

UNIVERSITY OF KWAZULU NATAL

**AN INVESTIGATION OF THE RELATIONSHIP BETWEEN INFLATION AND
INTEREST RATES IN SWAZILAND**

BY

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Declaration

I, **Lindiwe Cathrine Khumalo** declare that I am the sole author of this thesis, that during the period of registered study, I have not been registered for another academic award or qualification, nor has any of the material been submitted wholly or partly for any other award. This thesis is a result of my own research work, and where other people's research was used, they have been duly acknowledged.

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Supervisor Endorsement

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SUPERVISOR

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Abstract

Inflation rate and interest rate are some of the two economic variables that are used by governments across the world to monitor and ensure that economic performance is within meaningful limits. While inflation is the persistent increase in general prices for the commodities namely goods and services, interest rates is considered as technique that is used to regulate the levels of inflation because it would reduce the overall demand of money available in the society. This study engaged a quantitative research approach which was based on a review of secondary information with regards to the trends of both inflation and interest rate over the period of five years(2010 to 2014) in Swaziland. Data was analysed using Microsoft computer excel software that enabled the projection of the findings of the study in form of graphs and bar charts. The general data for the study, however, indicated the highest level of inflation rate was recorded at 8.9% in 2012 when the interest rate was at 10% in 2010 respectively. The study established that there was some positive collaboration between inflation rate and interest in the sense that in the event inflation increased, interest rates were perceived to have been cushioning and policies ensured that the rate of inflation was being regulated. The purpose for this study was to analyse and establish statistical trends with regards to the relationship between the interest rates and inflation with reference to the Swaziland economy. However, the future areas of interest would be influenced with the notion of the level of impact of inflation and interest rate had to the economy.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter discusses the background to the research problem; it considers the general meaning of inflation and interest rate from both the global and the Swaziland perspectives. The research problem is stated followed by the research objectives of the study. Other areas of focus in this chapter include the analysis of the significance of the study as well as the general structure of the entire research process.

1.2 Background of Study

The economic platform of the Kingdom of Swaziland is characterised by various fluctuations caused by the forces of various variables of which inflation and interest rates are paramount. However, Swaziland has little, scanty information and literature that analyses the relationship that exists between these two variables. Different views have been forwarded on the relationship between inflation, interest rates and economic growth with respect to the nature and direction of the relationship. One view is that inflation is good for economic growth. However, the monetarists argue that inflation is not good but harmful to economic growth and development of a country, it is the objective of every economy to achieve sustainable economic growth in order to lower debt burdens as developing countries face many challenges in boosting economic growth compared to developed countries (Central Bank of Swaziland Monetary Policy Statement, 2000). Countries like Swaziland are characterized by high inflation, high Government spending, high unemployment rate, high degree of indebtedness and high levels of poverty and poor economic activity. Several authors in Swaziland agree that interest rates can influence spending decisions of businesses and households, hence, the inflation (Suyuan and Khurshid, 2015).

1.3 Research Problem

According to the Central Bank of Swaziland Monetary Policy Statement (2000), Swaziland was in need of a stable inflation environment to aid the country to maintain its sustained economic growth which was essential for development and supportive of job creation and poverty alleviation. Swaziland's economy was characterised by a fluctuating rate of inflation, at the same time experienced a high unemployment rate which was about 28.5%. The country was also facing high poverty levels compared to other middle economy countries especially in the same region of southern Africa. Indicators indicated that 63% of the population in Swaziland lived in extreme poverty conditions which degenerated the country into a low income country (Swaziland Central Statistical Office and UNDP Report, 2011). However, high inflation levels coupled with high poverty levels created a dramatic impact on the way of life for many Swazis. This study However, this study generated information that would Swaziland in the adjustment of interest rates in line with acceptable levels of the inflation in order to assist in reducing the high levels of poverty and facilitate income generating activities such creation of entrepreneurship. The study also was perceived to assist the country to ascertain new models that would assist in explaining clearer the relationship that exists between interest rates and inflation.

1.4 Research Objectives

The primary objective of this study was to analyse and come up with specific statistical analysis and judgement pertaining to the nature of the relationship that exist between interest rates and price inflation in Swaziland based on evidence and analysis.

The sub-objectives of the study were to:

- 1) To examine the trend of interest rate of Swaziland in the period 2010 to 2014
- 2) To examine the trend of inflation rate of Swaziland in the period 2010 to 2014

- 3) To determine whether there is a relationship between interest rate and inflation rate in Swaziland over a period of 2010 to 2014
- 4) To determine solutions of reducing high inflation rate in Swaziland

1.5 Research questions

The following were the research questions for the study:

- 1) What is the trend of interest rate of Swaziland in the period 2010 to 2014?
- 2) What is the trend of inflation rate of Swaziland in the period 2010 to 2014?
- 3) What is the relationship if any, exist between interest rate and inflation rate in Swaziland over a period of 2010 to 2014?
- 4) What are the solutions of reducing high inflation rate in Swaziland?

1.6 Significance of the Study

Modelling and forecasting inflation are the necessary tools used for a number of reasons. They are important tools from the point of view of poverty alleviation and accelerating economic growth. In addition, inflation is a regressive form of taxation and among the most vulnerable section of the economy. Inflation depicts itself as a form of tax to the poor and those with fixed income in the economy. Inflation also is characterized by relative price distortion as some prices adjust more slowly than others. Another form of distortion takes place during inflationary periods, other forms of distortion take place as absolute price changes are mistaken for relative price changes. Productivity base of the economy experiences distortions during such periods and this causes efficiency losses lower. Furthermore, inflation can discourage savings if the rate of return on savings does not reflect the increase in the level of prices. The uncertainty about future prices can also cause unexpected gains and losses in trade and industry and, thus, discourage long term contracts and investments channelling resources into speculation.

This study was perceived to have been used to outline the relationship that existed between interest rate and price inflation in the case of Swaziland. This study distinguished in general price increase and actual price inflation since according to a layman's term this was one and the same thing yet inflation was technically perceived as a sustained increase in the general price level of goods and services in an economy over a period of time.

The study has been perceived to assist the country particularly because Swaziland was a developing country and, therefore, policy makers were perceived to have been faced with the need of having sufficient knowledge of how they would balance economic growth with low inflation while maintaining a considerable interest rate. Therefore, monetary policies came into play as far as curbing inflation was concerned. Focus on the determinants of inflation in the country was also covered in this study and this was perceived to have contributed in the assisting of shedding further light on the role that interest rates had on inflation.

The different arguments and views on the relationship between inflation and interest rates especially with respect to the nature of the relationship that were brought forward by this study hence, used for promoting and providing interesting grounds for further study and guidance for future academicians and researchers. Undertaking a study on inflation and interest rate determinants particularly in a developing country like Swaziland was perceived to have been necessity and a helpful approach that would enable both policy makers and other researchers to have access to critical information provided by this study.

1.7 Scope and Delimitations of the Study

Data that was utilised in this study was the interest rate figures and inflation rate figures which were publicly and readily available in the public domain namely at the central bank of Swaziland as well as the public library. However, the data was perceived to have been collected by the government systems and limited the establishment of the

right conclusions respectively. The other kind of limitation was the time factor that challenged the smooth operation of this study. Data was delayed to be collected and consolidated because of it was not readily available on the public domain.

1.8 Brief introduction on research methodology

This study adopted a descriptive quantitative research design that gave conclusions on the relationship of inflation and interest rate as in the case of Swaziland. Data of the study was analysed based on Meta analysis approach because the study was based on secondary data. Church (2001:33) argued that secondary data analysis enables the researcher to analyse a group of data using statistical means and this can be in form of texts, tables as well as graphs which existed in the public domain.

1.9 Structure of the study

The following was a brief description of the research structure for the study:

i. Chapter One: Introduction

Chapter one of the study was the introduction to the study. This chapter gave the research background, problem statement, the research objectives and questions as well as the significance of the study. Other areas that were considered in this chapter included the scope and delimitations of the study together with the brief description of the research methodology used in the study.

ii. Chapter Two: Literature Review

The literature review for the study included the review of secondary data that was available in the public domain which included both books and other publications in the public libraries as well as the internet. Meta analysis approach was employed to give a much detailed analysis of the research findings as guided by the research objectives in

Chapter One. Chapter Two provides a detailed presentation of the existing literature on the subject area of the study, increasing the body of knowledge on the topic for both the reader and researcher.

iii. Chapter Three: Research Design and Methodology

Chapter three gave the research design and methodology for the study. This was quantitative in nature because the study involved an extensive five (5) year analysis of inflation and interest rate data for Swaziland. In addition, this chapter is a detailed discussion of the methods, approaches and techniques used in the data collection process. This chapter further describes the study area, sample, ethics and the trustworthiness of the study.

iv. Chapter Four: Data Analysis, Findings and Discussion

This chapter presented the analysis of the research findings through the secondary research technique as guided by the research methodology in Chapter Three. The findings of the study were presented in the form of bar graphs, pie charts and tables.. Data projected was discussed in relation to and supported by the literature review in Chapter two as per the research objectives in Chapter One.

v. Chapter Five: Summary of Findings, Conclusions and Recommendations

Chapter Five gave the summarized information about the findings of the study as projected in Chapter Four. This chapter also discusses the conclusions and possible recommendations that were employed to bring about a cost-effective relationship between inflation and interest rate in Swaziland.

1.10 Conclusion

This chapter discussed the background to the research problem based current affairs and a review of pertinent literature on the subject under investigation. The chapter created a broader picture with regards to the influence of inflation and interest rates from both a global and a local (Swaziland) level. The research problem highlighted the actual problem that was currently prevailing in Swaziland. This was followed by the research objectives and questions that guided the research process through up to the conclusions and recommendations of the study. Several benefits of undertaking such a study were also discussed; the most important being the need to balance economic growth with low inflation. The last component of the chapter provided an overview of the structure of the study. Chapter Two follows this chapter and gives the literature review of the study as guided by the research objectives given in Chapter One. Chapter two also creates a general understanding about the definitions of two technical terms namely inflation and interest rate and how they are related.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discusses the conceptual framework for the study which takes into consideration the two technical terms of the study namely: Inflation and interest rates. The chapter also discusses the possible trends and behaviour of high interest rates and prices to an economy, factors that cause both high interest rates and inflation. These elements of focus are guided by the research objectives given in Chapter One.

2.1.1 Defining Inflation

Inflation has been defined by several authors in various ways. Ayub, Rehman, Iqbal, Zaman and Atif (2014:51) defined inflation as an increase in domestic prices of the commodities relatively more than increase in the prices of the commodities globally. Samuel and Nurina (2015:3) argued that inflation is best described as an increase in price as general, where inflation decreases purchasing power from a currency. Umaru and Zubairu (2012: 183) defined inflation as a persistence rise in the general price level of broad spectrum of goods and services in a country over a long period of time. The general understanding with regards to the definition of what inflation was; is grounded on the concept of money because Umaru and Zubairu (2012: 183) asserted that Inflation was all about an economic situation having too much money chasing too few goods. This inflation creates a situation where an increase in money supply in an economy grows at a faster rate than the actual production of the necessary goods and services. This situation of the circular flow creates an imbalance between the demand and supply of goods and services.

2.2.2. Defining Interest Rate

Semuel and Nurina (2015:3) defined interest rate as a value that is gained in the effort of a value that has been saved or invested. Ng'etich and Wanjau (2011:58) argued that Interest rate is the price a borrower pays for the use of money they borrow from a lender/financial institutions or fee paid on borrowed assets (Crowley, 2007). This notion describes interest rate as the percentage of money that was borrowed. This measures the value of the money that was being used by other people. In other words, interest rate is then perceived to have been the measure of the value of the borrowed money. Ng'etich and Wanjau (2011:58) also contended that an interest rate would mean the price of money that reflected market demand and supply and how these factors influenced the general purchasing power that influenced the level of inflation.

Ojima and Emerenini (2015:103) highlighted the critical areas that defined the relevance of interest rate to an economy with the focus on the level of consumer's level of decision making with regards to consumption. That is to state if they should save, borrow, or invest. However, the International Monetary Fund (IMF) report (2015) summarises the functions of interest from three perspectives namely:

- Incentives on the return on financial assets so as to promote deferred consumption which is also perceived as saving for the future activities;
- Interest having been considered as critical aspects of cost of capital that influenced the level of loan able money to the general public; and thirdly
- The domestic interest rate in conjunction with the rate of return on foreign financial assets and goods are hedged against inflation (Ojima and Emerenini, 2015:103).

The notion that is being established here points to the fact that interest rate in any given economic situation has an influential impact on several other factors or variables which would in turn become a critical determinate to the level of investment activities and eventually economic growth and development in general. This becomes much more meaningful in understanding the views of Ojima and Emerenini (2015:103) who stated

that investment was not to be perceived as an independent variable, rather as a dependable variable that was influenced with the changes in other variables such those that would happen in the changes of capital stock at any period of time.

2.2 Relationship between Inflation and Interest Rate

There has been a debate about the relationship between the existence of inflation and interest rate on the general behaviour of a given economy. Ayub, et al. (2014:51) maintained that the Fisher equation also known as the Fisher hypothesis suggests that there is a positive relationship between inflation and the interest rate in an economy. This notion is based on the understanding that both variables are money driven affecting both the demand and supply side of an economy as in the case of debtors and creditors (Semuel and Nurina, 2015:4).

Geetha, Mohidin, Chandran, and Chong (2011:1) contended that based on the financial theory, inflation rate reflected by consumer price index (CPI) represents an overall upward price movement of goods and services. The understanding of this notion is that the general value for money would depreciate because there would be so much money chasing after too few goods. However, during this situation the stakeholders such as the producers of goods who need to invest on the factor inputs would have been faced with a situation in which both the value for borrowing the money for funding the factor inputs as well as the value that was associated with the goods and services obtained would; therefore, work in opposite directions. The notion behind this concept is that since both interest rate and inflation are money driven, the inflation would reduce the demand for money which in turn would reduce the value at which the money was borrowed for injection into the capital investment for production (Geetha, et al, 2011:1-3).

However, Udoka and Roland (2012: 295) argued that the co-existent of both inflation and interest rate are highly monitored in some countries like Nigeria; more especially in the financial sector. This strategy focused on achieving the highest possible values of efficiency in the financial sector that would incorporate a harmonious trend of all

financial factors. Some of the measures that were done to embrace this kind of approach was the creation of policy regulatory mechanisms such as the imposition of a ceiling on deposits and lending nominal interest rate at a low level relative to inflation (Udoka and Roland, 2012: 295). According to Udoka and Roland (2012) this mechanism would work in favour of a controlled support of both demand and supply of goods and services in an economy which in turn would breed high expectations in economic growth.

Babalola, Danladi, Akomolafe, Ajiboye (2015:91) contended that both inflation and interest rate are essential macroeconomic variables capable of changing, transforming and redirecting the growth pattern of a country's economy. Both variables have a direct connection with the levels of production of goods and services as well as the purchasing power by consumers. The ideology lies on the understanding of establishing both the demand and supply of the communities. When there is high demand for goods and services in an economy, the producers who are the manufacturers would wish to meet the demand by seeking external funding that attracts interest because of the value created by the market. In return the more goods and services are produced, the greater levels an economy is expected to grow due to expansionary fiscal policies that enable the relative growth of money in an economy both on the short and long term basis (Ayub,et al., 2014:5; Samuel and Nurina, 2015:3).

Inflation and interest rates affect both individuals and the economy at large, whereas the impact of interest rates depends on the economic activity of the country. A close relationship exists between the inflation level and interest rates. A change in the interest rates will definitely impact on the household's consumption; hence, a shift in inflation. An increase in the price level will oblige the Central Bank to adjust interest rates which is the basic equation of regulation. Increase in interest rates may also lead to unexpected inflation, further reducing investments and a low confidence amongst investors and households. Inflation, money supply, economy and budget deficit are main economic factors that affect and influence supply and demand of funds that can readily be loaned to businesses as well as households (Semuel and Nurina, 2015).

There are many measures of inflation, because there are many different price indices relating to different sectors of the economy. Two widely known indices for which inflation rates are reported in many countries are the Consumer Price Index (CPI), which measures the rate of change in the prices of goods and services bought by the consumers, and the GDP deflator, which measures prices of locally-produced goods and services. In the case of Swaziland inflation is reported using the Consumer Price Index (CPI) collected by the Swaziland Central Statistics Office which is under the Ministry of Economic Planning (Babalola, et al., 2015)

Most recent work involving monetary policy rules has focused exclusively on the responses of interest rate to inflation rate, output, or past interest rate. According to the World Bank report (2011) Swaziland is a developing country with about 63% of its population living below the world poverty line of less \$1 per day; in spite of this statistic the country is said to have an ever increasing inflation rate as compared to other countries in the Southern African Customs Union (SACU). This increasing inflation rate may be one of the reasons why more than half of the country's population is living under very extreme poverty conditions. Interest rates are supposed to meet up with the cost of living, which is measured by inflation rate and since the inflation rate is said to be increasing on average, the huge question is "do the interest rates match the level of inflation in the country?" (World Bank, report 2011).

Since changes in interest rate have considerable effects on decision-making of economic agents, it has been one of the main policy variables in macroeconomics; and it has attracted the attention of economic agents and participants. On the other hand, various other factors have influences on the interest rate. One of the basic macroeconomic variables related with interest rate is the inflation rate. Based on theoretic issues and empirical studies, there is a bidirectional causality relationship between interest rate and inflation rate (World Bank report, 2011).

According to Jaradat, (2014:12-15), when the price level is increased, the real balances will be affected first. In other words, the higher price level is a cause for lower real supply of money. In Keynesian context of analysis, decreased real money supply

distorts whole economy (Jaradat, 2014:12). This means disequilibrium. So there is a positive causal relationship from inflation rate to nominal interest rate. In other words, increased inflation rate provides some increases in interest rate. Inflation, money supply, budget deficit and economic growth all influence the interest rate by affecting the supply and demand of loanable funds (Jaradat, 2014).

This study explores the relationship that exists between interest rates and inflation through analysing the effect that inflation has on interest rates over time using the (Autoregressive-Distributed Lag) ARDL model in order to inform monetary policy and to add to the previously distinct literature on wage rigidity and inflation's impact on relative price adjustments. On another note recognition and strong evidence of real wages and inflation interrelationships can help shape policy formation for production enhancement, inflation control and consumption stimulation. The Central Bank of Swaziland has undertaken monetary policies to try and curb inflation, however the country's economic growth remains slow (Central Bank of Swaziland Monetary Policy Statement, 2000).

2.3 Factors that Affect Interest Rates

There several factors that would affect interest rates in a given country like Swaziland. Some of these according to Udoka and Roland (2012:298) include the investment demand, the level of savings, general demand for money or the liquidity preference, as well as the quantity of money or money supply.

2.3.1 The investment demand

Udoka and Roland (2012:298) argued that higher investment levels in an economy would automatically bring about high demand of external funding to the investors creating a high level of scarcity among the investors. This would then put much pressure on the side of the supplier of money; hence, resulting in a hike of the interest rate since interest according to Ng'etich and Wanjau (2011:58) was the price of borrowed money. The notion implied here, is that the financial lending institutions are in

a position to establish policies that would regulate the levels of lending the funds to the general public. In order to avoid extremes in both the supply and the demand for money if there is a high supply of borrowed money in society there would be both high levels of production and consumption; hence, leading to an inflation rate which will be a threat to an established micro and macro economy.. Having understood the views of Ng'etich and Wanjau (2011:58) with regards to interest rate influence on the economy, it is important to realize that both direct and indirect effect is evident in the establishment of an economy.

Suyuan and Khurshid (2015:81) pointed out that adjustments in the interest rates can have a generic effect either being positive, negative, or neutral on various macroeconomic variables such as the Gross Domestic Product, employment levels, economic growth, price levels as well as the international trade affairs that can be established through the trade and balance of payment practiced in a country. This standpoint illustrates the fact that interest rates have direct and indirect influences on the general economic growth of a country.. Having considered the extent this variable can go in matters of economic and national interest, it is important to argue that any changes that would be done in the interest rates would be characterised by both macro and micro economic situation since all economic activities are directly influenced by the social trends of a given economy (Suyuan and Khurshid, 2015).

2.3.1.1 Positive effect

From an empirical perspective, Ojima and Emerenini (2015:103) highlighted the conclusions of Jorgenson (1963) who did an evaluation on the effects of real interest rates on investment spending. This study was based on the capital theory and investment behaviour especially in a social context. The approach that was used in this equation was based on the desired capital stock as a basic function of real output together with the related opportunity cost of that invested capital stock. The conclusions that were established from this approach indicated the desired capital stock had a direct

relationship with the level of output though there was an inverse relationship to the cost of capital and decrease in real interest rate which would in return would lower the cost of capital invested which in the long run would raise the needed capital stock and investment spending. However, in the short run, Suyuan and Khurshid (2015:81) argued that the current interest rates affected the investment activities since this would work towards the future economic activities by having an impact on the savings. A good example is when there is an increase in the interest rates a fall in bond prices would be seen and vice versa.

In compliance with this notion, Ojima and Emerenini (2015:108) conducted a case study investigation in the Nigerian economy from 1986 to 2012, with specific reference to investment spending and the interest rate, as dependent variables and retaining other variables such as interest rates, inflation rate, and exchanges rates as dependent variables. The study established that there was an inverse relationship between investment spending and the level of interest rate: an increase in interest rate by 1% reduced investment by 14%. The conclusions derived was that investment spending was very sensitive to the level of interest rate change and for the sake of maintaining a stable economic growth especially on the part of GDP, it was relevant to maintain the interest rate at a relatively lower level to attract more investment spending. This strategy will also compensate the steady increase of interest in the near future as other critical areas of economic growth and development can be drawn from such as diversification, creation of employment and sectoral development in various economic sectors across the economy.

This study (Ojima and Emerenini, 2015:108): offered the following recommendations and conclusions:

- Establishment of effective monetary policies by the monetary authorities which would be used as a mechanism for improving other functions such as savings so as to increase the levels of deposit rate. This would in turn increase the monetary

supply of loadable funds in order to increase demand and eventually the increase in the level of investments spending. The understanding is once access to reasonable amounts of funds were available, then the banks and financial intermediaries would maintain a high and sustainable balance between the demand and supply of money in the economy. Ojima and Emerenini (2015:103) pointed out that the relationship between interest rate and other variables is of great influence to the level of economic growth and development in the sense that through the examination of the outcomes of these variables, government and other stake holders would influence the advancement of productive policies that would not disadvantage other sectors that in the promotion of an effective and sustained economic sector influenced by the growth of the financial sector.

- Reducing the prime lending rate. The concept of promoting the reduction in the prime lending rate would be beneficial to the economy in the long term especially because the investors would be encouraged to borrow more for capital investments that would enable the growth of the GDP. Here savings becomes very relevant since it would encourage investment; hence, facilitating an increase in income levels of under developed citizens and eventually contributing to the development of the economy per capita (Ojima and Emerenini, 2015:108).

These two dimensions demonstrates a relative relationship between the macro and the micro economic sector in the sense that on the macro side, the government of and given country through the central bank would monitor and regulate the supply and demand of money with the aim of establishing an effective balance through savings and investments. Suyuan and Khurshid (2015:81) emphasized that the link between the micro and marco economic sector brings about effective results in the economy because the current interest rates would be perceived to affect the investment activities in a given economy. However at the same time, the scale of investment in the future would be affected through different levels of savings that would be adjusted based on the levels of interest rates and, bond prices.

However, Since these are the major drivers of the economy; the macro sector either private or public would establish jobs that would eventually empower the micro sector through the expanded levels of investment spending and the entire savings by the micro sector. In other words, this would be so because in practical terms the influence of interest rate on investment scale can be perceived to have been responsible for creating an operation that would serve as an opportunity cost of investment on total investment. However, in the event that there is an increase in the cost of investment due to some factors such as interest rates, then income would be lowered that would eventually lead to considerable withdrawal of investment even in strategic areas; but on the other hand a fall in interest rates would bring about an opportunity of declined investment costs thereby stimulating investments and increasing the total social investments.

Another empirical study by Suyuan and Khurshid (2015:81) established the correlation between interest rates and the level of investment spending. These authors indicated that the interest rates and, real financial assets are vital in the establishment of a sustainable economy. These researchers analyzed trends from 21 developing countries with a time series of between 1971 and 1980. The study was about establishing the relationship that existed between the financial assets and real interest rates. The findings based on the discount factors indicated that there was a positive relationship between real interest rates and the financial assets that were being traded. In other words the findings of the study established in actual terms, the higher the degree of interest rate volatility, the more sensitive it would be to the entire level of investment both in the short and long run.

Fawehinmi (2013:171) also contended that the relationship between interest rates and the level of investment spending was a much more practical and contemporary economic issue that demanded a more in depth stance because the lending rate had a significant effect on economic growth. However, this growth would be governed by the introduction of effective monetary policies to promote effective economic growth in

several areas.. A similar study conducted by lyoha (1998) pointed out that from a macroeconomic perspective, it is important to stimulate investment spending by establishing projective equations for the aggregate and private investment in a given country. The study conducted by lyoha (1998) however, pointed out to the fact that the interest rate of a given country had other related variables such as marginal product that would arise as a result of investment, the debt-income ratio and the level of inflation. These are critical variables that influence the level of investments (lyoha, 1998; Ojima & Emerenini ,2015:103).

Ojima and Emerenini (2015:103) explained that the study conducted by Ekwenem (2005), concurred with those of lyoha and Ojima and Emerenini where interest rate and investments were established as variables with regards to the economic development of the Nigeria between the time series of 1976- 2006 . The findings of the study indicate that the behavior for investment spending in an economy had positive influence on both interest rate and inflation in return. The conclusions derived is that investment spending was perceived as a dependable variable on several factors which would influence its performance in the short run and in the long run, making both interest rate and the level of investment positively related from either perspective though differentiated time series.

Another case study cited by Ojima and Emerenini (2015:103) with regards to definition of the relationship between interest rates and the level of investment is the one conducted by Majed and Ahmad (2010:25) in Jordan between the period of 1990 and 2005. The study used the integration approach to verify the findings of the study. The findings suggested that there was a negative impact on investment when there was a change in the level of interest rate. When there was an increase in real interest rate by 1% it would reduce the investment level by 44%. However, the fact that a small percentage growth or increase in the real interest rate had a sharp response of over 43% on the level of investment demonstrated that for investment to have remained sustainable, then it was reasonable to state that real interest needs to be revised over a considerable period of time. This strategy would allow a considerable increase in the

returns on investment spending since the cost of investment would be lowered to manageable levels; at least in the short run, but this would have to be revised in the long run due to the change in status of the factors of production from variable costs to fixed costs and vice versa (Suyuan and Khurshid, 2015).

2.3.1.2 Negative Effect

Other negative impact scenarios about the relationship between interest rates and investment spending are given by Ojima and Emerenini (2015:103). A study conducted by Greene and Villanueva (1990) examined the determinants of private investment spending on 23 developing countries between the time series of 1975-1987. However, the general findings of the study indicated that there was a negative relationship between the real interest rate and the level of private investment. The same was established in the study conducted by Hyder and Ahmad (2003) in Pakistan. In the same dimension, Eregha (2010) studied the variations in interest rate and investment determinants in Nigeria and established that there was an inverse relationship with interest rate levels and investment trends both in the long and short term period.

Other studies that conducted with the same objectives include Jordan, by Mahmudul and Gazi (2009) who examined the scenario about stock investment with the public sector and the level of interest rate in the time series of January 1988 to March 2003. The conclusions of the study established that interest rate has a negative impact on the level of stock investment on the public market or economic sector. The findings of this study was compared with other countries such as Germany, Canada, Italy, Bangladesh, Jamaica, Colombia, South Africa, Malaysia, Spain, Mexico, and Venezuela. The relevance of this study has established the notion that both developed and developing countries were involved in the study and that the outcomes of the study were basically similar with negative inclinations.

Olubanjo, Atobatele and Akinwumi (2010) examined a multi dimensional approach of establishing interest rates with other variables such as savings together with the level of investment in Nigeria between 1993 and 2010. The findings of the study further established that there was a considerable decrease in the real lending rate as a result of reduced demand due to high cost of investment (Ojima and Emerenini, 2015:103). Suyuan and Khurshid (2015:82) also conducted a similar study where they analysed the interest rates in the time series of 2002-2010. The result showed that while the consumers can afford the impact of increased interest rates in the short time, the investors cannot cope with the impact of interest rates in the long term due to the changes in other factor inputs from variable costs to fixed costs that would eventually lower the economies of scale of production for the investor. The study however, further established that from the micro economic sector, much consumer response is expected once there is an effective governing policy in place. The understanding is influenced by labour absorption as part of the production factor input.

2.3.1.3 Neutral effect

Suyuan and Khurshid (2015:82) believed that in as much as there is a significant record about either positive or negative relationships between investment spending and interest rate, it was also possible to understand that the relationship would give a much more balanced and neutral or no outcome between the two variables. This situation would arise as a result of existing macroeconomic policies that influenced the establishment of a stable balance between the two variables as advocated by Dore, Makken and Eastman (2013:215) with the case of West Germany where three rate hikes from 1960 to 1978 turned out that there was little investment on both the private and public sector.

However, the level of natural or optimal performance with regards to the changes of both interest rates and the level of investment income,) would be achieved in the case of reviewing the interest rates policies both in the short and long run due to the variation

in the factor inputs which had a great influence on investment income (Suyuan & Khurshid ,2015:82). Hiroaki and Jun, (2006)'s study concluded that short term related investment and long term ones were directly influenced with what was perceived as the prevailing rate of interest rates. This study was done on a comparative basis between Switzerland and United States. The general understanding is that though the two variables might work in an inverse direction, it is also clear that the determinant factor was the time series between interest rate and the level of investment.

2.3.2 The level of savings (or conversely the level of consumption)

The second factor that influences the interest rate in an economy is the level of savings among the consumers. Udoka and Roland (2012:298) pointed out that in normal situations, the higher the savings among the consumers in the economy, the more likely the interest rates would reduce which would then boost production for goods and services that would be consumed by the general public. This notion brings the element of having a controlled society so that the spending patterns are controlled or managed for the benefit of economic growth. This view is supported by the studies of Babalola et al.(2015:92) and Hidayat, Suman and Kaluge (2014).The empirical studies conducted in Indonesia in the period 2005-2012 indicated that both inflation and interest rate had greater influence on economic growth and development.

2.3.3 Demand for money or the liquidity preference

Udoka and Roland (2012:298) pointed out that the other factor that influenced the level of interest rates in an economy was the level of demand for money. It stands to reason that if there is a higher demand for money in an economy either for investment or consumption purposes when the interest rates were perceived to have been lower than their normal level, then it would mean that the interest rate for the money in circulation was at a lower level. This reasoning is a general representative of the entire fiscal policy in a long run. Gambhir, Shori, Chandna, and Shukla (2015:748) stated that the fiscal

policy has the power to affect the level of overall demand in the economy. The primary objective of the fiscal policy is to maintain the price stability, economic growth and employment of the country. Hence, an appropriate fiscal policy can help in combating rising inflation rates. Inflation generally refers to an increase in the average price level in the economy. The understanding of this notion is based on the element of the demand pull inflation factor which can result because of the enabling purchasing power of the consumer: The more money that consumers have the easier it is when it comes to demanding goods and services;, making it more demanding on the part of the supply side in order to establish an equilibrium level.

2.4 Factors that Affect Inflation

Semuel and Nurina (2015:3) argued that inflation is not an independent variable but that it was as a result of other factors, such as institutional factors, fiscal factors, monetary as well as balance of payments factors.

2.4.1 Institutional factors

Umaru and Zubairu (2012: 184:184) believed that institutional factors such as the legal and general national administrative bodies had the potential to influence the level of inflation in an economy. The understanding is based on the notion that most of these structures are driven by the forces of demand and supply on a larger scale;. for example government expenditure and its impact on the aggregate spending by the general public. This form of inflation is known as a demand pull inflation. Ahmad, Sheikh, and Tariq (2012:257) argued that the demand pull inflation which is demand driven has a positive relationship between aggregate demand and the general price levels in an economy. The understanding is based on the notion that if the supply of the goods and services that are in demand remains limited then the high levels of demand for those particular commodities would increase the prices due to limited supply and general resources. This factor takes us back to the understanding that if the economy had the

largest spending, then there would be greater levels of public consumption causing the cost push inflation equally becoming a contributing factor to the general increase in prices over a sustained period of time. However, the fact that institutions such as the banks are associated with the circulation of money in the economy would remain instrumental in the over all levels of inflation.

2.4.2 Fiscal factor

The second factor that influences the level of inflation in the country is the fiscal factor. Umaru and Zubairu (2012:184) argued that since fiscal factors were directly related to the issues of national budgeting and the possibilities of money creation through the engagement of budgetary deficits, it was highly considered to have been one of the major factors that affected or influenced the levels of inflation in an economy. However, in this situation, challenges such as having insufficient flow of funds for public consumption, because of poor financial collection and distribution mechanisms; such as not having effective and reliable financial markets that create a balance in the general demand and supply of money in the society are experienced. Some of the contributing factors are the forces exerted by the public policy makers and influencers. These would have been established to effect the changes in the force of adjustments made in the general distribution of public funds through government spending such as salaries and wages as well as procurement of consumables (Sheikh and Tariq, 2012).

Gambhir, et al. (2015:740) undertook an empirical study examining the fiscal factor and its influence on the levels of inflation in the United States of America through a case study approach. The study established that fiscal multipliers keep conventional signs throughout which meant that there was a direct implication and positive correlation between Government Expenditure and Gross Domestic Product. This notion points to fact that the higher government spending is, the higher are the levels of inflation since there was a high possibility of money circulation in an economy. However, a sustained effect of this kind would bring about a higher consumer price index that is characterised

by high spending by the general public leading to ambiguous impact on the economy's growth.

2.4.3 Monetary factor

A demand side of the economy would create a reactive effect in the general demand for domestic goods and services. Umaru and Zubairu (2012: 184) emphasized that the monetary factors and demand side determinants brought about increases in the level of money supply in excess of domestic demand, monetisation of oil receipts, interest rates, real income and exchange rate. For example if the economy reduced the interest rates, it would be easier for the producers to invest in the production of goods and services at a much cheaper rate as compared to when the interest rates are high. On the other hand consumers would have easy access to money which would make them demand for even more goods and services, consequently creating a situation of having more money chasing after too few goods. This would automatically bring about inflation in the society.

Tiwari and ATiwari (2011:132) averred that the monetary part of inflation generally pointed to expansionary measures that are taken into consideration with regards to the prevailing fiscal and monetary policies. The factors that influence the general levels of circulating money are at play as long as the demand and the supply of goods and services are within the purchasing power of the consumer in relation to the supply of the money in the economy. It is for this reason that Tiwari and ATiwari (2011:148) cited that the case of India because the country's economic performance has been characterised with the burden of fiscal deficit alongside the increase in the inflation rate due to increase money supply. This eventually brings about the increased levels of consumer demand for goods and service, forcing the production side to work under limited resources.

Another empirical study is the case of Pakistan. Parveen, and Ramzan (2013:242) pointed out that due to poor monetary policies, Pakistan is one of the world's countries that faced serious economic challenges due to poor monitoring of the monetary policies. A study by Abdul, Bukhari and Qazi (2007) examined the inflationary trend on large sample size from 1972-2006. The aim of the study was to establish the determinants of the prevailing inflation in Pakistan using the expansionary economic approach. The conclusions of the study indicated that the challenge was as a result of the imbalance in the financial mechanisms within the private credit sector which was in relation to the raised import regulations which eventually challenged the entire fiscal policies of the country in the long term.

Parveen, et al. (2013:242) findings concurred with the case study by Ayesha and Mumtaz (2009) who examined the fiscal imbalances and inflation for Pakistan using the time series analysis from 1976-2009. The findings of the study indicate that there was a positive influence between fiscal deficit and the level of inflation in an economy. In other words, these studies established that in the event the money supply was more than the level of production, then the economy would experience an imbalance that would eventually attract high inflation. It is in this regard that Shaheen and Turner (2012) found a strong relationship between money growth, fiscal deficit and inflation as in the case of Pakistan when they analyzed the findings using the quarterly data from 1977Q1-2009Q4. The findings of the study revealed that there was a positive relationship between fiscal deficit and inflation.

However, in much more clearer terms, Parveen, and Ramzan (2013:241) argued that a prominent development in recent years in Pakistan's economic scene has been the sharp increase in the rate of inflation. Pakistan's growth record since the 1970S underscores that high and persistent inflation is harmful to growth; a high inflation period associated with low growth environment and vice versa (Parveen, et al., 2013:242).

In the same dimension, Khalid and Muhammed (2011) estimated the fiscal deficit and its influence on the levels of inflation in Pakistan using secondary data from 1960-2010. The results of the study indicated that in the event of a fiscal deficit, much impact was found on the reduced levels of inflation. This notion is based on the levels of public spending that was mainly under the influence of the government, characterised by depreciating domestic currency and other macroeconomic variables within an economy. This is why Tiwari and ATiwari (2011:148) explained the condition that:

“Money supply is negatively associated and government expenditure is positively associated with the fiscal deficit. This implies that as money supply increases fiscal deficit will decrease and as government expenditure increases fiscal deficit will increase. This implies that while on one hand financing of deficit through the banking system from printing of new money and creating interest bearing decreases fiscal deficit, on the other hand increasing government expenditure is the main cause of mounting fiscal deficit.”

The concept that is being established here is that fiscal deficit in any economic situation has a greater influence than the money supply and in the event that this form of relationship manifests itself, government is faced with the pressure of maintaining inflation levels to manageable levels while maintaining the levels of expenditure which would eventually stimulates the levels of inflation (Tiwari and ATiwari,2011).

2.4.4 Balance of payments

The import side of the economy has the potential effect of creating inflation in an economy, in the sense that the balance of payments or supply side factors, relate to the effects of exchange rate movements on the price level would be forced to change positions due to the exerted pressure. This, however, takes place in a situation where there is devaluation in the exchange of one currency against the other; eventually contributing to failed purchasing power parity of one currency against another. However, due to the notion that there would be a reduced level of imports, the local demand for

goods and services would rise, forcing the general price levels up and eventually in the long causing inflation (Babalola et al., 2015:92).

Shafi, Hua, Idrees, and Nazeer (2015:13) pointed out that one of the relevance of balance of payment in the context of inflation is that it provides detailed information about the transactions of the business. It brings into existence the demand and supply side of a given country with regards to the country's inflows and outflows. This then influences the entire performance of an economy. For example, through the balance of payment the aggregate demand and supply of a country is measured which has a direct effect on the entire cash flow of the consumption levels in the country and inflation in general. Shafi, et al. (2015:13) conducted a study on how various variables such as exchange rate, inflation rate and interest rate influenced balance of payment in India and Pakistan. The aim of the study was to establish the levels of relationship among these variables. The findings of the study indicated that balance of payment played a vital role in the entire development of a given country. Factors like inflation rate as well as exchange rate had a positive effect on the performance of the economy through the balance of payment in both countries, but the interest rate had shown a negative effect. This notion is based on the element that high interest rates discouraged the entire performance of trade since it was a cost factor on the level of doing business as compared to the exchange rates which were determined and influenced by the levels of demand and supply of either the factor inputs or finished goods and services among countries of similar trade interests.

Other related studies that were conducted under the balance of payment with regards to inflation is one conducted by Alexander (2013) who analyzed the case of Ghana's monetary approach and balance of payment from 1980-2010 using the Dicker Fuller model. The aim of the study was to establish the relationship between inflation and the balance of payment. The general findings of the study, indicated that inflation is statically insignificant with regards to the levels of performance by the balance of payment; however, a 1% increase in domestic credit lead to about 6.6% decrease in

the national reserves, which implies that excessive generation of credit within an economy would cause discrepancy in reserve. This study concluded that even if the monetary variables were not the only ones responsible for the poor performance in the balance of payment, there were other factors or variables such as government spending that played an equally part in influencing the entire performance of the economy.

With regards to the government expenditure, Narayan (2006: 423) revealed that the effect of government spending, which distinguishes between government consumption and government capital accumulation, in the affairs of managing the levels of inflation, indicated that there was a positive relationship between government capital stock and the level of production which in turn influenced the levels of government spending and the entire growth. Since there was a positive and direct relationship between government spending and capital accumulation it had a direct impact on the levels of economic growth and development.

Tijani (2014:69) reviewed the study that was done by Obioma (1998) during the time series of 1960 to 1993 to test the validity of a monetary approach to balance of payment adjustment for Nigeria under fixed and flexible exchange regimes. The study established that whenever there was an increase in domestic credit on the monetary stock, that was a direct influence to the external reserves outflow balance of payment, during the period of the fixed exchange rate; this would be a different case in the flexible exchange rate period where an increase in domestic credit was expected to have brought about the depreciation on the exchange rate. Similar conclusions emanated from the study conducted by Jimoh (2004) with reference to Nigeria's money market using data from 1960-1995. The findings of the study were equally associated to that of Obioma (1998) which concluded that there was a negative relationship between the performance of the balance of payment with regards to the level of interest rate. In the case of Zimbabwe, despite the country having been faced with various levels of hyper inflation since 1990, when the country was faced with several currency instabilities;

Dhliwayo (1996) conducted a similar study to Obioma (1998), though with the time range series of 1980 and 1990.

The findings of the study however, established that there was a negative relationship between domestic credit and the inflow together with the outflow of the internal trade as it was indicated in the balance of payment. The conclusions that were drawn from this form of economic behaviour were that money played a serious role in the establishment of the balance deficit on the balance of payments. This finding was replicated in the study conducted by Imoisi, Olatunji, and Ekpenyong (2013:15) who examined the relationship between the inflation rate and the balance of payment in Nigeria between 1980 and 2010. The findings indicated that the national inflows and outflows represented the influence of the monetary policy on the entire balance of payment in Nigeria. The findings suggested that in as much as there was a positive relationship among variables such as the exchange rate and inflation with the regards to the balance of payment performance, it was evident that interest rates had a negative relationship.

2.5 Techniques of controlling high inflation rate

There are basically three measures that would be employed in curbing the high inflation rate in Swaziland. These include the monetary policies, fiscal policies, and reviewing the supply side of the economy.

2.5.1 Revising the Monetary Policy

Ogege and Shiro (2012:248) defined the monetary policy in the light of Abel's (1980) definition as an economic tool that is used for management of the expansion and contraction of the volume of money in circulation for the specific purpose of achieving certain declared national objective. Chowdhury and Afzal (2015:78) argued that the monetary policy becomes an effective instrument because it is considered to be an economic measure that deals with the discretionary control of money supply by the Central Bank of a given country with the objective of stabilising the entire demand and

supply of money. The end the result of this control measure would achieve stability of prices through targeting inflation rates, stimulating exchange rate leading towards positive balance of payment, and acceptable levels of employment.

Consequently, the monetary policy is used as a tool for establishing a more stabilised circulation of money in an economy for the purpose of achieving certain economic objectives. The ideology behind Abel (1980)'s definition is establishing the influence of the purchasing power by the money in circulation. This is because money influences both the demand and supply side of the economy and through the control of its supply the entire economy would reach a more balanced state of demand equals to the supply side. it is for this reason that Ogege and Shiro (2012:248) argued that through a well balanced form of financial regulation and control of the monetary supply in an economy, a country would achieve the desired state of both macro and micro economic objectives both in the short and long term periods. The relevant authorities need to take decisions to change or regulate the availability, quality, cost or direction of credit in any economy, stabilise the price level, stabilise the exchange rate, achieve equilibrium in the balance of payments and promote economic development in terms of international trade.

In other words, the monetary policy would demand the revision of interest rates by increasing the rate so as to reduce the demand for money from the financial institutes such as banks. The understanding is that increased interest rates would make the consumers reduce borrowing for consumption purposes and at the same time increase savings which would mean postponement of consumption. In this case, the aggregate consumption would be reduced by the consumers. This act of reducing the general access to money which was also considered as means to consumption would reduce the disposable income in general. At the same time high interest rates would lead to lower exports and more imports which would in some case control the local circulation of the money.

Hidayat, et al. (2014:244) argued that unlike the Keynesian theory which indicates that the main determinants in economic growth are the relationships between the production and demand. This theory states that if there is a demand for goods and services in an economy, the producers or providers of these commodities would wish to increase production to meet the expectations which in turn would bring about the increase in employment and high levels of production, making an entire economy reach the level of equilibrium.

However, Hidayat, et al. (2014:244) disagreed, when there was a decreased demand of goods and services in the society then there would be a decrease in the production and an increase in unemployment and aggregate demand which would bring about a reduction in consumer prices. In the final analysis, either direct or indirectly this would impact on the rate of prices and inflation would happen because either demand pull or cost push inflation would happen.

2.5.2 Tightening the fiscal policy

Chowdhury and Afzal (2015:78) described the fiscal policy as a economic tool that deals with government expenditure as well as the revenue side. The, fiscal policy can promote a sustainable economic growth with low level inflation rate as long as there is a narrow or managed deficit gap in the national budget. This is because fiscal policy measures are taken by influencing aggregate demand and supply, attempting to create better employment conditions and acceptable inflation levels, promoting the policy of steady trade balance and supporting sustainable economic growth.

Osuala, and Jones (2014: 204) pointed out that the fiscal policy as a control tool is perceived to have been used as an instrument that would in some way be used alongside the monetary policy to control the flow of money with regards to the aggregate spending on both capital and non capital goods. This measure would have a direct bearing and control on key issues such as employment, production and the

entire price stability because the more is produced, the more will be demanded; hence increasing production and prices of goods and services.

However, Bhatia (2008) noted that for an economy to enjoy the actual benefits of fiscal policy measures, several steps need to be considered such as government balancing the revenue and expenditure sides of its budget with the view to reducing its deficit. Therefore, key variables such as taxation on the income side would be equitable to the level of production and expenditure on employment.

A case study analyzed by Murwirapachena, Choga, Maredza, and Mavetera (2013:579) clearly illustrates the utility of fiscal policy as an instrument to achieve certain economic objectives in a certain period of time.; They argued in the case of South Africa around 1980 where the South African government used fiscal policy as a tool to influence the level of economic behaviour in an effort to achieve the economic objective of full employment. The general findings of the study established that the country had experienced several expansionary fiscal policies up to around 2010 which made government face several national budget deficits, causing the overall Gross Domestic Product (GDP) rising from about 1.3 per cent in 1980 to about 4.8 per cent in 2010 though a surplus was recorded in only two respective years namely 2007 with 0.3 percent and 2008 which scored .07 respectively.

Another case study cited by Mehmood and Sadiq (2010:31) deliberates on the empirical analysis of fiscal imbalances and inflation in Pakistan. It was found that the general relationship between inflation and fiscal policies in the short and long term period was seen in the structural and non structural sectors of society. It was established that structural sectors such as banks had more inflationary effects as compared to non banking sectors. The study further concluded that the expansionary fiscal policy increases interest which in turn influences the increase of inflation in the private investment sector.

It is for this reason that Osuala, and Jones (2014: 204) maintained that the fiscal policy can be used as an instrument to achieve social goals since it involved two critical variables namely the taxation and public expenditure. Hence, it can be stated that through the management of the fiscal policy, government is able to stabilise the economy and achieve a desired level of economic growth on the demand and supply side. Bhatia (2008) argued that when an economy is stabilised, investment decisions are more favorably effected as consumption expenditure does not fall below certain minimum level and forms a cushion against economic contraction. Angelo and Sousa (2009) argued that if the fiscal side of the economy is not well established, high inflation levels would create a more destabilized economic growth pattern which is characterised with high levels of public spending.

However, Chowdhury and Afzal (2015:79) bring in a sharp contrast between fiscal and monetary policies in the sense that they argued that fiscal policy also has an impact on the monetary policy i.e, if, the fiscal policy is expansionary, it results in economic overheating which in return offsets the need for monetary interventions; hence, causing price stability which would have an over output of the entire economic stability. In other words, it can be argued that once there was an increase in government spending on either capital or current items, it would result in the reduction of economic growth especially in the short term and would require a more restrictive monetary policy to create a balance between the circulation of money and the purchasing power (Bhatia, 2008).

2.5.3 Reviewing the Supply Side Economic Policies

The third mechanism that can be employed in managing the levels of inflation is reviewing the supply side of the economy. Mehrara and Sujoudi (2015:89) argued that supply pressure comes as a result of the capital reduction, supply reduction and demand for labor and reduction of other inputs. The understanding behind this notion is that prices for commodities would rise and to some extent bring about an increase in the general prices. However, the main idea of handling the increase in inflation is the fact

that if the supply side was to bear a sustained long term economic effect of functionality such as increased long term effect of competitiveness as privatization and deregulation, it might in the long run help reduce costs of business, leading to lower inflation. The understanding behind this notion is that all factor inputs or production become fixed costs in the long run and at the same time enable the expansion of respective firms through the economies of scale. Stinespring (2011:12) pointed out that:

“In the short run, fixed costs are unavoidable. As a result, they have no bearing on any economic decision . . . Because sunk costs are sunk, and because the firm’s fixed costs are sunk in the short run, it follows that fixed costs are irrelevant to the firm’s short-run supply decisions, including the decision about whether to shut down.”

The understanding to this concept is that if government can promote the establishment of long term investment in the production of goods and services, then it would become obvious that the cost of production would be much lower because both labour and other factors of production would be available and operate under a more competitive atmosphere would allow an easier way of creating utility of goods and services at the right time in the right place. In this way there would be a reduced level of scarcity of goods and services that would automatically bring the prices of commodities to more manageable levels.

Mehrara and Sujoudi (2015:89) believed that a sustained increase in the general level of prices in the long run can only be created by the continuous growth of money supply due to the expansion of the factors of production; however, this would happen gradually and would have informed the policy makers the ideal time to provide the necessary interventions. In other words, if the supply side of the economy was not constrained, then it would be practical to have a more stable supply since high prices or inflation take place in the event the demand is higher than the supply side, but in the case that the supply is meeting the demand at the right time and right quantity, the level of equilibrium price would be within the manageable limits (Desta, 2016).

2.6 Inflation and Interest Rates in Swaziland

The persistent and appreciable increase in the general price level over time, refers to inflation and interest rates that gives important information to dealers and investors on the financial markets (Jaradat, 2014). This term does not refer to goods becoming more expensive but rather that the purchasing power of money has decreased. Inflation refers to the cost of holding cash on the other hand the rate of interest is the cost of holding wealth in another form of asset either than cash.

According to the Central Bank of Swaziland Financial Report, (2012), the inflation rate of the country continues to be the highest compared to its SACU counterparts despite its downward trend seen in the last few years. The average inflation rate (CPI) of SACU during 1997 was 7.3% which dwindled to 5.25% in 2006 but marginally increased to 6.92% in 2007 and lastly dwindled to 5.9% in 2012 (Economic Report Integration SACU,2012).

The major causes of inflation are pressures most likely to emanate from continued increases or hike in food prices due to hike in oil prices and a relatively weaker Rand /Dollar exchange rate. Countries in the SACU region have pegged their currency against the Rand with an exchange rate of 1:1, so all these currencies have a weaker exchange rate when it comes to trading when compared to the U.S Dollar (which is the commonly used currency in the foreign market) and the Euro. The global oil prices have climbed by nearly 20% in the past two months driven by geopolitical tensions in the Gulf; the world's largest source of crude oil

According to Dlamini (2013) since May 2012 Swaziland's inflation rate has been maintaining a downward trend at a slow pace, falling slightly from 8.72% in July 2012 to 8.45% in August 2012. Transport, housing and utility prices benefitted from the falling inflation level. Transport prices decreased by 2.9%, housing and utility decreased by 5.4%. In spite of this decreasing trend, the country's inflation rate remains the highest compared to the countries in the SACU region. The pace of the fall of the inflation rate continues to be influenced by exogenous factors such as food prices which are

imported from the major trading partner, South Africa. Approximately 89% of Swaziland's imports are from South Africa since she cannot produce enough for the domestic population; hence, the country imports more than it exports. This heavy reliance on imports results in fluctuation inflation rates that are beyond control of the government of Swaziland.

According to the World Trade Organization Report, (2011,) Swaziland has the highest wage bill in Sub-Saharan Africa; the country's public service wage bill currently exceeds 18% of the Gross Domestic Product (G.D.P) and, thus, this takes Swaziland to the highest level in Sub-Saharan Africa. The huge bill is a result of the bloated civil service, and it has been cited as one of the reasons why the country is having difficulties in turning its economic fortunes around. Swaziland is classified as a lower middle income country, since the 1970s to early 1990s, the country has similar economic indicators as those of East Asia which is why it is classified to be a middle income country.

According to Hess and Schweitzer (2000), economists frequently focus on labor market activities in order to implement policies that control inflation on prices, some even consider unemployment to be the main source of price inflation. The common argument by Hess and Schweitzer (2000) is that, if the aggregate demand on goods and services caused by unemployment fall below some natural rate, inflation is expected to increase. However, according to The Central Bank of Swaziland the employment rate continued to fall in 1989 from 28.6% to 21.7% in 1995 and Swaziland inflation rose from 7.7%-12.4% in the period of 1989-1995. This, therefore, suggests that the above statement is true in the case of Swaziland. The standard argument by Hess and Schweitzer (2000), is that labour costs tend to push up prices leading to the wage-price spiral that further causes the inflation pressure to increase.

According to the Swaziland Public Service Report (2014), the wages in Swaziland are currently increasing in order to match up with the standard of living., Recently the wages of civil servants were increased by 15% and according to the latest report from the Swaziland Central Statistics Office there has been an increasing trend in the level of inflation in the period of August 2013- August 2014. This then raises the question as to

why wages and inflation increase simultaneously; implying that there are several reasons to believe the accuracy of this question.

However, economic growth was at its highest in the Kingdom of Swaziland around 1988 recording 18.58%, the country benefitted from the Republic of South Africa and Republic of Mozambique's political unrests. Since 1990 to 1991, this period saw Swaziland's economic growth falling to 1.76% particularly in 1991 and has remained below 5% ever since (Mkhatshwa et al., 2005). During this period many companies returned to South Africa due to the political stability in the country. Policy makers are presently faced with a challenge of balancing and stabilising inflation and economic growth but the relationship between inflation and interest rates is still debated.

Even though monetary policies are prepared to try to keep inflation under threshold, the Swaziland economy fails to show any signs of expanding or improvement. The Central Bank of Swaziland has tried to keep interest rates low and inflation rate at a single digit but economic growth remains low. Hence, this study is directed at assisting the Government of the Kingdom of Swaziland through the Central Bank of Swaziland to make informed decisions, as there is a need not to rule out the use of short term interest rates as a monetary instrument; but whilst controlling these monetary aggregates, there is need to improve long run average inflation rates. On the short run connections, money growth through changes in interest rates and inflation are unreliable, so in this area there is room for improvement, through research. In addition there is need to reconcile interest rate policies.

Never the less, institutions like the Southern African Customs Report (SACU, 2012:8) stated that one of the contributors of having a reasonably high rate of inflation in the year 2012, following a subsequent increase over the years of 2010 and 2011 respectively was that there was an overall increase in prices for housing & utilities 12%, food & non-alcoholic beverages which was rated at 1.6%, and the transport sector that was rated at 8.0%. Based on this outcome, it is can be argued that a huge percentage of the inflation that reached the highest peak in 2012 in Swaziland was as a result of the demand pull inflation. Umaru and Zubairu (2012:184) pointed out that one

of the major reasons as to why the inflation would reach highest levels in an economy is as a result of the monetary factors and dominance of the demand side of the economy whose determinants bring about increases in the level of money supply in excess of domestic demand. The understanding is that the demand-pull-inflation was as a result of having a lot of money which was also perceived as a means of stimulating the purchasing powers of the economy. This ultimately spurs the production and the demand factor used in production.

On the contrary, the demand pull inflation of 2012 in Swaziland was also as a result of low production levels of both goods and services. African Development Bank (2013:2) indicated that Swaziland's level of output which was characterised with a huge industrial service sector decreased its level of output from 34% to 31%; one the major contributor to this decrease was the agricultural sector whose percentage decreased from 10% to 9% within the same year. The two notions of increased demand side of the economy and the reduction on aggregate supply created a gap in establishing equilibrium of demand and supply forces in the economy. In this situation, it can be stated that the prices for commodities especially those that were also deemed as essentials for human survival were high due to limited supply and high demand.

Ahmad, et al. (2012:257) argued that the demand pull inflation which is demand driven has a positive relationship between aggregate demand and the general price levels in an economy. Therefore, if the supply of the goods and services that are in demand remains limited then the high levels of demand for those particular commodities would make the prices go higher due to limited supply and general resources. Swaziland experienced a consistent rise in consumer prices over the trend of 3 years (2010 to 2012) due to the reduced levels of supply of consumer goods and services which gradually reduced over a considerable period of time. Abedin, et al. (2013:7) stated that the rise in the inflation rate in many cases influences two sides of the economy, namely; the cost-push inflation which is typically caused by supply shocks to the economy and the demand-pull inflation that occurs when the aggregate demand (AD) in an economy outpaces the aggregate supply (AS). Therefore, , the monetary policies that would

maintain price stability were the most ideal measures to stabilise the entire hike in prices due to limited supply.

2.7 Conclusions

This chapter discussed the conceptual framework for the study which took into consideration the two technical terms of the study namely: Inflation and interest rates. The chapter also discussed the possible trends and behaviour of high interest rates and prices to an economy, factors that caused both high interest rates and inflation. These elements form the focus of this study and were guided by the research objectives given in Chapter One. The chapter in particular has discussed several factors that influence both inflation and interest rates in an economy; some of which include: investment demand, the level of savings, general demand for money or the liquidity preference, as well as the quantity of money or money supply from the interest rate perspective as well as those to do with institutional factors, fiscal factors, monetary as well as balance of payments which were considered from the inflation perspective.

The next chapter takes into consideration the research methodology that will be used in the analysis of the relationship that exists between the interest rate and inflation. The research methodology will give a clear guidance about the research design and the approach that was employed for the analysis of the research findings.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the procedure that was used to collect and analyse the data as guided by the research objectives in Chapter one of this study. Chapter Two has analysed the related literature review, noting the concept of interest rate and the inflation levels and the relative factors that contribute to the establishment of the two variables. This chapter gives the direction of how the Swaziland case was incorporated in the general analysis of the relationship between interest rate and inflation. Therefore, key elements such as the population size as well as the sample size were determined on the basis of five-year trend of both inflation and interest rates. Other key areas that were covered in this section include the procedure of data collection and analysis, taking into consideration the issues of validity and reliability.

3.2 Research Design

A research design is defined by Khalid, Hilman, and Kumar (2012:15) as a process of enquiry that involves series of well planned and carefully executed activities to find solutions to research problems. This study adopted a descriptive quantitative research because data for both interest rates and inflation rates was collected and analyzed on a five year basis form 2010 t0 2014. Ng'etich and Wanjau (2011: 61) maintain that descriptive research studies are ideal for describing data and relative characteristics about the phenomenon under study and that would be relatively better used for quantitative research.

3.3 The Study Population

A research population according to Goldstein, Lynn, Muniz-Terrera, Hardy, O'Muircheartaigh, Skinner, and Lehtonen (2015:449) is a general collection unit which might either be homogenous or heterogeneous in nature. This study's population was based on the primary data about interest and inflation rates for Swaziland that was published by the Central bank of Swaziland in the public domain with data ranging from 1989 to 2014.

3.4 Sampling and Sampling Methods

Singh and Masuku (2014:3) define sampling as a process of selecting a subset of individuals or variables from within a population to estimate the characteristics of whole population. Purposeful sampling technique was used for this study because the study was focused on the trends of both inflation and interest rates over a period of five years ranging from 2010 to 2014. Yin (2009) argued that purposeful sampling is an ideal and popular techniques of collecting data on a quantitative scale. Hence, the researcher purposefully selected the data that was related to the levels of both inflation and interest rates of Swaziland over a considered period of 5 years which ranged from 2010 to 2014. This time frame was selected because the researcher believed that a time range of 5 years gave sufficient information about the possible relationships between inflation and interest rates depending on the various forms of trends of the variables under study (Teddlie and Yu, 2007:77).

3.5 Data Collection Methods

Lawal (2013:40) defined data collection methods as techniques used by the researcher to systematically collect information about his/her object of study (people, objects, phenomena) and about the setting in which they occur. Data for the study was

collected from the source documents that were available in the public domain such as the public library as well as the internet. The data sources enabled the study to become more meaningful because the study was able to verify the findings of the study using several sources. Peersman (2014:3) argued that the usage of more than one method in collecting data helps to overcome the weaknesses inherent in each method than when used alone as a result enabling the research even to have more credibility. the researcher requested for any relevant information from the Central Bank of Swaziland as well as the Mbabane library.

3.5.1 Document review

Mueller and Hart (2010:6) defined document review as a secondary form of data collection which can be used as a way to explore alternate relationships among variables or from different research perspectives which might have been conducted before the study at hand. It is also called secondary data collection method. Document review was used as the first step in collecting necessary data according to the research objectives in Chapter One.

3.6 Data Analysis

Quantitative data analysis methods through use of computer Microsoft excel enabled the findings of the study to be projected in form of tables and graphs. The researcher was not able to use other software packages as proposed such as the Statistical Package for the Social Sciences (*SPSS*) because the software was not functional enough to meet the task of data analysis in a stipulated time frame. Hence, other measures of central tendencies such as means, relative frequencies, mode, median and standard deviation were not projected in the final research report. However, the study analyzed and established the reasons to justify the outcomes of the study as given in Chapter Fours of this research.

3.7 Validity and Reliability of the Data

Nieuwenhuis (2010) stated that validity and reliability referred to research that is credible and trustworthy. Lincoln and Guba (1985) as cited in Noble and Smith (2015:1) stated that the researcher, to ensure validity and reliability, can maintain alternative criteria for demonstrating rigour within study research namely truth value, consistency and neutrality, and applicability. Based on this notion, this study maintained consistency, neutrality and applicability of the subject matter by having an in-depth review of the data collected. The researcher also used other techniques as cited by Noble and Smith (2015:2) that include:

- The study ensured that the findings of the study were generalized from a specific perspective of both interest and inflation rates. It is also for this reason that the limited scope of the research findings was set at a 5 year' time series approach.
- Meticulous record keeping, demonstrating a clear decision trail and ensuring interpretations of data are consistent and transparent. A consistent analysis of data was maintained throughout the study in order to give a more consistent and coherent source of information and the possible trends data and information that were generated during the study.
- Establishing a comparison case/ seeking out similarities and differences across accounts to ensure different perspectives are represented;

3.3 Conclusion

This chapter discussed the data manipulation process. The study was quantitative in nature and both inflation and interest rates were analysed with the range of five years from 2010 to 2014. Desk top review as conducted and data was quantified using computer excel which was tabulated in form of figures accordingly.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS, AND DISCUSSION

4.1 Introduction

Chapter Four presents the data analysis, findings and the discussion of the study. The chapter critically analyses a five year trend of both inflation rate and the interest rate of Swaziland. It also demonstrates the reasons for the courses of the trends and the findings are justified by the theory cited in chapter two.

4.2 Presentation of Results

The research findings were based on the research objectives as given in Chapter One. They are:

- To examine the trend of interest rate of Swaziland in the period 2010 to 2014
- To examine the trend of inflation rate of Swaziland in the period 2010 to 2014
- To determine the relationship between interest rate and inflation rate in Swaziland over a period of 2010 to 2014
- To determine solutions of reducing high inflation rate in Swaziland

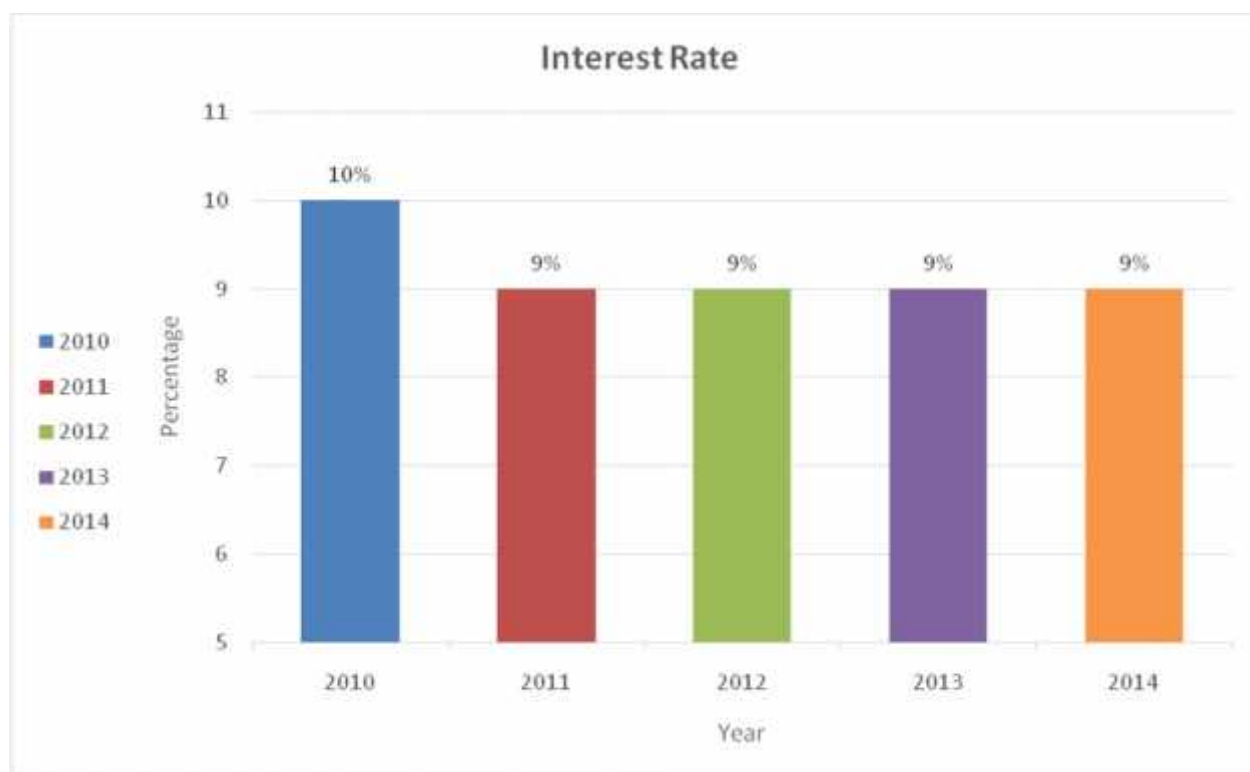
4.3 Data Analysis

The following is the data analysis according to the research objectives given in chapter one. This data is analysed according to the statistical information given in terms of interest rates and inflation according over a period of five years.

4.3.1 Presentation of results based on objective one: Trends of interest rates

The interest rate for Swaziland is projected in Figure 4.2 over a period of five years namely from 2010 to 2014.

Figure 4.1: Swaziland Interest Rate 2010 to 2014

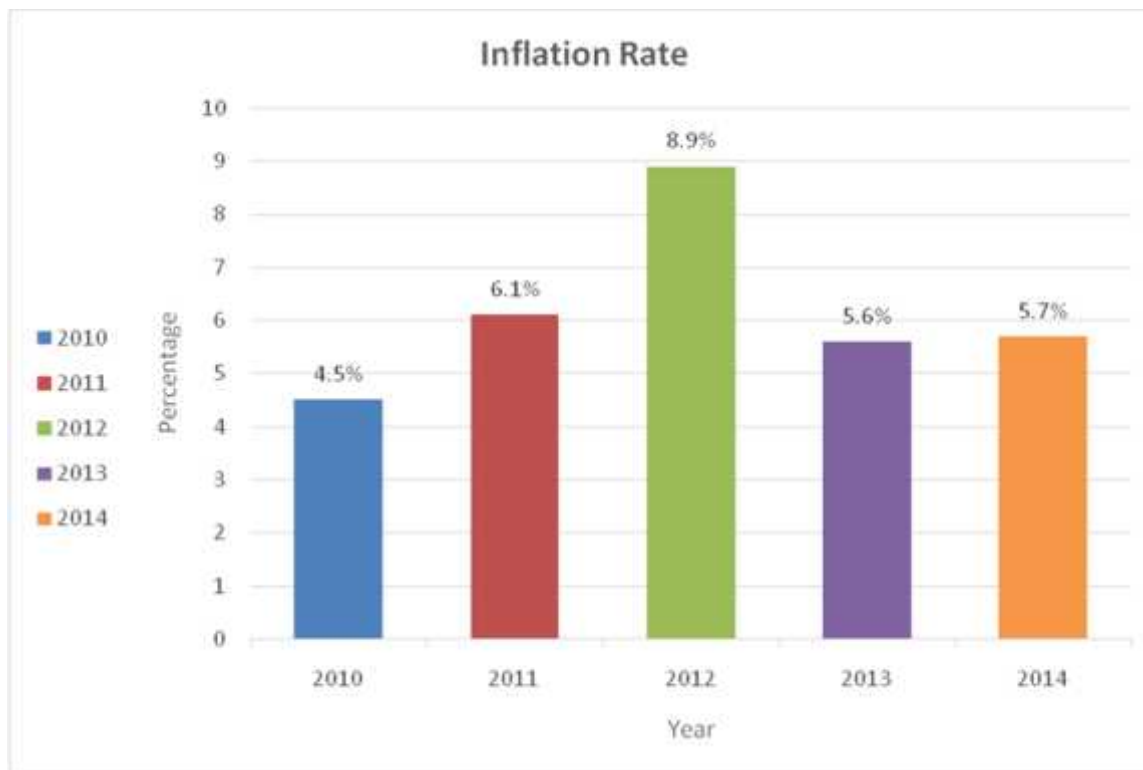


Based on the analysis of figure 4.1, the interest rate was recorded to have reached 10% as the highest; the country maintained a stable interest rate of 9% from 2011 to 2014. The central bank of Swaziland maintained a controlled system that would regulate the demand for money. This was a measure that was put in place following the indication of increase in inflation in 2010 from 4.1. The hike in interest rate was put as a measure to discourage the borrowing power of money from the financial institutions in the county. However, the general information stipulates that over the period, interest rate for the economy was stable despite the fluctuations in the inflation levels.

4.3.2 Presentation of results based on objective two: Trends in inflation rates

The inflation for Swaziland is projected in Figure 4.1 over a period of five years namely from 2010 to 2014.

Figure 4.2: Swaziland inflation rate 2010 to 2014



The variations of the findings of inflation are characterised by stable increase from 4.5% in the year 2010 to the highest indication in 2012 with 8.9%. However, subsequent percentage scores indicated a 5.6% in 2013 and 5.7% in 2014. The general analysis of the inflation as given in Figure 4.1 indicates that the stable increase inflation rate in the years 2010 to 2012 indicates that there was a general increase in consumer goods in the country which might have consequently caused a high cost of living.

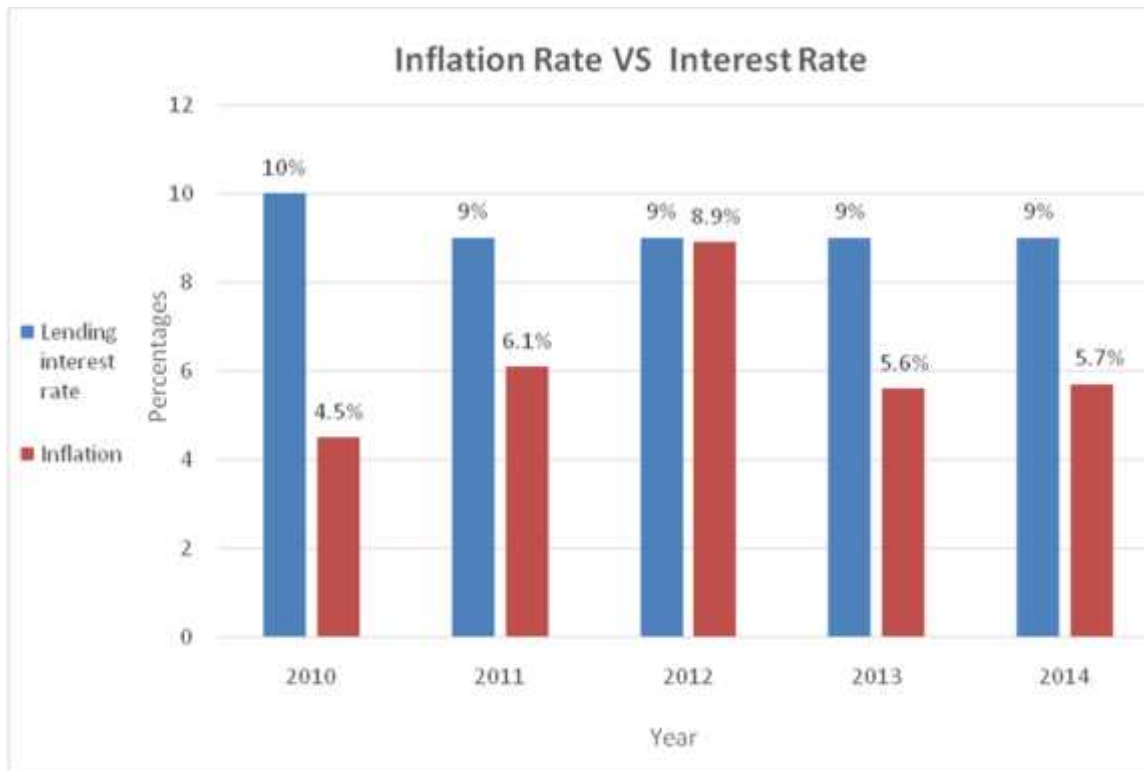
The Southern African Customs Report (SACU, 2012:8) stated that one of the contributors of having a reasonably high rate of inflation in the year 2012, following a

subsequent increase over the years of 2010 and 2011 respectively was that there was an overall increase in prices for housing & utilities 12%, food & non-alcoholic beverages which was rated at 1.6%, and the transport sector that was rated at 8.0%. the indication of the variations in the levels of inflation rate indicate that variables such as consumer prices on key commodities was changing over a period of five years, with the year 2012 being highest with 8.9% as compared to the lowest percentage point of 4.5% accordingly.

4.3.3 Presentation of results based on objective three: Relationship between interest rate and inflation rate in Swaziland over the period of 2010 to 2014

The relationship between inflation and interest rate was also considered for this analysis over the period of five years, ranging from year 2010 to year 2014 respectively.

Figure 4.3: Relationship between inflation rate and Interest Rates



The general trend in Figure of 4.3 indicates that the interest rate had maintained a higher percentage gap with regards to the comparisons of the inflation rate apart from the year 2012 where both the difference between inflation rate and interest was only 0.1%. In the year 2010, the interest rate was the highest among all the years with 10% as compared to the inflation rate that was scored at 4.5%. The subsequent years indicated a 9% interest rate and 6.1% inflation in the year 2011. The year 2012 indicated a 9% score of interest rate and 8.9% of the inflation rate. However, the remaining years namely 2013/14 indicated a balanced score of 9% interest rate and a 5.6% inflation in 2013 followed by a slight increase of 5.7% as indicated in Figure 4.3.

The general indications of Figure 4.3 show that the idea of keeping inflation slightly above the inflation rate was to ensure the cost of borrowing money was higher as compared to the savings or the engagement of what can be termed as investment spending which also points out that Interest rates' level and volatility had a direct impact on fiscal positions as they directly influence servicing costs and sustainability of debt.

4.4 Findings of the study

The general findings of the study are informed with the trends obtained in both the levels of interest rate and inflation rate. The understanding point to the fact that despite having had a stable interest rate which was at 9% over a period of four years that is from the year 2011 to the 2014 as a reduction from the year 2010 with only 1% (Figure 4.1), inflation levels had fluctuated over a desirable period of time.

The reduced percentage of interest rate with 1% in 2011 indicated a reduced level of the willingness to borrow money from the banks both by the business and the non business sector. However, at 9% the economy has indicated a positive and stable trend of interest rate though the economy would have been functioning at relatively low profile. The state of equilibrium between the lenders and borrowers of funds would have been considerate of the various input cost in the levels of production.

The study also Found out that inflation rate fluctuated to various factors being internally caused and externally established. Some of the internal factors however, would mean the issues of the demand pull inflation in which the consumers would wish to demand more of consumables due to favorable means of obtaining those given facilities. A good example is the inflation rate that increases in 2011 with about 2% because interest rate had been reduced to a much considerable levels. this indication indicate that there was positive relationship between inflation rate and interest rate in short term as compared to a longer term because interest rate had indicated a positive increase over a two year period that from the year 2011 to 2012 with a percentage margin of about 2.8% as indicated in figure 4.2 respectively. However, a considerable reduction was seen from the year 2012 to 2014 though at a reduced profile. The variance would not be clearly established in the sense that as presented in figure 4.3, the relationship between the two variables was consistent over a period of time.

4.5 Discussion of the study

The discussion of the study analyses the contextual findings of the study in both literature review and the Swaziland context with regards to the relationship that exists between inflation and interest rate respectively.

However, Figure 4.1 of the study were the Swaziland Interest Rate 2010 to 2014 is projected indicated that the highest 10% level as reduced to 9% which was maintained over a period of 4 years accordingly. The Central bank of Swaziland maintained a controlled monetary system that would regulate the demand for money within the economy. This was a measure that was put in place following the indication of increase in inflation in 2010 as indicated in figure 4.1. The hike in interest rate was put as a measure to discourage the borrowing power of money from the financial institutions in the county.

Some other forms of explaining this trend can be related to the notion that when interest rate rises, businesses have to pay more for borrowing which in turn would make

the cost of borrowing money either for consumption or investment purposes become expensive leading to loss or high cost of production. In this case, the 10 % of interest rate that was imposed by Central bank of Swaziland indicated that that few institutions or individuals were willing to borrow money from the financial institutions. In return, this enabled the country to bring the inflation levels to manageable levels (Khan and Sattar, 2014:141)

With regards to the levels of inflation, it can be argued that inflation behavior in most economies was as a result of the degree of interest rates and the levels of inflation targeting, that is to say whether these respective targets were attainable or not and depending on their nature, this inflation behavior or variation would in turn play a critical role in the formation of market prices of the commodities. In other words, it can be argued that by affecting real interest rates that was prevalent in the economy, changes in inflation behavior would lead to changes in aggregate demand and eventually the price levels in the economy.

the given discussion of the above given information is related to the case of the Central Bank of Nigeria where the bank considered removing the maximum interest rate in 1993, both individuals and the firms were free to borrow as much money as possible at a relatively lower percentage. The consequences of this decision lead to the high increase in the demand for the money and subsequently the prices of both goods and services which forced the government of Nigeria to have reconsidered the interest rates. In 1994 effective interest rates were put in place on a higher rate, but yielded negative economic performance which later leads to the regulation of the interest rate in 1996. This notion explains the situation in which the interest rate is considered as a fundamental tool that would control the levels of money supply and eventually the respective levels of inflation in an economy (Ogege and Shiro, 2012:250).

The study has also established that in the case of the Central Bank of Swaziland having tempered with the levels of inflation indicates that in the event the interest rate was increased, then it would automatically cause people to save their money in the bank. Subsequently, the amount of money available to circulate in the society will decrease

and reduce the buying power of society. Further, it is expected to reduce the price of goods and lead to a lower inflation rate. The reactive effect of this notion is centered around understanding the effect of having a reduced inflation rate in society which would in return reduce the interest rate especially in the long term. Since interest rates are seen as a control mechanism for high and low inflation rate, it would give the consumers enough grounds to choose either to consume or opt for long terms investment plan that would yield higher profits and be more rewarding than the investment in the banks.

Based on the findings of this study, can be argued that the bottom line that motivates the control of interest rate is based on the notion that high interest rates indicate restrictive monetary policy action by the central bank and this makes financial institutions' lending decisions scarcer and more expensive. In effect this would introduce a more controlled system of money circulation in the economy, and encourage the consumers to save more in the long run and bring about capital investment to would boost high levels of production and economic growth. Therefore it can be concluded that the higher the interest rate which is also perceived as the price for the commodity would bring about a reduction in the demand for the product which in turn causes a reduced level of inflation and creation of capital investment (Kanjumba, Njuguna and Achoki, 2016:196).

it can further be stated that since the main factor that destabilizes the entire economic growth is the influence of money circulation in an economy. Therefore it is important for government to develop mechanisms that would control or regulate the entire circulation of the money and the interest rate. The interest rate is described as the price at which money would either be borrowed or saved; as high rate would cause the potential borrowers to postpone the utility of money and encourage more savings that would in return be used for capital investment and economic growth through stimulating competitiveness. Hidayat, et al. (2014:244) maintained that the interest rate and inflation, are closely related by the issuance of government policy particularly for

the Central Bank as the policy holder would easily relate to the interest rate as an inflation control policy instrument and the inflation itself is able to influence economic growth.

4.6 Conclusion

This chapter has presented an individual analysis of inflation and the possible measures that would be taken to control it so as to enable a stable economic growth of Swaziland. Three measures have been discussed that include the need to review the fiscal, monetary policies as well as the need to review the supply side of the economy. The understanding was that inflation was caused by critical forces that added pressure on both the demand and supply side of the economy. The chapter has also assessed the influence of interest rate in the level of inflation. The findings indicate that interest rate was put in place as a mechanism of regulating the level of money in circulation in an economy since it was related to the price of the money being lent either for production or consumption purposes. This chapter established that in the event of high interest rates, consumers would prefer to forego consumption and save money that would then reduce the level of circulation in the economy contributing to high levels of consumer investment and creation of a more sustainable economic growth over a period of time.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summaries, conclusions, and recommendations of the study objectives as given in Chapter One. Chapter five summarises the findings on the relationship of interest rates and the inflation ration as presented in the literature review as well as the primary data sources that were analysed from a Swaziland context. The similarities and differences have been established in this study that makes the study more meaningful to the context in which this study was undertaken.

5.2 Summary of Key Findings

The summary of the key findings of the study takes into consideration the inflation rate, interest rate, as well as the relationship between the two variables.

5.2.1 Summary of key findings based on objective one: Trends of interest rates

Interest rate was the second variable that this study took into consideration. The understanding established with regards to this variable indicates that it was one of the measures that were used by Central Bank in controlling the supply of money in the society. The underlying mechanism with the interest rate indicates that the higher the interest rate, the less money would be borrowed for either investment or consumption. The primary data sources for this study points that Swaziland had the highest level of interest rate in 2010 which was as a result of the inflation forecast that was established some years back before 2012. This phenomenon points to the notion that the interest rate would maintain the same level or percentage over a prolonged period of time as a

mechanism of keeping the inflation levels under control. Therefore, in Swaziland interest has been kept at 9% from the year 2011 to 2014. The literature review has established that a reasonably high interest rate was the ideal as it would be used by government to reduce the purchasing power as a result of reduced borrowing power by the investors making both short and long term investment expensive in the economy.

5.2.2 Summary of key findings based on objective two: Trends in inflation rates

The study established that inflation was formed as a result of the imbalance circulation of money in the economy which caused an imbalance to the demand and supply side of the economy, making a consistent increase in prices of goods and services over a sustained period. The study also established that there were several economic factors that influenced the behavior of inflation in an economy some of which include: institutional factors, fiscal factors, monetary as well as balance of payments. The study has also taken into consideration several ways that the inflation rate would be managed and these include the monetary policies, fiscal policies, and reviewing the supply side of the economy. The understanding has been that since these factors played a vital role in the rise of inflation, it enabled the policy makers to have established meaningful governmental instruments for sustainable growth.

However, the study has re-established facts with regards to the Swaziland five year economic trends of inflation from the year 2010 to 2014. The study has revealed that the year 2012 had the highest percentage score of inflation resulting in 8.9%. The study has established some of the reasons that might have contributed to this sharp increase of inflation from the previous year of 6.1% (check figure 4.1 in chapter 4 of this study). Some of the reasons that were discovered through literature review were that the country had reduced on the production side, making the inflation based on the high demand and reduced supply mechanism.

5.2.3 Summary of key findings based on objective three: Determination of relationship between interest rate and inflation rate in Swaziland over the period of 2010 to 2014

The relationship between inflation and interest rate in this study was established on the basis of understanding that while inflation was the persistent rise in consumer prices over a sustained period of time, interest rate was used as a technical measure that would reduce and regulate the circulation of the money in the economy; instead it would allow most of the key players to engage into gross savings rather than storing money in banks that yield less returns where applicable.

The study also established that both interest rate and inflation rate were considered to have worked in the opposite direction. However, in the event that both inflation and interest rate was high then an economy would be faced with highest levels of stagflation which was an economic situation in which inflation was high with high levels of unemployment. This form of economic situation would cause a decline in the overall performance of an economy in several sectors such as reduction in the production levels as well as the increase in the commodity prices of goods and services.

5.2.4 Summary of key findings based on objective four: Solutions for reducing high inflation rate

There are basically three measures that would be employed in curbing the high inflation rate in Swaziland. These include the monetary policies, fiscal policies, and reviewing the supply side of the economy. Understanding this approach has been supported by several empirical studies in both developed and developing countries where several variables both on the fiscal and monetary side of the economy were reviewed so as to establish a striking balance between the two policies that influence the behaviour of other related sub policies within the general behaviour of the economy. The literature review as well as the general trend analysis of both the interest and inflation rate

indicate that while interest rate was the price at which the borrowed money had the demand power by the consumers, inflation rate determined the level at which the money was circulating within an economy over a period of time. This, however, is determined by the assessment of several characteristics that influence the economic performance from both the demand and supply side of the economy.

5.3 Conclusions

The conclusions that are drawn from this study with regards to establishing the relationship between inflation and interest rates are based on the understanding that the while inflation is an economic situation in which the consumer prices of goods and services was rising over a considerable period of time and in the long run would destabilise the entire economy. Some of the causes of the inflation include the demand and supply side of the economy; causing both the demand pull and cost push inflation. However, there are several measures that can be used to control the rate of inflation in an economy such as using fiscal and monetary policies. These policies included several techniques or approaches such as introduction of the interest rates that would control the demand of money by reducing the aggregate demand when the interest rate was high, and vice versa. However, the study has established that interest rate is an attempt used to control the monetary supply in an economy.

5.4 Recommendations

The recommendations of the study are offered for both the recommendations for study as while as the recommendations for further study.

5.4.1 Recommendations from the study

The following are some of the recommendations from the study:

- There is need to explore other variables that are affected by inflation and at the same time are influenced by inflation. These include variables like the levels of

unemployment and poverty in the country. The variables would enable the study to have been better represented, having a broader scope of analysis of various variables.

- There is need to explore the trends of occurrence over both inflation and interest rates in a broader perspective as compared to the five years. The reason for this recommendation is that the broader the scope of time series, the easier it would become to draw conclusions about the relationship of inflation rate, interest rate as well as other variables that influence the socioeconomic development of an economy
- Comparing Swaziland inflation and interest rate with other developing countries. This would establish more meaningful findings of the information because the data would be compared in order to generalise the findings about a given study area or phenomenon.

5.4.2 Recommendations for further study

The following are some of the recommendations for further study: The impact of inflation on economic growth: This area of further study is informed by the fact that inflation has been perceived as one of the factors that cause the decrease in economic decreases and high levels of poverty. Therefore, this study will seek to establish empirical findings as to what extent inflation influenced the levels of poverty and general reduction in economic growth.

5.5 Conclusion

This chapter has portrayed the summaries, conclusions, and recommendations of the study as guided by the research objectives in Chapter One which include the examination of both trends on interest and inflation rates over a period of 2010 to 2014 as well as the relationship that existed between inflation and interest rates respectively. The chapter has also summarised several dimensions of how the high inflation rate can be reduced.

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