cumulative percentage of 45.289%.

**Table 41: Factors Factor loadings**

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Factors2	.739	.241	-.022
Factors10	.721	.229	-.074
Factors1	.711	.113	.080
Factors3	.660	-.115	.360
Factors4	.648	-.092	.483
Factors11	.436	-.109	.363
Factors6	.412	.401	.333
Factors8	.186	.850	.029
Factors9	.081	.831	.202
Factors12	.001	.402	.004
Factors5	.194	.066	.788
Factors7	-.074	.336	.646

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 7 iterations.

These results present that the four factors have eigenvalues greater than 1 meaning that the items can be reduced to four factors. After extraction and rotation of the factors, the communalities and factor loadings output was as follows in Table 42 with the communalities greater than 0.16.

**Table 42: Factors communality extraction estimates**

<b>Final Communality Estimates</b>	<b>Extraction</b>
In my country, there is lack of collateral-free loan	.524
In my country, there are high utility expenses	.605
In my country, there is shortage of capital and lack of start-up training and skill	.579
In my country, there is lack of start-up training and skill	.662
In my networks, there is non-cooperation from another entrepreneur/other entrepreneurs in terms of support and network formation	.663
When prices fluctuate rapidly in a short space of time, it poses a negative impact on my business.	.442
High economic volatility in my country presents more entrepreneurship opportunities	.535
I often adapt roles such as that of an innovator depending on the stage of growth of my business	.757
I often adapt certain roles depending on the conditions of the market controllers and the economy	.739
In my country, there are expensive borrowing rates	.577
In my country there are underdeveloped financial markets	.334
I make use of the latest technology in my business in order to gain competitive advantage	.161

#### **4.5.1.3 Challenges**

Thirteen items were considered to measure strategy in relation with entrepreneurship activity. The Kaiser-Meyer-Olkin (KMO) was made use of in order to measure sampling adequacy. Each of the items in the sub-scale. The KMO measure of sampling adequacy was high at 0.825 and Barlett's test of sphericity was significant ( $p < 0.001$ ). Table 43 shows these values done for the tests of assumptions of factor analysis.

**Table 43: The KMO value for Challenges items**

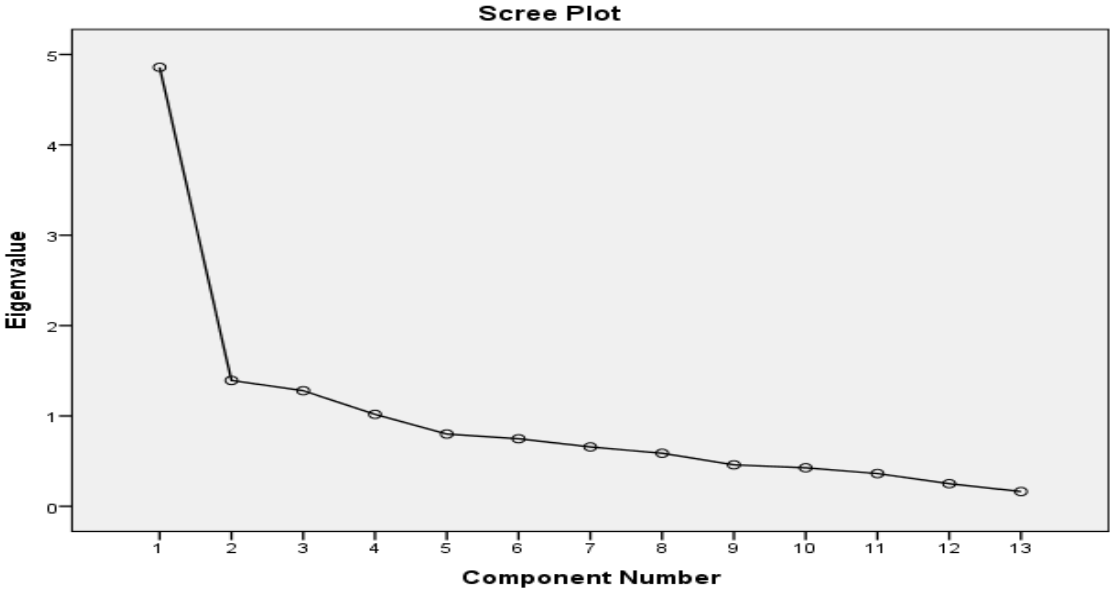
<b>KMO and Bartlett's Test</b>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.825
Approx. Chi-Square	965.099
Bartlett's Test of Sphericity	df
	78
	Sig.
	.000

The eigenvalues for the challenges scale are shown in Table 44. The table shows a three-factor solution explaining a 60.613% cumulative variance. The four factors have eigenvalue of values that are larger than 1. This indicates that a four-factor solution is appropriate to determine the factor structure of the scale. The number of constructed variables that were in line with the existing theory on the constructed scale was four. The cumulative variance of 60.613% is above the recommended 60%, therefore it is considered as valid.

**Table 44: Challenges-Eigenvalues and cumulative variance explained by the factors**

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.602	38.353	38.353	4.602	38.353	38.353	3.084	25.698	25.698
2	1.393	11.605	49.958	1.393	11.605	49.958	2.709	22.572	48.271
3	1.279	10.655	60.613	1.279	10.655	60.613	1.481	12.342	60.613

The scree plot for the factors is shown in Figure 34 and it shows a significant difference amongst the first four factors



**Figure 34: Scree plot for Challenges**

Table 45 shows the factor loadings of 0.48 and greater. These can be interpreted as significant as they significantly correlate with the particular factors. The



eigenvalue being 4.602 which shows how well-defined the factor was and accounted for 38.35% of variance. The first factor represents five items with values between 0.519 and 0.829 with an average of 0.726. The second factor represents five items and they represent values from 0.485 to 0.836 thus giving an average of 0.696. The third factor consists of values of 0.771 and 0.828.

**Table 45: Challenges - Factor loadings**

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Challenges3	.829	.193	.075
Challenges1	.828	.204	.138
Challenges2	.819	.207	.181
Challenges12	.634	.236	-.104
Challenges11	.519	.154	.071
Challenges7	.056	.836	-.070
Challenges5	.300	.744	.239
Challenges6	.250	.732	-.029
Challenges4	.237	.682	.171
Challenges8	.300	.485	.190
Challenges9	.058	.133	.828
Challenges10	.252	.049	.771

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

These results present the three factors that have eigenvalues greater than 1, meaning that the items can be reduced to three factors. The third factor is weak as it loads with only two items. After extraction and rotation of the factors, the communalities and factor loadings output was as follows in Table 46.

**Table 46: Challenges communality extraction estimates**

Final Communality Estimates	Extraction
1.In my country, there is no sufficient equity available for new and growing firms	.750
2.In my country, there is no sufficient debt funding available for new and growing firms	.748
3.In my country, there are no sufficient government subsidies available for new and growing firms	.720
4.In my country, the level of business and management education provide poor and inadequate preparation for starting up and growing new firms.	.544
5.In my country, no new and growing firms can easily enter the markets.	.685
6.In my country, no new and growing firms can easily afford the latest technology	.595
7.In my country, the national culture does not encourage entrepreneurial risk taking.	.711
8.We have many promising ideas than we have time and resources to pursue, therefore, we do not pursue a lot of opportunities.	.359
9.There is formation of strong networks in my country which help in my entrepreneurship activities.	.708
10.In my country a challenge inspires one to do things never thought possible. This however does not necessarily present entrepreneurial opportunities.	.652
11.It is demotivating when one experiences a lot of setbacks which are a challenge to the business, therefore, it deprives me from working harder.	.287
12.Due to lack of funding for small and medium enterprises in my country, we are limited on the opportunities we pursue on the basis of our current resources.	.466
13.In my country, corruption affects some of the entrepreneurial activities.	.305

#### 4.5.1.4 Trading

Ten items were considered to measure strategy in relation to entrepreneurship activity. The KMO measure of sampling adequacy was high at 0.774 and Barlett's test of sphericity was significant ( $p < 0.001$ ). Table 47 shows these values done for the tests of assumptions of factor analysis

**Table 47: The KMO value for Trading items**

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.774
Approx. Chi-Square	512.498
Bartlett's Test of Sphericity	
df	45
Sig.	.000

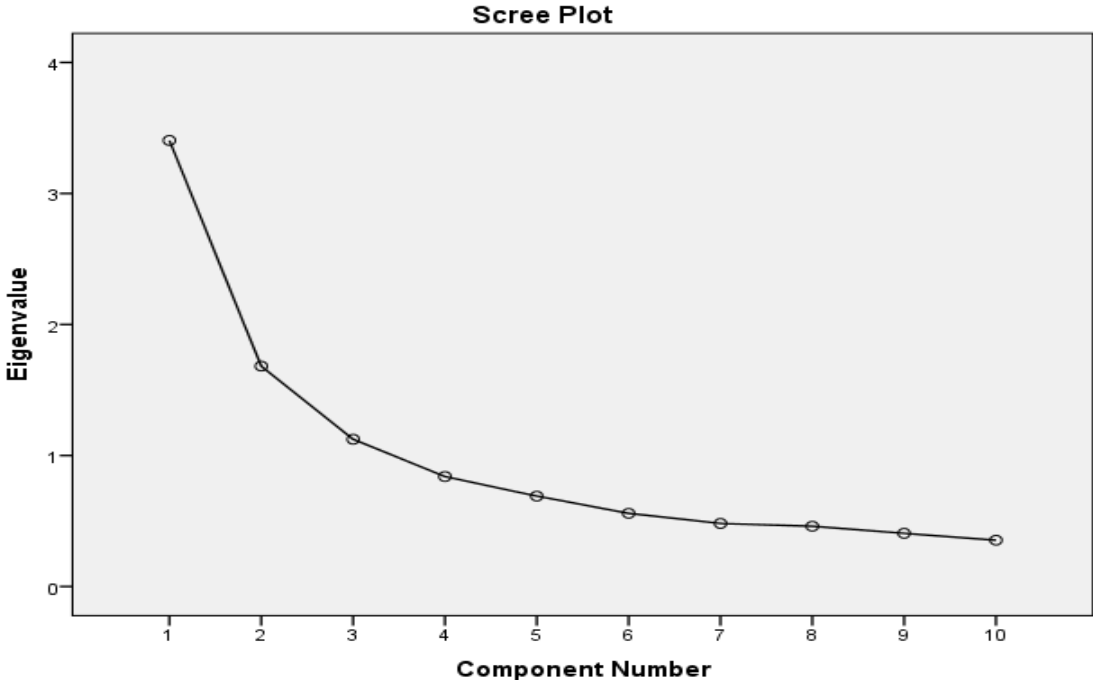
The eigenvalues for the challenges scale are shown in Table 48. The table shows a three-factor solution explaining a 62.102% cumulative variance. The three factors have eigenvalue of values that are larger than 1. This indicates that a three-factor solution is appropriate to determine the factor structure of the

scale. The number of constructed variables that were in line with the existing theory on the constructed scale was three. The cumulative variance of 62.105 is above the recommended 60%, therefore it is considered as valid.

**Table 48: Trading-Eigenvalues and cumulative variance explained by the factors**

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.404	34.044	34.044	3.404	34.044	34.044	2.911	29.109	29.109
2	1.682	16.820	50.864	1.682	16.820	50.864	1.754	17.539	46.649
3	1.124	11.241	62.105	1.124	11.241	62.105	1.546	15.457	62.105

The scree plot for the factors is shown in Figure 35 and it shows a significant difference amongst the first three factors.



**Figure 35: Scree Plot for Trading**

Table 49 shows the factor loadings of 0.556 and greater. These can be interpreted as significant as they significantly correlate with the particular factors. The eigenvalue being 3.404 which shows how well-defined the factor was and accounted for 34.044% of variance. The first five items represent values between 0.631 and 0.745 with an average of 0.7058. The second set of items are two and they represent values from 0.838 and 0.877 with an average of 0.8575, thus

showing a weak relationship as there are only two items in this factor. The third set of items consists of three items ranging from 0.556 and 0.749 with an average of 0.684.

**Table 49: Trading - Factor loadings**

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Trading8	.745	-.076	.194
Trading7	.744	-.173	.145
Trading9	.711	.201	.073
Trading1	.698	.145	.192
Trading10	.631	.310	-.060
Trading3	-.068	.877	.113
Trading2	.237	.838	.048
Trading5	.306	-.006	.749
Trading4	-.078	.263	.746
Trading6	.500	-.143	.556

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

These results present the three factors have eigenvalues greater than 1 meaning that the items can be reduced to three factors. The second factor is weak as it loads with only two items. After extraction and rotation of the factors, the communalities and factor loadings output were all greater than 0.4 and are shown in Table 50.

**Table 50: Trading communality extraction estimates**

Final Communality Estimates	Extraction
1. The trading environment with other countries is risky	.546
2. Fair trade gets political support in my country, therefore it increases employment opportunities	.761
3. There are government initiatives to encourage small scale industry.	.786
4. The increased connectivity via mobile and internet has made it easier for me to stay in touch with buyers	.632
5. I feel an economic slowdown results in poor demand in the country	.655
6. The failures of the government and other bodies make it difficult for entrepreneurs to invest with confidence in capacity building for the sake of fair trade.	.579
7. Entrepreneurship in my country has been affected by lack of quality standards.	.605
8. Entrepreneurship in my country has been affected by inadequate trade policies	.598
9. Trading over the past five years has been challenging, therefore, I am not willing to look at markets beyond my local area.	.551
10. Exchange rates in my country affect my trading activities	.498

#### **4.5.1.5 Informal vs Formal Sectors**

Six items were considered in order to measure informal vs formal sector entrepreneurship activities. The KMO measure of sampling adequacy was high at 0.744 and Bartlett’s test of sphericity was significant ( $p < 0.001$ ). Table 51 shows these values done for the tests of assumptions of factor analysis.

**Table 51: The KMO value for Informal vs Formal items**

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.744
Approx. Chi-Square	570.618
Bartlett's Test of Sphericity	df
	15
	Sig.
	.000

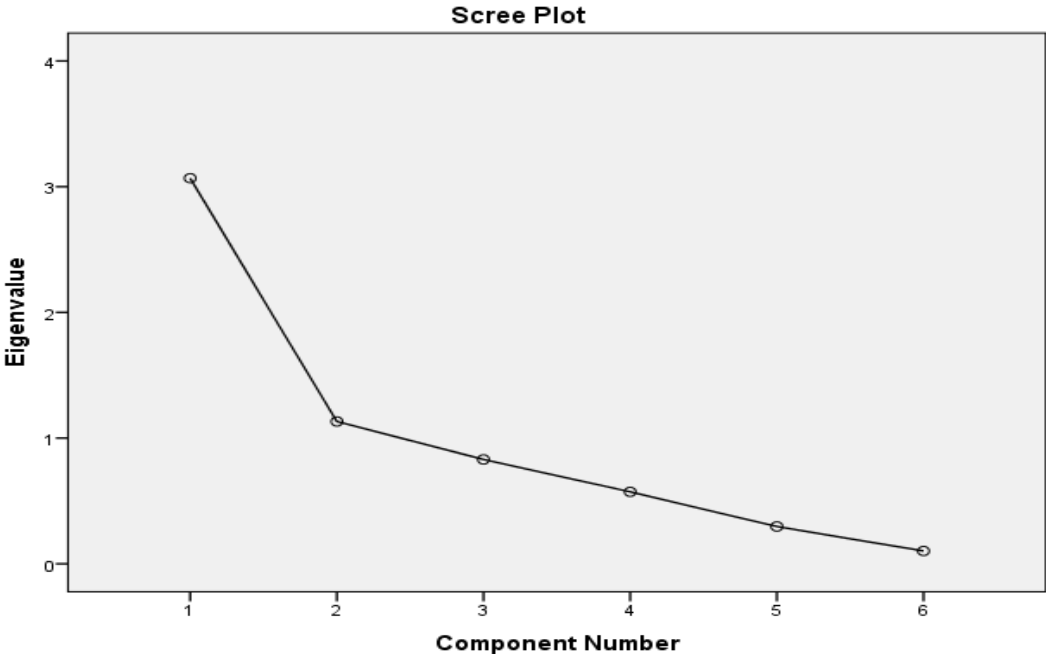
The eigenvalues for the strategy scale are shown in Table 52. The table shows a two-factor solution explaining a 69.985% cumulative variance. The two factors have eigenvalue of values that are larger than 1. This indicates that a two-factor solution is appropriate to determine the factor structure of the scale. The number of constructed variables that were in line with the existing theory on the

constructed scale was two. The cumulative variance of 69.985 is just above the recommended 60%.

**Table 52: Informal vs Formal-Eigenvalues and cumulative variance explained by the factor**

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.067	51.119	51.119	3.067	51.119	51.119	3.029	50.485	50.485
2	1.132	18.865	69.985	1.132	18.865	69.985	1.170	19.500	69.985

The scree plot for the factors is shown in Figure 36 and it shows a significant difference amongst the first four factors



**Figure 36: Scree plot for Informal vs Formal**

Table 53 shows the factor loadings of 0.631 and greater. These can be interpreted as significant as they significantly correlate with the particular factors. The eigenvalue being 3.067 which shows how well-defined the factor was and accounted for 51.119% of variance. The first four items represent values between 0.762 and 0.915 with an average of 0.855. The second set of items forming the

second factor represent values from 0.631 and 0.818 with an average of 0.725 thus presenting a weak relationship, as there are only two items in this factor.

**Table 53: Informal vs Formal - Factor loadings**

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
InformalFormal5	.915	.113
InformalFormal6	.883	.150
InformalFormal1	.859	.162
InformalFormal2	.762	-.203
InformalFormal3	.147	.818
InformalFormal4	.268	.631

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 3 iterations.

The results present the two factors that have eigenvalues greater than 1, meaning that the items can be reduced to two factors. The second factor is weak as it loads with only two items. After extraction and rotation of the factors, the communalities and factor loadings output were all greater than 0.7 and are shown in the Table 54.

**Table 54: Informal vs Formal communality extraction estimates**

Final Communality Estimates	Extraction
Due to the state of the economy, I prefer operating my business in the informal sector and I feel my business flourishes more when I remain operating in the informal sector.	.764
Due to the state of the economy, I prefer operating my business in the formal sector and I feel my business flourishes more when I remain operating in the formal sector.	.622
I feel my business benefits the people in my community	.691
The informal economy seems to provide more entrepreneurship activities and jobs with smaller capital.	.470
I prefer operating in the informal sector as it is a way that helps me to avoid burdens of bureaucracy/government	.851
I prefer operating in the informal sector as it is a way that helps me to avoid being affected by corruption as government policies are not entrepreneurship friendly	.802

## 4.5.2 Dependent Variable

This sub-section presents the validity done on the dependent variable.

### 4.5.2.1 Entrepreneurial Activity

Ten items were considered in order to measure strategy in relation to entrepreneurship activity. The KMO measure of sampling adequacy was high at 0.775 and Bartlett's test of sphericity was significant ( $p < 0.001$ ). Table 55 shows these values done for the tests of assumptions of factor analysis

**Table 55: The KMO value for Entrepreneurial Activity items**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.775
	Approx. Chi-Square	484.798
Bartlett's Test of Sphericity	df	45
	Sig.	.000

The eigenvalues for the strategy scale are shown in Table 56. The table shows a three-factor solution explaining a 60.029% cumulative variance. The three factors have eigenvalue of values that are larger than 1. This indicates that a three-factor solution is appropriate to determine the factor structure of the scale. The number of constructed variables that were in line with the existing theory on the constructed scale was three. The cumulative variance of 60.029 is just above the recommended 60%.

**Table 56: Entrepreneurial Activity - Eigenvalues and cumulative variance explained by the factor**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.241	32.407	32.407	3.241	32.407	32.407	2.638	26.383	26.383
2	1.703	17.030	49.437	1.703	17.030	49.437	1.823	18.231	44.614
3	1.059	10.592	60.029	1.059	10.592	60.029	1.541	15.415	60.029



The scree plot for the factors is shown in Figure 37 and it shows a significant difference amongst the first four factors

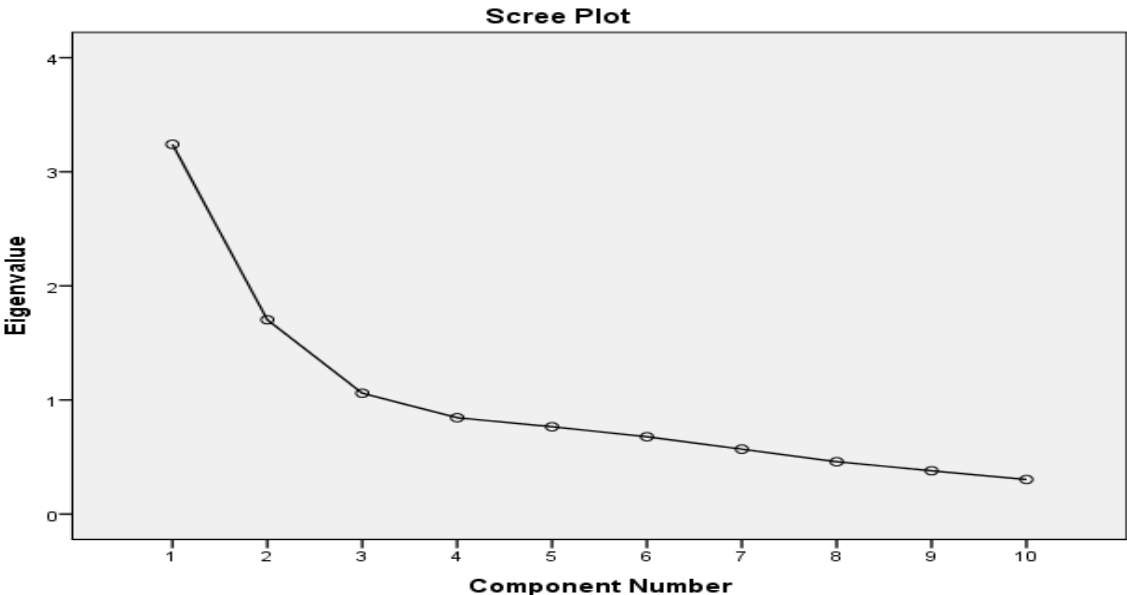


Figure 37: Scree plot for Entrepreneurial Activity

Table 57 shows the factor loadings of 0.575 and greater. These can be interpreted as significant as they significantly correlate with the particular factors. The eigenvalue being 3.241 which shows how well-defined the factor was and accounted for 32.407% of variance. The first factor represents values between 0.714 and 0.870 with an average of 0.795. The second factor has three items and they represent values from 0.633 and 0.701 with an average of 0.673. The third factor has three items from 0.496 to 0.774 thus giving an average of 0.615. Statement two was used on the third factor as it made more logical sense when grouped with that factor.

Statements two and three were cross-loadings and were considered as part of the construct and made sense logically, therefore, they were retained.

**Table 57: Entrepreneurial Activity - Factor loadings**

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
ENActivity8	.870	.077	.094
ENActivity7	.807	.140	.017
ENActivity9	.788	.018	.207
ENActivity5	.714	.114	.076
ENActivity1	.035	.701	.151
ENActivity4	.229	.686	-.325
ENActivity3	.104	.633	.425
ENActivity2	.056	.635	.496
ENActivity10	.087	.058	.774
ENActivity6	.158	.128	.575

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

These results present the three factors that have eigenvalues greater than 1, meaning that the items can be reduced to three factors. The second factor is weak as it loads with only two items. After extraction and rotation of the factors, the communalities and factor loadings output were all greater than 0.3 and are shown in the Table 58. This shows that the study has three models and these will be used going forward. The use of the models were determined in the next section through the reliability tests.

**Table 58: Entrepreneurship Activity communality extraction estimates**

<b>Final Communality Estimates</b>	<b>Extraction</b>
My company is very often the first business to introduce new products or services, administrative techniques, operating technologies etc.	.515
In my company, there is a very strong emphasis on research & development, technological leadership and innovation.	.652
My company has a strong tendency to partake in high risk projects with chances of high returns.	.592
I never experience lack of ideas that we can convert into profitable products and services.	.628
Success of my business depends more on my level of commitment in it	.528
There is a significant relationship of the economy and entrepreneurship activity in my country	.372
In order to keep my business successful I take risks, I am innovative, I have a need for high achievement	.671
In order to keep my business successful I am innovative	.772
In order to keep my business successful I have a need for high achievement.	.663
Shortage of capital and finance are the main inhibiting factors of entrepreneurship activity in my country	.609

## **4.6 RELIABILITY**

This section presents the tests done, such as those for reliability. Missing data was checked out of the 205 responses. After the data was checked for any errors and cleaned, a total of 194 responses were obtained and useable as they consisted of reliable data. The Cronbach's alpha will be used to determine reliability of the individual items in the subscales to look for any minimum Cronbach's alpha scores of below 0.7 and the item correlations with a total of 0.3. The discussion is mainly aimed at the scale items that gave high levels of reliability.

### **4.6.1 Strategy**

In terms of strategy, the items of the scale were aimed to measure strategy. Out of the 10 items in the subscale, the overall Cronbach's score for the constructed variables were 0.74 and 0.615 for the first variable value, which represents an acceptable reliability. This value is shown in Table 59. The Cronbach's alphas

when an item is deleted are almost the same value as the Cronbach's alpha for all the variables, therefore no item was deleted.

**Table 59: Reliability measures of scale – StrategyNew1**

Reliability Statistics	
Cronbach's Alpha	N of Items
.740	5

**Table 60: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Strategy4	23.30	10.638	.587	.660
Strategy5	23.29	11.079	.615	.651
Strategy6	23.15	11.789	.631	.654
Strategy9	23.37	12.587	.365	.747
Strategy10	23.16	12.905	.356	.747

**Table 61: Reliability measures of scale – StrategyNew2**

Reliability Statistics	
Cronbach's Alpha	N of Items
.615	3

**Table 62: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Strategy1	11.34	4.619	.453	.502
Strategy2	10.45	4.933	.563	.292
Strategy3	9.85	8.525	.327	.654

The values obtained confirm that the individual items in the subscales and entrepreneurship activity show an acceptable reliability and are in line with the recommended minimum for Cronbach's alpha of 0.6 and the item-total correlation of above 0.1. The third strategy variable (StrategyNew3) was weak with two items and had a low Cronbach's Alpha of less than 0.6, therefore it was deemed as unreliable. It was not used for further analysis.

#### 4.6.2 Factors

On the factors subscale, out of the 12 items that were used to measure the factors that affect entrepreneurship, two variables were constructed as the last one was weak. The Cronbach alpha for the first variable for factors that influence entrepreneurship activity were fairly high and were over 0.7 (0.78) and the item-correlations were above 0.3.

**Table 63: Reliability measures of scale – FactorsNew1**

Reliability Statistics	
Cronbach's Alpha	N of Items
.780	7

**Table 64: Cronbach's Alpha values for the construct variables\_FactorNew1**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Factor1	34.11	26.512	.520	.750
Factors2	33.93	28.778	.556	.752
Factors3	34.21	25.587	.595	.735
Factors4	34.70	22.834	.608	.731
Factors6	34.40	27.008	.423	.770
Factors10	34.05	27.568	.534	.750
Factors11	34.54	27.110	.385	.779

**Table 65: Reliability measures of scale – FactorsNew2**

Reliability Statistics	
Cronbach's Alpha	N of Items
.561	3

**Table 66: Cronbach's Alpha values for the construct variables\_FactorNew2**

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Factors8	11.19	3.875	.501	.288
Factors9	11.21	3.802	.509	.271
Factors12	11.60	3.899	.185	.815

The Cronbach's alpha for this factor if an item was deleted would be 0.815. The third item was not deleted as, if it had been, the number of items would have been weak and invalid. The overall Cronbach's alpha for the second variable was 0.561 which was slightly below 0.6, therefore it was deemed as reliable and was kept with three items. For the second variable, the combination made logical sense so it was kept with three items in the variable and also the items proved to be valid.

### **4.6.3 Challenges**

In the challenges subscale, out of the 13 items that were used to measure the factors that affect entrepreneurship, two variables were created. The Cronbach's alpha for factors that determined entrepreneurship activity were fairly high and were over 0.7; 0.807 and 0.8. These variables had fairly high Cronbach's alphas.

**Table 67: Reliability measures of scale- ChallengesNew1**

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.807	6

**Table 68: Cronbach's Alpha values for the construct – ChallengesNew1**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Challenges1	11.2990	20.791	.715	.736
Challenges2	11.3144	21.232	.681	.746
Challenges3	11.2577	20.462	.696	.739
Challenges11	10.0464	21.485	.410	.842
Challenges12	11.1134	22.588	.542	.785

**Table 69: Reliability measures of scale- ChallengesNew2**

Reliability Statistics	
Cronbach's Alpha	N of Items
.800	5

**Table 70: Cronbach's Alpha values for the construct – ChallengesNew2**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Challenges4	20.10	22.514	.588	.761
Challenges5	20.21	21.128	.689	.726
Challenges6	20.06	23.691	.600	.758
Challenges7	20.23	22.065	.604	.756
Challenges8	19.84	26.829	.441	.801

The third Challenges variable (ChallengesNew3) had two items, therefore was considered to be weak. Moreover, the Cronbach's Alpha for ChallengesNew3 was 0.535, which was less than 0.6, therefore it was unreliable to use, due to fewer items required and because it had an unreliable Cronbach's Alpha. ChallengesNew3 was not used for further analysis.

#### **4.6.4 Trading**

For the trading sub-scale, 10 items were measured for reliability whilst grouped into the respective variables obtained from explanatory factor analysis. The first variable gave an overall Cronbach's alpha score of 0.77 and it had more than

three items, therefore, it was considered as reliable. The second variable had two items which was less than the recommended number of items loading onto one factor, however, the Cronbach's Alpha was high with 0.738 and therefore the variable was deemed as reliable and was used for analysis. Tables 72 to 77 show the values obtained when reliability tests were performed.

**Table 71: Reliability measures of scale- TradingNew1**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.770	5

**Table 72: Reliability measures of scale – TradingNew1**

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Trading1	21.14	21.177	.586	.713
Trading7	20.38	23.667	.561	.727
Trading8	20.64	22.790	.598	.714
Trading9	21.46	19.525	.559	.728
Trading10	20.58	22.898	.449	.761

**Table 73: Reliability measures of scale- TradingNew2**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.738	2

**Table 74: Cronbach's Alpha values for the construct – TradingNew2**

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Trading2	4.89	2.184	.589	.
Trading3	4.66	2.827	.589	.

For the third variable, the Cronbach's alpha was 0.586. This variable was kept as it was valid and consisted of three items and the Cronbach's Alpha was



close to 0.6 when rounded off to the nearest decimal. When the first item was deleted the Cronbach’s Alpha was 0.647, however, this was considered as invalid as the variable now consisted of two items. As a result, the third variable was kept with three items since the Cronbach’s Alpha was 0.6 when rounded off to the nearest decimal point.

**Table 75: Reliability measures of scale- TradingNew3**

Reliability Statistics	
Cronbach's Alpha	N of Items
.586	3

**Table 76: Cronbach’s Alpha values for the construct – TradingNew3**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Trading4	11.71	3.730	.266	.647
Trading5	12.08	2.155	.509	.289
Trading6	11.97	2.657	.438	.417

**4.6.5 Informal vs Formal Sector**

For the informal and formal economy section, there were scale items that were reversed items. These were taken into consideration when measuring for reliability and the rest of the analysis. The overall Cronbach’s alpha for the one variable had an acceptable reliability of 0.881. The items were considered to also have an acceptable reliable in the study.

**Table 77: Reliability measures of scale- Informal vs Formal1**

Reliability Statistics	
Cronbach's Alpha	N of Items
.881	4

**Table 78: Cronbach's Alpha values for the construct Informal vs Formal1**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
InformalFormal1	11.79	24.986	.766	.839
InformalFormal2	12.23	28.839	.599	.902
InformalFormal5	11.05	25.863	.834	.813
InformalFormal6	11.11	26.916	.790	.831

No items will be deleted as the highest value that can be obtained is 0.902, which is not far from 0.881. The second variable InformalFormalNew2 had a Cronbach's alpha of less than 0.6, therefore it was considered as both weak and unreliable.

#### 4.6.6 Entrepreneurial Activity

In terms of the subscale that measured entrepreneurial activity, all of the items had an acceptable level of reliability. The overall Cronbach's alpha was 0.816 and 0.652 with an acceptable reliability. The values were high enough, therefore no item was deleted. The third variable was deleted as it was valid, but had a low Cronbach's alpha, therefore it was considered as unreliable.

**Table 79: Reliability measures of variable-Entrepreneurial Activity1**

Reliability Statistics	
Cronbach's Alpha	N of Items
.816	4

**Table 80: Cronbach's Alpha values for the variable – Entrepreneurship Activity1**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ENActivity5	18.39	3.566	.554	.818
ENActivity7	18.43	3.759	.641	.766
ENActivity8	18.35	3.564	.751	.716
ENActivity9	18.24	3.988	.630	.774

**Table 81: Reliability measures of scale-Entrepreneurial Activity2**

Reliability Statistics	
Cronbach's Alpha	N of Items
.652	4

**Table 82: Cronbach's Alpha values for the variable – Entrepreneurship Activity2**

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ENActivity1	15.34	10.547	.428	.594
ENActivity2	14.34	10.733	.540	.508
ENActivity3	14.31	11.232	.509	.533
ENActivity4	14.26	13.840	.273	.679

The reliable entrepreneurial activity variables were combined to have one model to measure entrepreneurial activity. Entrepreneurship Activity 3 had a very low Cronbach's alpha and had two items, therefore it was considered as weak and unreliable. It was not considered for further analysis.

**Table 83: Reliability measures of scale-Entrepreneurial Activity3**

Reliability Statistics	
Cronbach's Alpha	N of Items
.512	3

## **4.7 DESCRIPTIVE STATISTICS AND SUMMARY OF RESULTS**

This section will present some of the characteristics of the scales of the independent variables represented by the descriptive statistical tests. These are in the form of the spread and shape of the variables in the study. Table 84 shows the details of the mean, standard deviation and percentiles for the statements in each of the sections in the survey. (Tables showing each question mean etc).

The means of the constructs are displayed in Table 80 along with the standard deviations. The constructs were formed using the scale options from: Strongly Agree = 1; Disagree = 2; Mildly Disagree = 3; Neither agree or disagree = 4; Mildly agree = 5; Agree = 6; Strongly Agree = 7. Table 84 shows the descriptive statistics for the different variables.

**Table 84: Descriptive Statistics**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Deviation
ENActivityNew1	194	4.00	7.00	6.1173	.62398
ENActivityNew2	194	2.00	7.00	4.8544	1.07419
StrategyNew1	194	2.20	7.00	5.8144	.83213
StrategyNew2	194	1.33	7.00	5.2732	1.12405
StrategyNew3	194	1.00	7.00	4.9433	1.43400
TradingNew1	194	1.00	6.40	2.7897	1.14063
TradingNew2	194	1.00	7.00	4.7732	1.40875
TradingNew3	194	1.00	5.00	2.0395	.76791
ChallengesNew1	194	1.00	7.00	2.7515	1.12730
ChallengesNew2	194	1.00	6.40	2.9784	1.17634
ChallengesNew3	194	1.50	7.00	3.9794	.81571
FactorsNew1	194	1.00	5.14	2.2872	.84246
FactorsNew2	194	1.00	7.00	2.3333	.88939
FactorsNew3	194	1.00	7.00	4.4072	.98652
InformalFormalNew1	194	1.00	7.00	3.8479	1.68776
InformalFormalNew2	194	1.50	7.00	5.6856	.80581
Valid N (listwise)	194				

#### 4.7.1 Validity Summary

Principal component analysis was conducted on the responses in each of the six sub-scales. The orthogonal rotation was then performed in each of the sub-scales. The variable details are summarised as follows.

##### 4.7.1.1 Strategy

For the strategy sub-scale, the first three components displayed eigenvalues greater than 1, showing that only the first three components were meaningful in

the scale. A total combined cumulative variance of 60.7% was obtained. In order to interpret the rotated factor pattern, an item was to load on a given element only if the factor loading was greater than 0.4 for a certain factor and less than 0.4 on another. By making use of these criteria, five items managed to load on the first component and these made logical sense when grouped together. Three items of the items managed to load on the second component and two items managed to load on the third factor.

#### **4.7.1.2 Factor**

For the factors sub-scale, the first three components displayed eigenvalues greater than 1 showing that only the first three components were meaningful in the scale. A total combined cumulative variance of 54.8% was obtained. The first factor represents values between 0.412 and 0.739 with an average of 0.62. The other second factor represents three items with values from 0.402 to 0.85 representing an average of 0.694. Seven items managed to load on the first variable, which made logical sense when grouped together. The second variable had three items which also made logical sense when grouped together. The third item had two items and this was considered weak.

#### **4.7.1.3 Challenges**

For the challenges sub-scale, the first three components displayed eigenvalues greater than 1 showing that only the first three components were meaningful on the scale. A total combined cumulative variance of 60.613% was obtained. The eigenvalue being 4.602 which shows how well-defined the factor was and accounted for 38.35% of variance. The first factor represented five items with values between 0.519 and 0.829 with an average of 0.726, and these made logical sense when grouped together in the scale. The second factor represented five items and they represent values from 0.485 to 0.836 thus giving an average of 0.696 and these made logical sense when grouped together. The third factor had values of 0.771 and 0.828.

#### **4.7.1.4 Trading**

For the trading sub-scale the first three components represented eigenvalues greater than one with a cumulative variance of 62.10%. The first five factors with an average of 0.7058 managed to represent the first variable. The second set of factors were two with an average of 0.8575, thus reflecting a weak relationship, as there were only two items in this factor. The third set of items consists of three items ranging from 0.556 and 0.749 with an average of 0.684, this represented a third variable that was used in the rest of the study.

#### **4.7.1.5 Informal vs Formal Sector**

The Informal vs Formal sub-scale had two eigenvalues which were greater than 1 with a cumulative variance of 69.98%. The first variable formed had four items with an average of 0.855. The items made logical sense when grouped together. The second factor had two items with an average of 0.725 thus showing a weak relationship as there are only two items in this factor.

#### **4.7.1.6 Entrepreneurial Activity**

In terms of entrepreneurial Activity, three factors were formulated. The first variable formed had an average of 0.795, the second variable formed had three items with an average of 0.673 and the third factor had an average of 0.615. When these items were grouped together they made logical sense and three variables came out. However, the third variable had a low Cronbach's Alpha of 0.512, which was unacceptable; as a result it was not used going forward.

These can be interpreted as significant as they significantly correlate with the particular factors. The eigenvalue of 3.241 shows how well-defined the factor was and accounted for 32.407% of variance. The first factor represents values between 0.714 and 0.870 with an average of 0.795. The second factor has three items and they represent values from 0.633 and 0.701 with an average of 0.673. The third factor has three items from 0.496 to 0.774 thus giving an average of

0.615. Statement two was used on the third factor as it made more logical sense when grouped with that factor.

Statements two and three were cross-loadings and were considered to be part of the construct and made sense logically, therefore, they were kept

#### 4.7.2 Descriptive Statistics and Reliability Summary

A summary of the constructs formed is shown in Table 85. The construct formed show an acceptable values between 0.6– 0.8reliability, with 0.8 being high reliability. All values for Cronbach’s alpha were 0.7 and above.

**Table 85: Descriptive statistics and reliability summary**

	Items	Items Left Out	Mean	Std. Deviation	Cronbach	Reliability
ENActivityNew1	8,7,9,5		6.1173	.62398	0.816	Good
ENActivityNew2	1,4,3		4.8544	1.07419	0.652	Acceptable
ENActivityNew3		2,10,6	5.5223	.93226	0.512	Unacceptable
StrategyNew1	10,9,6,5,4		5.8144	.83213	0.740	Acceptable
StrategyNew2	2,1,3,		5.2732	1.12405	0.615	Acceptable
StrategyNew3		7,8	4.9433	1.43400	0.540	Unacceptable
TradingNew1	8,7,9,1,10		2.7897	1.14063	0.770	Good
TradingNew2	5,4,6		4.7732	1.40875	0.738	Acceptable
TradingNew3		3,2	2.0395	.76791	0.586	Acceptable
ChallengesNew1	2,1,3,1,3		2.7515	1.12730	0.807	Good
ChallengesNew2	7,5,6,4,8		2.9784	1.17634	0.800	Good
ChallengesNew3	11,12,10		3.9794	.81571	0.535	Unacceptable
FactorsNew1	1,2,4,3,10		2.2872	.84246	0.780	Good
FactorsNew2	9,8,6		2.3333	.88939	0.561	Acceptable
FactorsNew3		5,7	4.4072	.98652	0.433	Unacceptable
InformalFormalNew1	5,6,1,2		3.8479	1.68776	0.881	Good
InformalFormalNew2		3,4	5.6856	.80581	0.195	Unacceptable
Valid N (listwise)						

## **4.8 INFERENCE STATISTICS - RESULTS OF VARIABLES OF THE MODEL**

Inferential statistics was performed once the data was cleaned and verified in order to make statistical inferences to draw conclusions. The hypothesis and the research questions covered in this study have been discussed in the previous chapters. This section gives a recap of the hypothesis. In this section, certain statistical procedures were taken, firstly normality was tested and a correlation matrix was constructed to measure the linear relationship between two random variables. This also illustrates the strength of a relationship between two variables.

### **4.8.1 Correlation Matrix**

This section shows the results of the correlation matrix. This was a further analysis that was undertaken to show how the variables are correlated to each other. The results show how highly significantly Strategy is correlated with Entrepreneurial Activity. Trading New 2 (0.219) is also highly correlated with Entrepreneurial activity. Trading New and Factors are highly correlated to each other with 0.393. The correlation matrix is shown in Table 86.



**Table 86: Correlation matrix**

			ENActivity	StrategyNew1	StrategyNew2	InformalFormalNew1	TradingNew1	TradingNew2	TradingNew3	ChallengesNew1	ChallengesNew2	FactorsNew1	FactorsNew2
Spearman's rho	ENActivity	Correlation Coefficient	1.000	.398**	.170*	-.152*	-.096	.219**	-.125	-.111	-.268**	-.076	-.454**
		Sig. (2-tailed)		.000	.017	.035	.185	.002	.082	.123	.000	.294	.000
		N	194	194	194	194	194	194	194	194	194	194	194
	StrategyNew1	Correlation Coefficient	.398**	1.000	.248**	-.096	-.227**	.266**	-.270**	-.154*	-.248**	-.204**	-.324**
		Sig. (2-tailed)	.000	.000	.000	.185	.001	.000	.000	.032	.000	.004	.000
		N	194	194	194	194	194	194	194	194	194	194	194
	StrategyNew2	Correlation Coefficient	.170*	.248**	1.000	-.211**	.158*	-.006	.061	.207**	.140	.110	-.105
		Sig. (2-tailed)	.017	.000		.003	.028	.936	.398	.004	.052	.127	.144
		N	194	194	194	194	194	194	194	194	194	194	194
	InformalFormalNew1	Correlation Coefficient	-.152*	-.096	-.211**	1.000	-.094	-.146*	-.107	-.189**	-.057	-.182*	.179*
		Sig. (2-tailed)	.035	.185	.003		.193	.042	.137	.008	.433	.011	.012
		N	194	194	194	194	194	194	194	194	194	194	194
	TradingNew1	Correlation Coefficient	-.096	-.227**	.158*	-.094	1.000	-.304**	.443**	.500**	.566**	.405**	.035
		Sig. (2-tailed)	.185	.001	.028	.193		.000	.000	.000	.000	.000	.628
		N	194	194	194	194	194	194	194	194	194	194	194
	TradingNew2	Correlation Coefficient	.219**	.266**	-.006	-.146*	-.304**	1.000	-.072	-.051	-.229**	.040	-.130
		Sig. (2-tailed)	.002	.000	.936	.042	.000		.315	.483	.001	.584	.070
		N	194	194	194	194	194	194	194	194	194	194	194
	TradingNew3	Correlation Coefficient	-.125	-.270**	.061	-.107	.443**	-.072	1.000	.445**	.320**	.393**	.021
		Sig. (2-tailed)	.082	.000	.398	.137	.000	.315		.000	.000	.000	.775
		N	194	194	194	194	194	194	194	194	194	194	194
	ChallengesNew1	Correlation Coefficient	-.111	-.154*	.207**	-.189**	.500**	-.051	.445**	1.000	.496**	.588**	.162*
		Sig. (2-tailed)	.123	.032	.004	.008	.000	.483	.000		.000	.000	.024
		N	194	194	194	194	194	194	194	194	194	194	194
ChallengesNew2	Correlation Coefficient	-.268**	-.248**	.140	-.057	.566**	-.229**	.320**	.496**	1.000	.396**	.224**	
	Sig. (2-tailed)	.000	.000	.052	.433	.000	.001	.000	.000		.000	.002	
	N	194	194	194	194	194	194	194	194	194	194	194	
FactorsNew1	Correlation Coefficient	-.076	-.204**	.110	-.182*	.405**	.040	.393**	.588**	.396**	1.000	.258**	
	Sig. (2-tailed)	.294	.004	.127	.011	.000	.584	.000	.000	.000		.000	
	N	194	194	194	194	194	194	194	194	194	194	194	
FactorsNew2	Correlation Coefficient	-.454**	-.324**	-.105	.179*	.035	-.130	.021	.162*	.224**	.258**	1.000	
	Sig. (2-tailed)	.000	.000	.144	.012	.628	.070	.775	.024	.002	.000		
	N	194	194	194	194	194	194	194	194	194	194	194	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## 4.8.2 Normality and Skewness

Skewness and kurtosis coefficients were used to determine the distribution of the variable. Skewness refers to the asymmetry of the distribution where distribution can be positively skewed or negatively skewed (Ankarali, Yazici & Ankarali, 2009). The maximum Skewness value of +/-2 will be adapted in this study.

### 4.8.2.1 Strategy

Skewness for the Strategy New 1 variable was highly negatively skewed, which is lower than 1. This negative skew violates the rule of having negative or positive 1. Strategy 2 is also negative but the skewness is not lower than -2, as a result it was used for further analysis.

**Table 87: Strategy Skewness**

Descriptives			Statistic	Std. Error
StrategyNew1	Mean		5.8144	.05974
	95% Confidence Interval for Mean	Lower Bound	5.6966	
		Upper Bound	5.9323	
	5% Trimmed Mean		5.8833	
	Median		6.0000	
	Variance		.692	
	Std. Deviation		.83213	
	Minimum		2.20	
	Maximum		7.00	
	Range		4.80	
	Interquartile Range		1.00	
	Skewness		-1.507	.175
	Kurtosis		3.440	.347
StrategyNew2	Mean		5.2732	.08070
	95% Confidence Interval for Mean	Lower Bound	5.1140	
		Upper Bound	5.4324	
	5% Trimmed Mean		5.3289	
	Median		5.5000	
	Variance		1.263	
	Std. Deviation		1.12405	
	Minimum		1.33	
	Maximum		7.00	
	Range		5.67	
	Interquartile Range		1.33	
	Skewness		-.871	.175
	Kurtosis		.859	.347

The histogram and box and whisker diagrams show the shape of the skewness are presented in figures 38 and 39.

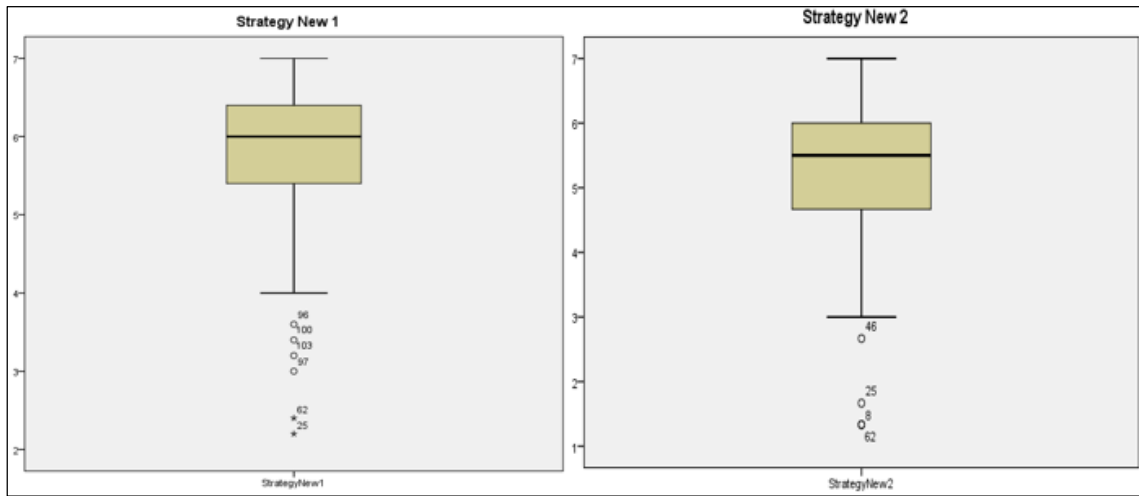


Figure 38: Strategy box plot

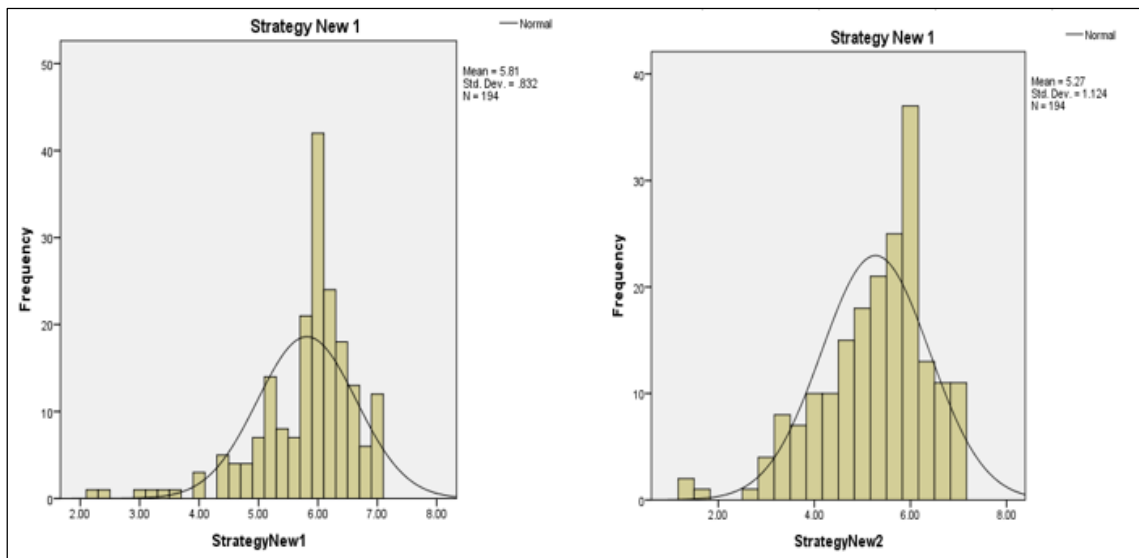


Figure 39: Strategy Histogram

Strategy 1 and 2 were negatively skewed but were not transformed as they were not lower than -2.

#### 4.8.2.2 Factors

Skewness for Factors New 1 was 1.058 and Factors New 2 was 1.592 and this was more than the recommended 1. The histogram and box and whisker diagrams that show the shape of the skewness for factors are presented in Figures 40 and 41.

**Table 88: Factors Skewness**

Descriptives			Statistic	Std. Error
FactorsNew1	Mean		2.2872	.06049
	95% Confidence Interval for Mean	Lower Bound	2.1679	
		Upper Bound	2.4065	
	5% Trimmed Mean		2.2316	
	Median		2.1429	
	Variance		.710	
	Std. Deviation		.84246	
	Minimum		1.00	
	Maximum		5.14	
	Range		4.14	
	Interquartile Range		.75	
	Skewness		1.058	.175
	Kurtosis		1.395	.347
FactorsNew2	Mean		2.3333	.06385
	95% Confidence Interval for Mean	Lower Bound	2.2074	
		Upper Bound	2.4593	
	5% Trimmed Mean		2.2690	
	Median		2.0000	
	Variance		.791	
	Std. Deviation		.88939	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.00	
	Skewness		1.592	.175
	Kurtosis		4.695	.347

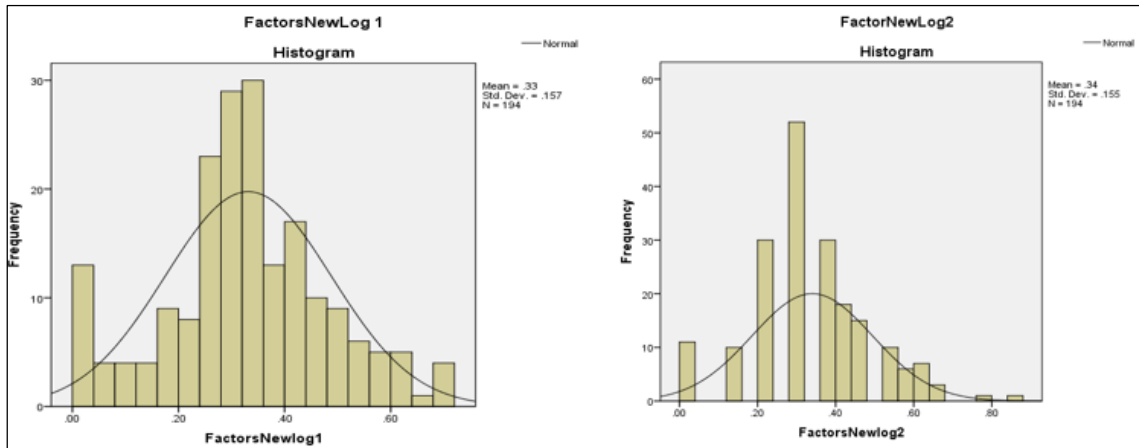


Figure 40: Factors Skewness

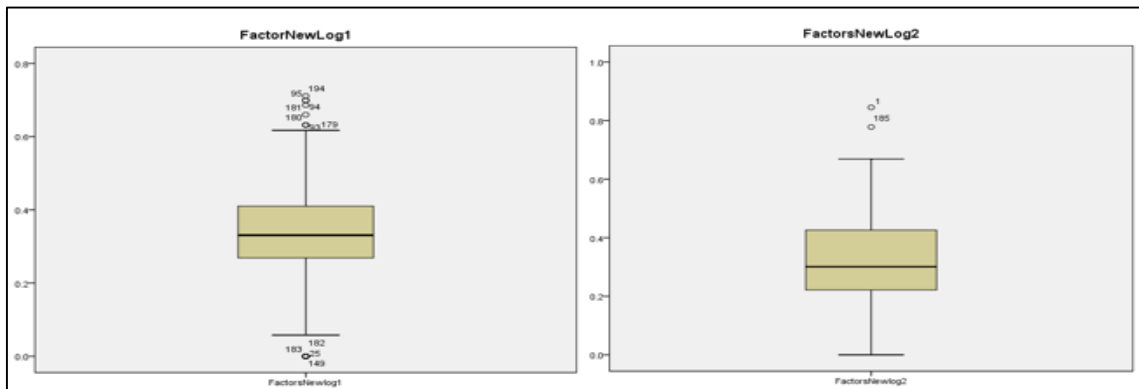


Figure 41: Factors Skewness

### 4.8.2.3 Challenges

The first challenges variable (ChallengesNew1) had a skewness of more than 1 (1.128) and a maximum value of 1. This showed how the data was highly positively skewed. In order to normalise the variable, transformation was done. Table 89 shows the skewness for Challenges 1 and Challenges 2 of -0.206 and 0.728.

**Table 89: Challenges Skewness**

Descriptives			Statistic	Std. Error
ChallengesNew1	Mean		2.7515	.08094
	95% Confidence Interval for Mean	Lower Bound	2.5919	
		Upper Bound	2.9112	
	5% Trimmed Mean		2.6734	
	Median		2.4000	
	Variance		1.271	
	Std. Deviation		1.12730	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		1.20	
	Skewness		1.128	.175
	Kurtosis		1.126	.347
ChallengesNew2	Mean		2.9784	.08446
	95% Confidence Interval for Mean	Lower Bound	2.8118	
		Upper Bound	3.1449	
	5% Trimmed Mean		2.9258	
	Median		2.8000	
	Variance		1.384	
	Std. Deviation		1.17634	
	Minimum		1.00	
	Maximum		6.40	
	Range		5.40	
	Interquartile Range		1.80	
	Skewness		.728	.175
	Kurtosis		.064	.347
ChallengesNew3	Mean		3.9794	.05856
	95% Confidence Interval for Mean	Lower Bound	3.8639	
		Upper Bound	4.0949	
	5% Trimmed Mean		3.9742	
	Median		4.0000	
	Variance		.665	
	Std. Deviation		.81571	
	Minimum		1.50	
	Maximum		7.00	
	Range		5.50	
	Interquartile Range		1.00	
	Skewness		.132	.175
	Kurtosis		1.525	.347

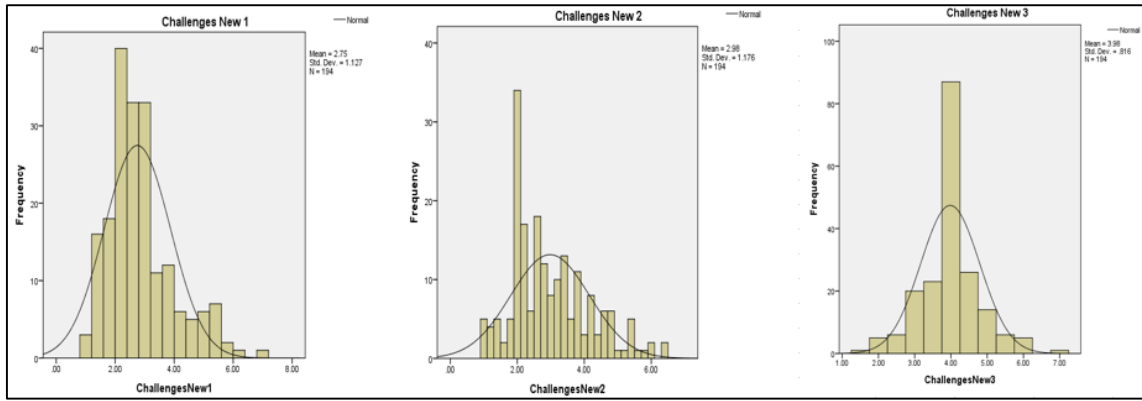


Figure 42: Challenges Skewness

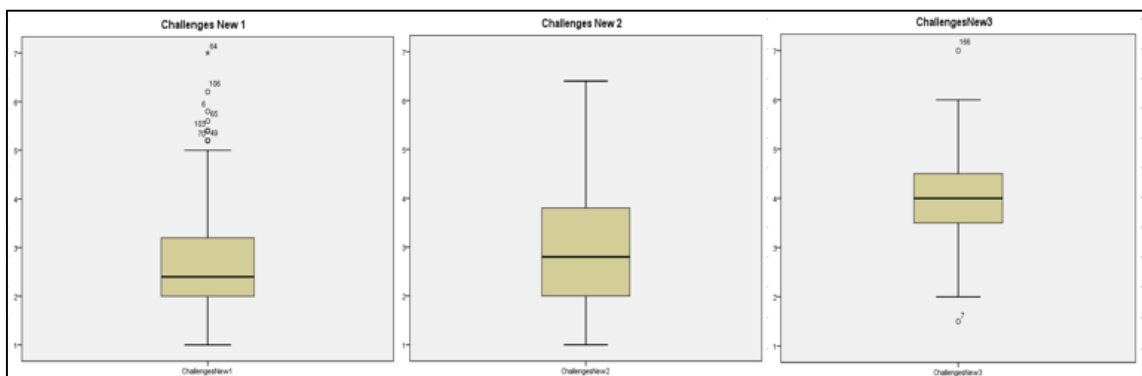


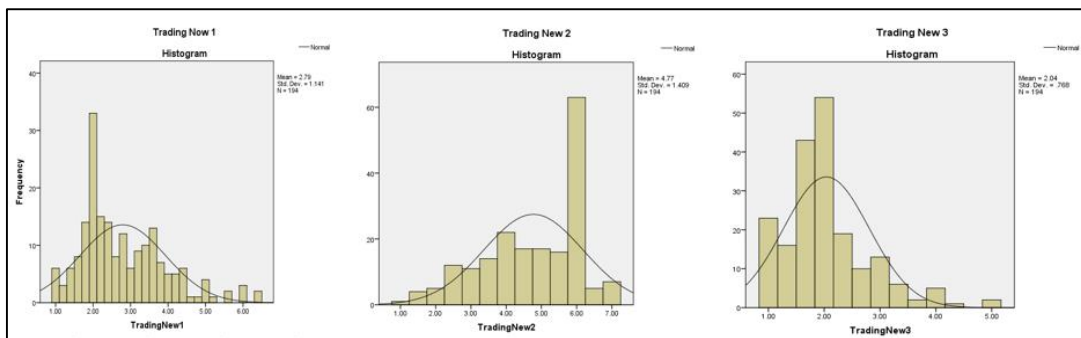
Figure 43: Challenges Skewness

#### 4.8.2.4 Trading

For the Trading variables, skewness was 0.655, -0.593 and 1.2. One of the variables was transformed to normalise the data.

**Table 90: Trading Skewness**

Descriptives			Statistic	Std. Error
TradingNew1	Mean		2.7897	.08189
	95% Confidence Interval for Mean	Lower Bound	2.6282	
		Upper Bound	2.9512	
	5% Trimmed Mean		2.7200	
	Median		2.4000	
	Variance		1.301	
	Std. Deviation		1.14063	
	Minimum		1.00	
	Maximum		6.40	
	Range		5.40	
	Interquartile Range		1.60	
	Skewness		.932	.175
	Kurtosis		.655	.347
	TradingNew2	Mean		4.7732
95% Confidence Interval for Mean		Lower Bound	4.5737	
		Upper Bound	4.9727	
5% Trimmed Mean			4.8285	
Median			5.0000	
Variance			1.985	
Std. Deviation			1.40875	
Minimum			1.00	
Maximum			7.00	
Range			6.00	
Interquartile Range			2.00	
Skewness			-.593	.175
Kurtosis			-.611	.347
TradingNew3		Mean		2.0395
	95% Confidence Interval for Mean	Lower Bound	1.9308	
		Upper Bound	2.1483	
	5% Trimmed Mean		1.9782	
	Median		2.0000	
	Variance		.590	
	Std. Deviation		.76791	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		.67	
	Skewness		1.203	.175
	Kurtosis		2.032	.347



**Figure 44: Trading Skewness**





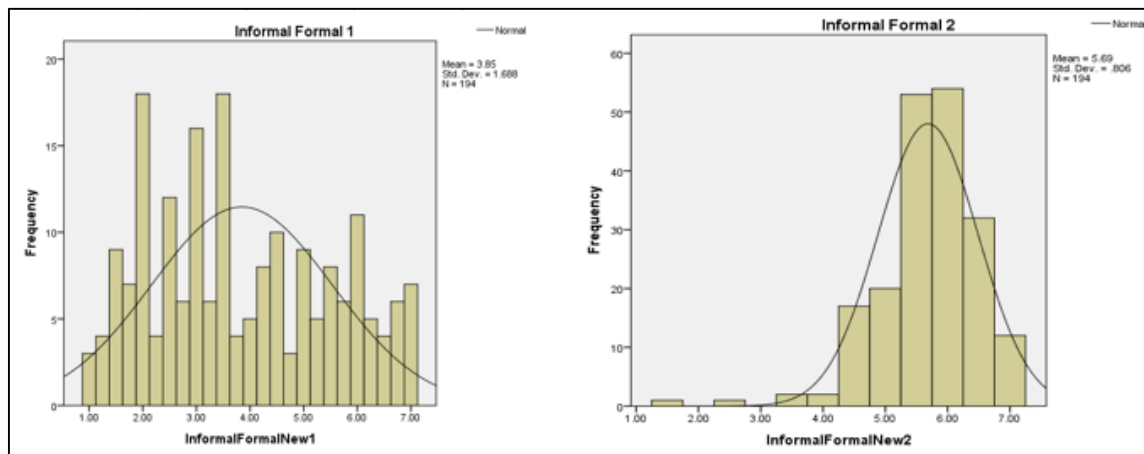
**Figure 45: Trading Skewness**

#### **4.8.2.5 Informal vs Formal**

The Informal vs Formal variable was 0.251 and the table 92 shows the values. This variable was close to normally distributed. Figures 44 and 45 show the skewness and normality in the diagram.

**Table 91: Informal vs Formal Skewness**

Descriptives			Statistic	Std. Error
InformalFormalNew1	Mean		3.8479	.12117
	95% Confidence Interval for Mean	Lower Bound	3.6089	
		Upper Bound	4.0869	
	5% Trimmed Mean		3.8214	
	Median		3.5000	
	Variance		2.849	
	Std. Deviation		1.68776	
	Minimum		1.00	
	Maximum		7.00	
	Range		6.00	
	Interquartile Range		2.75	
	Skewness		.251	.175
	Kurtosis		-1.087	.347
	InformalFormalNew2	Mean		5.6856
95% Confidence Interval for Mean		Lower Bound	5.5715	
		Upper Bound	5.7997	
5% Trimmed Mean		5.7242		
Median		6.0000		
Variance		.649		
Std. Deviation		.80581		
Minimum		1.50		
Maximum		7.00		
Range		5.50		
Interquartile Range		.50		
Skewness		-1.251	.175	
Kurtosis		4.054	.347	



**Figure 46: Informal vs Formal Skewness**

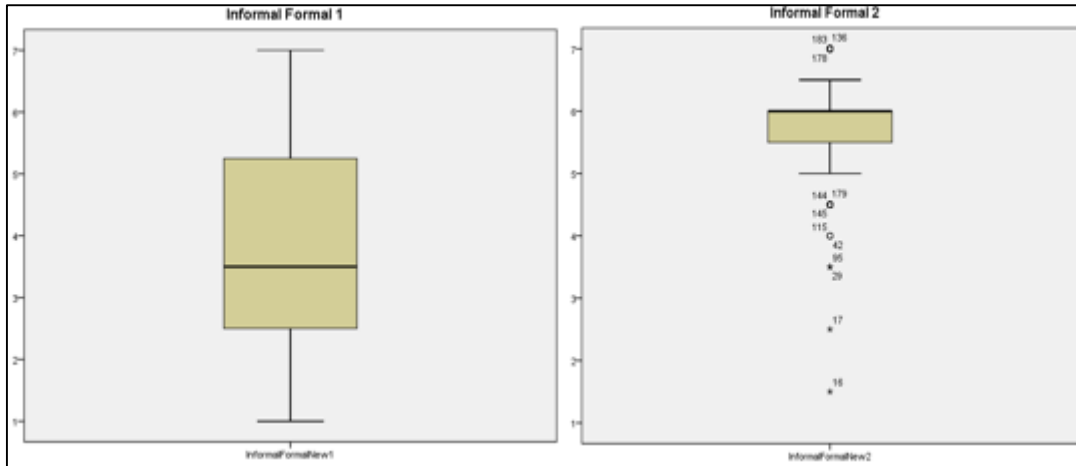


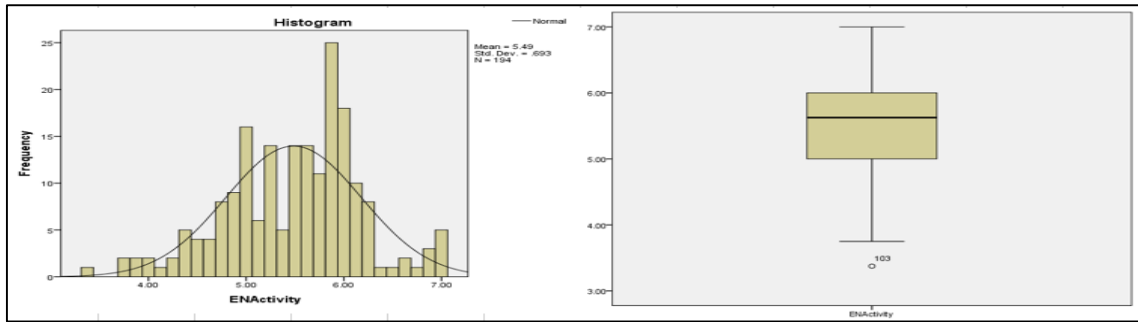
Figure 47: Informal vs Formal Skewness

#### 4.8.2.6 Entrepreneurial Activity

Entrepreneurship Activity had a skewness of -0.305 which was within the recommended skewness, therefore, no transformation took place.

Table 92: Entrepreneurial Activity Skewness

Descriptives			Statistic	Std. Error
ENActivity	Mean		5.4858	.04976
	95% Confidence Interval for Mean	Lower Bound	5.3877	
		Upper Bound	5.5840	
	5% Trimmed Mean		5.4941	
	Median		5.6250	
	Variance		.480	
	Std. Deviation		.69309	
	Minimum		3.38	
	Maximum		7.00	
	Range		3.63	
	Interquartile Range		1.00	
	Skewness		-.305	.175
	Kurtosis		.170	.347



**Figure 48: Entrepreneurial Activity Skewness**

## **4.9 QUANTITATIVE ANALYSIS RESULTS**

After doing normality and correlation tests, none of the variables were transformed as they gave a distribution that was close to normality and normality with a skewness between +/-2. The hypothesis tests performed were based on the correlations of the variables. Each construct was tested separately as a result linear regression was used. This assisted in determining the analytical power to the model for each hypothesis. Multiple regression was performed followed by the stepwise regression for each hypothesis. The tests included control variables such as age, gender, education, entrepreneurial training programs, country and success. Dummy variables were created for the control variables to perform multiple regression. The null hypothesis is rejected when  $p \leq 0.05$  and accepted when the p-value is greater than 0.05. To test the model, ANOVA was performed for each hypothesis and the F-Test was used to determine if the model significant or not.

### **4.9.1 Strategy - Results pertaining to Hypothesis 1**

For the multiple regression analysis, variables considered were the ones valid and reliable, which were StrategyNew1 and StrategyNew2. The multiple regression analysis was done separately for each hypothesis. For strategy, the multiple regression consisted of the two strategy variables which were valid and reliable, along with all the control variables, i.e. country, age, gender, highest

qualification, entrepreneurial success and entrepreneurial education. Part of the model tested is shown in Figure 48.



**Figure 49: Strategy variables for hypothesis testing**

The first hypothesis which was being tested was:

***First Sub-problem:*** *What were the survival strategies in South Africa and Zimbabwe during the past five years?*

**H<sub>0</sub>:** Survival strategies used by entrepreneurs in highly volatile economic environments do not have a positive impact on entrepreneurship activities.

**H<sub>1</sub>:** Survival strategies used by entrepreneurs in highly volatile economic environments have a positive impact on entrepreneurship activities.

The correlation coefficient for Strategy 1 and 2 varies. Strategy 1 has moderate positive correlation of 0.43 and Strategy 2 variable had a negative correlation coefficient of -0.451. The correlations shown in the Table 93 illustrate the relationship between the Entrepreneurial Activity and the Strategy variables. The results show that the correlation is moderate linear correlation as the p-value is less than 0.05.

**Table 93: Strategy Correlations**

Correlations			
		ENActivity	StrategyNew1
ENActivity	Pearson Correlation	1	.434**
	Sig. (2-tailed)		.000
	N	194	194
StrategyNew1	Pearson Correlation	.434**	1
	Sig. (2-tailed)	.000	
	N	194	194

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The model summary Table 94 gives the measure of how well Strategy and the control variables predict Entrepreneurial activity success in highly volatile economies. R measures how well the predictors predict the outcome. R-squares varies between 0 and 1. R-squared adjusted is 18.7% of the variance which shows that 18.7% of the variance in entrepreneurial activity success can be explained by strategy. The standard error of estimate is 0.62505, which shows how much the value of R is predicted to vary from one sample to the next.

**Table 94: Strategy Model Summary Multiple regression**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.521 <sup>a</sup>	.271	.187	.62505	.271	3.215	20	173	.000	2.125

a. Predictors: (Constant), VerySuccessful, Matric, StrategyNew2, TertiaryNotcompleted, Seminars, Gender, CertificateDiploma, Average, Country, Age35to44, StrategyNew1, Age55orOlder, TrainingPrograms, BelowAverage, PostgraduateDegree, Workshops, Age45to54, Age25to34, Successful, BachelorsDegree

b. Dependent Variable: ENActivity

After the stepwise regression, some variables were taken out as they were not significant to the model and the variance inflation factor was also high (above 10). Table 95 shows the results after stepwise regression was performed. The variance in entrepreneurial activity explained by Strategy was 18.4% by using the adjusted R Square.

**Table 95: Model Summary - Stepwise Regression**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.434 <sup>a</sup>	.188	.184	.62602	.188	44.571	1	192	.000	2.128

a. Predictors: (Constant), StrategyNew1

b. Dependent Variable: ENActivity

Table 96 shows the results using the F-test method for the first model results from multiple regression. P-value is 0.000, therefore, the model is statistically significant as it is less than 0.05 for both regression methods, thus showing that the model is significant.

**Table 96: ANOVA - Multiple Regression**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.121	20	1.256	3.215	.000 <sup>b</sup>
	Residual	67.590	173	.391		
	Total	92.711	193			

a. Dependent Variable: ENActivity

b. Predictors: (Constant), VerySuccessful, Matric, StrategyNew2, TertiaryNotcompleted, Seminars, Gender, CertificateDiploma, Average, Country, Age35to44, StrategyNew1, Age55orOlder, TrainingPrograms, BelowAverage, PostgraduateDegree, Workshops, Age45to54, Age25to34, Successful, BachelorsDegree

Using the F-test method for the model results from stepwise regression, Table 97 shows that the p-value is 0.000 once again, therefore, the model is statistically significant as it is less than 0.05 for both regression methods, thus showing that the model is significant.

**Table 97: ANOVA-Stepwise regression**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.467	1	17.467	44.571	.000 <sup>b</sup>
	Residual	75.244	192	.392		
	Total	92.711	193			

a. Dependent Variable: ENActivity

b. Predictors: (Constant), StrategyNew1

The unstandardised coefficients give the value of the constant which can be the intercept of the predicted value of Entrepreneurial success if the Strategy variable is zero. The coefficients predict the regression line. Beta value is the standardised version. Significant level p-value reflects the level of significance if it is less than 0.05 therefore the hypothesis is rejected. There is 95% confidence that the slope of the true regression line is somewhere between 0.255 and 0.468. In order to determine multicollinearity and the impact of collinearity among the variables, the variance inflation factor (VIF) was used. The VIF in some of the variables in the multiple regression was higher than 10, after stepwise regression was performed, the variables with a high VIF (greater than 10) caused great concern and where, therefore, removed. After the stepwise regression, the VIF was lower than 10 which shows that the remaining variables were acceptable.

**Table 98: Strategy Coefficients**

Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.384	.318		10.639	.000	2.756	4.011		
	StrategyNew1	.362	.054	.434	6.676	.000	.255	.468	1.000	1.000

a. Dependent Variable: ENActivity

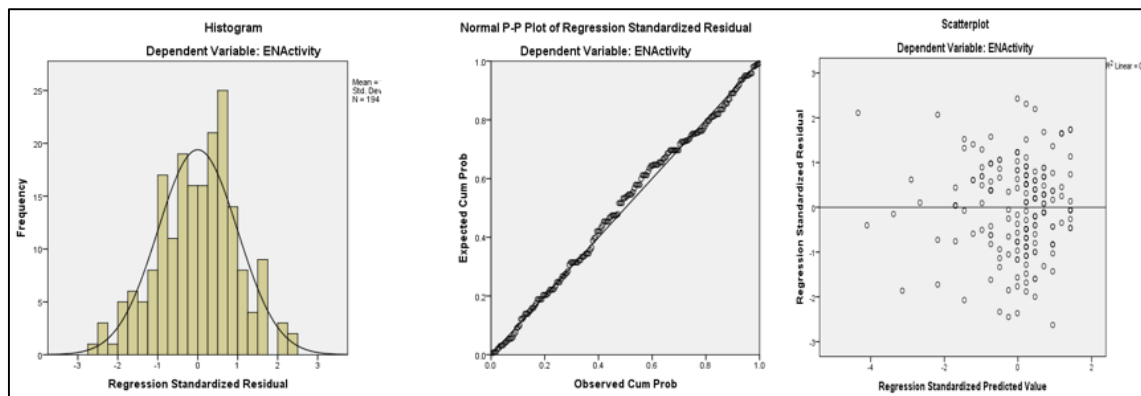
The residuals show the maximum and minimum predictive values summary and shows how spread out they are.



**Table 99: Strategy Residuals**

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.1791	5.9144	5.4858	.30084	194
Residual	-1.64483	1.51939	.00000	.62439	194
Std. Predicted Value	-4.344	1.425	.000	1.000	194
Std. Residual	-2.627	2.427	.000	.997	194

a. Dependent Variable: ENActivity



**Figure 50: Strategy Graphs**

At the  $\alpha = 0.05$  level of significance, there is enough evidence to show that the survival strategies used by entrepreneurs in highly volatile economies have a positive impact on entrepreneurship activities. In this case the p-value for the T and F-test are less than 0.05 i.e. 0.000, therefore the null hypothesis was rejected and results of the hypothesis test show that:

**Survival strategies used by entrepreneurs in high volatile economic environments have a positive impact on entrepreneurship activities.**

#### 4.9.2 Factors – Results pertaining to Hypothesis 2

For the factors that influence entrepreneurship activity, two of the variables were valid and reliable and the third consisted of two items, therefore it was regarded as weak. The multiple regression analysis was done separately for each hypothesis. For factors, the multiple regression consisted of the two factor

variables, i.e. FactorNew1 and FactorNew2, which were valid and reliable, along with all the control variables mentioned in the strategy section. As a result, the two variables were only used to test the hypothesis as shown in Figure 51.

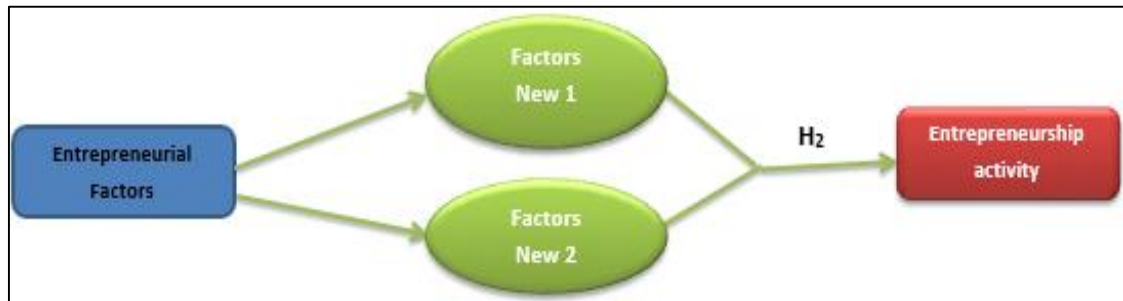


Figure 51: Factors variables for hypothesis testing

**Second Sub-problem:** *How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?*

**H<sub>0</sub>:** High economic volatility factors do not have a negative influence on entrepreneurship activities in countries with highly volatile economies.

**H<sub>2</sub>:** High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies.

The correlations shown in Table 101 illustrate the relationship between the Entrepreneurial Activity and the Factors variable. Factors was negatively correlated with entrepreneurial activity (-0.422). It had a significant correlation. The results show that the correlation is a moderate linear correlation as the p-value is less than 0.05.

**Table 100: Correlations**

Correlations				
		ENActivity	w2	Age45to54
ENActivity	Pearson	1	-.422**	.178*
	Sig. (2-tailed)		.000	.013
	N	194	194	194
FactorsNew2	Pearson Correlation	-.422**	1	-.068
	Sig. (2-tailed)	.000		.344
	N	194	194	194
Age45to54	Pearson	.178*	-.068	1
	Sig. (2-tailed)	.013	.344	
	N	194	194	194

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The model summary Table 101 gives the measure of how well Factors and the control variables predict Entrepreneurial activity success in highly volatile economies. When multiple regression was performed, the R Adjusted Square was 17.7%, showing that 17.7% percent of the variance in entrepreneurial activity success was explained by factors. The standard error of estimate is 0.62860, which shows how much the value of R is predicted to vary from one sample to the next.

**Table 101: Factors Model Summary- Multiple Regression**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.513 <sup>a</sup>	.263	.177	.62860	.263	3.082	20	173	.000	2.029

a. Predictors: (Constant), VerySuccessful, Matric, TertiaryNotcompleted, FactorsNew2, Seminars, BelowAverage, Age45to54, Gender, CertificateDiploma, FactorsNew1, Country, Workshops, Age55orOlder, Average, TrainingPrograms, PostgraduateDegree, Age25to34, Age35to44, Successful, BachelorsDegree

b. Dependent Variable: ENActivity

After the stepwise regression, some variables were taken out as they were not significant to the model and the variance inflation factor was also high (above 10) which raised concerns about the variables used in the regression tests. Table 102 shows the results after stepwise regression was performed. The variance of

the final model (Model 2) in entrepreneurship activity explained by Factors and Age was 19.2% by using the adjusted R Square.

**Table 102: Model Summary – Stepwise Regression**

Model Summary <sup>c</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.422 <sup>a</sup>	.178	.174	.63009	.178	41.523	1	192	.000	
2	.447 <sup>b</sup>	.200	.192	.62309	.022	5.339	1	191	.022	2.003

a. Predictors: (Constant), FactorsNew2  
b. Predictors: (Constant), FactorsNew2, Age45to54  
c. Dependent Variable: ENActivity

Using the F-test method for the model results from multiple regression, shown in Table 103, the p-value is 0.000, therefore, the model is statistically significant as it is less than 0.05 for both regression methods.

**Table 103: ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.353	20	1.218	3.082	.000 <sup>b</sup>
	Residual	68.358	173	.395		
	Total	92.711	193			

a. Dependent Variable: ENActivity  
b. Predictors: (Constant), VerySuccessful, Matric, TertiaryNotcompleted, FactorsNew2, Seminars, BelowAverage, Age45to54, Gender, CertificateDiploma, FactorsNew1, Country, Workshops, Age55orOlder, Average, TrainingPrograms, PostgraduateDegree, Age25to34, Age35to44, Successful, BachelorsDegree

Using the F-test method for the model results from stepwise regression, shown in Table 104, p-values are 0.000 once again The model is, therefore, statistically significant as it is less than 0.05 for both regression methods.

**Table 104: Factors ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.485	1	16.485	41.523	.000 <sup>b</sup>
	Residual	76.226	192	.397		
	Total	92.711	193			
2	Regression	18.558	2	9.279	23.900	.000 <sup>c</sup>
	Residual	74.153	191	.388		
	Total	92.711	193			

a. Dependent Variable: ENActivity  
b. Predictors: (Constant), FactorsNew2  
c. Predictors: (Constant), FactorsNew2, Age45to54

The unstandardised coefficients give the value of the constant which can be the intercept of the predicted value of Entrepreneurial success if the Factors variable is zero. The coefficients predict the regression line. Beta value is the standardised version. Significant level p-value reflects the level of significance if it is less than 0.05, therefore the hypothesis is rejected.

There is 95% confidence that the slope of the true regression line is somewhere between -0.420 and -0.221. In order to determine multicollinearity and the impact of collinearity among the variables, the variance inflation factor (VIF) was used. After the stepwise regression, the VIF was lower than 10 (1.005), which shows that the remaining variables were acceptable.

**Table 105: Factors Coefficients**

Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	6.253	.127		49.118	.000	6.001	6.504		
	FactorsNew2	-.329	.051	-.422	-6.444	.000	-.429	-.228	1.000	1.000
2	(Constant)	6.176	.130		47.454	.000	5.919	6.433		
	FactorsNew2	-.321	.051	-.411	-6.343	.000	-.420	-.221	.995	1.005
	Age45to54	.244	.105	.150	2.311	.022	.036	.452	.995	1.005

a. Dependent Variable: ENActivity

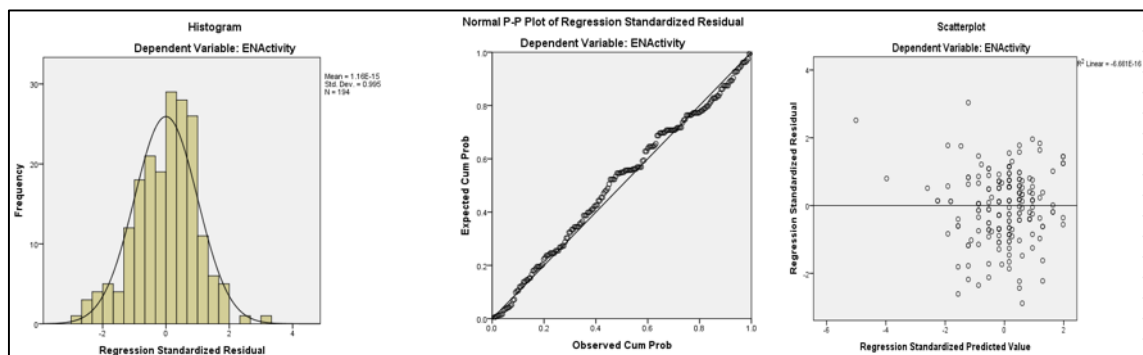
Since  $p\text{-value} = 0.000 \leq 0.05$ , the null hypothesis is rejected. At the  $\alpha = 0.05$  level of significance, there is enough evidence to show that the high economic volatility factors do not have a positive impact on entrepreneurship activities in countries with highly volatile economies. There is 95% confidence that the slope of the true regression line is somewhere between -0.420 and -0.221 as shown in Table 97. The researcher is confident that the factors that influence entrepreneurship activities decrease somewhere between 0.420 and -0.221.

The residuals in Table 106 shows the maximum and minimum predictive values summary and shows how spread out they are.

**Table 106: Factors Residuals**

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.9318	6.0992	5.4858	.31009	194
Residual	-1.79667	1.89256	.00000	.61985	194
Std. Predicted Value	-5.012	1.978	.000	1.000	194
Std. Residual	-2.884	3.037	.000	.995	194

a. Dependent Variable: ENActivity



**Figure 52: Factors Graphs**

At the  $\alpha = 0.05$  level of significance, there is enough evidence to show that the factors caused by high economic volatility have a negative impact on entrepreneurship activities.

The null hypothesis was rejected and it was concluded that:

**High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies.**

### **4.9.3 Challenges - Results pertaining to Hypothesis 3**

For the challenges that affect the success of entrepreneurship activity, two of the variables were valid and reliable, i.e. ChallengesNew1 and ChallengesNew2, as a result, these variables were used to test the hypothesis along with the control variables. Part of the model for the hypothesis testing is shown in Figure 53:



**Figure 53: Challenges variables for hypothesis testing**

***Third Sub-problem:*** *What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries such as South Africa and Zimbabwe?*

**H<sub>0</sub>: Challenges caused by high economic volatility do not have a negative impact on entrepreneurship activities.**

**H<sub>3</sub>: Challenges caused by high economic volatility have a negative impact on entrepreneurship activities**

In terms of the correlations, Challenges was significant and negatively correlated with Entrepreneurial Activity (-0.203). Age had a negative correlation with Entrepreneurial Activity of 0.178. These results are shown in Table 107.

**Table 107: Challenges Correlations**

Correlations				
		ENActivity	Age45to54	ChallengesNew2
ENActivity	Pearson Correlation	1	.178*	-.203**
	Sig. (2-tailed)		.013	.005
	N	194	194	194
Age45to54	Pearson Correlation	.178*	1	-.072
	Sig. (2-tailed)	.013		.316
	N	194	194	194
ChallengesNew2	Pearson Correlation	-.203**	-.072	1
	Sig. (2-tailed)	.005	.316	
	N	194	194	194

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The model summary Table 108 gives the measure of how well Challenges and the control variables predict Entrepreneurial Activity success in highly volatile economies. The model summary shows that the coefficient determination (R Square) is 0.152 and an adjusted R Square of 0.054, thus showing that about 5.4% of the variation in entrepreneurship activity is explained by challenges. This is a very low percentage and may appear to be less useful to make predictions. The standard error of estimate is 0.67396 which shows how much the value of R is predicted to vary from one sample to the next.

**Table 108: Challenges Model Summary**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.390 <sup>a</sup>	.152	.054	.67396	.152	1.555	20	173	.069	2.071

a. Predictors: (Constant), VerySuccessful, Matric, TertiaryNotcompleted, Seminars, ChallengesNew1, BelowAverage, Age35to44, CertificateDiploma, Gender, Country, TrainingPrograms, Age55orOlder, Average, ChallengesNew2, PostgraduateDegree, Workshops, Age45to54, Age25to34, Successful, BachelorsDegree

b. Dependent Variable: ENActivity

After stepwise regression was performed, some variables were taken out as they were not significant to the model and the variance inflation factor was also high (above 10) which raised concern about the variables used in the regression tests.



Table 109 shows the results after stepwise regression was performed. The variance of the final model (Model 2) in entrepreneurship activity explained by Challenges 2 and Age was 5.8% by using the adjusted R Square.

**Table 109: Model Summary – Stepwise Regression**

Model Summary <sup>f</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson	
					R Square Change	F Change	df1	df2		Sig. F Change
1	.203 <sup>a</sup>	.041	.036	.68045	.041	8.234	1	192	.005	
2	.261 <sup>b</sup>	.068	.058	.67262	.027	5.494	1	191	.020	2.031

a. Predictors: (Constant), ChallengesNew2  
b. Predictors: (Constant), ChallengesNew2, Age45to54  
c. Dependent Variable: ENActivity

Analysis of variance was performed, and the p-value from the F-test method was used to determine the model results from multiple regression. As is shown in Table 110, p-value is 0.02, and therefore, the model is statistically significant as it is less than 0.05 for both regression methods, thus showing that the model is significant.

**Table 110: Challenges ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.510	21	.786	1.775	.025 <sup>b</sup>
	Residual	76.201	172	.443		
	Total	92.711	193			

a. Dependent Variable: ENActivity  
b. Predictors: (Constant), Country, Age25to34, ChallengesNew3, CertificateDiploma, ChallengesNew2, Seminars, Gender, Successful, TertiaryNotcompleted, TrainingPrograms, Age55orOlder, BelowAverage, Matric, Age45to54, VerySuccessful, Workshops, PostgraduateDegree, ChallengesNew1, Age35to44, Average, BachelorsDegree

Using the F-test for the model results from stepwise regression, shown in Table 111, p-values were 0.005 and 0.001, therefore, the model is statistically significant as it is less than 0.05 for both regression methods.

**Table 111: ANOVA-Stepwise Regression**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.813	1	3.813	8.234	.005 <sup>b</sup>
	Residual	88.898	192	.463		
	Total	92.711	193			
2	Regression	6.298	2	3.149	6.961	.001 <sup>c</sup>
	Residual	86.413	191	.452		
	Total	92.711	193			

a. Dependent Variable: ENActivity

b. Predictors: (Constant), ChallengesNew2

c. Predictors: (Constant), ChallengesNew2, Age45to54

The unstandardised coefficients give the value of the constant which can be the intercept of the predicted value of Entrepreneurial success if the Challenges variable is zero. The coefficients predict the regression line. Beta value is the standardised version. Significant level p-value reflects the level of significance if it is less than 0.05 therefore the hypothesis is rejected.

There is 95% confidence that the slope of the true regression line is somewhere between -0.194 and -0.031 and 0.042 and 0.491. The researcher is confident that the challenges that influence entrepreneurship activities decrease somewhere between the above mentioned points. The variance inflation factor (VIF) was used to determine multicollinearity. After stepwise regression was performed, the variables with a high VIF (greater than 10) caused great concern and, therefore, they were removed. After the stepwise regression, the VIF was lower than 10 (1.000 to 1.005) which shows that the remaining variables were acceptable.

**Table 112: Challenges Coefficients**

Model		Coefficients <sup>a</sup>								
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	5.842	.133		43.828	.000	5.579	6.105		
	ChallengesNew2	-.119	.042	-.203	-2.870	.005	-.202	-.037	1.000	1.000
2	(Constant)	5.758	.137		42.163	.000	5.488	6.027		
	ChallengesNew2	-.112	.041	-.191	-2.726	.007	-.194	-.031	.995	1.005
	Age45to54	.267	.114	.164	2.344	.020	.042	.491	.995	1.005

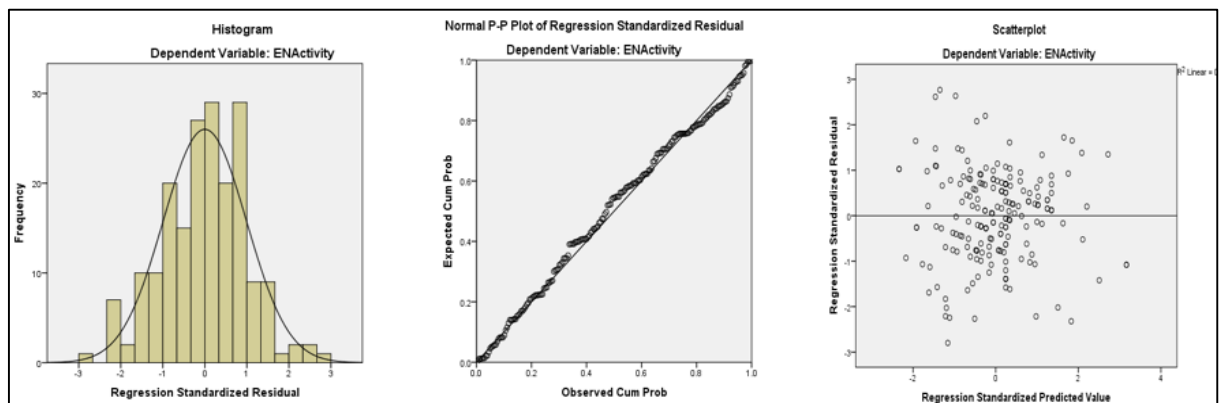
a. Dependent Variable: ENActivity

The residuals show the maximum and minimum predictive values summary and shows how spread out they are.

**Table 113: Challenges-Residual Statistics**

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	5.0377	5.9119	5.4858	.18065	194
Residual	-1.84265	1.72484	.00000	.66913	194
Std. Predicted Value	-2.481	2.359	.000	1.000	194
Std. Residual	-2.739	2.564	.000	.995	194

a. Dependent Variable: ENActivity



**Figure 54: Challenges Graphs**

At the  $\alpha = 0.05$  level of significance, there is enough evidence to identify that the challenges caused by high economic volatility have a negative impact on

entrepreneurship activities. Therefore, the null hypothesis was rejected and the conclusion was:

**Challenges caused by high economic volatility have a negative impact on entrepreneurship activities.**

#### 4.9.4 Trading - Results pertaining to Hypothesis 4

For the trading and entrepreneurship activity, three of the variables were considered to be valid and reliable. As a result, these variables were used to test the hypothesis along with the control variables. Figure 55 shows part of the model that is being tested in this hypothesis.



Figure 55: Trading variables for hypothesis testing

**Fourth Sub-problem:** *How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?*

**H<sub>0</sub>:** High economic volatility does not have a negative impact on trading activities in countries with highly volatile economies.

**H<sub>4</sub>:** High economic volatility has a negative impact on trading activities in countries with highly volatile economies

In terms of the correlations, Trading was significant and positively correlated with entrepreneurial activity (0.212). Age had a positive correlation with Entrepreneurial Activity with 0.178. These results are shown in Table 114.

**Table 114: Correlations**

Correlations				
		ENActivity	Age45to54	TradingNew2
ENActivity	Pearson Correlation	1	.178*	.212**
	Sig. (2-tailed)		.013	.003
	N	194	194	194
Age45to54	Pearson Correlation	.178*	1	-.143*
	Sig. (2-tailed)	.013		.047
	N	194	194	194
TradingNew2	Pearson Correlation	.212**	-.143*	1
	Sig. (2-tailed)	.003	.047	
	N	194	194	194

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The model summary Table 115 gives the measure of how well Trading and the control variables predict Entrepreneurial Activity success in highly volatile economies. The model summary shows the coefficient determination (R Square) is 0.412 and an adjusted R Square of 0.069, thus showing that about 6.9% of the variation in entrepreneurship activity is explained by trading. This is a very low percentage and may appear to be less useful to make predictions. The standard error of estimate is 0.66884 which shows how much the value of R is predicted to vary from one sample to the next.

**Table 115: Trading Model Summary**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.412 <sup>a</sup>	.170	.069	.66884	.170	1.678	21	172	.038	2.141

a. Predictors: (Constant), Country, TradingNew3, Age45to54, Seminars, CertificateDiploma, Gender, Average, TradingNew2, TertiaryNotcompleted, Age55orOlder, TrainingPrograms, VerySuccessful, BelowAverage, Matric, TradingNew1, Workshops, PostgraduateDegree, Age35to44, Age25to34, Successful, BachelorsDegree

b. Dependent Variable: ENActivity

After stepwise regression was performed, some variables were taken out as they were not significant to the model and the variance inflation factor was also high (above 10) which raised great concern about the variables used in the regression

tests. Table 116 shows the results after stepwise regression was performed. The variance of the final model (Model 2) in Entrepreneurship Activity explained by Trading 2 and Age was 8.0% by using the adjusted R Square.

**Table 116: Model Summary – Stepwise Regression**

Model Summary <sup>c</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.212 <sup>a</sup>	.045	.040	.67905	.045	9.060	1	192	.003	
2	.299 <sup>b</sup>	.089	.080	.66485	.044	9.292	1	191	.003	2.088

a. Predictors: (Constant), TradingNew2  
b. Predictors: (Constant), TradingNew2, Age45to54  
c. Dependent Variable: ENActivity

Analysis of variance was performed, the p-value from the F-test was used as the method for the model results from multiple regression. As is reflected in Table 117, p-value is 0.038, and therefore, the model is statistically significant as it is less than 0.05 for both regression methods.

**Table 117: Trading ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.767	21	.751	1.678	.038 <sup>b</sup>
	Residual	76.944	172	.447		
	Total	92.711	193			

a. Dependent Variable: ENActivity  
b. Predictors: (Constant), Country, TradingNew3, Age45to54, Seminars, CertificateDiploma, Gender, Average, TradingNew2, TertiaryNotcompleted, Age55orOlder, TrainingPrograms, VerySuccessful, BelowAverage, Matric, TradingNew1, Workshops, PostgraduateDegree, Age35to44, Age25to34, Successful, BachelorsDegree

Using the F-test method for the model results from stepwise regression, from the Table 118, p-values were 0.003 and 0.000, therefore, the model is statistically significant as it is less than 0.05 for both regression methods, thus showing that the model is significant.

**Table 118: Trading ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.178	1	4.178	9.060	.003 <sup>b</sup>
	Residual	88.533	192	.461		
	Total	92.711	193			
2	Regression	8.285	2	4.142	9.371	.000 <sup>c</sup>
	Residual	84.426	191	.442		
	Total	92.711	193			

a. Dependent Variable: ENActivity

b. Predictors: (Constant), TradingNew2

c. Predictors: (Constant), TradingNew2, Age45to54

The unstandardised coefficients give the value of the constant which can be the intercept of the predicted value of Entrepreneurial success if the Trading variable is zero. The coefficients predict the regression line. Beta value is the standardised version. Significant level p-value reflects the level of significance and if it is less than 0.05 the hypothesis is rejected.

There is 95% confidence that the slope of the true regression line is somewhere between 0.052 and 0.187. The researcher is confident that the trading variable that influences entrepreneurship activities decreases somewhere between the above mentioned points. In order to determine multicollinearity and the impact of collinearity among the variables, the variance inflation factor (VIF) was used. The VIF in some of the variables in the multiple regression was higher than 10, after stepwise regression was performed, the variables with a high VIF (greater than 10) caused concern, therefore, they were removed. After the stepwise regression, the VIF was lower than 10 (1.000 to 1.021), which shows that the remaining variables were acceptable.

**Table 119: Coefficients**

Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4.987	.173		28.888	.000	4.647	5.328		
	TradingNew2	.104	.035	.212	3.010	.003	.036	.173	1.000	1.000
2	(Constant)	4.834	.176		27.411	.000	4.486	5.182		
	TradingNew2	.119	.034	.243	3.478	.001	.052	.187	.980	1.021
	Age45to54	.346	.113	.213	3.048	.003	.122	.569	.980	1.021

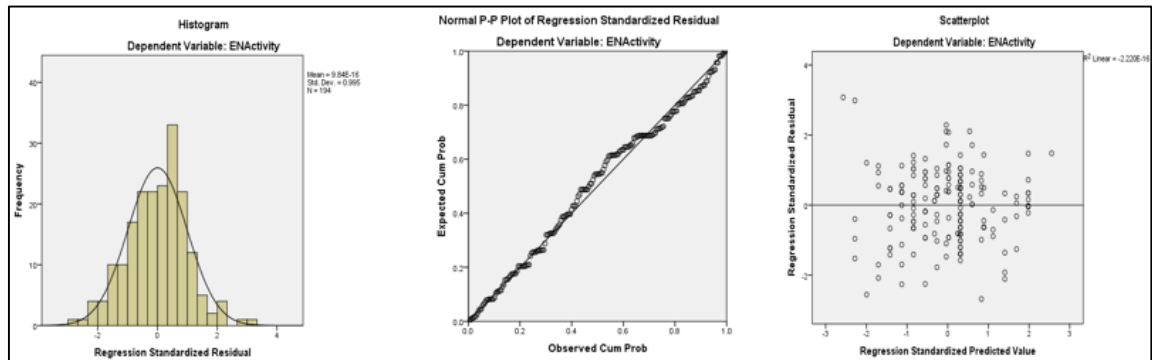
a. Dependent Variable: ENActivity

The residuals show the maximum and minimum predictive values summary and shows how spread out they are.

**Table 120: Residual Statistics**

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.9534	6.0154	5.4858	.20719	194
Residual	-1.78221	2.04661	.00000	.66139	194
Std. Predicted Value	-2.570	2.556	.000	1.000	194
Std. Residual	-2.681	3.078	.000	.995	194

a. Dependent Variable: ENActivity



**Figure 56: Trading Graphs**

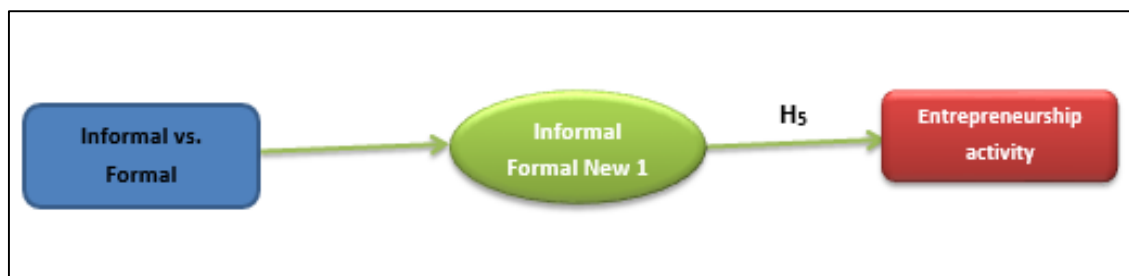
At the  $\alpha = 0.05$  level of significance, there is enough evidence to state that a highly volatile economy has a negative impact on trading activities. Therefore, the null hypothesis was rejected and the conclusion was:



**High economic volatility has a negative impact on trading activities in countries with highly volatile economies.**

#### **4.9.5 Informal vs. formal - Results pertaining to Hypothesis 5**

Only one variable was used to measure Informal vs. Formal entrepreneurial activity as it was valid and reliable. Part of the model being tested by this hypothesis is shown in Figure 57.



**Figure 57: Informal vs. Formal variables for hypothesis testing**

The hypothesis tested in this sub-section is:

***Fifth sub-problem:*** *Do highly volatile economies promote entrepreneurship activities in the formal or informal sector?*

**H<sub>0</sub>: Highly volatile economies do not promote more informal entrepreneurial activities than the informal entrepreneurship activities.**

**H<sub>5</sub>: Highly volatile economies promote more informal entrepreneurial activities than formal entrepreneurship activities**

In terms of the correlations, InformalvsFormal was not significant and negatively correlated with Entrepreneurial Activity (-0.111). Age was significant and had a positive correlation with Antrepreneurial activity of -0.178. These results are shown in Table 121.

**Table 121: Correlations**

Correlations				
		ENActivity	Age45to54	InformalFormalNew1
ENActivity	Pearson Correlation	1	.178*	-.111
	Sig. (2-tailed)		.013	.124
	N	194	194	194
Age45to54	Pearson Correlation	.178*	1	-.007
	Sig. (2-tailed)	.013		.920
	N	194	194	194
InformalFormalNew1	Pearson Correlation	-.111	-.007	1
	Sig. (2-tailed)	.124	.920	
	N	194	194	194

\*. Correlation is significant at the 0.05 level (2-tailed).

The model summary Table 122 gives the measure of how well the InformalvsFormal variable and the control variables predict Entrepreneurial Activity success in highly volatile economies. The model summary shows the coefficient determination (R Square) is 0.130 and an adjusted R Square of 0.035, showing that about 3.5% of the variation in entrepreneurship activity is explained by InformalvsFormal. This is a very low percentage and may appear to be less useful to make predictions. The standard error of estimate is 0.68085 which shows how much the value of R is predicted to vary from one sample to the next.

**Table 122: Informal vs Formal –Multiple regression**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.361 <sup>a</sup>	.130	.035	.68085	.130	1.368	19	174	.148	2.052

a. Predictors: (Constant), VerySuccessful, Matric, InformalFormalNew1, TertiaryNotcompleted, Seminars, Age45to54, Gender, CertificateDiploma, BelowAverage, Country, Workshops, Age55orOlder, Average, TrainingPrograms, PostgraduateDegree, Age25to34, Age35to44, Successful, BachelorsDegree

b. Dependent Variable: ENActivity

After stepwise regression was performed, the InformalvsFormal variables were both significant and the control variables were taken out as they were not significant to the model and the variance inflation factor was also high (above 10) which raised concern about the variables used in the regression tests. Table 123

shows the results after stepwise regression was performed. The variance of the final model (Model 2) in Entrepreneurship Activity explained by InformalvsFormal and Age was 2.7% by using the adjusted R Square.

**Table 123: Informal vs Formal – Stepwise Regression Results**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					Change	F Change	df1	df2	Change	
1	.178 <sup>a</sup>	.032	.027	.68379	.032	6.281	1	192	.013	2.008

a. Predictors: (Constant), Age45to54

b. Dependent Variable: ENActivity

Analysis of variance was performed, the p-value from the F-test was the method used for the model results from multiple regression, from the Table 124, p-value is 0.148. As a result, the model is not statistically significant as it is more than 0.05 for both regression methods, thus showing that the model is not significant.

**Table 124: Informal vs Formal ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.052	19	.634	1.368	.148 <sup>b</sup>
	Residual	80.659	174	.464		
	Total	92.711	193			

a. Dependent Variable: ENActivity

b. Predictors: (Constant), VerySuccessful, Matric, InformalFormalNew1,

Using the F-test method for the model results from stepwise regression, from the Table 125, the p-value was all 0.013, therefore, the model is statistically significant as it is less than 0.05 for both regression methods, thus showing that the model is significant with only the control variable for age.

**Table 125: Informal vs Formal ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.937	1	2.937	6.281	.013 <sup>b</sup>
	Residual	89.774	192	.468		
	Total	92.711	193			

a. Dependent Variable: ENActivity

b. Predictors: (Constant), Age45to54

The unstandardised coefficients give the value of the constant which can be the intercept of the predicted value of Entrepreneurial success if the InformalvsFormal variable is zero. The coefficients predict the regression line. Beta value is the standardised version. Significant level p-value reflects the level of significance if it is less than 0.05; therefore the hypothesis is rejected.

There is 95% confidence that the slope of the true regression line is somewhere between 0.269 to 0.487 and -0.124 to 0.020. The researcher is confident that the informalvsformal variables that influence entrepreneurship activities decrease somewhere between the above mentioned points. In order to determine multicollinearity and the impact of collinearity among the variables, the variance inflation factor (VIF) was used. The VIF in some of the variables in the multiple regression was higher than 10, after stepwise regression was performed, the variables with a high VIF (greater than 10) caused concern and, therefore, they were removed. After the stepwise regression, the VIF was lower than 10 (1.000 to 1.025), which shows that the remaining variables were acceptable.

**Table 126: Informal vs Formal Coefficients**

Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	5.417	.056		96.379	.000	5.306	5.528		
	Age45to54	.289	.115	.178	2.506	.013	.062	.517	1.000	1.000

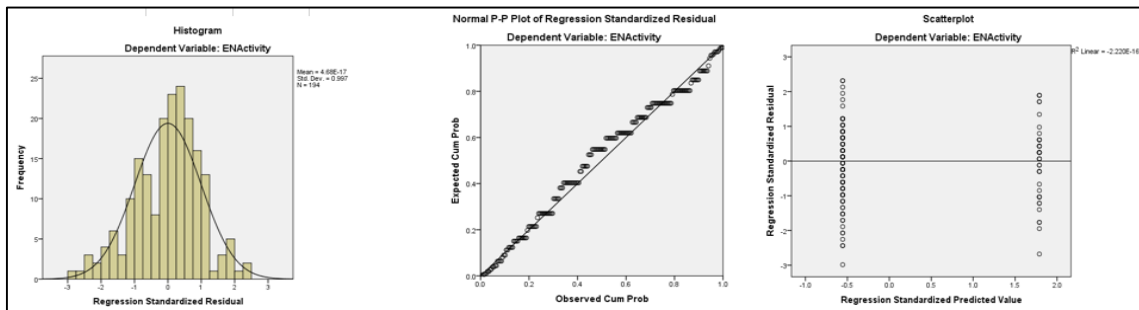
a. Dependent Variable: ENActivity

The residuals show the maximum and minimum predictive values summary and shows how spread out they are.

**Table 127: Residual Statistics**

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	5.4172	5.7065	5.4858	.12336	194
Residual	-2.04223	1.58277	.00000	.68202	194
Std. Predicted Value	-.556	1.789	.000	1.000	194
Std. Residual	-2.987	2.315	.000	.997	194

a. Dependent Variable: ENActivity



**Figure 58: Informal vs Formal**

At the  $\alpha = 0.05$  level of significance, there is enough evidence to show that the challenges caused by high economic volatility have a negative impact on entrepreneurship activities. Therefore, the null hypothesis was rejected and the conclusion was:

**Highly volatile economies do not promote more informal entrepreneurial activities than the formal entrepreneurship activities.**

#### 4.9.6 Entrepreneurial Activity Model Results

The final model was also tested as a whole to determine the significance of all of the variables as a combined model. The study used stepwise regression where all of the predictor variables were entered simultaneously into the model. The model summary represents R Square and adjusted R Square values of 0.252.

After stepwise regression was done, the model had adjusted R square values of 0.184 and 0.249 respectively. This shows that the weighted combinations of the predictor variables explained 24.9% and 18.4% of the variance of entrepreneurial activity. The correlation results were also produced and are shown in the appendix C.

**Table 128: Entrepreneurial Activity – Multiple Regression Model Summary**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.600 <sup>a</sup>	.360	.252	.59957	.360	3.318	28	165	.000	2.133

a. Predictors: (Constant), VerySuccessful, Matric, StrategyNew2, TertiaryNotcompleted, TradingNew2, Seminars, Gender, ChallengesNew1, CertificateDiploma, FactorsNew2, Country, InformalFormalNew1, Average, Age55orOlder, Age35to44, TrainingPrograms, BelowAverage, TradingNew3, PostgraduateDegree, Workshops, ChallengesNew2, StrategyNew1, Age45to54, TradingNew1, FactorsNew1, Age25to34, Successful, BachelorsDegree

b. Dependent Variable: ENActivity

**Table 129: Entrepreneurial Activity – Stepwise Regression Model Summary**

Model Summary <sup>c</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.434 <sup>a</sup>	.188	.184	.62602	.188	44.571	1	192	.000	
2	.499 <sup>b</sup>	.249	.241	.60371	.061	15.449	1	191	.000	2.064

a. Predictors: (Constant), StrategyNew1

b. Predictors: (Constant), StrategyNew1, FactorsNew2

c. Dependent Variable: ENActivity

The model is significant as the p-value of the F test is less than 0.05

**Table 130: Multiple Regression-ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.396	28	1.193	3.318	.000 <sup>b</sup>
	Residual	59.315	165	.359		
	Total	92.711	193			

a. Dependent Variable: ENActivity

b. Predictors: (Constant), VerySuccessful, Matric, StrategyNew2,

**Table 131: Stepwise Regression-ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.467	1	17.467	44.571	.000 <sup>b</sup>
	Residual	75.244	192	.392		
	Total	92.711	193			
2	Regression	23.098	2	11.549	31.687	.000 <sup>c</sup>
	Residual	69.613	191	.364		
	Total	92.711	193			

a. Dependent Variable: ENActivity  
b. Predictors: (Constant), StrategyNew1  
c. Predictors: (Constant), StrategyNew1, FactorsNew2

There is 95% confidence that the slope of the true regression line is somewhere between 0.135 and 0.369. After the stepwise regression, the VIF was lower than 10, which shows that the remaining variables were acceptable

**Table 132: Stepwise Regression - Coefficients**

Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.384	.318		10.639	.000	2.756	4.011		
	StrategyNew1	.362	.054	.434	6.676	.000	.255	.468	1.000	1.000
2	(Constant)	4.528	.423		10.708	.000	3.694	5.362		
	StrategyNew1	.252	.059	.303	4.260	.000	.135	.369	.779	1.284
	FactorsNew2	-.218	.055	-.279	-3.931	.000	-.327	-.108	.779	1.284

a. Dependent Variable: ENActivity

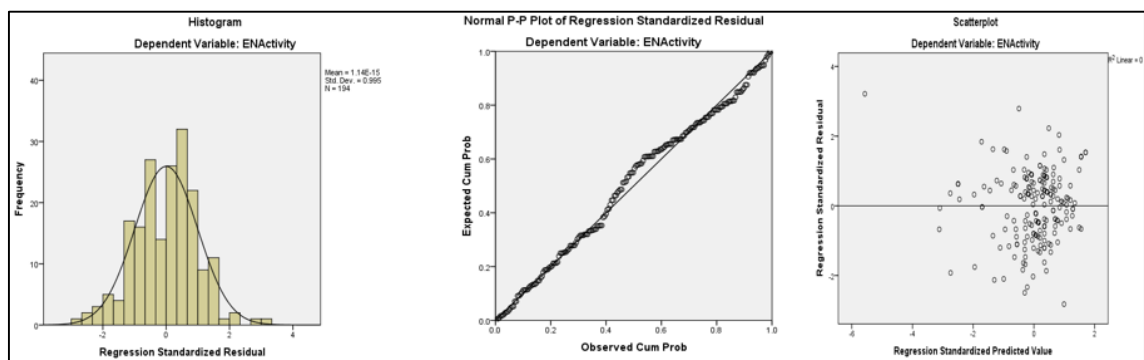
The residuals show the maximum and minimum predictive values summary and shows how spread out they are.

**Table 133: Stepwise Regression - Residuals**

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted	3.5590	6.0749	5.4858	.34595	194
Residual	-1.70395	1.94099	.00000	.60057	194
Std.	-5.570	1.703	.000	1.000	194
Std.	-2.822	3.215	.000	.995	194

a. Dependent Variable: ENActivity

The graphs for the model are shown in figure 58



**Figure 59: Entrepreneurial Activity Model graphs**

## 4.10 QUALITATIVE ANALYSIS RESULTS

Open coding analysis was done on the open-ended questions for each hypothesis. This helped the respondents to state other concerns that they had in relation to their entrepreneurship activities. The responses were grouped into certain themes and statements relating to the themes were taken into consideration and displayed in the tables along with the frequency of occurrence of the particular theme. The data was split by country to ensure the results for the two countries were analysed separately. Direct statements from the respondents are also stated in this section. The names and any other personal identification of the respondents were not captured as this was an online survey and the study did not collect personal identification information.



#### **4.10.1 Strategy**

This section presents results relating to strategy and entrepreneurial success in each of the countries. The sub-problem for this sub-scale is:

***What were the survival strategies in South Africa and Zimbabwe during the past five years?***

The question that entrepreneurs were asked was:

*What has been the most effective survival strategy for your business for the past year/years?*

The answers to this question are presented in Table 134 with customer/client being the most frequent theme mentioned by the respondents. The statements relating to the customer theme are related to customer relationships. Other popular themes stated by the respondents were market, adaptability, finance, networking, innovation, cash flow, competition and management.

##### **4.5.1.1 South Africa**

Some entrepreneurs operating in South Africa described how they achieve maximum value from their business

*Setting very clear and aggressive near/medium-term goals in the critical cash flow turnaround phase, whilst maintaining clear yet malleable long term strategic goals for achieving maximum value objective.  
(Respondent16 2014).*

**Table 134: Strategy Themes – South Africa**

Strategy Theme	Frequency	Associated Concepts
Customer/Client	14	Quickly adapting to change and client/customer needs, good customer service, maintaining customer relationships, knowing customers, analysing customer behaviour, communication with clients, building relationship with clients, tailoring the solution for the clients, constantly adapt to the clients needs.
Market	8	Quickly responding to market needs, market research, market direction, watching market trends, marketing online, up to date with the market, adapting to market need, low marketing
Hard work	7	Hard work
Adaptability	6	Being adaptable, quickly adapting to change, adapting to market need, ability to adapt in situations, constantly adapt to the clients needs.
Business	4	Business direction, business relationships and strategies, savings for business upkeep, follow general business practices,
Planning	4	Planning and chasing profitability.
Attitude	4	Great attitude, good attitude towards everything
Cost	3	Managing costs, keeping operating costs low, cross subsidising cost centers
Diversification	3	Diversification
Money/Finance	3	Saving money, shortage of money and equipment, ability to manage finances well
Networking	2	Networks
Innovation	2	Innovation
Product	2	Team and product, non-perishable products.
Cash flow	2	Critical cash flow turnaround phase, cash flow.
Management	2	Strong management skills, the ability to manage finances well
Competition	2	Analysing competitor behaviour, competition.
Quality	2	Be as frugal as possible but without compromising quality service delivery, quality products.
Profit	2	Chasing profitability, profit making.
Religion and culture	4	Faith in God, pray every day for God's favour, Basotho culture and value systems is a guiding principles, biblical principles

#### **4.5.1.2 Zimbabwe**

Some respondents managed to describe their industry and what strategies they use that related to their businesses. One of the descriptions was from a respondent from Zimbabwe who stressed how it has become challenging to operate a business in Zimbabwe. Responses are shown in Table 135.

*I am in the Airline industry, operating out of Zimbabwe. My biggest challenge has been maintaining my international clients in a hostile and very volatile political environment. Tourism and cargo into Zimbabwe were our cash cow. That market has since dried up because of the perceived sanctions, hyper-inflation, USD dollarization of the economy and the proliferation of the informal sector. We have identified central government as our biggest client under the current socio-economic and geo-political environment. We survive on government budget allocations and function on trip pay outs.*

*(Respondent18 2014)*

**Table 135: Strategy Themes - Zimbabwe**

Strategy Theme	Frequency	Associated Concepts
Customer/Client	19	Customer needs, new customer relations, customer service, customer needs, customer relationships, customer focus.
Business	10	Good business referrals, business direction, grow business, changing business environment, direction for underperforming business, developing alternative business relationships, follow up on critical business issues, business service needs.
Market	8	Market has since dried up, niche marketing, understanding market dynamics.
Adaptability	7	Adapting to the ever changing operating environment, adapting to market need.
Networking	7	Having strong networking skills, networking and discussion with colleagues and friends.
Environment	6	Quick reaction to the interchanging environment, political environment, changing business environment, responding swiftly to changing in the operating environment, monitoring the environment,
Cost	5	Cost cutting, reviewing every cost incurred and trimming, cost reduction, keep overhead costs low.
Innovation	4	Innovative products, pro-active decision-making.
Product	4	Innovative products, quality product across all price brackets, team and my product, needed products, high quality products, best service and product for my customer.
Planning	3	Careful planning, good planning.
Money/Finance	3	Void of equivalent monetary gain to the fact, shortage of money.
Diversification	2	Especially when one line of business is under-performing.
Cash flow	2	Tourism and cargo into Zimbabwe were our cash cow, consulting for improved cash flow.
Management	3	Debt management.
Competition	2	Competitive prices, knowing your competitors.
Quality	2	Producing a quality product across all price brackets, high quality production.
Profit	2	Focus on the critical aspects of the business in order to remain profitable.

#### 4.10.2 Factors

In terms of factors that influence entrepreneurial success, the research sub-problem associated with the factors sub-scale is:

***How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?***

The open-ended question for this sub-scale was:

*What factors do you feel have influenced the success of your business?*

This question was aimed at identifying both economic volatility factors and entrepreneurial factors that influence entrepreneurship activity. The popular themes stated by the entrepreneurs who responded were market, service delivery, networking, relationships, client, team work, innovation and creativity and completion. The answers given by the respondents were similar to the ones stated in the first sub-scale for challenges in terms of factors caused by economic volatility. For the factors that they applied, the answers were similar to the survival strategies that they apply. In this section, some managed to explain in detail what their businesses do and what type of factors influence their particular business.

***4.9.4.1 South Africa***

Some responses from entrepreneurs operating in South Africa were:

*Taking calculated risk. Taking advantage of low hanging fruit.*  
(Respondent54 2014)

*Mine is a service business - offering uncompromised levels of service is a significant differentiator.*  
(Respondent94 2014)

**Table 136: Factors Themes – South Africa**

Factors Themes	Frequency	Associated Concepts
Market	7	Focusing on the right target market, keeping up to date with the market, marketing factor has contributed, marketing activities, implementation of technology to stay ahead of the market, niche marketing, ability to adapt to changing market trends.
Service Delivery	6	Quality of service, excellence in service delivery, technological services, offering uncompromised levels of service is a significant differentiator, service number one, customer communication and service
Networking/Relationship	5	Growing a string of networks, networks, good relationships with people and suppliers, maintaining customer relationships
Technology	5	Technological services, use of technology, implementation of technology to stay ahead of the market, system implementation.
None	5	None since I am still a struggling entrepreneur
Customer/Client	4	Loving the customer, maintaining customer relationships, customer communication and service, building a solid foundation looking after our clients.
Team work	4	Young dynamic team, team work and good understanding, team work.
Finance/Money/Cash	4	Money number two follows after service, always maintaining a positive cash flow.raising fuel prices
Communication	4	Customer communication and service.
Training/Learning/Skill	3	Industry skills and knowledge, dedicated and skilled people.
Hard work	3	Hard work to achieve results.
Innovation and Creativity	3	Designing innovative products.
Stock availability	3	Stock availability.
Product	2	Designing innovative products, quality products.
Competition	2	Competition, depreciation of competitor suppliers.
Development	2	Personal development, developing and travelling with all the workers to the field.
Quality	2	Quality of service, quality products.
Persistence and Perseverance	2	Persistence, passion and creativity.
Adapt	2	Adaptability, ability to adapt to changing market trends.
Change	2	Ability to change quickly, adjusting to change.
Planning	2	Business planning.

#### **4.9.4.2 Zimbabwe**

Some could not state any factors as they did not deem their businesses as successful. Instead they managed to state the challenges they face that prevent

them from being successful. An example given by an entrepreneur from Zimbabwe was:

*Under the current Zimbabwe's political and economic situation, I can say our business operations have not been and are not a success story. The Business Brand has been damaged internationally and locally Business Loans are very expensive and prohibitive. We are of the opinion that we are going through a business cycle and in the "LOW" phase. (Respondent18 2014).*

*I have recorded limited success because of the limited disposable income in the country and industries are struggling. (Respondent32 2014).*

However, some of the entrepreneurs in Zimbabwe did have success factors that they stated and these took advantage of the country's economic situation by creating unique products. Examples of some of the statements are:

*Good opportunity identification. No intense competition in the services that we offer. Bootstrapping to finance the start-up. (Respondent39 2014).*

*High demand of the product in the country at the moment. Reduced operating cost as I hire labour for each project. Consistency in quality of the product and good customer service. (Respondent91 2014).*

Table 137 shows the factor themes obtained from respondents in Zimbabwe.

**Table 137: Factors Themes - Zimbabwe**

Factors Themes	Frequency	Associated Concepts
Customer/Client	9	Good track record and value-added to past clients leading to repeat business and referrals, customising solutions per client needs
Training/Learning/Skill	9	Good business development skills, very strong ICT background, accountability to mentors,
Experience	7	Many years of experience in senior managerial positions in well-established companies
Networking/Relationship	6	Networking with other entrepreneurs of the same level, good public relations, relationship management, networking.
Product	6	Customer response to our products, product range, develop our product to match client needs, maintaining quality of product and service, consistency in quality of the product,
Market	5	Knowing your market, niche marketing, market needs knowledge, responsiveness to current market needs.
Service Delivery	5	Making sure there was a real need for the service provided, excellence in service delivery, no intense competition in the services that we offer, maintaining quality of product and service, good customer service.
Innovation and Creativity	4	Innovation ability, creativity and maintaining quality of product and service
Finance/Money/Cash	4	Bootstrapping to finance the startup, financial support from friends and family during the tough times, financial discipline, making sure that there is no lack of money, grand's.
Development	4	Business development skills, continuous developing product to match client needs.
Persistence and Perseverance	4	Being persistent.
Hard work	3	Determination and working hard.
Competition	3	No intense competition in the services that we offer, low competition from international corporate.
Quality	3	Quality of product and service, consistency in quality of the product and good customer service
Technology	2	Business and technical know how, implementing systems.
Team work	2	Young dynamic team, team work
Communication	2	Good communication.
Adapt	2	Adaptability, ability to adapt roles quickly and efficiently at various stages of growth of the business.
Flexibility	2	Strategic flexibility.
Planning	2	Careful planning.
Analysis	2	Business analysis, analysing customer behaviour, critical analysis.

#### 4.10.3 Challenges

Several entrepreneurial challenges were stated by some of the entrepreneurs. The sub-problem relating to this section is:



***What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries such as South Africa and Zimbabwe?***

The question that the respondents answered in the survey was:

*What are the main challenges that affect the success of your business that you have faced in your country?*

The common themes stated by the respondents were corruption, finance, government policies, competition, skill and education, exchange rates, labour strikes and interest rates.

***4.5.3.2 South Africa***

Other associated statements to the themes that are not stated in the table are from entrepreneurs operating in South Africa, they included:

*Trust in black entrepreneur, lack of experience is a barrier to entry, high minimum wages!*

*(Respondent36 2014).*

*Civil service that is visionless, uninspiring, selfish, lack commitment to take this country to the economic zenith.*

*(Respondent54 2014).*

In terms of trading, certain challenges were stated and are not included in the table as they could not be associated to a particular theme:

*Imports from the east, unrealistic pricing and quality have a negative impact on local manufacture.*

*(Respondent138 2014).*

Table 138 shows the challenges themes obtained from respondents in South Africa.

**Table 138: Challenges Themes – South Africa**

<b>Challenges Themes</b>	<b>Frequency</b>	<b>Associated Concepts and statements</b>
Corruption	8	Government corruption, corrupt state officials
Finance, cost and income	7	Financial resources, unwillingness of financial institutions to lend money to promising people, banks are not prepared to lend you money, failing to find the loan, high cost of living
Funds	7	No government support/funding, lack of funding, correct funding instruments, accessing funds when you are not a permanent citizen, Getting the relevant funders to understand our business concept
Government Policies	6	Inability to get government work due to BEE policies, opportunities are limited to certain people due to their political affiliation
Competition	5	A lot of competition, internationally competitive
Skill and Education	5	Lack of skilled labour especially recent graduates, lack of skill development programmes, lack of quality candidates in terms of experience, skill and education
Capital	5	Start up capital and resources, lack of capital
Economy	3	Economic climate, National Economy, lack commitment to take this country to the economic zenith
Staff	3	Quality of staff, staff issues, finding good staff, scaling down of staff by organisations
Exchange rate	3	Exchange rates
Labor strikes	3	Labour strikes
Start-up	2	Large corporates who receive rebates from large companies are not willing to risk doing business with small businesses
Interest	3	High interest rates

#### **4.10.3.1 Zimbabwe**

In Zimbabwe, certain challenges were stated by the respondents. Some of these were describing the actual challenge and how it arises. Below is an example of these types of statements:

*Projects funded on basis of political affiliation yet our products taken for exhibitions by the same funders to show what SMEs are producing. No long term funding and the need for collateral limiting access to much needed funding.*

*(Respondent33 2014).*

Table 139 shows the challenges themes obtained from respondents in Zimbabwe.

**Table 139: Challenges Themes - Zimbabwe**

Challenges Themes	Frequency	Associated Concepts
Capital	13	Limited resources to grow the business, financial capital, capital and liquidity, lack of liquid working capital, lack of access to capital, lack of capital support, capitalization, lack of capital to expand the business, lack of resources to try new ideas.
Corruption	13	Licensing coupled with corruption is a challenge, corrupt institutions.
Finance, cost and income	9	Financial capital, Lack of funding, unwillingness of financial institutions to lend money to promising people, financial liquidity, lack of finance, lack of cheap financing, lack of International lines of credit, high cost of doing business, low disposable income.
Funds	8	Funding for growth, lack of funding, projects funded on basis of political affiliation.
Government Policies	7	Bad politics, high compliance costs with government statutes, government policy inconsistency and bureaucracy, bad governmental policies.
Liquidity	7	Liquidity crunch, limited business due to liquidity crisis, liquidity in the financial, capital and liquidity.
Training and Education	5	Lack of proper training, an education system that is not targeted at creating entrepreneurs. lack of cost-effective middle to high level specialist managerial skills, lack of requisite skills, an education system that is not targeted at creating entrepreneurs, government and educational institution leads to start business from a corrective measure than a constructive measure.
Government	5	Interlink between the entrepreneur, government and educational institution, lack of Corporate Governance.
License	4	Licensing is a challenge and coupled with corruption, licences and registration procedures, too much bureaucracy and licensing/registration fees, too many legal requirements and licences, high licensing fees.
Legislation	4	Unsupportive legislation, no legislative framework for SMEs, legislative bottlenecks
Tax	4	High taxes
Regulation	3	Government regulations, regulatory issues being manipulated by monopolistic established market players, too many regulatory procedures.
Economy	2	Economic meltdown, contraction of the economy.
Competition	2	Intense competition.
Start-up	2	Setting up a company and getting things done takes far too long, lack of start-up support.

#### **4.10.4 Trading**

In terms of entrepreneurship trading in high volatile economies, the sub-problem for the section is:

***How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?***

The question in the sub-scale for trading was:

*What are the main challenges that you have faced in terms of trading in your country and how did you manage to deal with them?*

The popular themes from this sub-scale were exchange rates, market, finance and cost, currency, capital, skill, customers, competition, corruption, regulation and services. Table 140 shows the trading themes obtained from respondents in South Africa.

#### 4.5.4.2 South Africa

Table 140: Trading Themes – South Africa

Trading Themes	Frequency	Associated Concepts and statements
Exchange	7	Exchange control, exchange rates, exchange rates have been at a high creating a slump in profit, exchange regulations, fluctuating exchange rates
Market	6	The market in South Africa is small and diverse, we do not rely on the local market, markets are treated as close business, door to door marketing, difficulty in focusing on the right target market.
Finance and cost	5	Lack of finance, increase in transport costs.
Currency	4	Weak currency, falling currency.
Capital	4	Lack of resources, lack of capital.
Skill and education	4	Uneducated labour force, need to constantly be training and upskilling.
Customers	4	Customers not paying up, people not paying for services provided, business is usually slow so there is a need to contact customers.
Competiton	4	Depreciating rand has made it difficult to be competitive off shore, stiff competition.
Corruption	3	Corruption, corrupt government department and parastatals.
Regulation	3	Regulatory environment, legal environment.
Services	3	People not paying for services provided, there is a need spread the word about our products and services beyond our immediate area.
Growth	2	Difficulty finding funding for growth, growing the capacity of the company
Prices	2	Fabric prices going up without notice due to fluctuation in rand, fluctuating prices

#### 4.10.4.1 Zimbabwe

Some entrepreneurs, especially those from Zimbabwe, managed to describe the challenges that they face. Some stated challenges and how they sometimes deal with them. An example would be:

*Shelf companies and fly-by-night tenderpreneurs use their inside-links to get orders. The best way to deal with them is to offer a better quality product at a better/lower price.*

*(Respondent13 2014).*

Some of the detailed responses were:

*International Politics and perceived sanctions affected the company Brand which saw our clientele and air freight cargo dwindling. We scaled down our operations, had some retrenchments which turned out to be expensive and had some legal challenges.*

*(Respondent17 2014).*

Other statements were mainly on operations:

*Getting payments for work done especially for large corporates - were forced to close manufacturing operations and focus on consulting insisting on payment before work is done.*

*(Respondent33 2014).*

Table 141 shows the trading themes obtained from respondents in Zimbabwe.

**Table 141: Trading Themes - Zimbabwe**

<b>Trading Themes</b>	<b>Frequency</b>	<b>Associated Concepts and statements</b>
Government	6	Government policy inconsistencies especially on indigenisation, government regulations.
Tax	6	Taxation, new excise taxes, withholding taxes to foreign suppliers, prohibitive taxes, punitive import taxes, high tax rates.
Demand	6	Depressed demands, low demand for goods, low demand due to poor economic performance
Liquidity	5	Liquidity crisis, financial liquidity.
Trade	5	information due to lack of knowledge on foreign markets, lack of good trading policies.
Prices	5	Low prices, level of prices unpredictable, When rand loses value prices in Zimbabwe go up, when rand gains prices do not come down
Market	4	Fluctuation of global markets have kept the level of prices unpredictable, diversification and carving out niche markets,
Corruption	4	Government corruption, corruption.
Competition	4	Lack of local competitiveness makes it difficult to export, high competition from cheap imports, pricing models and competition.
Economy	4	Economy not performing, US dollar is too strong for the economy so circulation of money is difficult, low demand due to poor economic performance
Growth	4	No growth, struggling with growing our market share, organic growth of my company, no funding for growth
Expense	4	Retrenchments which turned out to be expensive, high tariff and customs duties make imported inputs more expensive, high
Cash	3	Cashflow management, diversification of activities in search of cashflow, lack of cash and poor disposal incomes.
Exchange	3	Exchange control, exchange rates
Products		Low demand for products, offering a better quality product at a better/lower price.

#### **4.10.5 Informal vs Formal Entrepreneurial Activity**

In terms of the Informal vs Formal sub-scale. The sub-problem related to it was:



***Do highly volatile economies promote entrepreneurship activities in the formal or informal sector?***

***The question that the respondents answered was:***

*Are there any other reasons why you feel operating in the formal or informal sector is best for your business? If yes, please state.*

Not many responses were given by entrepreneurs for this question. Main themes identified from the data which were related to the formal economy were costs, tax, government, exposure, finance and cash, opportunity, clients/customers, market and business. The informal economy identified themes were growth, education, network, business, opportunities, corruption, environment, economy and networking.

The tables for each country were divided into formal- and informal-related themes. This gives clarity of the themes identified and whether they state something positive or negative.

***4.10.5.1 South Africa***

Some entrepreneurs strongly supported operating in the informal sector, one such detailed response was:

*Informal sector people work for themselves. They are responsible for their own money. If they don't work they don't have money. In formal sector employees need to do what unions tell them and they don't care if the work is done today or next week, but they demand their pay at the end of the week.*

*(Respondent47 2014).*

One entrepreneur did not give a definite answer and was mainly concerned with the employment opportunities provided for the people in the country. This detailed statement was:

*It depends on the type of business. As long as opportunities for employment are provided to people. Informal sector has a lot of limitation that causes the business to remain fragmented.*

*(Respondent12 2014).*

Table 142 shows the Informal vs Formal themes obtained from respondents in South Africa.

**Table 142: Informal Formal – South Africa**

Informal vs Formal Themes	Themes	Frequency	Associated Concepts and statements
Formal sector	Business	2	Prefers informal but obliged to work in the formal as line of business requires it, clients are large global Bluechip businesses, enables one to meet the business requirements.
	Costs	2	Too expensive because of registration and book keepers.
	Government	2	Has support programs for formal businesses by the government.
	Tax	2	Proud to pay tax owing, high tax rates.
	Security	3	Security, feels safer, protects reputation.
	Exposure	4	Gives exposure and enables one to be recognized, gives access to larger multi-nationals and large locals, enables one to reach a variety of clients.
	Market	2	Formal market is selfish, market always request from an entrepreneur an educative directive.
	Clients/Customers	2	Gain credibility with clients
	Competition	3	Enables one to be competitive, competitive advantage.
	Opportunity	2	Leads to bigger opportunities as we grow capacity.
	Finance and cash	3	Cash flow problems, availability of finance, more returns in the long run.
Informal sector	Growth	3	Exposure to learn to be the best and eventually grow, ensures responsibility, Enables one to make decisions and adapt to new demands very easily.
	Education	2	Informal market requests from an entrepreneur an educative directive.
	Opportunities	4	Limited opportunities, one needs to be open to all opportunities.
	Business	2	Has a lot of limitation that causes the business to remain fragmented.

#### **4.10.5.2 Zimbabwe**

In Zimbabwe, there were a lot more detailed statements than for South Africa with entrepreneurs stating their views on the informal and formal economies. Some of these statements were:

*There is no economy that will survive in the informal sector. The informal sector only survives when meeting the political ends of political parties.*

*The thinking is, bring out opportunities and innovativeness at a small scale, develop structures and a market and grow the business. The normal process would be to formalise the informal businesses once they take shape and corporate governance takes over.*

*(Respondent17 2014).*

On the other hand, some entrepreneurs supported operating in the formal sector due to several reasons. An example of this is detailed below:

*One has better peace of mind away from prying eyes of compliance inspectors who are always rent-seeking 90% of the time. Being formal opens you up to a myriad of statutory obligations whose sum total of compliance fees reduces profitability and viability, and the harassment from these inspectors essentially criminalizes formal business.*

*(Respondent22 2014).*

Some described how the informal economy in Zimbabwe is ideal for start-ups. An example of an entrepreneur who touched on different reasons for why the informal economy is ideal to operate in, in a country such as Zimbabwe is a respondent with the statement below:

*Since we are still starting the informal sector is less costly for my business because formalising it would incur extra costs which would have an impact on the final price to my consumers. Due to the high corruption in the government I don't feel any loyalty to them because I know my money would be used for personal things which do not have any good impact on the country.*

*(Respondent91 2014).*

Table 143 shows the Informal vs Formal themes obtained from respondents in Zimbabwe.

**Table 143: Informal vs Formal - Zimbabwe**

<b>Informal vs Formal</b>	<b>Themes</b>	<b>Frequency</b>	<b>Associated Concepts and statements</b>
Formal sector	Tax	6	More taxes that affect formal business than those that affect informal business, taxes and returns.
	Growth	6	Positions business for growth, great for any meaning desire for growth and sustainability for generations to come, allows me to reach capital markets outside of Zimbabwe in search of funds to grow my business, good for growth, helps to increase the customer base as major companies wants to see the SME contributions to taxes and or the security issues.
	Business	5	Being formal is a sign that you are serious about your business, not the best way to operate at all, allows for transparency in business, business requires formal registration with central bank.
	Finance	5	Gives access a lot of things such as financial assistance, makes it easier to borrow in the future.
	Operating	5	Enables one to operate beyond borders, moulds one to become a grounded business person who can even take his business outside the countries borders, gives the ability to trade with large corporates, offers a structured and bankable way of operating, exposure to large companies as potential clients, gives an acceptable track record.
	Market	2	Offers better access to the market and capital though it will be expensive, allows one to reach capital markets.
	Regulation	2	Formal sector brings standards and regulation.
	Corruption	2	Helps reduce unofficial but high costs of corrupt government officials, too much corruption.
	Opportunity	2	Tenders/corporate orders are available if formal, more opportunity.
	Customer	2	Helps to increase the customer base as major companies wants to see the SME contributions to taxes and or the security issues.
Informal sector	Tax	5	Can do without paying huge taxes, not affected by high taxes, no prohibitive taxes, less taxation.
	Cost	5	Aligning to procedures costs both time and money, easier to do business and you avoid statutory costs of doing business which are punitive to small business, cuts down on overhead costs, less costly for business because formalising it would incur extra costs which would have an impact on the final price to consumers.
	Growth	4	Leaves breathing room for unfettered growth from red tape and the all consuming tax authority, No scope of growth if one gets comfortable.
	Opportunity	2	A lot of opportunity still to be exploited by serving the informal sector.
	Environment	2	Enables one to react quickly to changing environment.
	Network	2	Contacts are simpler and there is more trust.
	Regulation	2	Less regulation and it reduces overheads.
	Corruption	2	Avoid paying corrupt authorities that hinders progress.
	Economy	2	Does not contribute to economic survival.
	Business	2	Best for small scale operating business.

#### **4.10.6 Entrepreneurship Activity**

In terms of entrepreneurship activity, the question that the respondents were asked was:

*What are your main concerns with regards to entrepreneurship activity in your country?*

The question was mainly giving the respondents an opportunity to state any issues or concerns that they have with regards to entrepreneurship activity in their country. Respondents managed to give several answers relating to their country.

The main themes derived from the sub-scale question were entrepreneurship, government, training, business, support, finance, systems, corruption and environment.

##### **4.10.6.1 South Africa**

In South Africa, respondents managed to also state their views on entrepreneurship activity. Some of the detailed statements are set out below:

*It is important for entrepreneurs to think big, think out of the box, equip themselves with administrative and financial skills and automate their systems as far as possible.*

*(Respondent5 2014).*

One entrepreneur from the manufacturing and operations industry managed to explain what some South African entrepreneurs face:

*You need money to make money. Americans and Europeans are reluctant to place orders as people in SA in the art and crafts take orders but are never on time or never deliver goods. People do the same design over and over and don't come up with new ideas, therefore we battle to get buyers interested in the industry. It's about training them and not just putting*

*people on a stand. They sell what they have there, live from hand to mouth, don't think of keeping samples etc. Training, training, training!*  
(Respondent45 2014).

In the retail industry, some entrepreneurs managed to describe their entrepreneurial issues:

*If the economy is down we suffer financially. Landlords don't care if you have a good or bad financial month, they want their money. Same with SARS. Another thing is South African's copy each other but in that way they actually bring each other down. E.g. everyone wants to own a boutique these days in my area. They think it's all so glamorous. Import clothes from overseas and sell it for dirt cheap. While I am employing local people to manufacture at a higher price.*  
(Respondent47 2014).

Table 144 shows the Entrepreneurship Activity themes obtained from respondents in South Africa.

**Table 144: Entrepreneurship Activity Themes- South Africa**

Entrepreneurship Activity Themes	Frequency	Associated Concepts and Statements
Entrepreneurship	10	Not enough, not taken seriously sometimes, country wants to be seen as being supportive of entrepreneurship but there is little evidence of this on the ground, important for entrepreneurs to think big, entrepreneurial spirit not fully realised, lack of a pipeline of entrepreneurs, need for more entrepreneurs in the industry, need for more entrepreneurs to take risks, finding the right information.
Government	8	Lack of real government support, bureaucracy in government and private sector, lack of efficient government bodies that our company relies on to operate, too much of government intervention, corrupt governments departments eg eskom parastatals, not encouraged sufficiently by the government
Training, education and skill	7	Lack of training in the school system, need for training, falsely enterprise training practices, uneducated people, shortage of skills relevant to the industries, level of educating the public
Business	7	Need to encourage business to take risks, lack of revolutionary business ideas, high expenses for small businesses, business infrastructure, small businesses who have to try and operate with continuous power cuts and strikes, state commitment to assist small businesses is not very effective
Support	7	Lack of real government support, country wants to be seen as being supportive, need for programmes that truly support entrepreneurs to succeed, support from people, lack of support for inexperienced start-up companies, lack of industry specific support.
Finance	4	Lack of finance, financial suffering, need for financial skill
Growth	4	Need for patience to let company grow, need for support in growth.
Economy	4	Economic slowdown, poor economy, low economic development.
Funding	3	Lack of funding
Systems	2	School systems, automate company systems
Bureaucracy	2	Bureaucracy in government and private sector, bureaucracy leads to high expenses for small businesses



#### **4.10.6.2 Zimbabwe**

In Zimbabwe, some entrepreneurs mainly discussed entrepreneurship activity in relation to their businesses. Some of the detailed statements were:

*There is poor projection on how each individual no matter how small can actually translate into great economic activity that can positively contribute to the country and be able to revert back and bring solutions to problems mentioned and highlighted in the survey.*

*(Respondent10 2014).*

*My main concern is the final destination of the whole economy. At the moment the way things stand I wonder where the government will get returns as many entrepreneurs are shying away from the formal way of doing business. I also think many entrepreneurs should venture into development of new products which will benefit and resuscitate the country's economy.*

*(Respondent91 2014).*

Table 145 shows the Entrepreneurship Activity themes obtained from respondents in Zimbabwe.

**Table 145: Entrepreneurship Activity Themes - Zimbabwe**

Entrepreneurship Activity Themes	Frequency	Associated Concepts and statements
Entrepreneurship	15	Entrepreneurs want to take shortcuts to get rich overnight, need to finance promote entrepreneurship, partaking in entrepreneurship for the sake money and unemployment, lack of will and good business ideas limiting entrepreneurship activity, lack of entrepreneurship support, entrepreneurial environment, need to promot entrepreneurship initiatives, entrepreneurs lack information and resources, entrepreneurship culture has been slow in developing, entrepreneurs should venture into development of new products, needs improvement.
Government	11	Corruption on the governance, lack of Corporate Governance, lack of government co-operation or support, lack of government policy implementation supporting the entrepreneurs, government and major business are stiffling small enterprises, lack of govt support in terms of the laws, training and tax incentives, lack of developmental policies within the governmental systems.
Finance and funding	11	Lack of capital finance, need for finance to promote entrepreneurship, lack of funding options, inadequate funding
Support	10	Lack of institutional support, lack of proper infrastructure to support entrepreneurship activities, lack of government support, lack of support from traditional institutions for the newer innovations, entrepreneurs shy away form the formal way of doing business.
Business	8	Lack of support for small busines, high cost of doing business, lack of affordable business loans, lack of will and good business ideas, business bullying.
Training, education and skill	7	Access to skills and training which the innovation hubs should focus on, training and capacity building, an education system that does not support entrepreneurs but creates workers, lack of will and good business ideas.
Capital	6	Lack of capital, lack of ideas that sell and attract capital, need to obtain venture capital, shortage of capital.
Economy	5	Dying economy, need to rescuscitate the country's economy, economic activity, economic turn-around, macroeconomic volatility.
Corruption	5	Legislation and corruption, corruption on the governance side and capital.
Systems	4	Governmental systems, ability to develop systems, education systems.
Bureaucracy	2	Bureaucratic bungling.
Growth	2	Entrepreneurial growth is hampered by lack of capital finance.
Environment	2	Lack of a sufficient enabling environment.
Tax	2	Lack of tax incentives, government does not benefit from tax collection as many entrepreneurs operate informally.

## 4.11 SUMMARY OF THE RESULTS

In terms of the model, the tests for the reliability of the scales assisted in the further analysis of the hypothesis. The analysis aimed to produce the power of the independent variables to the dependent variables as shown in the model.

#### **4.11.1 Quantitative results**

Reliability and validity tests were performed and the results were presented in this chapter. The model summary results were presented from the multiple regression analysis performed. Certain results were obtained for each hypothesis and these results are discussed. The model was tested with all the variables and two variables were significant; Strategy and Factors.

#### **4.11.2 Qualitative results**

Results for each of the open-ended questions led to similar themes. Major themes identified from the data were: Finance, corruption, networking, support, quality, government, tax, growth and environment. These themes were linked to the statements mentioned by the entrepreneurs. Some discussions by the respondents were quoted in order to give practical answers and to understand the industry in which they operate along with the challenges and issues they face. These results are discussed in the next chapter.

### **4.12 CONCLUSION**

This chapter shows and describes the results obtained in various tests and analysis done in the study. It presents the results in graphs and tables to give visual support to the results obtained. These results aim to give insight into answering the hypotheses. Analytical results help determine the final results obtained from the study. The qualitative analysis section gives results based on an analysis of data from the open-ended questions. The results were coded into themes that relate to the constructs. This method managed to give the respondents a chance to state the other areas they felt affected entrepreneurship activity in their country. The analysis was split between the two countries so as to identify which issues relate to which country, as their volatility levels are different. The results obtained in this chapter were discussed in Chapter Five.

## **CHAPTER 5: DISCUSSION OF THE RESULTS**

This chapter discusses and explains the results obtained in the analysis. It also links the results to the literature reviewed in Chapter Two. A thorough explanation of the results that includes the demographic profile of the respondents, the hypothesis and the model are provided in this chapter.

### **5.1 INTRODUCTION**

The chapter consists of various sections that relate to Chapter Four as the results obtained are discussed in that chapter. Section 5.2 explains the demographic results obtained as well as the companies. Sections 5.3 to 5.8 explain and discuss the empirical results obtained based on the strengths of the relationships of the constructs. Section 5.9 summarises the discussion. The discussion also gives an overview of the findings in relation to the findings of the studies reviewed.

### **5.2 DEMOGRAPHIC PROFILE OF RESPONDENTS**

The demographic profile of the respondents is very important as it enables the study to examine the insights of the entrepreneurs in relation to the research. The demographic profile discussion also helps to relate the findings of the study to the previous studies and what type of entrepreneurs each country has.

### **5.3 RESPONDENTS' CHARACTERISTICS**

The discussion of results section focuses on discussing the results presented in Chapter Four with regards to the data. It aims to discuss the respondents' characteristics in relation to entrepreneurship activities.

### **5.3.1 Gender of Respondents**

In terms of gender, 60% of the entrepreneurs who responded were male and 40% of the entrepreneurs were female. Despite the number of respondents obtained for the study, this shows the expected breakdown of female and male entrepreneurs and is in line with the literature. The literature reviewed shows issues in terms of gender in entrepreneurship where there are fewer female entrepreneurs than male entrepreneurs. Literature points out how gender influences entrepreneurship activities where males are likely than females to start a business, as men think more positively than women and have the required skills and knowledge to become entrepreneurs (Minniti 2010). More female entrepreneurs operate in the informal sector compared to men and the females show 61% operating in the informal sector versus 32% of males who operate in the informal sector. No definite causes for this were identified in the literature; however it shows how gender influences entrepreneurship activities in both the formal and informal sectors. Men seem to have a positive attitude towards exploiting opportunities and, as a result, they partake more in entrepreneurial activities.

### **5.3.2 Age of Entrepreneurs**

Most entrepreneurs were found to be between the ages of 35 and 44 (31%) and 25 and 34 (30%). This shows these age groups as the ones in which people identify opportunities and become entrepreneurs. In the literature reviewed, age was one of the factors that influence entrepreneurial activities. In the 2013 GEM report, a high percentage of entrepreneurs are found to be between the ages of 35 and 44 and people are likely to start a business after the age of 25 years (Amorós & Bosma 2013). There were fewer entrepreneurs who are 25 years old or younger, as this is the age whereby completion of studies takes place (Johansen 2013). The figures obtained from the data relate to the theory that entrepreneurs who are 24 make up less (3%) than any other age group and the

highest number of entrepreneurs are between the ages of 35 and 44 (31%) and 25 and 34 (30%).

### **5.3.3 Highest Qualification**

Most entrepreneurs had a bachelor's degree (30%), postgraduate degree (29%) or certificate/diploma (26%) as their highest qualifications. Education has a major effect on entrepreneurship as entrepreneurship varies across countries due to the educational systems available. The respondents show that more entrepreneurs have a higher education level.

### **5.3.4 Entrepreneurship Programs**

32% of the respondents indicate that they have never attended any entrepreneurship workshops, seminars or training programs. Of these 32%, many of them (45%) operate in the informal economy. 26% of the respondents have attended entrepreneurship training programs before and 23% have attended workshops. The literature states how entrepreneurship training is a challenge that entrepreneurs face, therefore, a lot of entrepreneurs are not exposed to entrepreneurship programs (Gynawali & Fogel 1994). Entrepreneurship training is a critical factor that contributes to the success of entrepreneurship activities.

### **5.3.5 Bank Account**

The study shows 86% of the respondents have bank accounts. Of the respondents operating in the informal sector, 66% have bank accounts. When entrepreneurs register their businesses formally one of the procedures that they go through is opening a bank account in order to register. Entrepreneurs with bank accounts may not need to go through this process again when they register their business formally.

### **5.3.6 Respondents' work experience**

In terms of work experience, the highest number of respondents (59%) had five years or more of work experience when they started their company. 64% of the entrepreneurs operating in the formal economy had five years or more worth of work experience when they started their business. In the informal sector, 48% of the respondents had five years or more work experience when they started their business. The GEM report specifies how entrepreneurs in the 35-44 year old age bracket are likely to have acquired more experience to operate in specific environments even in developing countries (Amorós & Bosma 2013). Generally greater work experience is deemed to have a positive influence on their entrepreneurial activities.

### **5.3.7 Cross tabulation of Age and Education level**

Cross tabulation analysis was done on the age versus education level. Bachelor's degree seems to have the highest number (12%) of respondents within the 35 to 44 age group compared to any other age group or qualification. 11% of the respondents are between the ages of 25 and 34 and also hold a Bachelor's degree qualification. 10% of the respondents have a postgraduate qualification. The cross tab gives an overview of the distribution of the age groups across all of the qualifications and shows how age qualification relate to each other and also shows how the same age group is highly involved in entrepreneurial activities.

## **5.4 COMPANY CHARACTERISTICS**

This section mainly focuses on discussing the company's characteristics. The discussion is focused mainly on the company characteristics that were presented in Chapter Four. The discussion also is centrally around entrepreneurship activities in the two countries.

### **5.4.1 Company Industry**

The industry is a very important aspect of the research study as it allows the researcher to identify which industries are represented by the respondents. The study aimed to have entrepreneurs from a variety of industries and therefore, the researcher identified several different business parks when distributing the hard copies of the survey. The Manufacturing/Operations (15%) industry was the highest represented industry in the study, along with the Retail (12%), Information technology (11%) and Services (8%) sectors.

In the formal sector the above-mentioned industries were also the most represented, along with Consulting (10%). The trading industry comprised of 6% of the respondents. The literature discussed how certain industries contribute to the economy of the two countries. Certain significant industries represented in this study are Manufacturing, Mining and Information Technology. These industries also contribute a certain amount to the GDP of the country.

### **5.4.2 Economic Sector**

The study has more respondents operating in the formal sector as it targeted respondents with companies currently operating in the respective countries. The survey was distributed to various companies in office parks as well as in industrial areas of Johannesburg and Harare. The online survey was mainly distributed to entrepreneurs at entrepreneurial events and databases, therefore, these sources mainly represented entrepreneurs operating in the formal sector. 71% of the respondents operate in the formal economic sector of their respective country. The type of sector is a very important aspect as it determines what type of business the entrepreneur is running and most of the larger organisations with 100 or more employees operate in the formal sector. In developing countries, small scale activities take place in the informal sector. Activities that take place in this sector are Operations and Trading.



### **5.4.3 Company Age**

Most of the respondents have companies that have been operating for longer than five years (38%) and some of them have companies established only one to three years ago. This shows that many of these firms were formed before 2009 and have been running for the past five years in such economic conditions. Although this was not part of the scope of the study, the age of company is important to illustrate whether these respondents continued to operate in highly volatile economies for a certain number of years despite the certain challenges that they faced.

### **5.4.4 Number of companies**

The study also asked some of the respondents whether they had operated other companies before or currently have companies running other than the one that they referred to in the statements. 59% of the entrepreneurs had the current business as their first business, showing that a lot of respondents had one business. 41% of the respondents have had more than one business, 46% have had two businesses and 48% had three or four businesses. There were fewer respondents operating in the formal sector (55%) that had more than one business than the respondents in the informal sector (66%). Of the respondents that had businesses, many of the respondents in the informal sector had three or four businesses (53%) and the other 47% had two businesses. This is in line with the study, as literature states how it is expensive to establish a business in the formal sector due to the costs of establishing a business and there is also a need to factor in some of the issues like reviewing tax, labour issues and regulations and licensing processes (Abdelhamid & El Mahdi 2003).

This finding is in line with the research as there is a slightly lower percentage (46%) of entrepreneurs operating in the formal sector compared to the informal sector.

#### **5.4.5 Number of employees**

Most of the respondents have companies with 50 or fewer employees. In the informal sector, most of the respondents have 50 or fewer employees (95%) compared to the respondents in the formal sector with 50 or fewer employees at 78%. This is in line with the research that shows that the sizes of the businesses operating in the informal sector are small scale businesses with 50 or fewer employees. The literature states how the informal sector has various small businesses which operate on a small scale (Hitimana *et al* 2011).

#### **5.4.6 Job field**

More respondents (53%) started their business in the same field as their previous job experience. In the informal economy, 45% of entrepreneurs started their businesses in the same field as their previous work experience, which is slightly less than entrepreneurs operating in the formal sector, which is 56%. This shows how more entrepreneurs utilise their work experience to start their own business.

#### **5.4.7 Finance to start-up the business**

Business finance has been a significant topic throughout the study as well as in the respondents' data. Some entrepreneurs have managed to save money and some were helped by their family and friends. 59% of the entrepreneurs have financed their businesses with their own money. More entrepreneurs in the informal sector started their businesses with their own savings. 19% of the entrepreneurs operating in the formal economy financed their businesses through bank loans. In the literature, in Zimbabwe, lack of finance and capital was seen as the main inhibiting factor (Maphosa 1998). Some or most entrepreneurs have limited access to finance (Pennisi 2012). As a result, entrepreneurs save and get income from various jobs and businesses to finance their own business.

#### **5.4.8 Company status**

Company status is an important aspect of the study as it determines how the entrepreneurs perceive their businesses. Success depends on various aspects that influence the business. The highest number of respondents viewed their companies as successful (42%) and 31% see their companies as having average performance. In the formal sector, entrepreneurs see their own businesses mainly as successful (43%), which is a higher percentage than the entrepreneurs in the informal sector (39%). More entrepreneurs in the informal sector view their businesses as being average performing. The context of the study aims to identify if ventures have been successful at all or there were/are affected by the economy. The literature states how male entrepreneurs consider them as successful entrepreneurs more often than women do mainly as they are motivated and consider themselves as competent (Johansen 2013).

#### **5.4.9 Cross tabulation of Economic sector and respondents with a bank account**

A large number of respondents have a bank account and the formal sector has a larger number of respondents with a bank account compared to the informal sector.

#### **5.4.10 Cross tabulation of country and entrepreneurs with a bank account**

More entrepreneurs in South Africa (48%) have a bank account for their business compared to entrepreneurs in Zimbabwe. In Zimbabwe 40% have had problems with banks closing down and cash flow and people in this country have since started to seek better ways of saving their money. The issue faced by Zimbabwe of bankruptcy in 2008 resulted in banks having trouble with currency (The Times 2008). Some private commercial banks at this time could also not give finance to entrepreneurs (Maphosa 1998).

#### 5.4.11 Cross tabulation of country and economic sector

South Africa has the highest number of entrepreneurs who have established their businesses in the formal sector compared to Zimbabwe. It also has the lowest number of responds in the informal sector.

### 5.5 DISCUSSION PERTAINING TO HYPOTHESIS 1: STRATEGY

*Sub-problem: What were the survival strategies in South Africa and Zimbabwe during the past five years?*

#### 5.5.1 Results from the Quantitative analysis

Results of the hypothesis tests show that the **survival strategies used by entrepreneurs in countries with highly volatile economies have a positive impact on entrepreneurship activities**. This can be seen in how the entrepreneurs view the status of their ventures. Most of the entrepreneurs rate their businesses as successful (42%) and others rate their businesses as average (31%). 19.5% of the variance in entrepreneurial activity success is explained by strategy.

As a result only certain strategies are important for a business to implement and are determined by the economic conditions of the country. Examples of strategies that entrepreneurs may consider employing are critical point planning and being opportunistic and reactive (Hiemstra *et al* 2006). The strategies tend to have a high impact on success of entrepreneurship activities. Networking is also a strategy that assists entrepreneurs to be successful. Most of the entrepreneurs in the study rate themselves as successful (42%) and very successful (14%). Entrepreneurs form social ties in their networks and this enables them to establish trust relationships with other entrepreneurs (Phillips *et al* 2013). This type of relationship in turn creates a form of knowledge sharing and this sustains organisational effectiveness and enhances entrepreneurs.

Respondents state certain strategies that they use to establish success in their business ventures. Entrepreneurs need to achieve strategic positions to ensure success of their businesses and efficient use of their company's resources and competencies in order to meet client/customer demands and expectations (Thompson 1999). There is a need for entrepreneurs to adapt and strategically manage economic changes and to adopt certain roles.

Some of the strategies used to ensure entrepreneurial success in highly volatile economies depend on the demand of the customers, value offered by the business and value perceived by the customer (Regan 2012). Customer involvement is an important strategy that ensures product and process innovation to identify the right strategic direction and value drivers. Organisations should be willing to invest in certain strategies and there may not be enough resources for a small enterprise to invest in certain strategies, such as innovation, due to the state of the economy. As a result, a company may only focus on maximising returns as one of its strategies by utilising the available resources which may not be much (Regan 2012).

Some entrepreneurs integrate new product ideas through cross-functional teams, this enables them to identify gaps and flaws in the business and improve in certain aspects of the business. Other strategies comprise of institutional strategies that foster entrepreneurship through research and education (Jennings *et al* 2013). This may provide entrepreneurs with further knowledge such as managing human resources, planning, entrepreneurial orientation, identifying market opportunities, risk analysis prior to starting a business, competitor analysis and available business investments.

Strategies also depend on the stage of the business, some strategies are useful for start-ups and some strategies can only be used when the business has matured, or is below average, unsuccessful or successful. The area in which the business is located is another important aspect as some businesses may be in the townships and some based in the suburbs. As an example businesses based in the townships provide strategic services such as small product offerings, credit

to customers, spaza shops and longer and flexible trading hours through petty traders, unlicensed small producers, service providers, kiosk owners and retail and wholesale traders (Ligthem 2010:142). Some other strategies are based on competitors' actions. This is an important aspect as the entrepreneur then determines how to position his or her product against the competitors' product. Examples of strategies used in this scenario would be providing the same product or service similar to that of the competitor at a lower cost and differentiation by understanding the market conditions.

Entrepreneurship also involves risk taking in order to ensure a positive growth trajectory. This may involve room for change in the business model and not being worried about taking calculated risks. Entrepreneurial strategies can be strong predictors of entrepreneurial survival and success and therefore, they may need to be applied with caution as they have a positive impact on entrepreneurship activities.

### **5.5.2 Results from Qualitative analysis**

The sub-problem covered in this section was:

***What were the survival strategies in South Africa and Zimbabwe during the past five years?***

The question that entrepreneurs were asked in the survey was:

*What has been the most effective survival strategy for your business for the past year/years?*

The results from entrepreneurs consisted of several different entrepreneurial strategies used by the respondents in their particular industries and economic sectors. Customer/client focus was one of the most mentioned strategies used by entrepreneurs to ensure entrepreneurial success. Strategies mentioned in the study relate to the literature reviewed. Customer reaction, along with customer

loyalty and trust, was considered an important strategy for entrepreneurs to apply in order to ensure entrepreneurial success (Garcia-Muina & Navas-Lopez 2007).

Due to the state of the market, some entrepreneurs apply certain strategies according to the status of the market. Understanding the market dynamics and doing market research is one of the important strategies that entrepreneurs apply. Innovation practices are also some of the strategies mentioned by the respondents that are in line with the existing literature. Regan (2012) talks about innovation and how it can be an effective strategy for the company and how one should emphasise the value offered and how the customer perceives the business.

Most of the strategies mentioned by the respondents are in line with the existing literature and answer the research sub-problem. Other strategies mentioned are: A great attitude, planning, quality products, competition (analysing competitor behaviour), adapting to the market, knowing the market, managing costs, diversification, innovation, product focus, strong management and entrepreneurial skills, networks amongst similar people with a high level of trust, shared understanding, and interpersonal attraction, religion and culture.

This study showed how strategy is an important aspect to have in a business as all the respondents managed to state a certain type of strategy that they apply to the business and specific to their industry. Networking was mentioned as one of the strategies that the entrepreneurs use in order to succeed and form social ties with other entrepreneurs. There are certain types of networks that the literature mentions and these can be networks amongst similar people with a high rate of trust, shared understanding and interpersonal attraction (Phillips *et al* 2013). Networks, particularly in the formal sector, promote trust relationships amongst entrepreneurs and effective knowledge sharing.

In terms of religion and culture, other respondents expressed how they believe in God for their business to work out and how they adopt a certain culture to ensure they have value principals. This was one of the strategies that the literature

reviewed did not mention in relation to entrepreneurship activity in highly volatile economies

### 5.5.3 Conclusion

From both the qualitative and quantitative studies conducted in the empirical research, it was established that the **survival strategies used by entrepreneurs in countries with highly volatile economies have a positive impact on entrepreneurship activities.** The empirical research showed acceptable evidence that there is a relation between the strategies that entrepreneurs apply and that they have a positive effect on the outcome of their business. On the contrary, the findings revealed that the control variables gender, age, highest qualification, success level and entrepreneurial training programs did not have any effect on the final result

Survival strategies depend on the industrial and economic sector that the business operates in. Some of these strategies are effective and some may need to be evaluated before being taken into consideration and applied. Therefore, entrepreneurs need to carefully apply certain strategies depending on the type of business, age of business and how the business is affected by the economy. The qualitative study showed certain themes of strategies that entrepreneurs use depending on the state of their business. Some of the strategies are: **A great attitude, planning, quality products, competition (analysing competitor behaviour), adapting to the market, knowing the market, managing costs, diversification, innovation, product focus, strong management and entrepreneurial skills, networks amongst similar people with a high rate of trust, shared understanding, interpersonal attraction, religion and culture.**



## 5.6 DISCUSSION PERTAINING TO HYPOTHESIS 2- FACTORS

**Sub-problem:** *How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?*

### 5.6.1 Results from Quantitative analysis

In the results presentation section, the null hypothesis was rejected and it was concluded that: **High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies.**

Highly volatile economic factors have a certain negative influence on entrepreneurship activities. Certain factors that arise are lack of capital and financial innovation, expensive borrowing rates and underdeveloped financial markets (Pennisi 2012). Entrepreneurs struggle to survive as they have limited access to finance for their businesses, and low savings. This has a negative impact on their businesses. Some contextual factors mentioned in the literature are the types of business environments, socioeconomic conditions, cultural tradition and the international and domestic pressures that a highly volatile economy brings (Azmat & Samaratunge 2009). These factors can, in turn, cause immature civil society activities

These types of volatile economies have certain cultural traditions which influence entrepreneurial practises, and cause customers to react in certain ways due to the economic conditions. Certain barriers to entry that negatively affect entrepreneurship activities exist in such economies and these can be in the form of product, market and labour regulations (Klapper *et al* 2010). Some of the countries have poor infrastructure, high borrowing costs, high rentals of business premises, lack of human and financial capital and government policies that may not be entrepreneurship friendly (Klapper *et al* 2010). Uncontrollable changes to business ventures occur due to drastic changes in economic conditions and disturbing factors such as inflation and high petrol prices.

In turn, entrepreneurial success factors work well in certain economies, business sectors and industries. Certain factors are considered when entrepreneurs react to their business issues. Some entrepreneurs wear different hats, for example they adapt different roles, such as that of a technical innovator or market controller to operate successfully in certain types of economies (Muller *et al* 2012).

There are also positive factors that influence entrepreneurship activities; however, countries with highly volatile economies do not present enough of these factors. The negative factors overcome the positive factors and, as a result, businesses suffer a great deal. An examples of a positive factor is the contribution and forming of public opinion and awareness that helps to expose certain issues such as corruption, however this may not necessarily be an effective way (Azmat & Samaratunge 2009).

Highly volatile economies do not have sufficient education programs that are available and affordable for entrepreneurs (Johansen 2013). Economic shifters play a big role and these can be in the form of supply of material inputs, skilled labour, spread of knowledge and political and cultural forces (Glaeser *et al* 2010). These shifters can be positive or negative for entrepreneurship activities as they affect the business inputs and have external forces. Highly volatile economies lack tangible infrastructure which assists entrepreneurship, such as institutional arrangements, resource endowments, skilled labour, financing and manufacturing (Woolley & Rottner 2008:793).

Highly volatile economies do not present enough adequate resources, which are a critical aspect of entrepreneurial success (Solymossy 2005). Entrepreneurs also lack the confidence to operate in such environments as they feel that their ventures will not be successful. Some of the ventures do not appear to be profit rewarding due to the economic conditions, weak distribution channels, lack of legitimate commercial development and lack of supportive institutional frameworks as well as the interest and exchange rates (Solymossy 2005). This does not present successful activities factors for entrepreneurs to look for. For

entrepreneurs to succeed and feel motivated to partake in entrepreneurship activities in highly volatile economies, there is a need for certain factors such as state strength, market development and policies to control corruption issues (Robson *et al* 2009). It is imperative for government to provide entrepreneurial support such as guaranteed loans for entrepreneurs to purchase essentials for their businesses (Islam 2009). Not enough support is currently given to entrepreneurs at the moment in both countries and as a result entrepreneurship and the economy continues to suffer.

### **5.6.2 Results from Qualitative analysis**

In terms of factors that influence entrepreneurial success, the research sub-problem associated with the factors sub-scale is:

***How do high economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?***

The open-ended question for this sub-scale was:

*What factors do you feel have influenced the success of your business?*

In terms of factors, a certain number that influence entrepreneurship success are similar to the strategies applied by the entrepreneurs.

A certain number of factors stated and discussed by the respondents consist of innovation and creativity, ensuring stock availability, hard work to achieve results, producing quality products, enhancing one's knowledge in the field through learning, training and skills gained from experience, being persistent and having perseverance, personal development and the use of technology and systems.

A focus on the client/customer was also the theme with the highest number of responses in this section for Zimbabwe. It touched on various factors such as customising solutions for clients, forming good relationships with clients in order

to obtain referrals and having a good track record. This is in relation to the literature, which discusses how customer reaction is one of the important factors that affects entrepreneurial activity. Azmat and Samaratunge (2009) express how important it is to achieve best practices to establish customer loyalty and trust

In South Africa, the most popular theme had to do with how to focus on the right market. The literature also mentions how the market has a significant influence on the entrepreneurship activities. Factors mentioned by respondents in relation to the market comprised of focusing on the right target market, keeping up to date with the market, niche marketing, staying ahead of the market and the ability to adapt to market changes. There is a strong need for entrepreneurs to be able to adapt to certain roles depending on market controllers (Muller *et al* 2012). Literature also mentions factors such as product market as they may serve as barriers to entry for entrepreneurs who want to enter certain markets (Klapper *et al* 2010).

Technology was also one of the factors that influences entrepreneurial success in highly volatile countries. Standardisation of new technology was one of the factors mentioned by Woolley and Rottner (2008) as this promotes entrepreneurship infrastructure. Garcia-Muina and Navas-Lopez (2007) also mentioned how technology gives a competitive advantage and contributes to the success of entrepreneurship activities. Science and technology creativities are considered one of the main factors that ensure innovation in entrepreneurship activities (Woolley & Rottner 2008). Certain policies should continuously support and encourage technological changes to ensure success in entrepreneurial activities.

Some of the entrepreneurs could not state any factors as they rate their businesses as unsuccessful. These entrepreneurs stated challenges that they face instead, particularly in Zimbabwe, and they emphasised the issue of how most industries are suffering. Two entrepreneurs in Zimbabwe that responded to the survey insisted that the researcher visit their businesses to gain an understanding of how their businesses are suffering. In Zimbabwe, some

entrepreneurs take the opportunity of the country having a highly volatile economy by creating unique products and services that customers need. These type of entrepreneurs ensure that they have low labour costs and form good customer relationships.

These answers certainly gave some insight, especially in the context of Zimbabwe, as entrepreneurs were free to express themselves and explain how the economy affects their businesses. Previous findings are also in line with the current findings that the entrepreneurs stated and discussed. The situation in Zimbabwe raises great concerns and further analysis into certain factors that can be applied to specific types of industries to ensure entrepreneurial success. It was a bit difficult for some of the entrepreneurs to state some of the factors that they feel have influenced the success of their operations in certain harsh conditions as some businesses are directly affected by the state of the economy. Most businesses in Zimbabwe have closed down due to the economic downturn, however, certain businesses and shops have opened in the country over the past five years. Examples of these businesses are food outlets and supermarkets such as Food Lovers Market, Pick 'n Pay, Ocean Basket and Mugg and Bean.

### 5.6.3 Conclusion

Both quantitative and qualitative analysis was done on this sub-section. It was established that: **High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies.** In the quantitative analysis, tests were done in order to establish the results. The results also show that the strength of the relationship may increase or decrease with changing levels of economic volatility factors.

In the qualitative study, certain themes of factors were identified from the empirical research done. These were in line with the existing literature and more factors were stated in the details provided by some of the entrepreneurs. The most popular theme that entrepreneurs apply to ensure success when experiencing high economic volatility factors are: Innovation and creativity,

ensuring stock availability, hard work to achieve results, producing quality products, enhancing one's knowledge in the field through learning, training and skills gained from experience, being persistent and having perseverance, personal development, use of technology and systems, focusing on the right target market, keeping up-to-date with the market, niche marketing, staying ahead of the market and the ability to adapt to market changes.

## **5.7 DISCUSSION PERTAINING TO HYPOTHESIS 3- CHALLENGES**

***Sub-problem:** What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries such as South Africa and Zimbabwe?*

### **5.7.1 Results from Quantitative Analysis**

In the presentation of the results section, the null hypothesis was rejected and the conclusion was: **Challenges caused by high economic volatility have a negative impact on entrepreneurship activities.**

It was expected for the results to show that challenges have a negative impact on entrepreneurial activities due to the conditions that a volatile economy brings about. Findings of the research go along with the literature that was reviewed for the study. Certain challenges are difficult for entrepreneurs to overcome and as a result businesses suffer a great deal and some even close down. This has been seen mostly in Zimbabwe, where certain businesses in various industries closed down in the period between 2008 and the current year.

Some form of challenges was covered in the highly volatile economic factors. Corruption in certain areas remains the most corrosive challenge in highly volatile countries. Certain environmental conditions pose some challenges to entrepreneurial activities and these comprise of; crime, lack of adequate technology low production capacity, lack of management skills, poor skilled labour, obtaining credit and finance, less access to markets and development of relationships with customers, less recognitions by large companies, government

bureaucracy, lack of knowledge and support for their role in the economic development and regular compliance.

Instead of focusing more on competitive strategies for profit making, entrepreneurs face the problem of tackling these challenges first, and as a result they only aim for and reach the survival stage.

Another major challenge that entrepreneurs operating in highly volatile countries face is a lack of finance. This goes along with a lack of working capital, difficulty in obtaining loans, seasonal fluctuations in cash and having to secure finances from friends and family. The economy is not efficient enough to provide venture capital funding or more credit given by banks. Such conditions make it difficult for entrepreneurs to raise capital for their businesses (Azmat & Samaratunge 2009; Krashinsky 2012). Countries with highly volatile economies have poor regulatory quality and, as a result, entrepreneurs have to resort to external sources to finance their businesses.

Weak networks formed in these types of economies are not helpful due to lack of trust and challenges (Gadzala 2009). Some of the challenges that they face are similar. As a result it is difficult for entrepreneurs to overcome these challenges. Due to the shifts in demand and supply, the customer-supplier relationship is affected too.

High volatile economies face extensive issues and major challenges such as harsh economic conditions, inflation, poverty and poor availability of skills (Krashinsky 2012). From the study it was established that entrepreneurship is not being fostered sufficiently, especially by the governments in both countries, there are not enough business development systems in place, and, as a result, the challenges are too steep for the entrepreneurs to handle themselves.

Entrepreneurs in these types of economies therefore, have to re-examine their business strategies so that they can practise successful entrepreneurship in these countries. These countries need to revise certain issues that affect small to medium enterprises such as e-tolls, electricity, fuel prices, exchange rates and

certain policies. There is a need to provide a great deal of support for entrepreneurs operating in these types of economies in order for them to overcome the challenges that are posed.

### **5.7.2 Results from Qualitative Analysis**

The sub-problem relating to this section is:

***What is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries as South Africa and Zimbabwe?***

The question that the respondents answered in the survey was:

*What are the main challenges that affect the success of your business that you have faced in your country?*

Challenges that were stated by the entrepreneurs in both countries were slightly similar. Most respondents managed to fill in this section as it is something that they can relate to in the day-to-day running of their businesses.

Corruption was the major theme in both countries, with Zimbabwe also having capital as its highest theme. Topics and discussions stated around these themes were government corruption, corrupt state officials, corrupt institutions and corruption in licensing one's business. Literature reviewed also mentions that this is a major challenge that affects entrepreneurship in countries. It remains the most common challenge as the 2013 GEM report also specifies how corruption affects entrepreneurship in countries (Amorós & Bosma 2013). Corruption affects the rules that certain countries should abide by, and, as a result, entrepreneurs tend to lack knowledge in certain rules and policies due to the lack of accountability (Azmat & Samaratunge 2009).

Another major theme stated by the respondents is capital. Associated discussions around this theme are limited resources to grow the business, lack of financial capital, lack of liquid working capital, lack of capital support and lack



of capital to expand businesses. Lack of finance is a challenge faced by entrepreneurs in both countries. Obtaining credit and finance is associated with certain challenges which have an impact on businesses. Several researchers such as Krashinsky (2012) and Azmat and Samaratunge (2009) have mentioned how finance can be a critical challenge as there is a decline in wealth in these countries, less credit given by banks at high interest levels and therefore entrepreneurs find it hard to raise capital for their business. As a result, entrepreneurs resort to family, friends and external sources to finance their businesses.

Other major themes mentioned by the respondents are the economy, lack of education and sufficient skill, government policies, exchange rates, labour strikes, competition, starting up, licensing their businesses and liquidity. The literature mentions challenges that also affect entrepreneurs up to a certain extent, such as change and formation of weak networks, gender difference, difficulties in obtaining institutional support, family support and barriers to entrepreneurial activities (deficiencies in infrastructure, legal and regulatory framework, financial support and social systems) (Solymons 2005; Johansen 2013).

Most of the challenges stated by the respondents relate to the past literature and it seems very little effort has been put into resolving them, particularly in Zimbabwe due to the state of the economy. In South Africa there seems to be a major challenge around corruption and this prevents the country from progressing to the next level of success in terms of establishing businesses.

### **5.7.3 Conclusion**

From the quantitative analysis, it was established that: **Challenges caused by high economic volatility have a negative impact on entrepreneurial activities.** Age was the only control variable that was significant in relation to challenges.

From the qualitative study done, there were challenges caused by economic conditions and these strained their business. Certain themes of the challenges were established and these were: Corruption, lack of finance, lack of education and sufficient skill, government policies, exchange rates, labour strikes, competition, starting up, licensing their businesses and liquidity.

## **5.8 DISCUSSION PERTAINING TO HYPOTHESIS 4- TRADING**

***Sub-problem:** How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?*

### **5.8.1 Results from Quantitative analysis**

In the quantitative analysis section, it was established that: **High economic volatility has a negative impact on trading activities in countries with highly volatile economies**

Trading activities are highly affected by economic conditions; therefore they also react negatively to volatile conditions. Several trading activities take place in countries with this type of economy both in the informal and formal sector. Traders also face similar challenges such as those of any type of entrepreneur and this causes a negative impact on their businesses. Challenges that traders face that are similar to those in the literature reviewed consist of fluctuating exchange rates, inadequate trade policies and uncertainty between demand and supply (Kshetri 2011).

Due to these challenges most trading activities happen in the informal economy, especially in Zimbabwe where the entrepreneurs identified mainly operate in the informal sector. As a result, most of the trading activities that take place are on a low scale and for basic commodities. Volatile economies face challenges like poverty that also encourage people to partake in cross-border trading as a means of survival. Such factors were extensively discussed by entrepreneurs in their responses.

Certain strategies are used by traders to survive. Most of the traders strive to earn a living rather than make a profit. Government organisations need to consider providing economic opportunities and better trading policies as the extent of trading activities varies depending on the policies.

### **5.8.2 Results from Qualitative analysis**

In terms of entrepreneurship trading in high volatile economies, the sub-problem for the section is:

#### ***How have entrepreneurs handled trading over the past five years in South Africa and Zimbabwe?***

The question in the sub-scale for trading was:

*What are the main challenges that you have faced in terms of trading in your country and how did you manage to deal with them?*

In terms of challenges associated with trading, exchange rate was one of the popular themes obtained from the respondents. Associated discussions around this theme comprise of exchange control, exchange regulations and fluctuating exchange rates.

Certain challenges stated by the respondents in terms of trading were: Prices, growth, people not paying for the services provided, competition, customers, skill and education, corruption, weak currency, difficulty in finding the right target market, expenses and demand.

Respondents stated how difficult it is to get payments for their products and having to sell their products at a cheaper price due to competition from larger companies. Literature states how trading activities have been affected by lack of quality standards, inadequate trade policies and fluctuating exchange rates (Kshetri 2011). It states how important trading policies determine and affect the trading activities that take place. Some of the respondents stated how the

policies, regulations and sanctions affected companies, and. as a result, companies retrench staff and reduce their trading activities in order to continue to provide certain products at a cheaper price. Trading forms part of the economic activities in these two countries and there is a need to encourage more trading activities by informing people of the existing opportunities that may be offered by the governments and non-government organisations.

### **5.8.3 Conclusion**

Mixed methods were used to analyse this sub-section as well and from the results obtained, it was concluded that: **High economic volatility has a negative impact on trading activities in countries with high volatile economies.** The results show that the variance of the final model in entrepreneurship activity explained by trading challenges was acceptable although small, and, as a result there may be need for further investigation.

Quantitative analysis managed to bring out certain themes associated with trading in highly volatile economies. These themes were associated with the challenges that they face when trading in highly volatile economies. The themes were: Prices, growth, people not paying for the services provided, competition, customers, skill and education, corruption, weak currency, difficulty in finding the right target market, expenses and demand.

## **5.9 DISCUSSION PERTAINING TO HYPOTHESIS 5- INFORMAL VS FORMAL ENTREPRENEURIAL ACTIVITY**

In light of the research, the sub-problem and hypothesis formulated from the literature was:

### 5.9.1 Results from Quantitative Analysis

In the presentation section, the null hypothesis was accepted and concluded that: **Highly volatile economies do not promote more informal entrepreneurial activities than the formal entrepreneurship activities.**

Highly volatile countries are mainly developing countries as well, and, as a result informal activities are seemingly more prevalent than formal activities due to the economic conditions. There are several high economic volatility factors which contribute to this outcome. The informal economy plays an important role in the economy in many African countries. Certain types of activities take place in this sector as some of these activities are unobserved and irregular. People who partake in this sector feel free to exit and enter as they do not incur any registration and tax costs. Many entrepreneurs in highly volatile countries prefer operating in the informal sector as it is characterised by unregistered businesses that do not align to any employment and trade union policies and gives an option to operate on a temporary basis.

In the literature reviewed, highly volatile economies promote informal entrepreneurial activities due to formation of small businesses, temporary businesses, high tax, strict regulations, high costs of production and time spent bribing. In Zimbabwe the costs of establishing a formal business are very high and this affects the survival of the business.

In order to be successful in the informal economy, entrepreneurs need to achieve high levels of production, have a dynamic mindset, and provide low cost of goods and services needed to low income groups (Abdelhamid & El Mahdi 2003). The informal economy in developing countries constitutes 20% to 70% of the GDP (Hitimana *et al* 2011). Some countries view the informal economy as sufficient enough and have provided support by introducing financial means and training to assist entrepreneurs. The highly volatile economies can take that into consideration to improve entrepreneurship activities which promote economic growth. Countries with highly volatile economies can use the informal economy

as a way to revive the economy. The informal sector does generate a form of income, for example, since entrepreneurs in the informal economy do not pay tax, they can afford to sell their goods at a lower price than an entrepreneur in a formal economy and still make a reasonable profit.

Some highly volatile and developing economies include people who partake in the informal sector as a means of survival due to necessity (Amorós & Bosma 2013). People find it hard to make a living due to industries that close down and unemployment. As a result the economy tends to be unproductive as there is no adequate support from the government for businesses to grow. Entrepreneurs operating informally also tend to face the risk of being distrusted by investors and potential clients. The harsh economic conditions that result from highly volatile economies tend to present opportunities for entrepreneurs to operate in the informal economy.

Governments operating in highly volatile economies need to seek appropriate policies in order to reduce the activities in the informal sector and provide an environment that is conducive to entrepreneurs operating their businesses in the formal sector. The informal sector is seen as an underdeveloped sector which may be harmful to the country's economy (Hitimana *et al* 2014). However, some developing countries take it into consideration. Highly volatile countries may need to look at reviewing certain economic issues in order to encourage formal activities such as revising tax and labour issues, promoting registration, lowering start-up/registration costs and increasing affordable learning opportunities. There is also a need for governments in highly volatile economies to integrate the formal and informal sectors as this may encourage more entrepreneurship activity to take place and be successful and enhance economic development. Policies to support the entrepreneurship activities and reduce onerous registration procedures in the formal sector may be used so as to encourage economic growth.

Highly volatile economies do not promote or force entrepreneurs to partake in businesses in the informal economies. Some entrepreneurs however, choose to

operate in the informal economic sector as a way to avoid formal operating costs and certain government policies and to provide a means of personal survival. The study shows that highly volatile economies do not promote more informal entrepreneurial activities. Entrepreneurs merely decide which sector they want to operate in and the conditions that they will face by operating in that sector.

### **5.9.2 Results from Qualitative Analysis**

In terms of Informal vs Formal sub-scale. The sub-problem related to it was:

**Is entrepreneurship activity in highly volatile economies highly beneficial in the formal or informal economic sector?**

The question that the respondents answered was:

*Are there any other reasons why you feel operating in the formal or informal sector is best for your business? If yes, please state.*

Mixed responses were given in terms of Informal versus Formal entrepreneurial activity. As a result, the data and these were divided into the formal and informal sector. Not all respondents answered this question as they had mixed feelings in terms of answering the questions. Those who responded did state how they felt about operating in the two different sectors.

The formal sector themes were mainly tax, growth, business, finance, operating, costs government, opportunity, client/customer, exposure, finance and cash, market and corruption. Most respondents who operate in the formal sector mentioned how they prefer to operate in the informal sector but are required to work in the formal sector due to the nature of their business. Some stated how the formal economy establishes some form of trust with the client and provides more opportunities to provide services and products to big companies. The respondents stated how the formal economy gives more access to finance and enables one to operate beyond borders by forming strong relationships with other companies and customers. Some stated the negative side of the formal sector,

which was how expensive it is to operate in the formal sector due to licensing costs, registrations, tax and book keeping.

Entrepreneurs who operate in the informal sector state how it saves them from paying administration costs and large amounts of tax. This relates to the literature as entrepreneurs operating in the informal sector seek to avoid some of the costs, procedures and regulations (Abdelhamid & El Mahdi 2003). Furthermore, they state how this sector allows them to make important decisions which enable the growth of the business and to react quickly to a change. Other entrepreneurs state how this sector helps them to avoid corruption and provides more opportunities. However, others state the negative side of the informal economy as having limited opportunities. Literature reviewed states how certain entrepreneurs choose to operate in the informal sector and this may cause a challenge of their business reaching its full potential compared to a business operating in the formal sector (Klapper *et al* 2010). This is also in relation to one's business not obtaining certain clients and investors or gaining access to capital markets (Abdelhamid & El Mahdi 2003).

The respondents have different views towards the formal and informal economies and it depends on the industrial sector. From the responses given about the informal sector in relation to the literature, this seems to be a way that helps entrepreneurs avoid licensing and tax, high production costs and time spent in bribing and corruption activities (Abdelhamid & El Mahdi 2003; Sookram & Watson 2008). Although this might be a way to avoid the issues mentioned above, entrepreneurs face challenges such as high costs when they decide to expand their business into a medium size and operate formally

Most entrepreneurs in this study support operating in the informal sector even though most of them operate in the formal sector due to the nature and size of their businesses. Operating in the informal economy also depends on the products and services offered by the individuals as some may not be developed enough to operate in the formal economy.



### **5.9.3 Conclusion**

A mixed method approach was conducted for this sub-section. The results from the quantitative analysis led to the conclusion that: **Highly volatile economies promote more informal entrepreneurial activities than the formal entrepreneurship activities.**

Results from the qualitative analysis show how most of the respondents prefer operating in the informal economy rather than the formal economy due to the economic challenges found in highly volatile economies. Certain themes raised by the respondents with regards to the formal sector were mainly around tax, growth, business, finance, operating, costs government, opportunity, client/customer, exposure, finance and cash, market and corruption.

## **5.10 DISCUSSION PERTAINING TO THE ENTREPRENEURIAL ACTIVITY**

### **MODEL RESULTS**

The results of the variables combined tested with the model show two significant variables, i.e. Strategy and Factors. This shows how strongly significant these variables are. Survival strategies that entrepreneurs use in highly volatile economies are vital and have a positive impact on the outcome of the business. They provide a means of survival as well as an opportunity to make a profit in such economic conditions. The survival strategies were discussed previously in the discussion for Hypothesis 1. Factors caused by highly volatile economies also affect entrepreneurship activities. These factors were also discussed in the Hypothesis 2 results.

## **5.11 ENTREPRENEURIAL ACTIVITY THEMES**

A sub-scale for entrepreneurship activity was included in the survey and this managed to measure entrepreneurship activity in the two countries.

In terms of entrepreneurship activity, the question that the respondents were asked was:

***What are your main concerns with regards to entrepreneurship activity in your country?***

The main concerns stated by the entrepreneurs were the challenges that they face. The major theme in relation to entrepreneurship activity was entrepreneurship itself. Respondents in South Africa discussed how entrepreneurship is not taken seriously in their country, how there is little evidence on the ground to prove entrepreneurship support, how there is lack of entrepreneurs, a lack of people willing to take risks and how difficult it is to find the right information. Respondents in Zimbabwe discussed how entrepreneurship needs improvement and how people get involved in entrepreneurship due to lack of jobs, lack of good business ideas and lack of enough entrepreneurs.

Another major theme associated with entrepreneurship activity is government. Associated topics of discussion from the respondents were lack of government support, lack of efficient government bodies, corrupt government departments and lack of government policy implementation to support entrepreneurs. The government policies along with the education system influence entrepreneurship activities as well (Raposo & Do Paço 2011). The Government needs to have enough supporting structures and policies for entrepreneurship activity, especially in South Africa.

An interesting theme raised by the responses of some of the entrepreneurs is growth. Discussions associated with this theme were the need for support in growth, the need for patience to let the company grow and how entrepreneurship growth is hampered by a lack of capital finance.

The entrepreneurs discussed a wide range of topics in this section and these mostly related to what they hope to see as assistance in order to sustain a successful business. Some authors in the literature review argued that entrepreneurship activities occur regardless of the conditions (Solymossy 2005).

From the themes obtained from this study, entrepreneurship activities do occur, and the level and type of entrepreneurship activities are determined by certain conditions, mainly the economic conditions. This study mainly focused on entrepreneurs operating in the formal sector, so with regards to the entrepreneurs operating in the informal sector, the study did not consider street vendors but rather focused on identifying people who provide products and services to certain types of customers and operate in certain type of industries such as catering services, beauty consulting, retail and Information technology services.

Entrepreneurship activity in Zimbabwe is mainly determined by the state of the economy, corruption, the Government and the lack of sufficient knowledge, education and skills related to entrepreneurship. As long as the economy remains in its current status, most entrepreneurship activities will remain affected. Economic growth is a very important aspect of entrepreneurship as good economic conditions contribute positively to entrepreneurship and provide increased potential for business income, provision of credit at reasonable interest rates and improved opportunities (Raposo & Do Paço 2011; Fairlie 2013).

Entrepreneurs on the other hand need to adapt to the economic changes and form strategies that assist them in terms of operating a successful venture. The economy has a high impact on the factors that contribute to entrepreneurial success (Glaeser *et al* 2010). The themes obtained show more negative issues than positive issues due to the state of the economies in the two countries. The responses and themes, however, vary between the two countries and the literature reviewed states how entrepreneurship activity varies across countries due to a number of reasons such as the influence of the government and education systems (Raposo & do Paço 2011).

In this case South Africa is a more economically developed country than Zimbabwe, so these two countries cannot be treated the same and may represent different stages and types of volatile economic conditions. Also the level to which a country provides resources for entrepreneurship activities is a main contributing factor (Woolley & Rottner 2008).

Issues raised in the literature reviewed that are not found in the themes are of gender differences. Minniti (2010) states how gender differences is an issue associated with entrepreneurship as there are fewer women entrepreneurs than men. This may be the case as most respondents in the sample are men (60%) as compared to female respondents (40%).

## **5.12 CONCLUSION**

The chapter covers the results in more detail in order to explain and discuss the model results. These results were used to determine the relationships between the constructs of the study. Both analytical methods produced similar results in terms of direction and the conclusion. The themes were related to the sub-problems and managed to show a clear answer as to what entrepreneurs in the study think about the economy in which they operate.

The discussion can be concluded by summarising the important findings:

- Survival strategies used by entrepreneurs in countries with highly volatile economies have a positive impact on entrepreneurship activities.
- High economic volatility factors have a negative influence on entrepreneurship activities in countries with highly volatile economies
- Challenges caused by high economic volatility have a negative impact on entrepreneurial activities.
- High economic volatility has a negative impact on trading activities in countries with highly volatile economies
- Highly volatile economies do not promote more informal entrepreneurial activities than the formal entrepreneurship activities.

# **CHAPTER 6: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS**

This chapter gathers all the main findings of the study, which were discussed in the previous chapter. Furthermore, this chapter presents conclusions that are based on the findings in the various sections.

## **6.1 INTRODUCTION**

Based on the findings and discussions in the previous sections, this section will summarise the findings. Furthermore, it discusses the conclusions, implications and recommendations that are related to the study. The recommendations are aimed at certain stakeholders affected by the study such as researchers, policy makers, entrepreneurs and companies. Limitations faced by the study will also be discussed in the following sections. A conclusion of the results in relation to the study as well as suggestions for further research will be included. The research findings contribute to the existing body of knowledge of entrepreneurial activities in relation to the economy.

## **6.2 CONCLUSIONS OF THE STUDY**

The context of the study mainly focused on how entrepreneurs survive and operate successful ventures in countries with highly volatile economies. The study took into consideration different volatility levels and came up with two countries, South Africa and Zimbabwe. South Africa and Zimbabwe cannot be classified as to have the same volatility levels, however the study considered these two countries to help gain an understanding of these different levels. Zimbabwe appeared to have a more volatile economy than South Africa. South Africa triggers a specific volatility index which may be different to that of Zimbabwe.

The study managed to use judgemental sampling to only select existing entrepreneurs in these two countries who rated their current businesses at

different levels of success. Very few entrepreneurs rated themselves as very successful, most of them rated themselves as successful, some were average and very few were unsuccessful. This shows how some entrepreneurs find opportunities within challenging economic conditions whilst some are affected negatively by challenges posed by the same economic conditions. Entrepreneurship and the economy are related as entrepreneurial activities contribute to economic growth and the economy also impacts on entrepreneurial activity.

In order for entrepreneurship in these types of economies to be successful and reach greater heights, there is a need for an understanding of the economic constraints that entrepreneurs operating in such an economy face. As a result, this research aimed to analyse these economic conditions at different stages by taking two countries with different economic volatility levels. Of the two countries, Zimbabwe appeared to be more under constraint and produced more necessity entrepreneurs rather than opportunity entrepreneurs, due to job losses, and approximately 2776 entrepreneurs closed down their businesses over five years due to losses and harsh economic conditions (Ankomah 2007).

To summarise the findings obtained, the results show how entrepreneurial activity in highly volatile economies is accompanied by myriad challenges and the need to apply certain strategies to ensure survival of one's business.

Some entrepreneurs struggle to run their businesses successfully and just aim to survive and make a living. Others implement several strategies and the findings suggest that survival strategies used by entrepreneurs in countries with highly volatile economies have a positive impact on entrepreneurship activities. These survival strategies consisted of certain themes that were in line with the existing literature, such as a great attitude, careful planning, producing quality products, competition (analysing competitor behaviour), adapting to the market, knowing the market, managing costs, diversification, innovation, product focus, strong management and entrepreneurial skills, networks amongst similar people with a high rate of trust, shared understanding, and interpersonal attraction, religion and

culture (Woolley & Rottner 2008; Ligthem 2010; Manev & Manolova 2010; Jennings *et al* 2013). Moreover, other strategies discussed in the study were adapting certain roles depending on the stage of the business, critical point planning, being opportunistic and reactive, social ties, adapting to changing conditions, being proactive relative to market opportunities and entrepreneurial orientation, providing products at a lower cost and differentiation of services (Hiemstra *et al* 2006; Gadzala 2009; Chaston & Scott 2012; Phillips *et al* 2013). These authors show how some strategies have a positive impact on entrepreneurship activities.

The study concluded that challenges caused by high economic volatility have a negative impact on entrepreneurial activities. In relation to the literature, the study also found certain challenges associated with entrepreneurship in both countries. Moreover, from the qualitative analysis, the study provided themes associated with the challenges that the entrepreneurs face. These themes consist of issues that existing entrepreneurs face in the daily running of their businesses. Some of these are unsupportive government policies, corruption, exchange rates, labour strikes, competition, starting up, licensing their business and liquidity, a lack of government-procured programs that help firms to grow faster and to develop competence in marketing and export-related activities (Gynawali & Fogel 1994; Griffiths *et al* 2013). From these challenges it was established that there is a need for governments to promote entrepreneurship activities by introducing activities such as entrepreneurship fostering programs and introducing anti-corruption schemes (Solymossy 2005). Entrepreneurs operating in such economic conditions need a lot of support from investors, government and institutions in order to overcome certain challenges.

Apart from challenges faced by entrepreneurs, the study looked at the factors caused by highly volatile economies which have a certain influence on entrepreneurship activities. The factors are coupled with economic challenges and both have a negative influence on entrepreneurship activities. A lot of negative factors are associated with establishing a business in countries with

highly volatile economies such as a lack of finance and less credit given by banks, high interest rates, long and expensive registration processes and corruption, (Azmat & Samaratunge 2009; Gadzala 2009). As a result entrepreneurs struggle to sustain their businesses.

In terms of trading, the study concluded that high economic volatility has a negative impact on trading activities in countries with highly volatile economies. Trading activities are also negatively affected by highly volatile economic conditions. Quantitative analysis managed to extract certain themes associated with trading in highly volatile economies. These themes were also in line with the challenges that they face when trading in a highly volatile economy. The themes were: Prices, growth, people not paying for the services provided, competition, customers, skill and education, corruption, weak currency, difficulty in finding the right target market, expenses and demand and exchange rates. Most traders operating in these types of economies strive to survive and make a living. Traders face certain challenges and most of them are similar to challenges faced by any type of entrepreneur. Some of these challenges are fluctuating exchange rates, inadequate trade policies, poverty and uncertainty between demand and supply (Kshetri 2011). In order to overcome some of these challenges, they use certain strategies similar to the ones mentioned in the strategies section to survive, as stated in the literature. Traders also need support from the government in the form of economic opportunities and better trading policies in order to survive.

Mixed themes about the informal vs. formal sector came from the qualitative analysis. The findings in line with the literature also show that most entrepreneurs operating in highly volatile economies prefer operating in the informal economy. However, the study proved otherwise, as this is not always possible due to the nature of their businesses and circumstances. Some entrepreneurs who gave answers to open-ended questions state how they are health practitioners, how they would want to obtain international clients, and, as a result, they are forced to operate in the formal economy. Some of the respondents also mentioned how the formal economy allows them to reach certain clients and investors thus



gaining access to capital markets (Abdelhamid & El Mahdi 2003). Support for both formal and informal economy was seen in the results as well as in the literature review.

Due to the conditions set out by highly volatile economies, some entrepreneurs feel it is best to operate in the informal sector as a way to avoid the burdens and high operating costs found in formal economies. Some entrepreneurs take advantage of the economic conditions and see opportunities in the formal sector. Amorós and Bosma (2013) in the GEM report specify how the formal economy has entrepreneurship activities classified by opportunity entrepreneurs which are productive, and the necessity entrepreneurs operate in the informal sector where there is less productivity. This appears to be the same in terms of entrepreneurship activities in countries with highly volatile economies. More entrepreneurs in their answers specified how they perceive the formal sector to provide more opportunities and trust from investors and clients. Some entrepreneurs gave different responses on how they feel in that the formal economy gives them more challenges for their business to reach its full potential that it may not reach when operating in the informal sector. This was also in line with the literature reviewed of how small enterprises become big when they operate in the formal economy if the economic conditions do not affect the business negatively (Klapper *et al* 2010). The conclusion obtained was that highly volatile economies do not promote more informal sector activities.

The results obtained from the study have certainly added more knowledge to the existing literature taking into consideration that there is no direct study that specifically analyses highly volatile economies and entrepreneurship activities. Most studies mention entrepreneurship in developing countries, informal and formal entrepreneurship, trading in developing economies and highly volatile economic challenges (Erturk 2005; Pennisi 2012; Nyahokwe & Ncwadi 2013). The quantitative analysis for the overall regression model when all the variables are combined shows that factors and strategies are highly significant.

In conclusion, the study discusses how vulnerable entrepreneurs operating in highly volatile economies are. Some entrepreneurs just aim to survive without making a profit by implementing certain strategies, and some prefer operating in the informal sector so as to avoid the economic challenges associated with the formal sector. The use of a mixed methodology approach enabled the study to get enough information to be able to reach certain conclusions by relating the hypothesis tests results to the obtained themes. Some entrepreneurs failed to express how badly the economic conditions are negatively affecting their business and they invited the researcher to spend some time with them in their daily activities observing some of the situations they go through, as they could not find the right words to express their challenges in the survey.

Some of the results from the hypothesis tests explained a weak variance in terms of them not explaining a large variation of entrepreneurial activity. The results were practical and acceptable as they were in relation to the theory and study, therefore these results were considered to be theoretically viable.

### **6.3 IMPLICATIONS FROM THE RESEARCH FINDINGS**

The study intended to contribute to the upliftment of entrepreneurial activity in economic conditions that do not seem viable. The study focuses on Africa and includes countries such as South Africa and Zimbabwe. It added to the literature that concerns Africa's entrepreneurship activities and builds on to global entrepreneurship such as all countries with volatile economies.

There are several interesting areas that the study covers. Some of these areas include giving a view of how entrepreneurship activities and issues differ in countries with different levels of volatility and showing the link between highly volatile economies and entrepreneurship.

Other interesting aspects of the study are mainly concerned with relating the study to policy makers in countries with highly volatile economies. The research findings suggest that finance and corruption are the main challenges experienced

by entrepreneurs operating in these types of economies, as well as the provision of assistance in terms of finance and supportive policies. An implication which resulted from the findings of the study is that policy makers in the government may be able to take into consideration policies that support entrepreneurship activities. There has been a positive return in terms of emphasising the importance of entrepreneurship in economic development in certain countries.

#### **6.4 LIMITATIONS**

There were several limitations that were related to the study. The study was limited to only two countries: South Africa and Zimbabwe. In these countries, many entrepreneurs surveyed were from Gauteng, Western Cape, Harare and Bulawayo. The research findings cannot be generalised based on these two countries as there is need for further research that focusses on other countries with different economic volatility levels. Certain variables formed were weak due to being loaded with two items that related and obtained from validity tests. This resulted in weak variables that could not be used further in the inferential statistics. However, some variables were used as they prove to form a strong relationship and made logical sense.

Some results proved to be weak as they did not explain a large amount of the variance; however, these results were accepted as they were in line with the theory and the empirical research.

#### **6.5 RECOMMENDATIONS**

Based on the limitations discussed in the previous section, several recommendations were derived.

Research carried out by several authors such as Erturk (2005), Azmat and Samaratunge, (2009), Islam (2009), Pennisi, (2012) and Nyahokwe and Ncwadi, (2013) also recommends that research in countries with these types of

economies be conducted at a broader level. In relation to entrepreneurship in countries with highly volatile economies:

- Policy makers involved in government, education systems and businesses in countries with these types of economies should put in place policies that support entrepreneurship activity.
- The South African and Zimbabwean entrepreneurial organisations can implement certain facilities associated with the specific challenges posed by these particular economies and consider partnering non-volatile countries with developed economies so as to lessen the challenges faced in countries with highly volatile economies.
- Entrepreneurs operating in such environments and economic conditions need to strategically position themselves not only to survive but to make a profit out of their business ventures.
- Institutions may need to develop more programmes associated with entrepreneurship aimed at developing entrepreneurial mindsets.
- Developing countries and other countries with highly volatile economies can also learn from these countries and avoid certain aspects that do not promote entrepreneurship activities, such as the challenges mentioned, some of them being corruption, formation of weak networks and legal and regulatory frameworks (Thompson 1999; Gadzala 2009; Krashinsky 2012).

## **6.6 SUGGESTIONS FOR FURTHER RESEARCH**

The study advances the literature in terms of promoting entrepreneurship activities under certain economic conditions. The study expanded the research done in relation to the economy and entrepreneurship. Though the study managed to determine significant relationship in all hypotheses, there is still limited literature that covers entrepreneurship in highly volatile economies and yet there are various countries which such economic conditions. The study points out the strong effect of economic volatility on entrepreneurship activities in

countries, and it is important to further analyse which of the constructs strongly affects the relationship. A similar study can also be done in countries on other continents. Research can be conducted on entrepreneurship in countries with different levels of volatility such as Central African Republic, Democratic Republic of Congo, Somalia and Chad as well as countries in other continents. Moreover, research can be done on some countries that are less volatile compared to those mentioned previously, such as Angola, Kenya, Malawi, Mozambique, Uganda and Zambia. This will assist in broadening the research in these various countries to give an overview of how entrepreneurship relates to countries with highly volatile economies.

Moreover, there is need to carry out further empirical research on the relationship between entrepreneurship and other types of economies. Certain questions arose whilst conducting the study that incorporated elements such as, how do entrepreneurs make enough profit from operating in such environments, and for specific industries, what is the relationship between entrepreneurship and highly volatile economies.

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# APPENDIX A: LETTER TO RESPONDENTS

The Graduate School of Business Administration  
2 St David's Place, Parktown,  
Johannesburg, 2193,  
South Africa  
PO Box 98, WITS, 2050  
Website: [www.wbs.ac.za](http://www.wbs.ac.za)



10 November 2014

## MM RESEARCH CONSENT FORM

Dear Respondent

My name is Faustinah Magama. I am currently studying towards a Masters in Management at Wits Business School. I am conducting research on Entrepreneurship Dynamics in Countries with highly Volatile Economies such as South Africa and Zimbabwe. The objectives of the research are to establish how entrepreneurship activity is affected by highly volatile economies. If you are an entrepreneur or a trader, please may you take the time to partake in the study by completing the survey that has been designed. There are no risks associated and no personal identification details will be requested or collected from you during your participation in the survey. Your participation is voluntary. The study will be extremely helpful to understand entrepreneurship dynamics in such economies. If you would like to receive feedback on the study, please email me and I will send you the results of the study when it is completed sometime after June 2015. Thank you in advance for your time and participation. We kindly request that you take 10 minutes to complete this survey no later than the 25th of November 2014.

This research has been approved by the Wits Business School. If you have any complaints about ethical aspects of the research or feel that you have been harmed in any way by participating in this study, please contact the Research Office Manager at the Wits Business School, Mmabatho Leeuw. [Mmabatho.leeuw@wits.ac.za](mailto:Mmabatho.leeuw@wits.ac.za). If you have concerns or questions about the research you may call my academic research supervisor Dr Jose Barreira [Genhinge5@global.co.za](mailto:Genhinge5@global.co.za).

Respectfully yours

Faustinah Magama  
Master of Management, 2014 (Wits Business School)  
Email: [faustinahmagama@gmail.com](mailto:faustinahmagama@gmail.com)



## CONSENT

I hereby agree to participate in research on Entrepreneurship Dynamics in Countries with highly Volatile Economies. I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop participating at any point should I not want to continue and that this decision will not in any way affect me negatively. I understand that this is a research project whose purpose is not necessarily to benefit me personally in the immediate or short term. I understand that my participation will remain confidential.

.....  
**Signature of participant**

**Date:**.....

## ACTUAL RESEARCH INSTRUMENT

### Entrepreneurship Dynamics in Countries with highly Volatile Economies: A contextual study of South Africa and Zimbabwe

1. Please select your country. \*Required

- South Africa
- Zimbabwe

2. Please indicate your gender. \*Required

- Male
- Female

3. Please select your age. \*Required

- 24 or younger
- 25 to 34
- 35 to 44
- 45 to 54
- 55 or older

4. Please select your highest qualification. \*Required

- Less than matric/A level
- Matric or grade 12/NQ4/A level

- Certificate/Diploma
- Tertiary not completed
- Bachelor's degree
- Postgraduate degree
- Other. Please state:

5. Do you have a bank account? \*Required

- Yes
- No

6. Have you ever attended any entrepreneurship training programs, workshops, seminars? \*

- No, I have never attended
- Training programs
- Workshops
- Seminars

7. Please select your business operating sector. \*Required

- Formal
- Informal

8. Please select your business sector. \*Required

- Manufacturing/ Operations
- Information Technology
- Telecommunications
- Finance
- Marketing
- Human Resources
- Legal

- Retail
- Consultancy
- Trading (Export and Import)
- Other. Please state:

9. Please select the age range of your company. \*Required

- Less than 1 year
- 1 - 3 years
- 4 - 5 years
- Over 5 years

10. Is this your first business? \*Required

- Yes
- No

11. If you answered no in the previous question, how many businesses have you previously had?

- 1
- 2 to 4
- 5 or more

12. Number of employees. \*Required

- 50 or less
- 51 to 100
- 101 to 200
- 201 or more

13. Did you start your business in the same field as your previous job? \*Required

- Yes

- No

14. How would you describe your business success? \*Required

- Very Successful
- Successful
- Average
- Below average
- Unsuccessful

15. Please indicate the number of years work experience you had before starting a business.  
\*Required

- Never worked before
- Less than one year
- 1 - 3 years
- 3 - 5 years
- 5 years and above

16. How did you finance your business upon start-up? \*Required

- Bank Loan
- Loan from family
- Loan from friend(s)
- Loan from micro-financing organisation
- Own money
- Other

**Strategy and entrepreneurial success (Ahmad, Ramayah, Wilson & Kummerow 2010)**

Please complete the following sections by ticking a box that indicate your response that shows how much you agree or disagree. Please note that all statements in this section require responses.

Statement	Strongly disagree	Disagree	Mildly disagree	Neither agree or disagree	Mildly agree	Agree	Strongly agree
1. My ability to produce a business plan has contributed to the success of my business							
2. My business and managerial skills have been a contributing factor in the success of my business							
3. I monitor progress towards strategic goals for my business.							
4. I constantly redesign my business to better meet long-term objectives due to the changes in the economy.							
5. I evaluate results against strategic goals.							
6. As I define the business strategies I am driven by my perception of opportunity.							
7. I am not constrained by the resources at or not at hand.							
8. I adapt freely to changing circumstances without much concern for past practices							
9. The resources that we have significantly influence my business strategies.							
10. Some of the strategies that I apply in order to ensure the success of my business in my country are critical point planning, being opportunistic and reactive.							
11. What has been the most effective survival strategy for your business for the past year/years?							

**Factors that influence entrepreneurial success (Islam 2009)**

Please complete the following sections by ticking a box that indicate your response that shows how much you agree or disagree. Please note that all statements in this section require responses.

Statement	Strongly disagree	Disagree	Mildly disagree	Neither agree or disagree	Mildly agree	Agree	Strongly agree
1. In my country, there is lack of collateral-free loan							
2. In my country, there are high utility expenses							
3. In my country, there is shortage of capital and lack of start-up training and skill							
4. In my country, there is lack of start-up training and skill							
5. In my networks, there is non-cooperation from another entrepreneur/other entrepreneurs in terms of support and network formation							
6. When prices fluctuate rapidly in a short space of time, it poses a negative impact on my business							
7. High economic volatility in my country presents more entrepreneurship opportunities							
8. I often adapt roles such as that of an innovator depending on the stage of growth of my business							
9. I often adapt certain roles depending on the conditions of the market controllers and the economy							
10. In my country, there are expensive borrowing rates							
11. In my country there are underdeveloped financial markets							
12. I make use of the latest technology in my business in order to gain competitive advantage							
13. What factors do you feel have influenced the success of your business?*							

### Entrepreneurial Challenges in highly volatile economies (Islam 2009)

Please complete the following sections by ticking a box that indicate your response that shows how much you agree or disagree. Please note that all statements in this section require responses.

Statement	Strongly disagree	Disagree	Mildly disagree	Neither agree or disagree	Mildly agree	Agree	Strongly agree
1. In my country, there is no sufficient equity available for new and growing firms							
2. In my country, there is no sufficient debt funding available for new and growing firms							
3. In my country, there are no sufficient government subsidies available for new and growing firms.							
4. In my country, the level of business and management education provide poor and inadequate preparation for starting up and growing new firms.							
5. In my country, no new and growing firms can easily enter the markets.							
6. In my country, no new and growing firms can easily afford the latest technology							
7. In my country, the national culture does not encourage entrepreneurial risk taking.							
8. We have many promising ideas than we have time and resources to pursue, therefore, we do not pursue a lot of opportunities.							
9. There is formation of strong networks in my country which help in my entrepreneurship activities.							
10. In my country a challenge inspires one to do things never thought possible. This however does not necessarily present entrepreneurial opportunities.							
11. It is demotivating when one experiences a lot of setbacks which are a challenge to the business, therefore, it deprives me from working harder.							
12. Due to lack of funding for small and medium enterprises in my country, we are limited on the opportunities we pursue on the basis of our current resources.							

13. In my country, corruption affects some of the entrepreneurial activities.							
14. What are the main challenges that affect the success of your business that you have faced in your country?*							



### Entrepreneurship trading in high volatile economies (Khanapuri & Khandelwal 2011)

Please complete the following sections by ticking a box that indicate your response that shows how much you agree or disagree. Please note that all statements in this section require responses.

Statement	Strongly disagree	Disagree	Mildly disagree	Neither agree or disagree	Mildly agree	Agree	Strongly agree
1. The trading environment with other countries is risky							
2. Fair trade gets political support in my country, therefore it increases employment opportunities							
3. There are government initiatives to encourage small scale industry.							
4. The increased connectivity via mobile and internet has made it easier for me to stay in touch with buyers							
5. I feel an economic slowdown results in poor demand in the country							
6. The failures of the government and other bodies make it difficult for entrepreneurs to invest with confidence in capacity building for the sake of fair trade.							
7. Entrepreneurship in my country has been affected by lack of quality standards.							
8. Entrepreneurship in my country has been affected by inadequate trade policies.							
9. Trading over the past five years has been challenging, therefore, I am not willing to look at markets beyond my local area.							
10. Exchange rates in my country affect my trading activities							

11. What are the main challenges that you have faced in terms of trading in your country and how did you manage to deal with them?

### Informal versus formal entrepreneurship activity

Please complete the following sections by ticking a box that indicate your response that shows how much you agree or disagree. Please note that all statements in this section require responses.

Statement	Strongly disagree	Disagree	Mildly disagree	Neither agree or disagree	Mildly agree	Agree	Strongly agree
1. Due to the state of the economy, I prefer operating my business in the informal sector and I feel my business flourishes more when I remain operating in the informal sector.							
2. Due to the state of the economy, I prefer operating my business in the formal sector and I feel my business flourishes more when I remain operating in the formal sector.							
3. I feel my business benefits the people in my community							
4. The informal economy seems to provide more entrepreneurship activities and jobs with smaller capital							
5. I prefer operating in the informal sector as it is a way that helps me to avoid burdens of bureaucracy/government							
6. I prefer operating in the informal sector as it is a way that helps me to avoid being affected by corruption as government policies are not entrepreneurship friendly							
7. Are there any other reasons why you feel operating in the formal or informal sector is best for your business? If yes, please state							

### Entrepreneurship Activity in highly volatile economies (Gürbüz & Aykol 2009)

Please complete the following sections by ticking a box that indicate your response that shows how much you agree or disagree. Please note that all statements in this section require responses.

Statement	Strongly disagree	Disagree	Mildly disagree	Neither agree or disagree	Mildly agree	Agree	Strongly agree
1. My company is very often the first business to introduce new products or services, administrative techniques, operating technologies etc.							
2. In my company, there is a very strong emphasis on research & development, technological leadership and innovation.							
3. My company has a strong tendency to partake in high risk projects with chances of high returns.							
4. I never experience lack of ideas that we can convert into profitable products and services.							
5. Success of my business depends more on my level of commitment in it							
6. There is a significant relationship of the economy and entrepreneurship activity in my country							
7. In order to keep my business successful I take risks, I am innovative, I have a need for high achievement							
8. In order to keep my business successful I am innovative							
9. In order to keep my business successful I have a need for high achievement.							
10. Shortage of capital and finance are the main inhibiting factors of entrepreneurship activity in my country							
11. What are your main concerns with regards to entrepreneurship activity in your country?*							

# APPENDIX B

## CONSISTENCY MATRIX

Table 146: Consistency matrix

<i>How do highly economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?</i>					
<b>Aims of research</b>	<b>Literature Review</b>	<b>Hypotheses or Propositions or Research questions</b>	<b>Source of data</b>	<b>Type of data</b>	<b>Analysis</b>
Entrepreneurship activity and the economy	Dave Valliere & Rein Petersonb (2009); Leora Klapper, Raphael Amit, and Mauro F. Guillén (2010); Robert W. Fairlie (2012)	H <sub>1</sub> : Economic volatility is negatively related to entrepreneurship activities in countries with volatile economies.	Input-output and social accounting matrix models; Data on new ventures; Data used from the Panel Study of Income Dynamics and Current Population Surveys	Integral data, logical order representing the data	Qualitative analysis; Methodology that can be applicable across heterogeneous legal regimes and economic systems

*How do highly economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?*

<b>Aims of research</b>	<b>Literature Review</b>	<b>Hypotheses or Propositions or Research questions</b>	<b>Source of data</b>	<b>Type of data</b>	<b>Analysis</b>
The relationship between the economic meltdown and the growth of micro and small-scale enterprises (MSEs) in Zimbabwe	Sophia Mukorera & Darma Mahadea (2014); JS Juana & RE Mabugu (2005); Leora Klapper, Raphael Amit & Mauro F. Guillén (2010)	H <sub>1</sub> : Economic volatility is negatively related to entrepreneurship activities in countries with high volatile economies.	Vector Autoregressive Model (VAR Model) or a Vector Error Correction Model (VECM); Data on new business collection	Integral data, Five endogenous variables	The test for co-integration, the Johansen test for co-integration was used. Quantitative analysis and SAM based and input-output multipliers;
Entrepreneurship and in an emerging economy.	Chaston, I & Scott, G.J (2012)	H <sub>1</sub> : Economic volatility is negatively related to entrepreneurship activities in countries with volatile economies	Structured questionnaire to respondents	Responses in questionnaire	Quantitative analysis

*How do highly economic volatility factors influence entrepreneurship activities in countries with high economic volatility such as South Africa and Zimbabwe?*

<b>Aims of research</b>	<b>Literature Review</b>	<b>Hypotheses or Propositions or Research questions</b>	<b>Source of data</b>	<b>Type of data</b>	<b>Analysis</b>
Factors influencing entrepreneurial activity	Colletah Chitsike (2010); Fara Azmat Ramanie Samaratunge (2009); Annemarie M. F. Hiemstra, Koen G. van der Kooy, & Michael Frese (2006)	H <sub>1</sub> : Economic volatility is negatively related to entrepreneurship activities in countries with volatile economies.	Entrepreneurial programmes and projects; Data collection on Small Individual Enterprises; Survey sent to entrepreneurs	Observed actions through field work; Logical data	Interpreting observed actions; Qualitative analysis, regression analysis

*How high is the impact caused by highly volatile economic challenges on entrepreneurial activities in countries as South Africa and Zimbabwe?*

<b>Aims of research</b>	<b>Literature Review</b>	<b>Hypotheses or Propositions or Research questions</b>	<b>Source of data</b>	<b>Type of data</b>	<b>Analysis</b>
Challenges faced by entrepreneurs in Zimbabwe	Tendai Murisa & Tendai Chikweche (2013)	H <sub>2</sub> : Challenges faced by entrepreneurs in countries with volatility economies are negatively related to their entrepreneurship activities.	Data collected using model	Adapted a CEI model	Qualitative analysis



*Is entrepreneurship activity in highly volatile economies highly beneficial in the formal or informal economic sector?*

Aims of research	Literature Review	Hypotheses or Propositions or Research questions	Source of data	Type of data	Analysis
Dynamics of formal and Informal entrepreneurship in developing countries	Ndiweni, E. and Verhoeven, H. A. L. (2013); Robert Nyakuwa, (2011)	H <sub>5</sub> : Economic volatility environments are is negatively related to entrepreneurship activities in the formal or informal economic sector?	An analysis of the experiences of six informal entrepreneurs who were interviewed for this study	Visual data and interviews	Visual ethnographic approach where observations, informal conversations were combined with a visual methodology. Quantitative analysis
Activities of the Informal and entrepreneurship	Aleksandra Gadzala, (2009)	H <sub>5</sub> : Economic volatility environments are is negatively related to entrepreneurship activities in the formal or informal economic sector?  H <sub>3</sub> : Economic volatility is negatively related to trading activities in countries with volatile economies.	Observations of main activities in formal and informal sector	Proportions and estimates in the informal sector	Analysis of trading activities

*What were the survival strategies in South Africa and Zimbabwe during the past 5 years?*

<b>Aims of research</b>	<b>Literature Review</b>	<b>Hypotheses or Propositions or Research questions</b>	<b>Source of data</b>	<b>Type of data</b>	<b>Analysis</b>
Entrepreneurial Strategies	Emily Chamlee-Wright (2005)	H <sub>4</sub> : Survival strategies for entrepreneurs in high economic volatility environments are positively related to entrepreneurship activities.	Interviews with Zimbabwean entrepreneurs, development organizations, and commercial banks	Descriptive information from interviews	Transcribing interviews. Quantitative analysis

# APPENDIX C

## DESCRIPTIVE STATISTICS

**Table 147: Descriptive Statistics**

	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
StrategyNow1	5.8144	0.83213	0.692	-1.507	0.175	3.44	0.347
StrategyNow2	5.2732	1.12405	1.263	-0.871	0.175	0.859	0.347
FactorsNow1	5.7907	0.89635	0.803	-1.31	0.175	2.099	0.347
FactorsNow2	5.7302	0.92491	0.855	-1.604	0.175	3.017	0.347
ChallengesNow1	5.6392	1.12293	1.261	-1.352	0.175	1.508	0.347
ChallengesNow2	5.0216	1.17634	1.384	-0.728	0.175	0.064	0.347
ChallengesNow3	4.9072	1.1128	1.238	-0.714	0.175	0.154	0.347
TradingNow1	5.2103	1.14063	1.301	-0.932	0.175	0.655	0.347
TradingNow2	5.9605	0.76791	0.59	-1.203	0.175	2.032	0.347
InformalFormalNow1	3.8479	1.68776	2.849	0.251	0.175	-1.087	0.347
ENActivityNow1	6.1173	0.62398	0.389	-0.574	0.175	0.786	0.347
ENActivityNow2	4.7801	1.09206	1.193	-0.164	0.175	-0.455	0.347
ENActivityNow3	5.5223	0.93226	0.869	-1.106	0.175	1.406	0.347
Valid N (listwise)							

**Table 148: Descriptive Statistics**

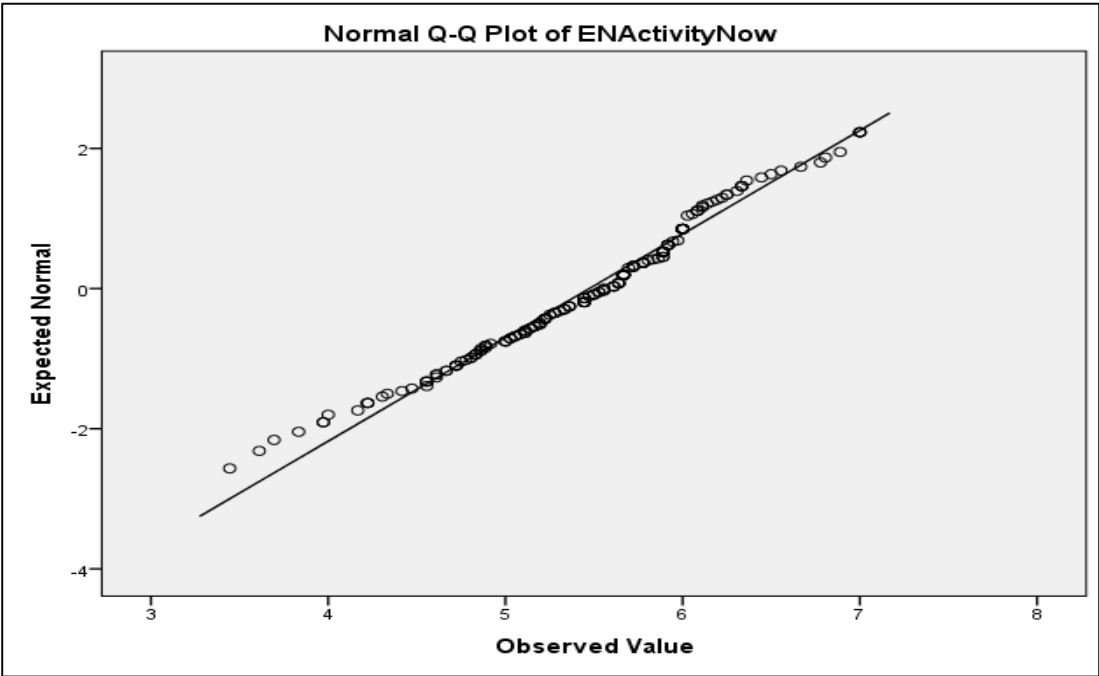
Descriptive Statistics			
	Mean	Deviation	N
ENActivity	5.4858	.69309	194
InformalFormalNew1	3.8479	1.68776	194
Country	.49	.501	194
Gender	.60	.492	194
Age25to34	.3041	.46123	194
Age35to44	.3093	.46339	194
Age45to54	.2371	.42641	194
Age55orOlder	.1186	.32410	194
Matric	.0773	.26779	194
TertiaryNotcompleted	.0567	.23187	194
CertificateDiploma	.2577	.43852	194
BachelorsDegree	.3041	.46123	194
PostgraduateDegree	.2887	.45431	194
Seminars	.1959	.39790	194
TrainingPrograms	.2526	.43561	194
Workshops	.2268	.41985	194
BelowAverage	.1082	.31150	194
Average	.3093	.46339	194
Successful	.4175	.49443	194
VerySuccessful	.1392	.34702	194

**NORMALITY**

**Table 149: Normality and Missing Data**

	Case Processing Summary					
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
ENActivityNow	194	100.00%	0	0.00%	194	100.00%
StrategyNow1	194	100.00%	0	0.00%	194	100.00%
StrategyNow2	194	100.00%	0	0.00%	194	100.00%
FactorsNow1	194	100.00%	0	0.00%	194	100.00%
FactorsNow2	194	100.00%	0	0.00%	194	100.00%
FactorsNow4	194	100.00%	0	0.00%	194	100.00%
ChallengesNow1	194	100.00%	0	0.00%	194	100.00%
ChallengesNow2	194	100.00%	0	0.00%	194	100.00%
TradingNow1	194	100.00%	0	0.00%	194	100.00%
TradingNow2	194	100.00%	0	0.00%	194	100.00%
InformalFormalNow1	194	100.00%	0	0.00%	194	100.00%

**Entrepreneurial Activity Plots**



**Figure 60: Entrepreneurial Activity**

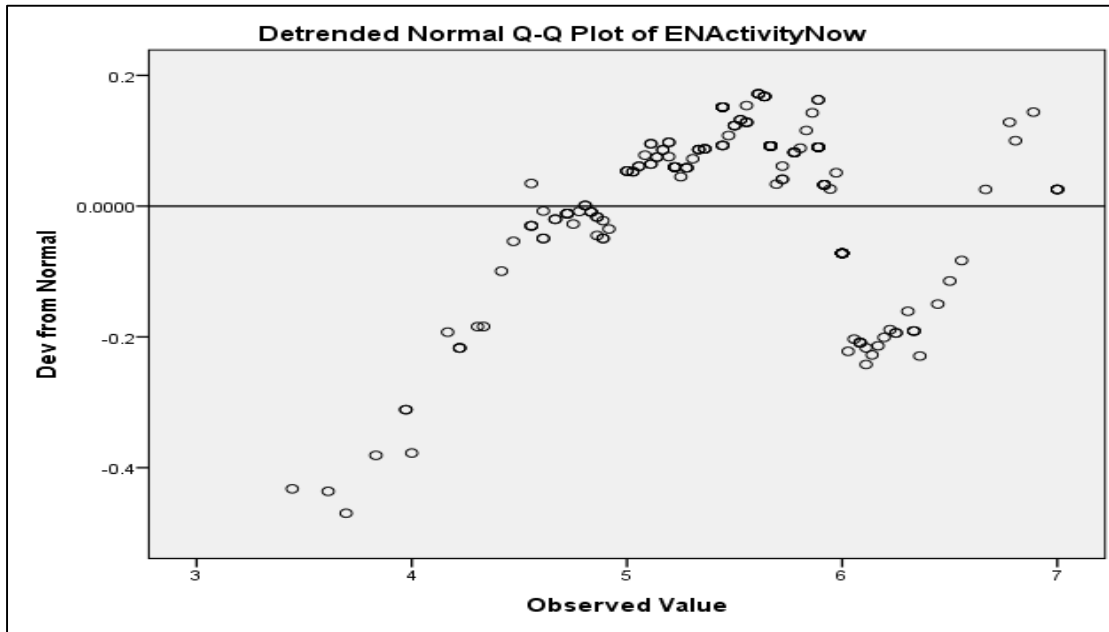


Figure 61: Entrepreneurial Activity

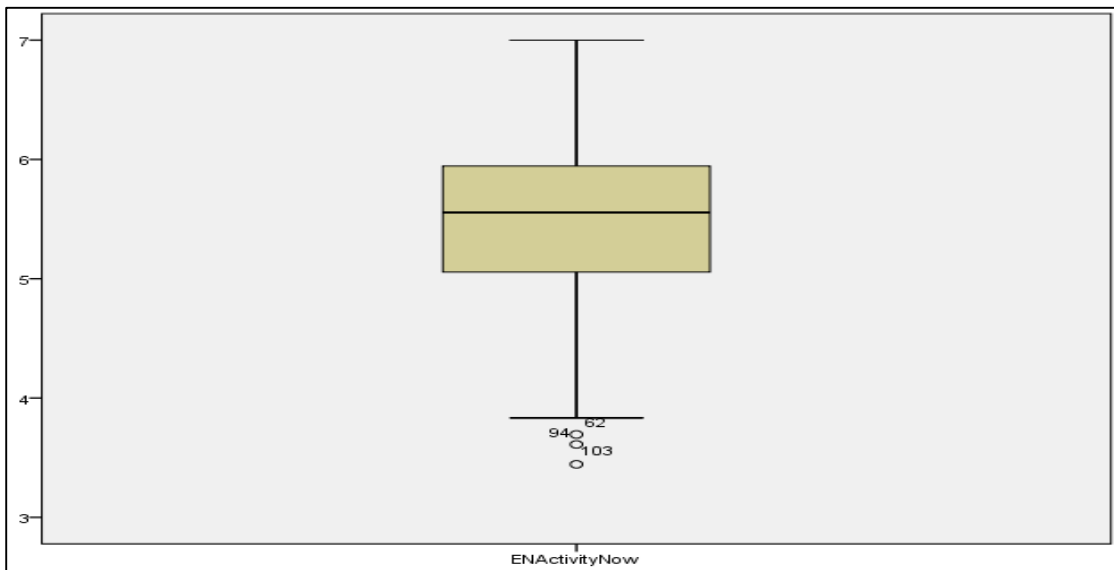


Figure 62: Box and Whisker Entrepreneurial Activity

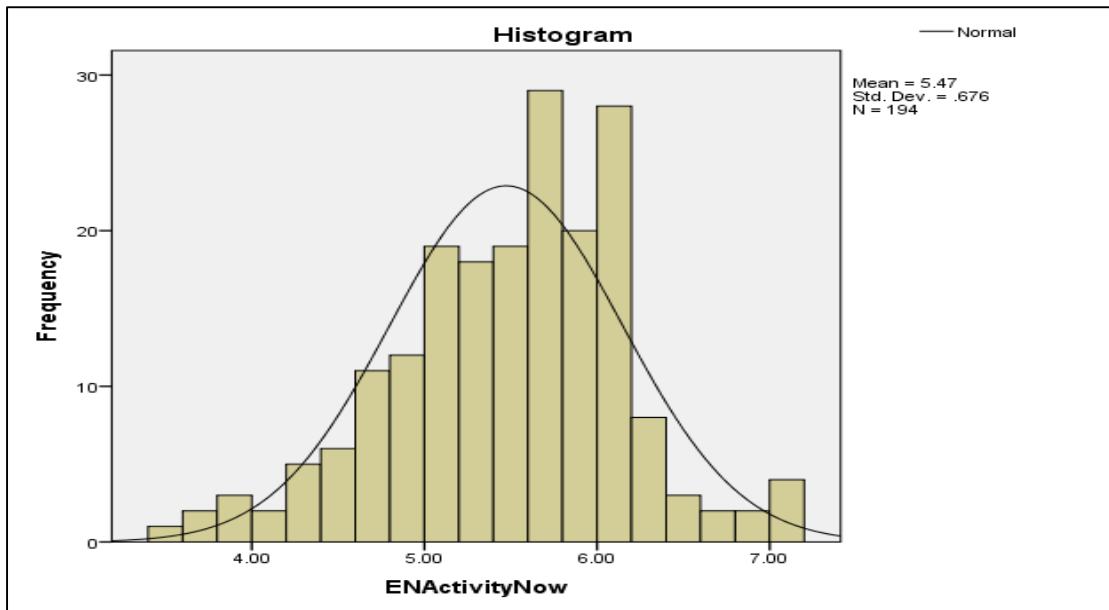


Figure 63: Histogram for Entrepreneurial activity

### Strategy

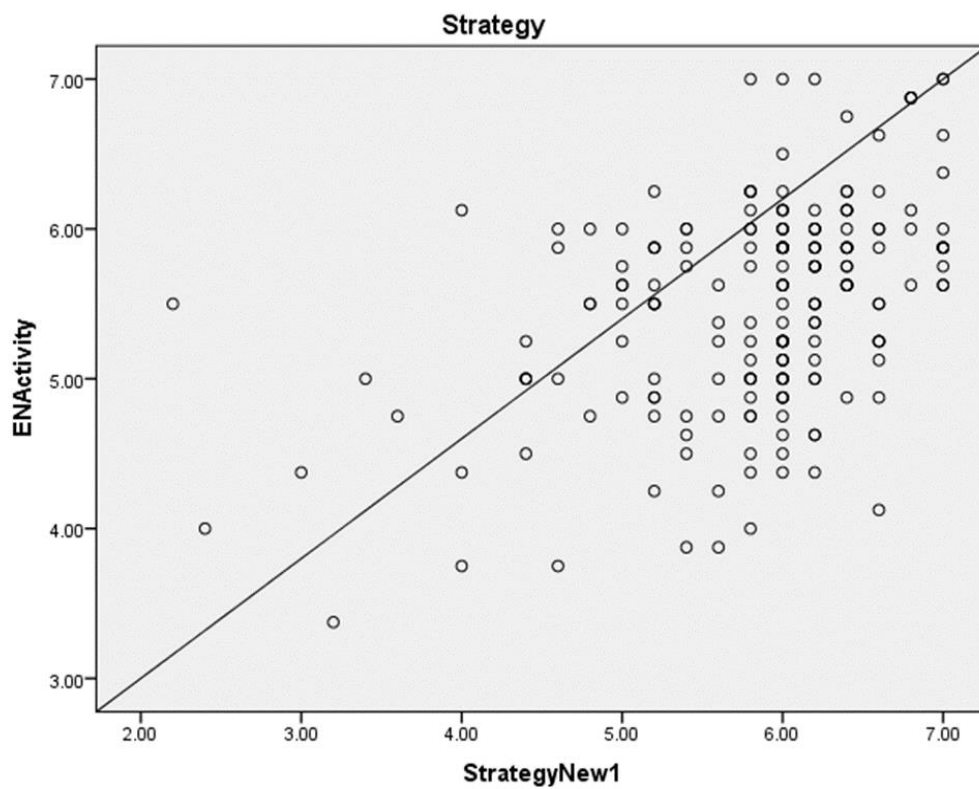


Figure 64: Scatter Plot - Strategy

## Factors

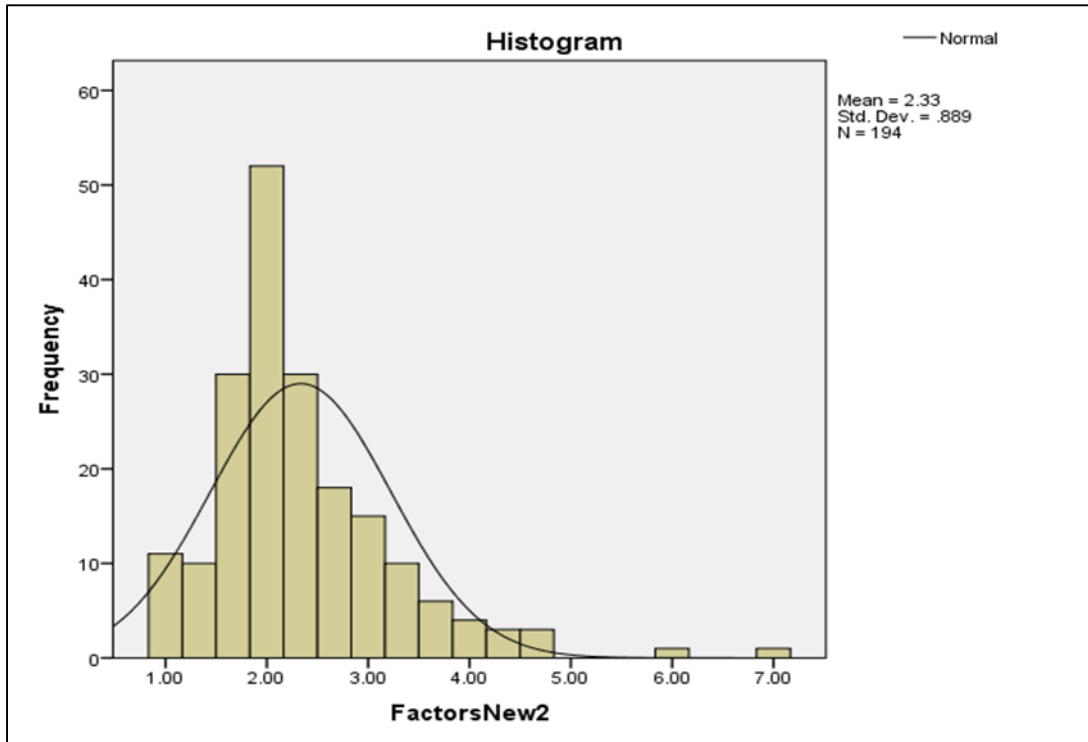


Figure 65: Histogram - Factors

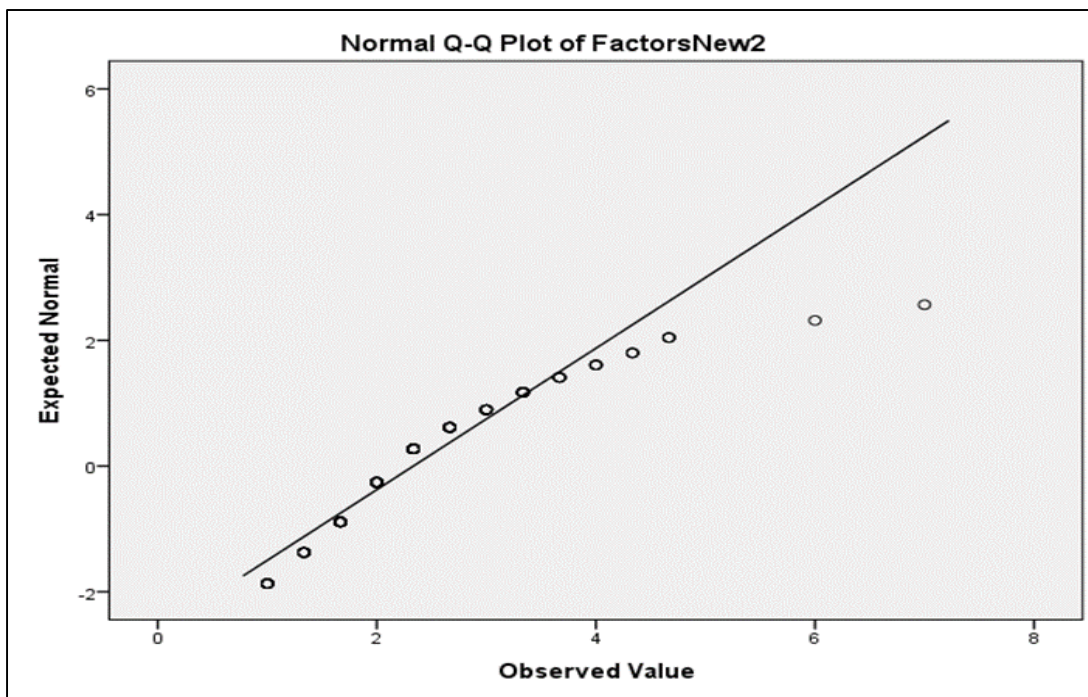


Figure 66: Q-Q Plot - Factors

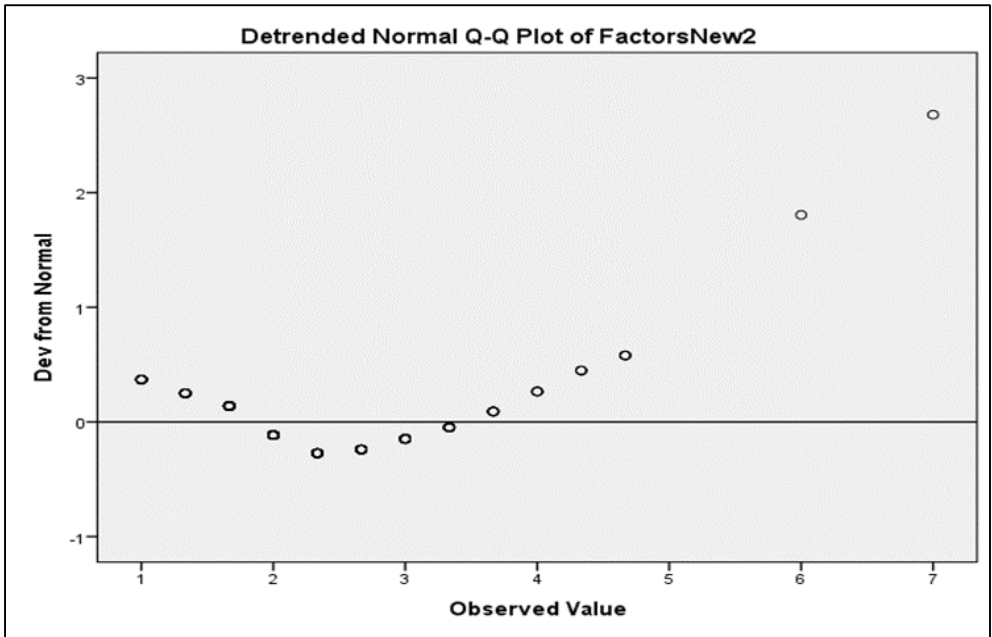


Figure 67: Q-Q Plot - Factors

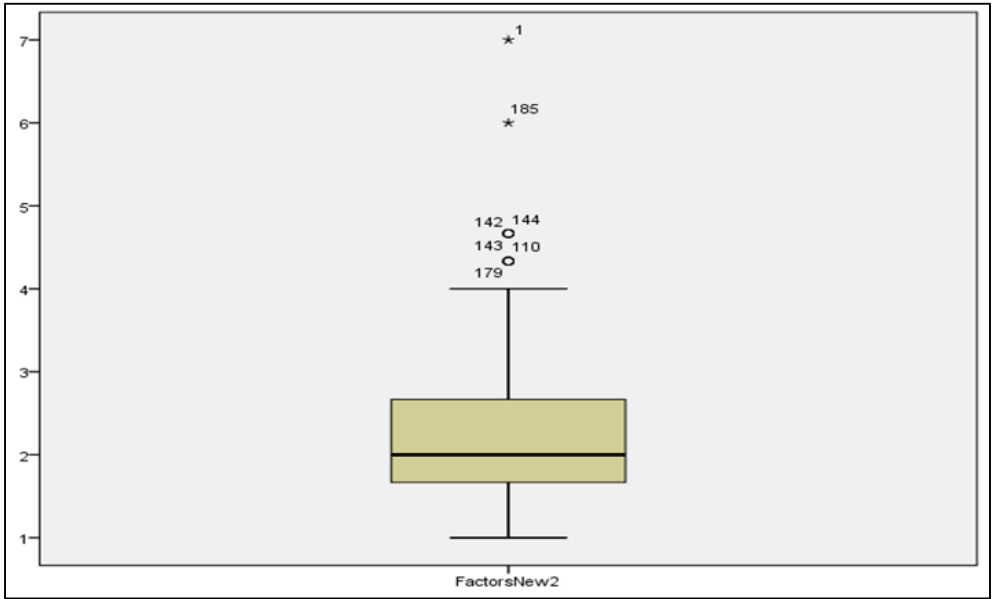


Figure 68: Box and Whisker Plot - Factor



## Challenges

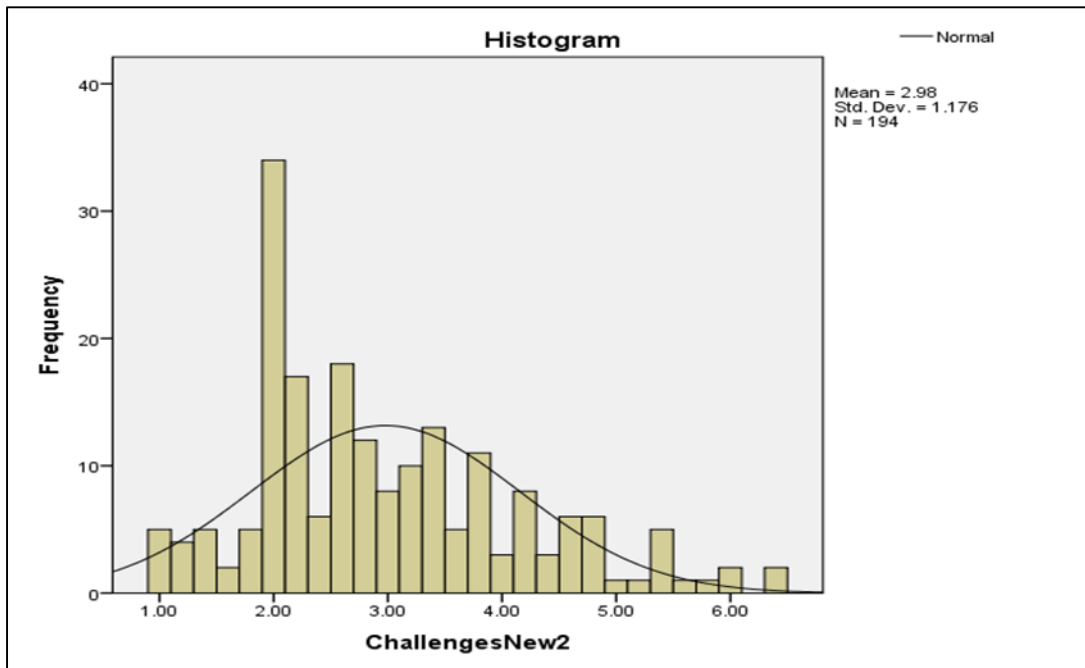


Figure 69: Histogram - Challenges

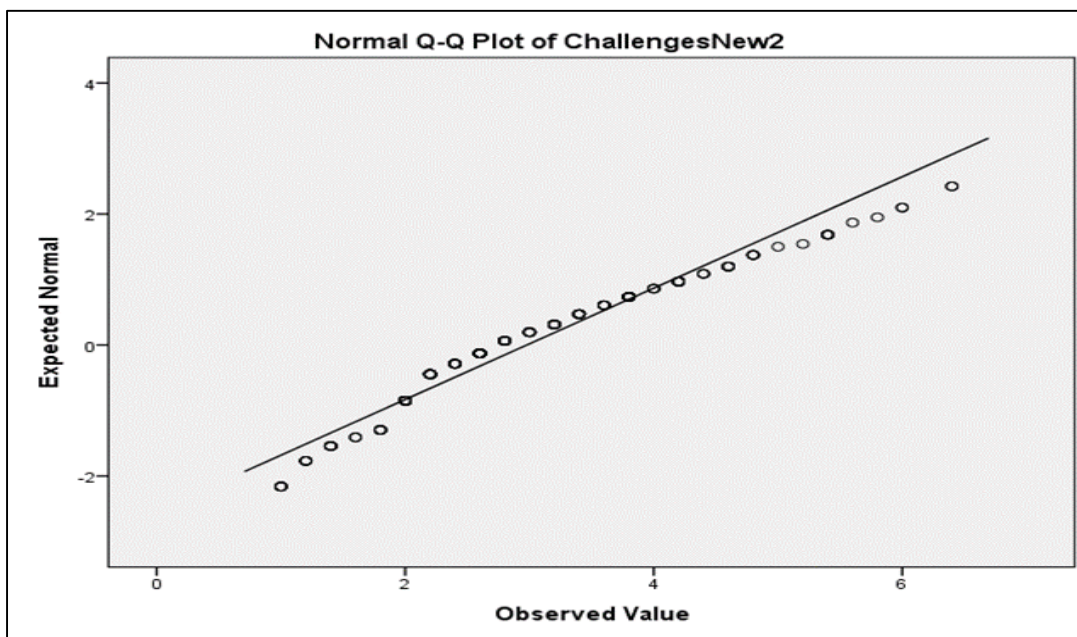


Figure 70: Q-Q Plot - Challenges

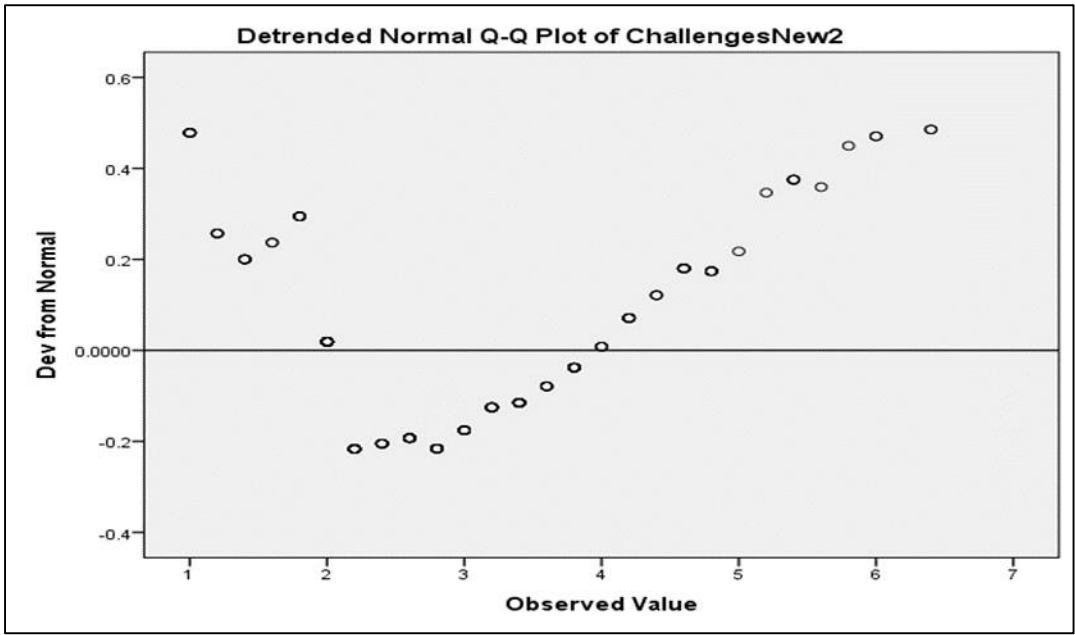


Figure 71: Q-Q Plot - Challenges

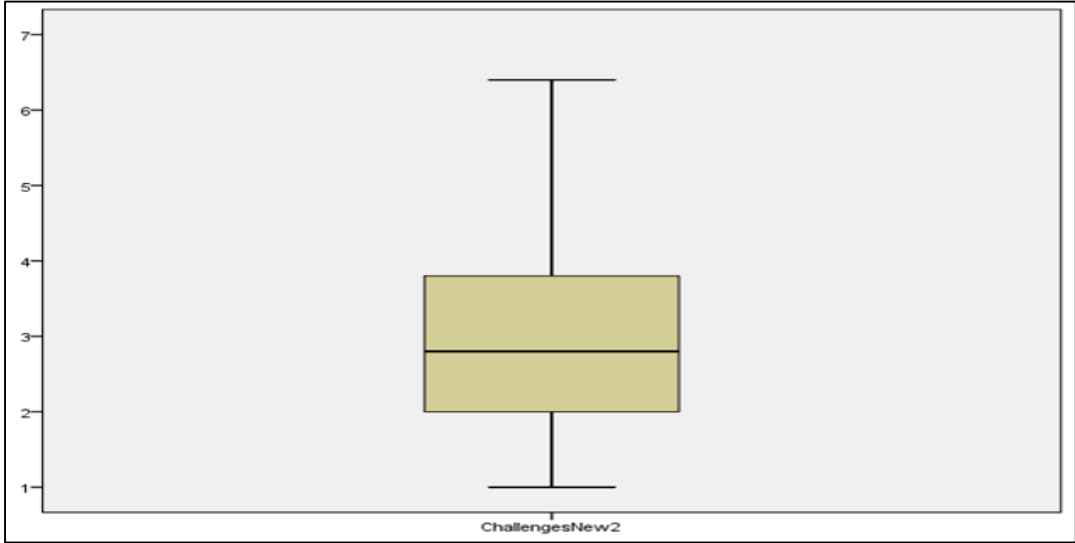


Figure 72: Box and Whisker Plot - Challenges

# Trading

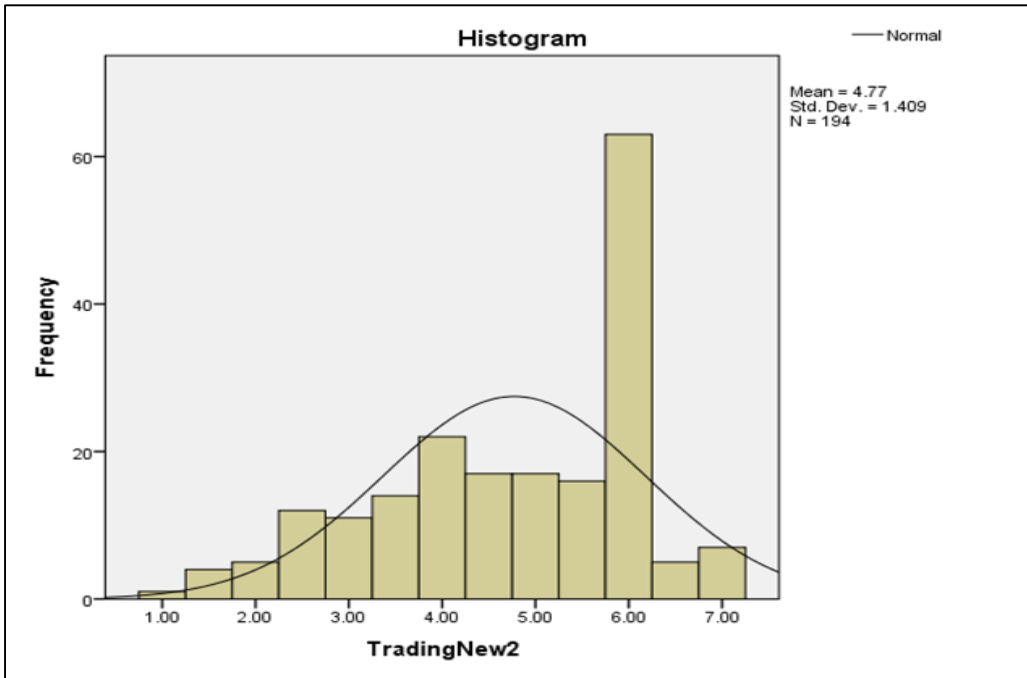


Figure 73: Histogram - Trading

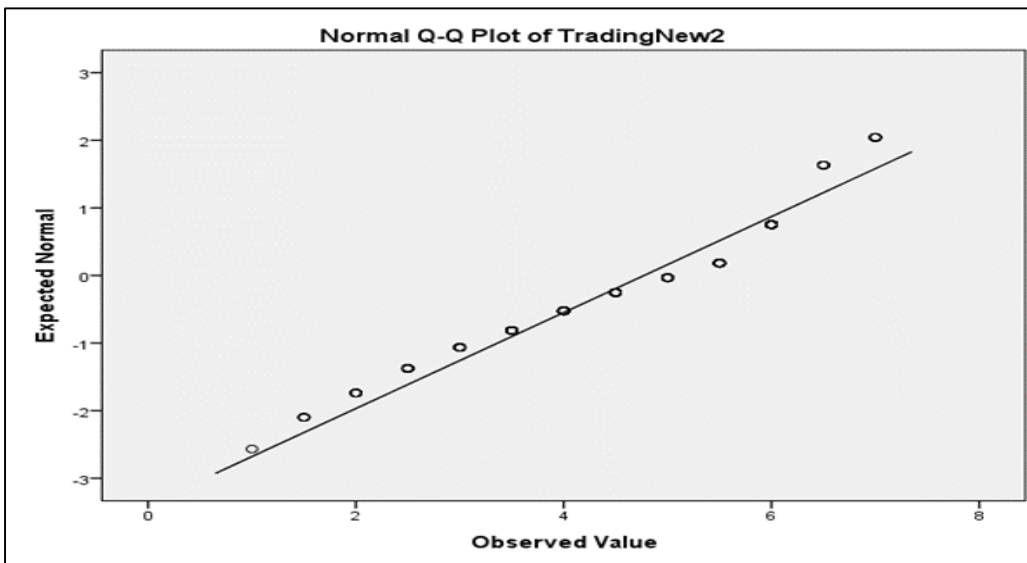


Figure 74: Q-Q Plot - Trading

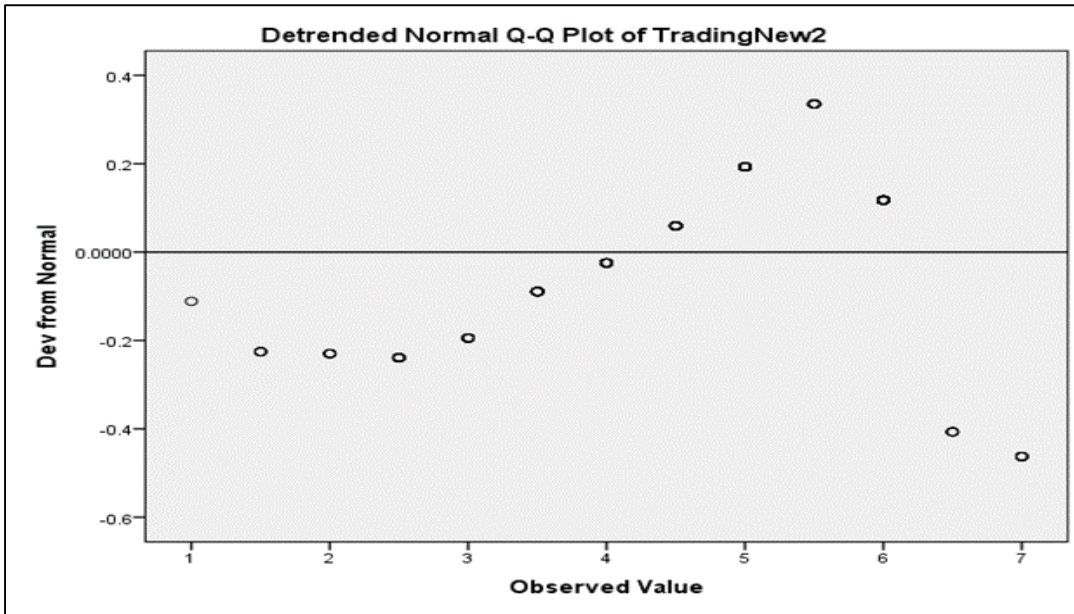


Figure 75: Q-Q Plot - Trading

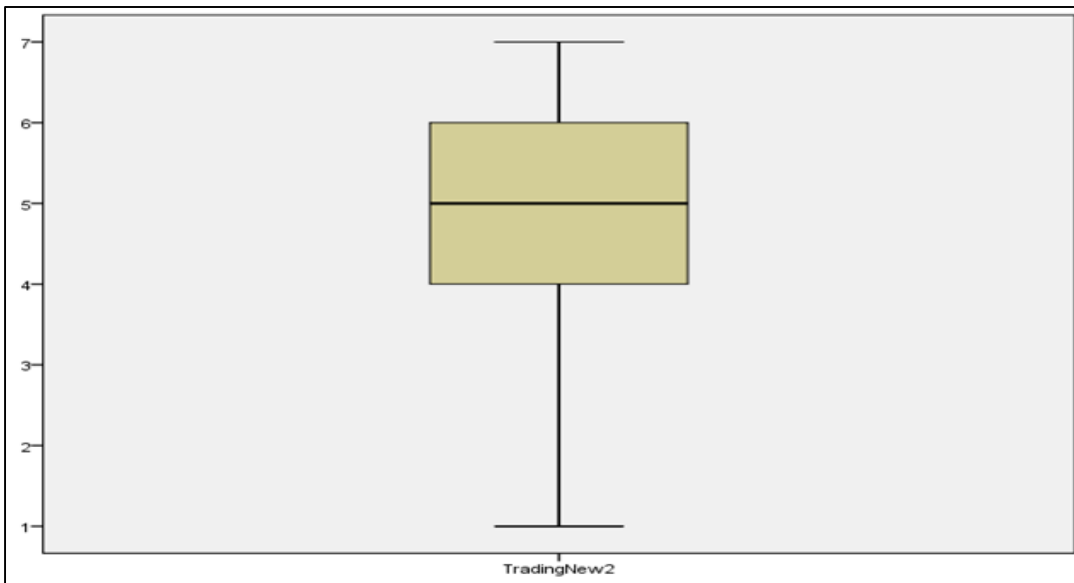


Figure 76: Box and Whisker Plot - Trading

## Informal vs Formal

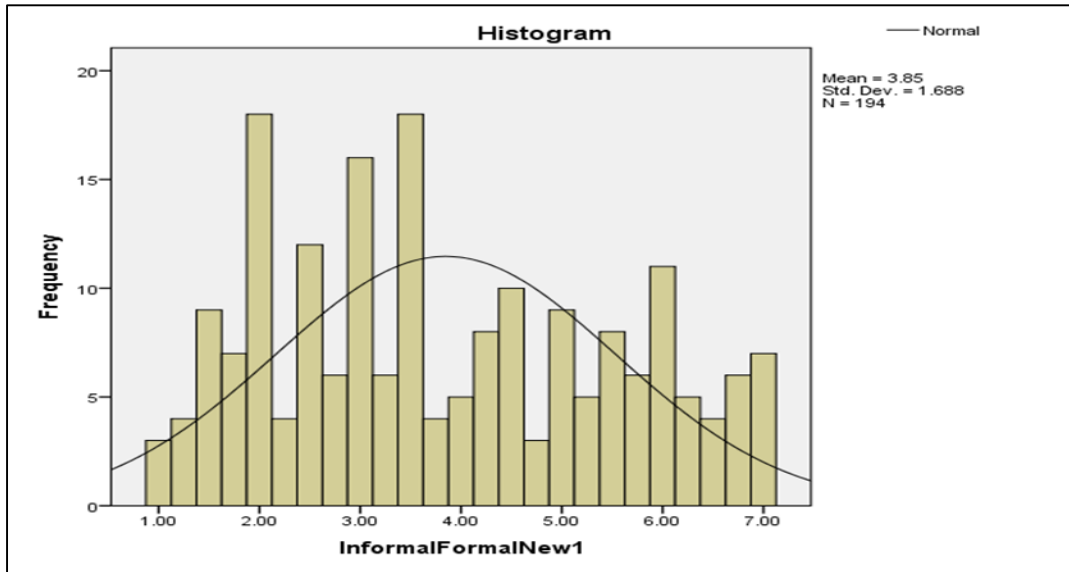


Figure 77: Histogram – Informal vs Formal

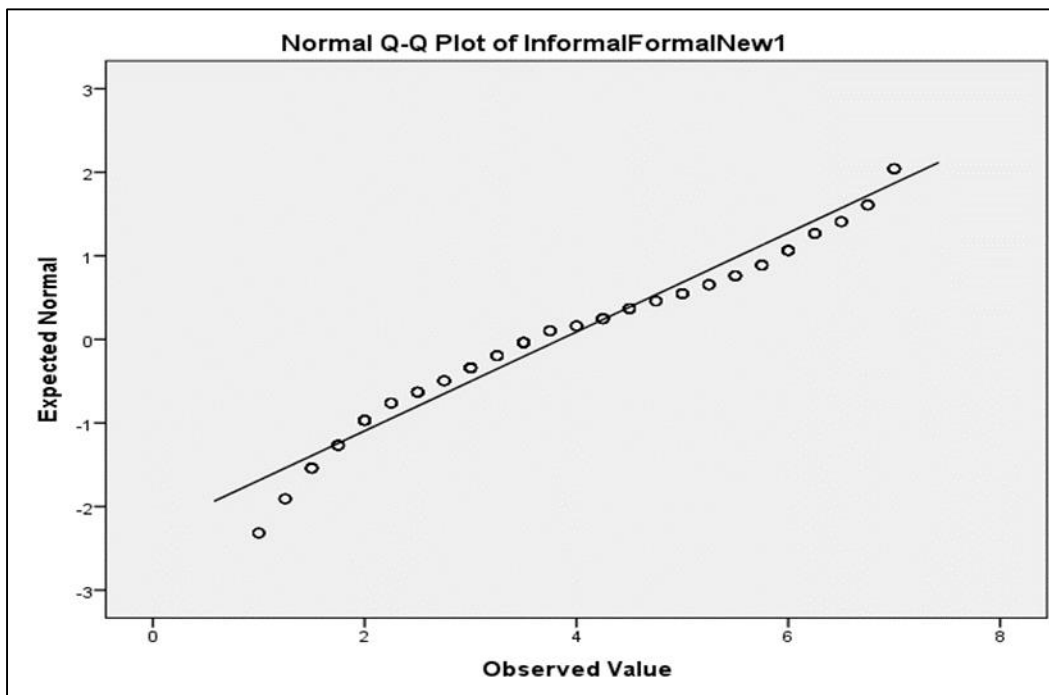


Figure 78: Q-Q Plot – Informal vs Formal

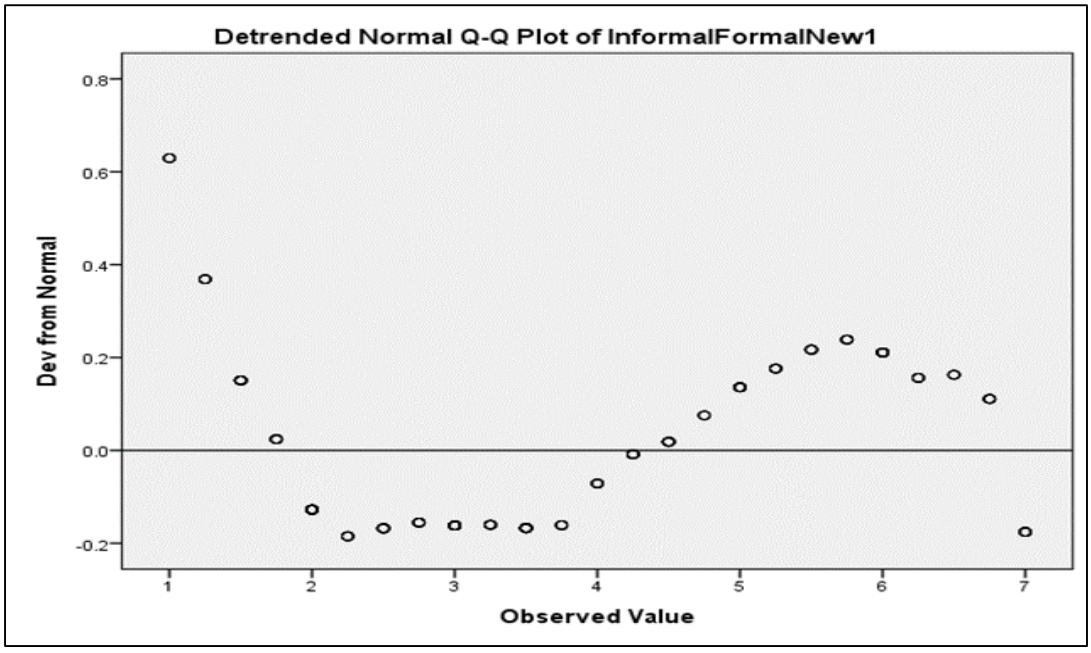


Figure 79: Q-Q Plot – Informal vs Formal

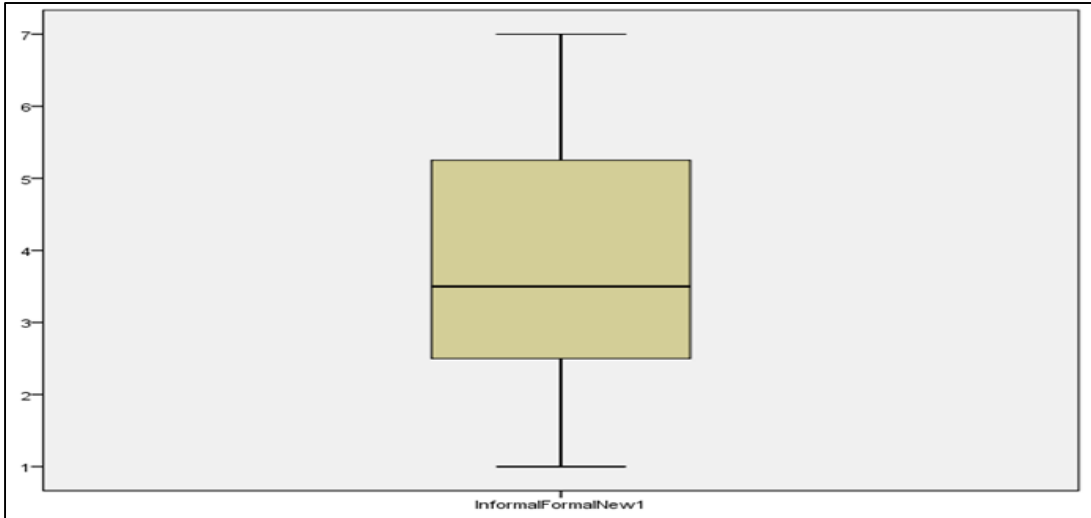


Figure 80: Box and Whisker Plot – Informal vs Formal

## Scatter Plots

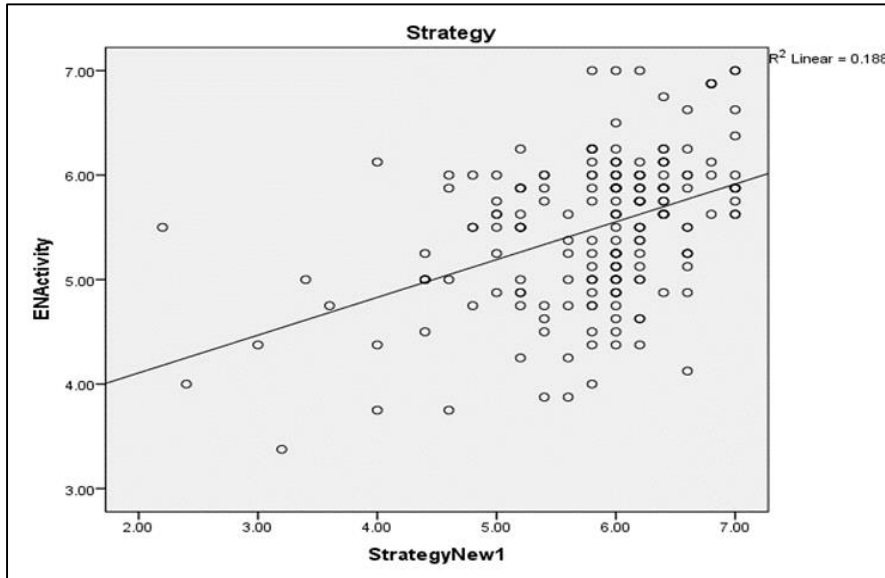


Figure 81: Scatter Plot - Strategy

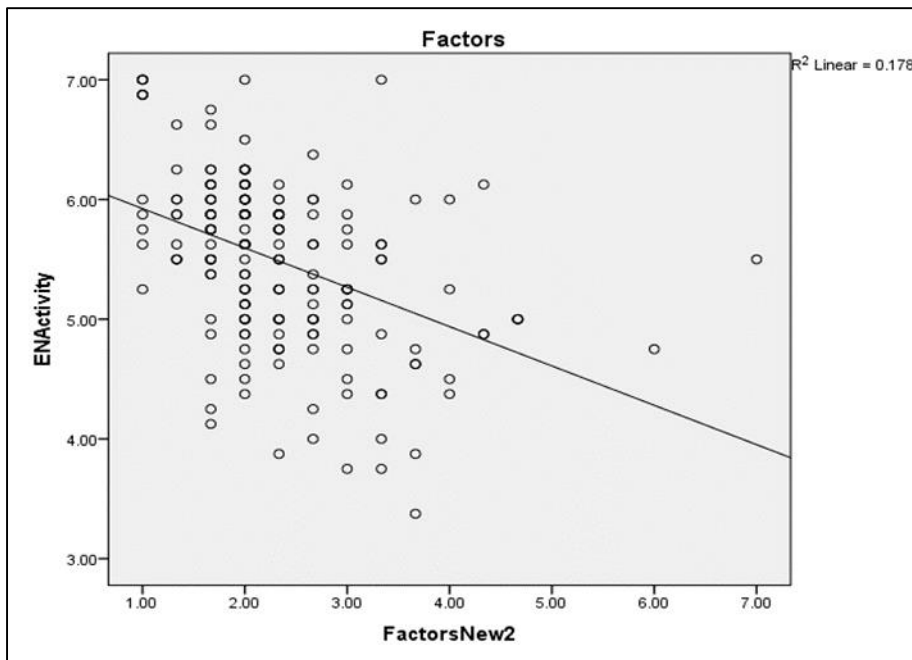


Figure 82: Scatter Plot - Factors

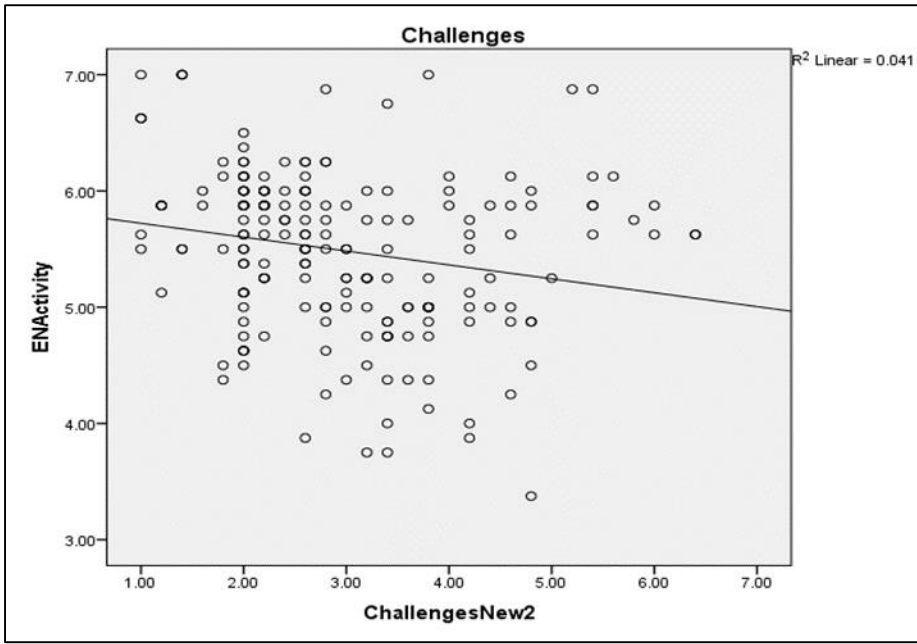


Figure 83: Scatter Plot - Challenges

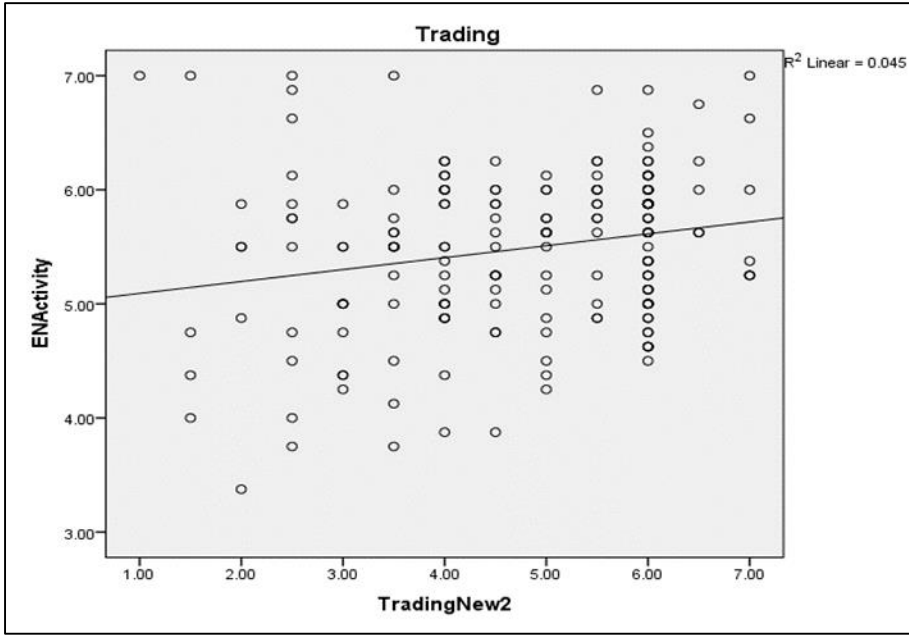


Figure 84: Scatter Plot - Trading



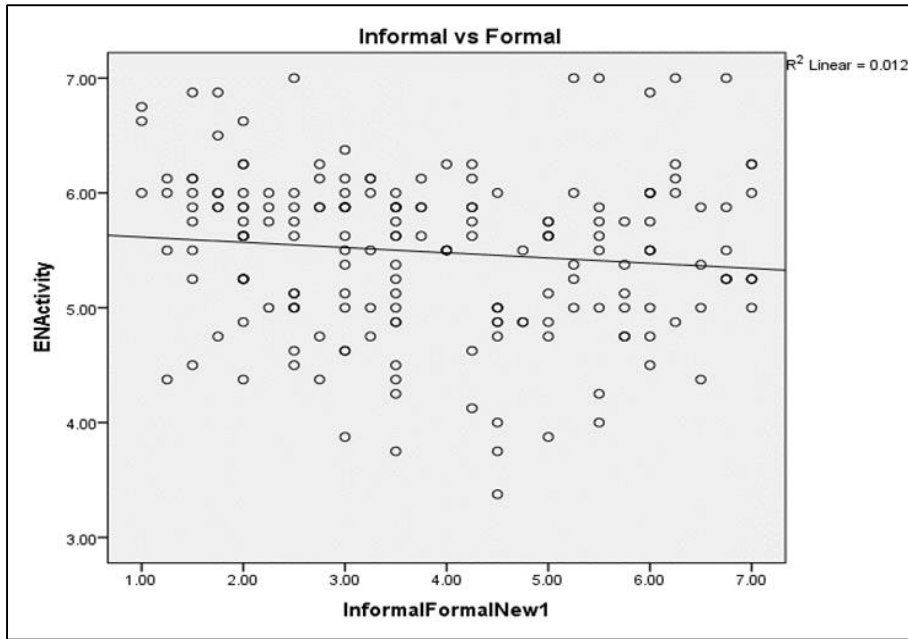


Figure 85: Scatter Plot – Informal vs Formal

**PEARSON AND SPEARMAN CORRELATION**

**Table 150: Pearson and Spearman Correlation**

Correlations											
		StrategyNew1	StrategyNew2	FactorsNew1	FactorsNew2	ChallengesNew1	ChallengesNew2	TradingNew1	TradingNew2	TradingNew3	InformalFormalNew1
StrategyNew1	Pearson Correlation	1	.309**	-.211**	-.470**	-.106	-.172*	-.134	.277**	-.214**	-.062
	Sig. (2-tailed)		.000	.003	.000	.141	.016	.063	.000	.003	.390
	N	194	194	194	194	194	194	194	194	194	194
StrategyNew2	Pearson Correlation	.309**	1	.077	-.151*	.175*	.175*	.166*	-.004	.076	-.165*
	Sig. (2-tailed)	.000		.285	.036	.014	.015	.020	.959	.291	.021
	N	194	194	194	194	194	194	194	194	194	194
FactorsNew1	Pearson Correlation	-.211**	.077	1	.244**	.677**	.489**	.358**	.043	.367**	-.176*
	Sig. (2-tailed)	.003	.285		.001	.000	.000	.000	.549	.000	.014
	N	194	194	194	194	194	194	194	194	194	194
FactorsNew2	Pearson Correlation	-.470**	-.151*	.244**	1	.096	.185**	.013	-.192**	.007	.127
	Sig. (2-tailed)	.000	.036	.001		.181	.010	.862	.007	.926	.079
	N	194	194	194	194	194	194	194	194	194	194
ChallengesNew1	Pearson Correlation	-.106	.175*	.677**	.096	1	.529**	.462**	-.010	.490**	-.223**
	Sig. (2-tailed)	.141	.014	.000	.181		.000	.000	.891	.000	.002
	N	194	194	194	194	194	194	194	194	194	194
ChallengesNew2	Pearson Correlation	-.172*	.175*	.489**	.185**	.529**	1	.539**	-.140	.311**	-.067
	Sig. (2-tailed)	.016	.015	.000	.010	.000		.000	.051	.000	.355
	N	194	194	194	194	194	194	194	194	194	194
TradingNew1	Pearson Correlation	-.134	.166*	.358**	.013	.462**	.539**	1	-.212**	.459**	-.165*
	Sig. (2-tailed)	.063	.020	.000	.862	.000	.000		.003	.000	.022
	N	194	194	194	194	194	194	194	194	194	194
TradingNew2	Pearson Correlation	.277**	-.004	.043	-.192**	-.010	-.140	-.212**	1	-.153*	-.148*
	Sig. (2-tailed)	.000	.959	.549	.007	.891	.051	.003		.033	.040
	N	194	194	194	194	194	194	194	194	194	194
TradingNew3	Pearson Correlation	-.214**	.076	.367**	.007	.490**	.311**	.459**	-.153*	1	-.145*
	Sig. (2-tailed)	.003	.291	.000	.926	.000	.000	.000	.033		.044
	N	194	194	194	194	194	194	194	194	194	194
InformalFormalNew1	Pearson Correlation	-.062	-.165*	-.176*	.127	-.223**	-.067	-.165*	-.148*	-.145*	1
	Sig. (2-tailed)	.390	.021	.014	.079	.002	.355	.022	.040	.044	
	N	194	194	194	194	194	194	194	194	194	194

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 151: Pearson Correlation**

			Correlations									
			StrategyNew1	StrategyNew2	FactorsNew1	FactorsNew2	ChallengesNew1	ChallengesNew2	TradingNew1	TradingNew2	TradingNew3	InformalFormalNew1
Spearman's rho	StrategyNew1	Correlation Coefficient	1.000	.248**	-.204**	-.324**	-.154	-.248**	-.227**	.266**	-.270**	-.096
		Sig. (2-tailed)		.000	.004	.000	.032	.000	.001	.000	.000	.185
		N	194	194	194	194	194	194	194	194	194	194
	StrategyNew2	Correlation Coefficient	.248**	1.000	.110	-.105	.207**	.140	.158*	-.006	.061	-.211**
		Sig. (2-tailed)	.000		.127	.144	.004	.052	.028	.936	.398	.003
		N	194	194	194	194	194	194	194	194	194	194
	FactorsNew1	Correlation Coefficient	-.204**	.110	1.000	.258**	.588**	.396**	.405**	.040	.393**	-.182*
		Sig. (2-tailed)	.004	.127		.000	.000	.000	.000	.584	.000	.011
		N	194	194	194	194	194	194	194	194	194	194
	FactorsNew2	Correlation Coefficient	-.324**	-.105	.258**	1.000	.162*	.224**	.035	-.130	.021	.179*
		Sig. (2-tailed)	.000	.144	.000		.024	.002	.628	.070	.775	.012
		N	194	194	194	194	194	194	194	194	194	194
	ChallengesNew1	Correlation Coefficient	-.154	.207**	.588**	.162*	1.000	.496**	.500**	-.051	.445**	-.189**
		Sig. (2-tailed)	.032	.004	.000	.024		.000	.000	.483	.000	.008
		N	194	194	194	194	194	194	194	194	194	194
	ChallengesNew2	Correlation Coefficient	-.248**	.140	.396**	.224**	.496**	1.000	.566**	-.229**	.320**	-.057
		Sig. (2-tailed)	.000	.052	.000	.002	.000		.000	.001	.000	.433
		N	194	194	194	194	194	194	194	194	194	194
	TradingNew1	Correlation Coefficient	-.227**	.158*	.405**	.035	.500**	.566**	1.000	-.304**	.443**	-.094
		Sig. (2-tailed)	.001	.028	.000	.628	.000	.000		.000	.000	.193
		N	194	194	194	194	194	194	194	194	194	194
	TradingNew2	Correlation Coefficient	.266**	-.006	.040	-.130	-.051	-.229**	-.304**	1.000	-.072	-.146*
		Sig. (2-tailed)	.000	.936	.584	.070	.483	.001	.000		.315	.042
		N	194	194	194	194	194	194	194	194	194	194
	TradingNew3	Correlation Coefficient	-.270**	.061	.393**	.021	.445**	.320**	.443**	-.072	1.000	-.107
		Sig. (2-tailed)	.000	.398	.000	.775	.000	.000	.000	.315		.137
		N	194	194	194	194	194	194	194	194	194	194
InformalFormalNew1	Correlation Coefficient	-.096	-.211**	-.182*	.179*	-.189**	-.057	-.094	-.146*	-.107	1.000	
	Sig. (2-tailed)	.185	.003	.011	.012	.008	.433	.193	.042	.137		
	N	194	194	194	194	194	194	194	194	194	194	194

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## REGRESSION COEFFICIENTS

Table 152: Regression Coefficients

Model		Coefficients <sup>a</sup>								
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.415	.776		4.400	.000	1.883	4.948		
	StrategyNew1	.208	.069	.249	3.012	.003	.072	.344	.566	1.767
	StrategyNew2	.016	.044	.026	.368	.713	-.071	.104	.752	1.330
	FactorsNew1	-.030	.078	-.036	-.378	.706	-.184	.125	.427	2.340
	FactorsNew2	-.188	.060	-.242	-3.117	.002	-.308	-.069	.644	1.553
	TradingNew1	.076	.052	.125	1.457	.147	-.027	.178	.531	1.885
	TradingNew2	.035	.036	.072	.993	.322	-.035	.106	.737	1.358
	TradingNew3	-.101	.075	-.111	-1.349	.179	-.248	.047	.568	1.760
	ChallengesNew1	.091	.061	.147	1.490	.138	-.029	.211	.396	2.526
	ChallengesNew2	-.108	.051	-.184	-2.145	.033	-.208	-.009	.526	1.901
	InformalFormalNew1	-.022	.028	-.053	-.778	.438	-.077	.034	.831	1.203
	Country	.090	.096	.065	.938	.350	-.100	.280	.804	1.243
	Gender	-.009	.096	-.007	-.096	.924	-.200	.181	.828	1.208
	Age25to34	.178	.291	.119	.614	.540	-.396	.753	.104	9.658
	Age35to44	.155	.283	.104	.547	.585	-.404	.715	.108	9.257
	Age45to54	.371	.292	.228	1.272	.205	-.205	.947	.120	8.304
	Age55orOlder	.084	.296	.039	.283	.778	-.501	.669	.202	4.948
	Matric	.986	.402	.381	2.455	.015	.193	1.779	.161	6.206
	TertiaryNotcompleted	.794	.413	.266	1.921	.056	-.022	1.609	.203	4.926
	CertificateDiploma	.819	.379	.518	2.160	.032	.070	1.569	.067	14.862
	BachelorsDegree	.825	.378	.549	2.183	.030	.079	1.571	.061	16.312
	PostgraduateDegree	.928	.377	.608	2.461	.015	.183	1.672	.064	15.740
	Seminars	.053	.132	.030	.399	.690	-.209	.314	.671	1.490
	TrainingPrograms	-.051	.124	-.032	-.409	.683	-.295	.193	.642	1.557
	Workshops	.155	.129	.094	1.201	.232	-.100	.411	.632	1.583
	BelowAverage	.041	.317	.019	.130	.896	-.584	.667	.191	5.227
	Average	.194	.305	.129	.634	.527	-.409	.796	.093	10.742
	Successful	.131	.305	.094	.430	.668	-.471	.733	.082	12.211
	VerySuccessful	.180	.326	.090	.553	.581	-.463	.823	.146	6.851

a. Dependent Variable: ENActivity