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An investigation of the causes of South Africa’s rising inflation from 2007– 2023

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Title:

AN INVESTIGATION OF THE CAUSES OF SOUTH AFRICA'S RISING INFLATION FROM 2007– 2023

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A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, [2024]

Protocol number: (**WBS/BA577434/920**)
Supervisor
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DECLARATION

I, Phumudzo Faranani Ndou, declare that this Research project is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

PHUMUDZO FARANANI NDOU



Signed at JOHANNESBURG

ON THE 29th DAY OF FEBRUARY 2024

DEDICATION

I thank God almighty for his grace and light continues to shine upon me. He has been with me all the way. I thank my parents Shoni and Muthphei Ndou for their constant support and encouragement in my education. I thank my brothers Marubini and Shudufhadzo for their love and support throughout my study. I futher dedicate this paper to my son Omphulusa, I am continuously motivated by my desire to make you proud of me. Finally, it has been a privilege to be supervised and lead by South Africa's foremost central bank scholar in Professor Eric Schaling he was always available and supportive throughout the course of this project.

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SUPPLEMENTARY INFORMATION

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EXECUTIVE SUMMARY

The paper investigates the causes of South Africa's inflation from 2007-2023. The report finds that labour costs, import prices and the exchanges rate are positive determinants of inflation. The report finds that labour unit cost is still the biggest contributor to inflation. The report futher finds that inflation targeting must be employed together with non-monetary policy measures to be fully effective. The report recommends fiscal policy measures such govement price control and policy measures to control wage increases. The report futher recommends that the SARB must be more transparent in communicating its measures on how it will deal with inflation in the future this will enable the Reserve Bank to better control inflation expectations.

DEFINITION OF TERMS

Inflation targeting (IT)–	A policy by the South African Reserve Bank to control inflation by either increasing or decreasing interest rates.
Monetary policy-	A central bank's policy to control inflation.
Repurchase rate (repor rate)	This is the interest rate at which the SARB provides landing to the commercial banks.
Exchange rate	The price of a foreign currency in Rand
GDP	GDP is a measurement of the total amount of demand for all finished goods and services produced in an economy.
CNB	Checz National Bank
Global financial crisis 2007 (GFC)	The global meltdown due to the subprime lending crisis in the USA. The crises arose from the collapse of the housing market.
Consumer price index	The price of a benchmark basket of goods typically purchased by specific households.
Headline inflation	Total inflation in an economy including fuel prices and commodities

ITEM	TABLE CONTENTS	PAGE NO:
	DECLARATION	II
	DEDICATION	III
	ACKNOWLEDGEMENT	IV
	SUPPLEMENTARY INFORMATION	IV
1.1.	INTRODUCTION	6
1.2.	RESEARCH PROBLEM	10
1.3.	RESEARCH OBJECTIVES	10
1.4.	RATIONALE OF THE STUDY	10
1.5	DELIMITATIONS OF THE STUFY	11
1.6	ASSUMPTIONS	11
1.7	LITERATURE REVIEW	11
1.7.1	Demand Pull inflation	
1.7.2	Cost pull inflation	12
1.7.3	Monetarist theory	13
1.7.4	Structuralist theory	13
1.7.5	Inflation targerting	14
1.8	THEORITICAL RESEARCH FRAMEWORK	15

1.9	CONCEPTUAL FRAMEWORK	17
1.10	RESEARCH METHODOLOGY	18
1.10.1	Research approach	18
1.10.2	Research design	18
1.10.3	Data collection methods	18
1.10.4	Sample	19
1.10.5	Data analysis strategies and interpretation	19
1.10.6	Possible limitation and challenges of the study	19
1.10.7	Quality Assurance	19
1.10.8	Ethical considerations	20
1.11	ANALYSIS OF SOUTH AFRICA'S INFLATION FROM 2007-2017	21
1.12	ANALYSISI OF SOUTH AFRICA'S INFLATION FROM 2018-2023	23
1.13	UNIT ROOT RESULTS	25
1.14	COINTERGRATION RESULTS	26
1.15	ERROR CORRECTION MODELING RESULTS	27
1.16	THE EFFECTIVENESS OF INFLATION TARGERTING IN SOUTH AFRICA	30
1.17	ALTERNATIVE MODELS TO INFLATION TARGERTING	34
1.18	RECOMMENDATIONS	35
1.19	CONCLUSIONS	36
	REFERENCES	37

TOPIC: AN INVESTIGATION INTO OF THE CAUSES OF SOUTH AFRICA'S INFLATION FROM 2007 - 2023

STATEMENT OF PURPOSE

The purpose of this paper is to investigate the causes of South Africa's inflation as well as to examine the attempts by the South African Reserve Bank to curb inflation.

1.1 INTRODUCTION

In recent years, South Africa has seen a notable increase in inflation, a trend persisting despite the South Africa Reserve Bank's efforts to counteract it through increased interest rates (Kganyago, 2021). These measures have proven largely ineffective. The inflationary trend is driven primarily by the rising costs of essential commodities like food and fuel, heavily impacting living standards.

Historically, from 2009 to 2023, South Africa's average inflation rate was approximately 4.7%. However, when compared with its global competitors, this rate positions South Africa unfavorably in terms of competitiveness. Despite implementing strategies for inflation targeting, the nation continues to grapple with high inflation (Kganyago, 2021).

The peculiar aspect of this rising inflation is its coexistence with sluggish economic growth and escalating unemployment rates, a scenario usually characterized by an imbalance between wages and production levels (Adusei, 2013). To cover increasing production costs, often exacerbated by elevated wages demanded by trade unions, companies raise their prices. This, in turn, can lead to workforce reductions and diminished productivity (Adusei, 2013). Moreover, South Africa's reliance on imported goods adds to the inflationary pressures, suggesting a need for more investment in domestic production. The SARB has attributed the current global inflation partly to excessive quantitative easing during the Covid-19 pandemic (Kganyago, 2022). There's also a noted negative correlation between inflation and unemployment (Vermeulen, 2017).The impact of inflation extends beyond business, as it increases the cost of living, particularly affecting the poorer segments of the population and negatively influencing employment and job creation (Vermeulen, 2017).Furthermore, inflation negatively affects the value of money thereby reducing the value of the currency.

Inflation mainly affects the poor because they cannot hedge against it to protect their investments, the rich can protect their investments through acquisition of assets and financial instruments which are immune from the effects of inflation(Ellyne & Veller 2011). Inflation results in welfare loses due to inflated costs of production.

In most instances the definition of inflation is confused with its causes It's important to distinguish the definition of inflation from its causes (Mohr & Rogers, 1991).There are various definitions of inflation, according to Black & Dollery, 1989 inflation is a persistent rise in prices levels. Mohr & Rogers (1991) describe it as a noticeable, sustained increase in the general price level, typically represented by indexes like the CPI. Mohr and Fourie (2011, p. 495) in (Wyngraad,2019) define inflation as "the continual and significant rise in general price levels over time".

Regarding the theories explaining South Africa's inflation, the debate has centered around demand-pull and cost-push theories, which emerged post-World War II. Demand-pull theory suggests inflation results from an excess aggregate demand for goods and services (Greenridge & Dacosta, 2009), while cost-push inflation arises from a decline in aggregate supply, often linked to higher production costs and exchange rate depreciation (Asogou, 1991).

In the late 1960s, new inflation theories, such as the structuralist and monetarist theories, were proposed. The structuralist theory differentiates itself from cost-push and demand-pull theories by attributing inflation to structural weaknesses in the state, such as social, political, and economic factors, including unemployment and resource underutilization (Boianovsky, 2012). Monetarist theory, on the other hand, views inflation as a consequence of excess money supply in the market (Ackah, Hanson, & Agboyi, 2015; Jain, 2015).

The South Africa Reserve Bank, tasked with controlling inflation, adopted an inflation-targeting policy in 2000. This policy involves adjusting the repo rate and increasing interest rates to dampen demand for goods and services, thereby controlling consumer spending (SARB Monetary Policy, 2023). However, in the past two years, despite the Bank's efforts to increase interest rates, inflation has continued to rise, prompting a re-evaluation of the effectiveness of this approach (SARB Monetary Policy, 2023).

This report will delve into the causes of South Africa's inflation from 2007-2017 using qualitative methods, drawing on the South African Reserve Bank's biannual and quarterly reports, Statistics SA reports, and academic literature. Due to the

scarcity of secondary qualitative data for the period 2018-2023, the report will also include a quantitative study for this timeframe. The effectiveness of South Africa's inflation targeting will be reviewed, followed by a discussion of alternative strategies and policies to address the nation's inflationary challenges.

This report will commence with a literature review which will debate the main theories of the causes of inflation. The literature review will be limited to four main theories of inflation, which are cost pull inflation,demand inflation, monetarist theory, and structuralist theory. A preliminary analysis of inflation targeting as a method of controlling inflation will also be conducted in the in the literature review.

The report will proceed to review academic literature on the determinants of South Africa's inflation from 2007-2023.After an evaluation of causes of South Africa's inflation has been determined, the report will proceed to analyze and review the effectiveness of inflation targeting in its ability to control inflation in South Africa. The paper will also consider alternative models to inflation targeting such as exchange rate targeting, GDP targeting and monetary targeting. The report will conclude by making recommendations on alternative steps and policies to address South Africa's inflation.

1.2 RESEARCH PROBLEM

Since adopting the inflation targeting framework in 2000, the South African Reserve Bank has managed to keep South Africa's inflation rate within the range of 3% to 6%. However, this rate remains higher than that of its competitors and trade partners, adversely impacting the country's purchasing power. In the past couple of years inflation has been at the higher end of the inflation target band resulting in the SARB increasing the repo rate in order to curb inflation. It's crucial to investigate the fundamental causes of this persistent inflation. On numerous occasions since the adoption of inflation targeting the inflation has breached the target. Currently - 23 years after its adoption - the SARB inflation targeting policy is in restrictive territory. The challenges South Africa faces in curbing inflation raise doubts about the efficacy of the inflation targeting approach. Thus, this report aims to assess the effectiveness of inflation targeting aswell to explore alternative methods for managing inflation.

1.3 RESEARCH OBJECTIVES

The questions that this study seeks to find answers to are the following:

1. This report will examine the drivers of South Africa’s rising inflation from 2007-2023.

2. This report will examine the effectiveness of South Africa's monetary policy of inflation targeting as a measure to address inflation.

3. This report will examine alternative remedies in controlling South Africa’s inflation.

1.4 RATIONALE OF THE STUDY

The rationale behind this study is shaped by several key events in the last decade that have significantly influenced inflation in South Africa. These include the global financial crisis of 2007, the COVID-19 pandemic in 2020, and the Russia-Ukraine conflict in 2022. Each of these events has adversely affected the economy. Consequently, much of the existing research on this subject, primarily focusing on inflation determinants, is now outdated and lacks insight into the efficacy of the Reserve Bank's monetary policy in controlling inflation. Notably, this is the first time since 2007 that the South African Reserve Bank (SARB) monetary policy is in restrictive territory, yet inflation rates remain relatively high.

Additionally, most prior studies were conducted before the financial challenges posed by COVID-19 and recent inflationary pressures, such as the post-COVID-19 inflation surge in South Africa and the economic repercussions of the Ukraine conflict. Hence, this report aims to go beyond identifying the causes of inflation; it will also critically assess the effectiveness of the Reserve Bank's monetary policy in mitigating inflation.

1.5 DELIMITATIONS OF THE STUDY

The study will only be limited to South Africa; the study shall not conduct a comparative analysis. The report will focus on South Africa's inflation from 2007-2023.

1.6 ASSUMPTIONS

The report assumes that the secondary data relied upon is credible, reliable, and truthful.

1.7 LITERATURE REVIEW

This report will consider the determinants of South Africa's inflation within the boundaries of four main theories which form the basis of inflation drivers in economic literature.

1.7.1 Demand-pull inflation

In the era preceding World War II, the debate on inflation was primarily dominated by the cost-pull and demand-pull theories. Several authors have posited that there is no universal explanation for inflation, suggesting that these theories may explain different causes of inflation across various economies. Some have proposed that in certain economic contexts, both cost-push and demand-pull factors may concurrently drive inflation (Tobin, 1967, as cited in Schwazer, 2018).

Demand-pull inflation is described as inflation arising from an excessive increase in the demand for goods or services relative to aggregate supply (Kibritçioğlu, 2001). According to this perspective, inflation is essentially the gap between demand and supply (Jalil Totonchi, 2011). This type of inflation emerges when the demand for goods and services in the economy surpasses production capabilities, prompting firms to raise prices in response to this demand and, to some extent, by increasing output (Sloman, 1994). Demand-pull inflation is often observed in flourishing economies

(Meyer, 2023) and is driven by consumer confidence and their willingness to spend, typically associated with high returns on investments (Jain and Sharma et al., 2022).

1.7.2 Cost-push inflation

According to the cost-push theory, inflation occurs when there is a constant level of aggregate demand but a decrease in aggregate supply. Conversely, the cost-push theory suggests that inflation is driven by wage increases, leading employers to mark up prices to accommodate these higher wages. Proponents of the cost-push theory, such as Humphrey (1979), argue that increasing interest rates can help lower prices by curbing aggregate demand, thus reducing inflation.
Cost-push inflation can also result from the bargaining power exerted by producers or wage setters, like labour unions. Advocates of cost-push theories, such as Humphrey (1998), reject the notion that the availability or surplus of money plays any significant role in causing inflation.

Cost-push inflation is understood as an increase in production costs that surpasses labor productivity (Asogou, 1991). Mohr (2020) contends that cost-push inflation is not effectively addressed through restrictive monetary policy. This type of inflation can also emerge when monopolies leverage their market power to raise prices for profit, a phenomenon known as profit-push inflation. Here, the price increase is not demand-driven but results from the market dominance of monopolies (Sloman, 1994).

In the cost-push theory, factors other than wages, such as rising costs of electricity, energy, municipal rates, taxes, and fluctuations in the exchange rate, are also considered significant contributors. This variant is often termed tax-push inflation (Sloman, 1994).

Natural disasters can also affect production costs, especially if they disrupt the supply of raw materials. A recent example is the COVID-19 pandemic, which caused an exogenous shock to the economy and led to an increase in the prices of certain goods.

Another factor in this theory of inflation is the cost of imported goods, or import price inflation, which includes items like oil and manufacturing products. Should the costs

of these imported goods rise, it impacts domestic prices. This kind of inflation is observed when international prices increase independently of aggregate demand levels, such as the oil price hike by OPEC in the 1970s for reasons unrelated to economic factors.

1.7.3 Monetarist theory

In the late 1960s, an intellectual debate emerged between two schools of thought: the monetarists and the structuralists. Monetarism, led by the renowned 20th-century economist Milton Friedman, posited that inflation is primarily caused by an excess supply of money in the economy. Friedman advocated for the reduction of inflation by urging central banks to limit the printing of money (Snowdon, 1997). Monetarists hold the view that inflation is fundamentally a monetary issue, dismissing other theories that attribute inflation to factors like structural bottlenecks or high labor costs (Undiji and Kaulihwa, 2015).

A key assertion of monetarism is that monetary policy does not influence the natural rate of unemployment (Stein, 1981). This theory continues to receive support: for example, a study by Qaum (2006) investigated the applicability of monetarist theory to inflation in Pakistan. The study found a significant correlation between the supply of money, GDP growth, and inflation, concluding that monetary expansion was a key driver of inflation in Pakistan (Qaum, 2006). Monetarists argue for the need to adjust the money supply to match the production levels of the economy in order to control inflation (Boafo, 2013).

1.7.4 Structuralists theory

Structuralist theorists present a different perspective, attributing inflation to underlying structural weaknesses within an economy. These include inefficient policies and structural impediments that hinder economic growth. Originating primarily to explain inflation in Latin American countries during the 1970s, structuralist theories suggest that inflation results from the inability of developing economies to effectively manage economic expansion (Watcher, 1979). The

emphasis in this approach is on supply-side factors, particularly focusing on inelastic supply in the agricultural sector, which is seen as a key driver of inflation (Charles & Gilbert et al., 2022). Proponents of this theory argue that inflation in developing countries is caused by rigidities in the agricultural sector and the decline in purchasing power which results in difficulties of importing important foods (Fischer & Mayer,1980)

1.7.5 Inflation targeting in South Africa

The South African Reserve Bank employs inflation targeting as its primary strategy to manage inflation. However, some researchers, like Wyngaard (2019), have suggested that inflation targeting itself can contribute to inflation. This approach was initially adopted by New Zealand in the late 1990s. The theory behind inflation targeting is that by raising interest rates, borrowers will be discouraged from spending more and thereby reducing inflation and thereby controlling consumer shopping patterns. Secondly, increasing interest rates increases the rate of return on rand-based investments reducing the price of imports(SARB Monetary policy, 2023).

Matemilola, Bany-Ariffin, and Muhtar (2015, p54) criticize the Reserve Bank's efforts in controlling inflation as largely ineffective. Van Wyngaard (2019) attributes this ineffectiveness to the presence of cost-push inflation factors and structural challenges that undermine the efficacy of the Reserve Bank's monetary policy. She also contends that inflation targeting impacts inflation only over the long term, noting that a 1% increase in the repo rate may lead to a 0.45% rise in inflation eventually.

Stiglitz (2008) points out that in developing countries, external factors like rising oil and food prices are key inflation drivers, arguing that inflation is less a result of poor micromanagement and more a consequence of globalization. Recent critiques of inflation targeting highlight its potential to hinder economic growth and increase unemployment (Stiglitz, 2008). Conversely, Burger & Marinkov (2008) suggest that while strict inflation targeting may not be effective in

curbing inflation, it can be successful if interest rates are raised to extreme levels.

Gonçalves and Salles (2006) conducted a study on 15 emerging economies and found that those adopting inflation targeting experienced significant decreases in inflation compared to those with alternative regimes. Van der Merwe (2004) notes that inflation targeting enhances coordination between monetary policy and other economic policies, bringing discipline to monetary policy and increasing central bank accountability.

Mishkin & Posen (1998) analyzed the success of inflation targeting in New Zealand, Canada, and the United Kingdom. Their findings indicated that inflation targeting effectively maintained low inflation rates, particularly in New Zealand, which had previously been prone to inflation. Some advocates of this approach argue that it reduces inflation by limiting credit availability, although external factors like oil prices heavily influence inflation in South Africa (Mpofu, 2011). Jared et al., (2010) suggest that there is no singular solution to inflation, advocating for a combination of monetary and fiscal discipline, along with addressing supply-side disruptions. Lyne et al. (2011) support a more intensive approach to inflation targeting, finding that a lower intensity of this strategy correlates with higher inflation volatility during the period South Africa adopted inflation targeting.

1.8 THEORETICAL RESEARCH FRAMEWORK

The theoretical discussions surrounding the causes of South Africa's inflation have been a subject of extensive debate. This debate was initially sparked by the findings of the De-Cock Commission of Inquiry, which concluded that South Africa's inflation was not primarily driven by wages or production costs, but rather by the money supply. However, over time, the consensus has shifted towards supporting the cost-push theory.

In the early 1990s, a study by Pretorius year? identified cost-push factors as the main contributors to South Africa's inflation (Pretorius and Small, 1994). This finding was

later reinforced by Fedderke and Schaling (2000), who determined that the money supply had a negligible impact on the country's inflation rate.

The biannual reports of the South African Reserve Bank reflect an analysis of inflation predominantly through the lens of the cost-push theory. While this theory forms the core of the bank's analytical framework, other elements like monetary supply and imported inflation are also considered. These factors, along with demand-pull elements, are acknowledged to have a secondary effect on the country's inflation (Kabundi et al., 2016). Currently, it is widely accepted that cost-push factors are the primary causes of inflation in South Africa (Nell, 2000).

This study will be approached from the perspective of the cost-push theory, which attributes factors such as increased global competition, rapid technological advances, reduced union influence, and heightened job insecurity as elements contributing to low inflation (Humphrey, 1998). The theory posits that inflation arises from a mismatch between wage levels and production rates (Totondi, 2011). According to cost-push theorists, inflation has three primary drivers: first, labor unions anticipate price hikes and negotiate higher wages, leading companies to increase prices to cover these raised production costs (Fedderke & Schaling, 2000); second, elevated labor costs can lead to unemployment as companies downsize to cut expenses, resulting in decreased productivity and higher wages (Schwizer, 2018); and third, oligopolies and monopolies raising prices for profit can trigger a cycle of wage demands and price hikes, further fueling inflation.

The cost-push theory also considers the role of "supply shocks" - unexpected events altering the cost or availability of goods or services. Javed, Farooq, & Akram (2010) note that negative supply shocks can lead to stagflation. These shocks can either raise or lower production costs, thus influencing inflation. An example of this is the Covid-19 pandemic, which led to increased production costs due to raw material scarcity and supply chain disruptions.

1.9 CONCEPTUAL FRAMEWORK

This study will explore the various factors influencing inflation in South Africa, focusing on several key variables:

Labour Wages: Increases in labour costs, encompassing wages, benefits, and overall employee remuneration, typically lead to a rise in product prices. Conversely, stable labor costs can exert a deflationary effect. Hess and Scherwt (2009) posit that inflationary pressures are unlikely in scenarios where wage hikes are matched by productivity gains.

Exchange Rate: The exchange rate, or the value of one currency against another, is a significant factor in price fluctuations. An appreciation in the exchange rate can elevate production costs, influencing the price of imported goods (Manfered and Akin, 2007). Conversely, a depreciation in the exchange rate can make domestic goods cheaper for foreign buyers, boosting aggregate demand (Reserve Bank Australia, 2023).

Money Supply: Similar to the exchange rate and oil prices, the money supply significantly impacts inflation (Mpofu, 2011). Excessive liquidity in the economy can lead to inflation (Maliaris and Uritia, 1991). A study by Mpofu using a VAR model showed that a 1% increase in money supply leads to a 0.43% increase in inflation (Mpofu, 2014).

Production Costs: This includes expenses like electricity, transportation, administration, energy, taxes, and municipal rates. Higher production costs generally result in increased prices of goods and services.

Supply Shocks: These are unexpected events, such as wars or pandemics, that disrupt the aggregate supply of goods and services, affecting production costs. The study will closely examine the impact of the Covid-19 pandemic and the Ukraine war on inflation, particularly their effects on oil and global food prices.

Price Fluctuations: Price changes can result from general inflation or from price manipulation by oligopolies and monopolies seeking profit. This study will investigate

the extent to which price increases are driven by inflationary trends or market manipulation.

Interest Rates: The South African Reserve Bank uses interest rate adjustments as a tool to maintain price stability. The study will analyze historical interest rate trends and their impact on inflation in greater detail.

1.10 RESEARCH METHODOLOGY

1.10.1 Research approach

The research methodology for this study will encompass both qualitative and quantitative approaches, with a primary focus on qualitative analysis due to data accessibility and resource limitations. The study is designed as explanatory research, aiming to delve deeper into the subject matter. However, a portion of the study, particularly concerning the investigation of South Africa's inflation from 2018 to 2023, will adopt a quantitative approach. This decision stems from the scarcity of secondary data for this period. The study will be conducted by analysing Journals, newspaper articles, books, policy documents, and media statements from the South African Reserve Bank (SARB). The study will not conduct questionnaires or interviews. Given the extensive prior research on the topic, the study will leverage established variables and concepts to provide an explanatory analysis of the subject.

1.10.2 Research design

This study aims to investigate the factors behind the escalating inflation in South Africa. Given that the cost-push theory is widely recognized as a key explanation for South Africa's inflation, the research will take the form of an explanatory case study. The focus of this study is not to formulate a new theoretical framework, but rather to generate hypotheses based on data gathered and interpreted through the lens of this existing theory.

1.10.3 Data collection methods

The research will gather data from various secondary sources, including peer-reviewed academic journals and economics textbooks. Additionally, information will be sourced from media releases and reports issued by the South African Reserve Bank (SARB), both quarterly and biannually, as well as from reports by the International Monetary Fund and the World Bank. Given the stability of academic literature on inflation theories, conducting questionnaires is deemed unnecessary for this study. The SARB's regular media releases and reports will be a vital source of up-to-date information on inflation and its underlying causes. While not peer-reviewed, newspaper articles will also be utilized for their timely insights into the ongoing developments related to inflation and its factors.

1.10.4 Sample

This study will be conducted through qualitative research; the study will be done through a form of a review of previously researched material to extract a sample. To minimal extent the study will conduct a quantitative analysis on south Africa’s inflation

1.10.5 Data analysis strategies and interpretation

This study herein will require establishing the link between the obtained data and the current inflation and thereafter applying the relevant theory in concluding the causes of inflation; this will be a purely qualitative approach. Therefore, a thematic analysis approach will be used to interpret the data. The interpretation of the sample will be done from the subject point of view of the researcher.

1.10.6 Possible limitations and challenges of the study

Since interviews and questionnaires will not be conducted, it means that the instrument will be biased and one-dimensional. This might have a limiting effect on the data collected.

1.10.7 Quality assurance

To guarantee the study's quality and dependability, it will adhere to a comprehensive rubric applicable to both qualitative and quantitative research methodologies. The research aims to be relevant not only to economics students but also to those interested in the political and macroeconomic landscape of South Africa. Given the current significance of inflation as a major challenge across various societal sectors, the study will be articulated in accessible language to appeal to a broad range of readers, including those specializing in qualitative and quantitative research methods.

Data for the study will be sourced from peer-reviewed publications and journals, as well as from media releases and reports issued by reputable organizations such as the South African Reserve Bank (SARB), the International Monetary Fund (IMF), and the World Bank. Financially informed newspaper articles authored by qualified journalists will also be utilized.
To achieve triangulation, the study will consider and integrate diverse viewpoints and debates. Finally, confirmability will be assured by grounding the study's conclusions in data from credible and authoritative sources.

1.10.8 Ethical considerations

The research topic has been thoroughly considered to ensure that it does not have unintended consequences. The paper will guard against making findings based on race, gender, religious or political issues. The paper will avoid politically sensitive topics. All data collected will be handled in a diligent manner and stored in a folder on the researcher's desktop. No interviews or questionnaires will be conducted. Therefore, the risk is low.

1.11 ANALYSIS OF SOUTH AFRICA'S INFLATION FROM 2007 – 2017

The study examines South Africa's inflation trends and contributing factors over several years, focusing on key periods and their impacts:

2007-2008 Financial Year: Inflation hit double digits for the first time since adopting inflation targeting, largely due to the 2007 global financial crisis (SARB 2007-2008). This period saw a downturn in economic growth and a significant increase in labor costs in both formal and non-agricultural sectors, reaching 11%. Inflation remained high until the first quarter of 2009, hitting 5.7%.(SARB,2009)

2012-2014: Inflation breached the target range during these years due to labour unrest and wild cat strikes. This period was characterized by higher wages and lower productivity due to strikes. In August 2013, inflation peaked at 6.3% due to factors like potential quantitative easing impacting the exchange rate and fuel prices. However, it later declined due to global economic factors and lower fuel prices. (SARB, 2013)

2015-2019: Inflation generally remained within the target range, averaging around 4.5% in 2015, largely due to favorable oil prices. However, in 2016, rising oil prices and other supply-side factors, such as the exchange rate and food prices, caused a spike in inflation. Inflation averaged 4.7% in the subsequent years due to reduced supply-side factors and subdued demand.

2020 Global Financial Crisis: Triggered by the COVID-19 pandemic, this period saw reduced demand, low oil prices, and a decrease in imported goods prices, including a drop in Brent crude oil.

2021-2022: Headline inflation averaged 5.2%, with transport costs, particularly fuel prices related to the Russia-Ukraine war, driving inflation from June 2021 to 2022 (Stats SA, 2023).

2022: The reopening of the global economy led to a surge in inflation, influenced by ultra-low interest rates from COVID-19 responses. South Africa's inflation averaged

7.2%, pushed above the target band by international food and oil prices and large stimulus packages globally (L Kganyago, 2022).

The Reserve Bank has increased interest rates several times to control inflation, which remained high despite these measures. As of July 2023, the repo rate was maintained at 8.2%, and inflation was expected to decline (MPC, SARB 2023).

Madito **(**2017) conducted a study of South Africa's rising inflation using quarterly data from 1971 to 2015 applying error correction model modeling techniques Madito found that labour costs, inflation expectations, import priceses and government expenditure are positive determinants of inflation while GDP and exchange rates had a negative correlation with inflation. The study further found that labour costs where the largest contributor to inflation. The results of Madito's study were futher confirmed by another study conducted by Madito and Odihambo (2018) which confirmed that labour costs were the biggest driver of inflation. The study confirmed the earlier studies by (Aron,Muellbauer, Smit,2004)who confirmed that the persistence South Africa's inflation is mainly due to increase of wages which are often based on employees' concerns.

Research on the causes of South Africa's inflation have consistently identified labor costs as a major and persistent driver of South Africa's inflation. Studies by Fedderke & Liu (2018) and Madito (2017) using various models and data sets have confirmed this, highlighting the significant relationship between labor costs and inflation.

Mngayi (2021) conducted a study on the impact of wages on South Africa's inflation using CPI data from statistics South Africa and the Reserve Bank dating 1980- 2019. Applying the Engle Granger cointegration model the study found cointegration of wages and inflation in the long ran and in the short run. The results of the Engle Granger test revealed a cointegration between wages and inflation. The ADRL model revealed that average real wages have a significant long run positive relationship on inflation. The study found strong correlation between wages and inflation. Fedderke and Yang Liu (2018) further identified that supply-side shocks play a substantial role in

inflation, although the impact of labour costs remains consistently strong throughout the year.

The studies of the authors above outline above confirm earlier studies into the determinants of South Africa's inflation by Akinboade,Sieberits and Niedermeier (2004) which confirmed that labour costs are a major determinant of South Africa's inflation. These findings further emphasize the complex dynamics of inflation in South Africa, involving various factors beyond labour costs, such as supply shocks and external economic event.

1.12 ANALYSIS OF THE CAUSES OF INFLATION DURING 2018-2023

Due to the lack of availability of secondary data on the causes of South Africa's inflation during 2018-2023, this part of the study will take form of a quantitative study. The study will use data sourced from the statistics South Africa, IMF, quarterly data SARB from 2018Q1 to 2023.

The study will employ the error modeling technique to make an econometric determination of South Africa's causes of inflation. The ECM model is commonly used for data wich is cointegrated or where the variable has a stochastic trend (Alogoskoufis, & Smith, 1991). ECM can combine variables in a flexible dynamic specification with long-term desirable properties (Madito,2017). The regression coefficients of ECM provide good economic interpretation.

The ECM model is econometrically expressed as follows:

INF = f($INF_{t-1}, EXR, FGCE, GDP, IM, LW, M2$)

The study estimates the following model:

$$INF_t = \alpha_0 + \beta_1 INF_{t-1} + \beta_2 logEXR_t + \beta_3 logFGCE_t + \beta_4 logGDP_t + \beta_5 logIM_t + \beta_6 logLW_t + \beta_7 logM2_t + \beta_8 DUM + \mu_t$$

INF is inflation , INF_{t-1} represents inflation expectations , EXR is real effective exchange rate , $FGCE_t$ represents final government consumption expenditure , GDP_t is real GDP , IM_t represents import prices , LW_t is nominal unit of labour cost , $M2_t$ is a representation money supply and DUM00 is a dummy variable whose value is equal to

1 during the period 2017 Q1 to 2023 Q3 and 0 otherwise, capturing the change in monetary policy framework from eclectic approach to inflation targeting in 2000. (Madito, 2017).
$\propto$ is the constant , β is the respective coefficients , t is the period and μ_t is the error term.

This report will employ Moser's (1994) model, which assumes that the expected inflation rate in period t is based on adaptive expectations.

According to the theory of adaptive expectations, the current inflation rate is used as an indicator of the next period's inflation rate (Madito, 2017). The expected inflation equation for the is as follows :

$E(\pi_t) = d_1(\Delta Inf_{t-1}) + (1\text{-}d_1)\pi_{t-1}$

Where (ΔINF_{t-1}) and π_{t-1} =1 represents actual inflation and expected inflation respectively in the period t-1. To this study, it is assumed that d_1 = 1, the inflation expectation equation , is expressed in a reduced form model as follows :

$E(\pi_t) = \Delta INF_{t-1}$

The model in this study incorporates inflation expectations, as prior research has established their influence on inflation and price dynamics in South Africa. In line with Madito (2017), inflation expectations are considered a positive contributor to inflation. The study also examines the relationship between economic growth, defined as GDP growth, and inflation, treating economic growth as a negative coefficient in relation to inflation. Additionally, the study acknowledges the effect of import prices on inflation, where increased costs of imports lead to higher domestic prices. The influences of money supply and labor unit costs on inflation have been previously discussed and will be further explored.

For the analysis, the study employs the Error Correction Modeling (ECM) approach. This method is chosen for its ability to assess both long-term and short-term impacts

concurrently, offering an adjustment rate factor that indicates how quickly the system returns to its equilibrium following a disturbance.

The study will analyze both the general and parsimonious models, including conducting stability tests for these models. A modified model, adapted from Madito and Odihambo (2018), will be utilized to evaluate the determinants of inflation in South Africa. This model extends the original first and second equations and is articulated in a specific manner to address the research objectives.:

$$INF_t = \alpha_0 + \beta_1 INF_{t-1} + \beta_2 \Delta logEXR_t + \beta_3 \Delta \log FGCE_t + \beta_4 logGDP_t + \beta_5 \Delta logIM_t + \beta_6 \Delta logLW_t$$

The data will be tested for stationarity using the Dick fuller censured least square and the Philip Peron unit test. Cointegration of the variables will be tested using the Johansen Jesulus cointegration technique.

1.13 UNIT ROOT RESULTS

The report will conduct a unit root test using the Dickey – Fuller least square test and the Philip Peron unit root test (PPtest) in order to assess stationarity of the variables before ECM, the results are below:

TABLE 1 :

Stationarity of all Variables				
Dickey-Fuller generalised least square(DF-GLS)				
Variable	Stationariy of all variables in Level		Stationarity of all variabes in First Difference	
	Without trend	With Trend	Without trend	With Trend
INF	-1.377	-1.099	-2.757	-3.656
lnEXR	-4.160	-4.265	-1.965	-2.986
lnFGCE	-2.035	-3.548	-0.741	-2.348
lnGDP	-5.035	-5.064	-0.741	-2.348
lnIM	-3.099	-4.380	-1.332	-2.482
lnLW	-4.874	-5.085	-1.504	-3.804
lnM2	-3.995	-4.548	-1.887	-2.280

Table 2:

Phillips-Perron (PP)				
Variable	Stationariy of all variables in Level		Stationarity of all variables in First Difference	
	Without trend	With Trend	Without trend	With Trend
INF	-0.221	-7.166	-22.023	-22.932
lnEXR	-2.422	-0.886	-20.458	-20.389
lnFGCE	-14.33	1.392	-10.563	-10.576
lnGDP	0.229	-3.775	-30.297	-30.276
lnIM	1.025	-4.865	-30.46	-30.936
lnLW	0.692	-4.074	-27.793	-27.753
lnM2	-0.237	-2.735	-21.424	-21.750

Note: *,** and *** denote stationarity at 10% , 5% and 1% significance levels respectively .

The levels of the variables are not stationary, however after differentiation all variables became stationary making it possible to move to cointegration using the Johnson cointegration approach in order to determine if there is a long run relationship between the variables under study. The Philip Theron test was used to verify and confirm the Dick Fuller results. The results agree that the variables are stationery after first difference.

1.14 COINTEGRATION RESULTS

In applying the Johansen-Juselius co-integration technique, it's crucial to identify the appropriate lag length (k), for which the Akaike Information Criterion (AIC) and Schwarz Information Criterion (SC) tests were utilized.

The data presented in Table 3, Panel A, clearly indicates a lack of trends. The rejection of the null hypothesis, which proposes no co-integration, is evidenced by the trace statistic surpassing the critical value. This implies a robust indication of cointegration among the variables within the system. Thus, the trace statistics test effectively

dismisses the null hypothesis of non-cointegration, establishing the presence of at least one cointegrating equation.

The null hypothesis, which posits an absence of co-integration, is further refuted as the trace statistic is observed to be higher than the critical threshold. This finding strongly suggests that the system's variables are indeed cointegrated. Consequently, the trace statistic test conclusively affirms the existence of a cointegration equation within the model. Panel B of Table 3 reinforces this conclusion, showing that the null hypothesis of no cointegration is rejected when considering the largest eigenvalue's exceedance of the critical value, thereby indicating the presence of a cointegration equation in the model.

Table 3:

Panel A: Trace test				
H0: Rank=P	**Hypothesized No. of CE(s)**	**Trace Statistic**	**0.05 Critical Value**	**Probability****
p=0	None	236.654	124.24	0.01
P≤1	at most 1	145.773	94.15	0.125
P≤2	at most 2	90.0400	68.52	0.305
P≤3	at most 3	49.9871	47.21	0.245
P≤4	at most 4	20.2961	29.68	0.2
P≤5	at most 5	3.7301	15.41	0.14
P≤6	at most 6	0.1799	3.76	0.24
Panel B: Maximum eigenvalue test				
H0: Rank=P	**Hypothesized No. of CE(s)**	**Max-Eigen Statistic**	**0.05 Critical Value**	**Probability****
p=0	None	90.881	45.28	0.043
P≤1	at most 1	55.733	39.37	0.345
P≤2	at most 2	40.0528	33.46	0.849
P≤3	at most 3	29.691	27.07	0.703
P≤4	at most 4	16.566	20.97	0.604
P≤5	at most 5	3.5502	14.07	0.157
P≤6	at most 6	0.1799	3.76	0.244

1.15 ERROR CORRECTION MODELING RESULTS

The Johansen-Juselius cointegration analysis indicates a strong cointegration among the variables under study. This finding from the Johansen-Juselius test forms a solid foundation for the estimation of the Error Correction Model (ECM). Employing general-to-specific modeling techniques to derive a more streamlined model, the ECM outcomes are presented in Table 4. These outcomes reveal a notable and statistically significant positive relationship between inflation and its lagged values in South Africa. Specifically, the coefficient for lagged inflation is positively significant at a 1% level,

suggesting that an increase in inflation in one quarter tends to lead to a rise in inflation rates in the subsequent quarter, underscoring the role of inflation expectations in the South African economy.

Regarding the exchange rate, as indicated by the NEER index, there exists a negative correlation with inflation. The coefficient for the lagged exchange rate is negatively significant at the 10% level, implying that an appreciation of the local currency, as denoted by a rise in the NEER, results in fluctuations in the subsequent quarter's inflation rate. This indicates that currency valuation changes, particularly the rand's devaluation, can influence domestic inflation, as shown in Table 3.

Furthermore, government consumption expenditure exhibits a positive and significant association with domestic inflation at the 10% significance level, suggesting that increased government spending can lead to higher inflation. This outcome aligns with prior empirical research linking government expenditure to inflationary pressures.

The study finds that GDP negatively impacts domestic inflation in that the increment in GDP correlates with a reduction in the inflation rate. This inverse relationship between GDP growth and inflation highlights the economic dynamics at play in the South African context.

Table 4 :

Dependent Variable: *INF*			
Variable	coefficient	T static	Probability
INF	-0.051	-0.85	0.005
$\Delta lnEXR_t$	-2.650619	-0.82	0.245
$\Delta lnEXR_{t-2}$	-2.650619	-13.06	0.000
$\Delta lnFGCE_t$	-4.88372	-0.37	0.058
$\Delta lnGDP_t$	16.68123	7.76	0.005
$\Delta lnIM_t$	0.1341885	-0.7	0.492
$\Delta lnIM_{t-1}$	-0.0343	-0.7	0.492
$\Delta lnLW_t$	9.924018	-7.95	0.002
$\Delta lnLW_{t-2}$	-0.6999	-7.25	0.040
$\Delta lnM2_t$	2.821493	-3.05	0.955
ECM_{t-1}	-0.08	-2.80	0.010
c	-232.3335	-3.54	0.002
R^2	0.591	F static	19.500

The findings of this study are in alignment with the research of Barro (1996), Fischer (1993), and De Gregorio (1993), all of whom identified a negative correlation between

GDP and inflation. The study also reveals a positive and significant connection between import prices and inflation, indicating that a 1% rise in import prices contributes to an increase in the inflation rate. The lagged coefficient for import prices further underscores that higher import costs in a previous quarter escalate inflation in the subsequent quarter. This relationship is particularly impactful for a country like South Africa, which relies heavily on imports, thus making external cost pressures a crucial factor in domestic price setting. This pattern echoes the findings of other empirical studies, such as those by Madito (2017), Maditio &Odihambo (2018) Lim and Papi (1997), Kaseeram et al. (2004), Monfort and Pena (2008), and Ziramba (2008), which also observed a direct effect of increased import prices on domestic inflation in South Africa.

Unit labor costs are also found to have a positive and significant influence on inflation. An uptick in unit labour costs results in a rise in the inflation rate, with the lagging coefficient for unit labour costs showing a similar trend of increased costs in one quarter leading to higher inflation in the next. The significance of unit labour costs is evident at both the 1% and 5% levels.

Contrarily, the impact of money supply on inflation was deemed statistically insignificant. The study incorporated a dummy variable, which demonstrated a negative correlation with domestic inflation and was statistically significant at the 1% level.

The error correction coefficient is negative, highlighting a long-term equilibrium relationship between inflation and its determinants. This suggests that deviations from inflation will self-correct by about 7% each quarter to return to a long-term equilibrium.

Diagnostic tests, including the Breusch-Godfrey Serial Correlation LM test and the Jarque-Bera test, confirm the absence of serial correlation and heteroscedasticity in the residuals, which are normally distributed. The Ramsey Reset test affirms that the error correction model is free from specification errors. Thus, the ECM model is deemed correctly specified, and the parameter estimates are considered valid and unbiased.

1.16 THE EFFECTIVENES OF INFLATION TARGERTING IN SOUTH AFRICA

Van der Merwe (2004) notes that prior to the year 2000, South Africa employed what could be described as an informal inflation targeting regime. During this phase, the South African Reserve Bank (SARB) focused on lowering the inflation rate without explicitly setting a target or defining a timeline for achieving it. During this time, South Africa focused on reducing money supply growth without setting explicit targets. Burger & Markinov (2008) label this era as "implicit inflation targeting," which successfully brought inflation down from double to single digits.

This approach primarily concentrated on curbing the expansion of the money supply (Van der Merwe, 2004). Burger & Markinov (2008) characterized this era as a phase of “implicit inflation targeting.” This informal approach to inflation targeting proved effective, successfully reducing inflation from double-digit levels to single digits. Under inflation targeting a specific inflation target is set and publicized, and the SARB uses interest rates to achieve these targets (Mohr, 2008; Demetris & Viegi 2008).

As previously mentioned, in 2000, South Africa formally adopted an inflation targeting regime. Under this system, an explicit inflation objective is publicly announced, along with a commitment to adhere to this objective.

The SARB achieves this by establishing a specific numerical target range that is intended to be met within a set timeframe.
The purpose behinds inflation targeting was the following:

- To create certainty in the Reserve Bank policy
- To increase Reserve Bank accountability
- To target investors inflation expectations (Mboweni, 2000)

The effectiveness of South Africa's inflation targeting policy is assessed based on its ability to maintain inflation within a specified target range. According to Mboweni (2000), a consistent deviation from this range implies the policy's failure or loss of credibility.

According to Van der Merwe (2004)- the purpose of inflation targeting is to ensure credibility to public about the country's monetary policy stance. The purpose of inflation targeting is anchoring inflation-expectations as a strategy to control inflation. The govement adopts an inflation target and the Reserve Bank uses interest rates to control inflation to achieve the target set by the government.

The philosophy of the inflation targeting framework is that price setters such as producers and trade unions will rely on the target in setting prices of bargaining wages (Naraidoo and Gupta 2010).The policy is ineffective if economic agents do not rely on the target in setting prices or wages.

The policy's success, according to Mishkin & Hebbel (2001), is evident in the significant reduction in normalized inflation rates globally, a decade after its adoption. Similarly, Gumaja, Kabundi, and Ndou (2013) note that South Africa achieved single-digit inflation within a decade due to inflation targeting. Wilusa (2015) suggests that this has facilitated conditions for economic growth. However, Burger and Markinov (2008) argue that the success of inflation targeting is not only based on lowering inflation below the target but on (1) the ability to anchor inflation expectations, (2) the ability of the policy to lower inflation inertia, (3)a weaker relationship between inflation and the oil price changes, (4) a changed Philips curve and lower inflation forecast errors.

Reid (2019) proposes enhancing the policy's effectiveness through predictable monetary policy and effective communication. Coulibaly & Kempf (2010) found that inflation targeting helps reduce exchange rate pass-through effects, while Stiglitz (2008) cautions that rising interest rates can suppress demand, only reducing inflation at intolerable levels. Gonclaves & Salles (2008) and Ransamy (2009) affirm its success in reducing inflation and anchoring expectations.

Keshof (2002) highlights the importance of expectation surveys in anchoring inflation forecasts. Madito (2017) observes a decline in average inflation to 5.5% between 2000 and 2013 following the adoption of inflation targeting.

John (2012) in (khumo,2015) states that a major advantage of inflation targeting is that it combines both rules and discretion. Khumo (2015) found that the adoption of inflation targeting to be associated with a 4.8 percentage point reduction in average inflation relative to other monetary policy regimes.

Kabundu and Schaling et al (2014) conducted a study on the success of inflation targeting in anchoring inflation expectations. Their study found the SARB has been successful in anchoring the inflation expectations of analysts but not the expectations producers and unions. They found, inflation expectations differ across sectors and that inflation targeting has not been successful in anchoring expectations of all agents. They futher found that target of price setters is usually in the upper end of the target and that price setters have not used focal point of inflation. Their study found that labour unions and price setters have not relied on inflation targeting primarily because wage agreements are concluded in advance and therefore do not rely on the target the year in which the agreement signed.

Gupta and Naraidoo (2014) argue that inflation targeting in practice has been asymmetric and mostly been effective when inflation is futher from the target. They suggest a point target inflation targeting rather than an inflation targeting zone. The response to inflation is lower for high inflation targets. It is also important to note that inflation targeting does not target the exchange rate or its effects or supply shocks.

Akinboade & Sibrits (2004) argue that inflation targeting is limited in addressing structural inflation drivers like labour costs and supply shocks. Franknel (2012) recommends nominal GDP targeting as an alternative, arguing for a stabilization of demand to manage inflation and responsiveness to supply shocks.

According to Aron & Muelbauer(2007) inflation targeting has increased the credibility of monetary policy despite the economy being subject to sizeable external shocks.

Kaseeram,Nichola and Mainardi (2004) argue that targeting inflation expectation is not enough to influence inflation inertia, they argue that South Africa must fix structural rigidities wich influence inflation. They argue that inflation is a symptom of a malfunctioning economy. They note wage imbalances, high taxes, trade barriers and

budget deficits as structural idiosyncrasies' requiring attention by policy makers in order to control inflation.

According to Akinboade, Niedermeyer and Siebrits (2002) the decline of inflation during the 1996- 2000 was not necessarily due to inflation targeting but other factors such as, a stable exchange rate and price stability of our trade partners, low wage settlements, recession of inflation expectations and conservative monetary policy. They argue that inflation in South Africa is largely structural. They further argue that inflation targeting has no impact on labour costs which are the main drivers of inflation and therefore it is a limited framework. They further argue that adjustment of interest rates only affects inflation after 9 quarters. This argument is futher supported by Comment and Epstein (2011) who argue that the success of inflation targeting during the 1980" and the 90"s was due the favourable economic circumstances at the time.

Rossouw (2007) is of the view that the major disadvantaged with inflation targeting is its lagged impact on inflation. The impact is noticeable only after a long period which comes at a huge cost to the economy(Rossouw 2007).

According Mishkin & Hebbel (2007) conducted a study on the success of inflation targeting after its adoption by central banks. Their study found that inflation targeting helps countries reduce inflation in long run, but it has a smaller response to oil price and exchange rate shocks. They however argue that inflation targeting countries have not achieved better monetary policy performance relative to non-inflation targeting countries.

According to Wyngaard (2019), inflation targeting is inefficient in combating inflation because it only has an impact on inflation only after 9 quarters. Her study found that an increase of 1% in the repo rate will lead only to 04.5% in consumer price inflation in the long run. She futher argues that monetary policy alone is insufficient in controlling inflation pressures and this requires assistance from enabling fiscal policy conditions, she recommends the subsidization of small business to reduce the costs of production and the reduction of red tape in the labour industry in order to reduce strikes. She further recommends increasing exports to curb the impact of import prices on the economy.

1.17 ALTERNATIVE MODELS TO INFLATION TARGERTING

Various models to combat inflation have been employed globally some with success in other countries, for the purpose of this study we shall only explore monetary targeting, exchange rate targeting, and GDP targeting.

Monetary targeting is a monetary policy framework which has been employed in Germany successfully but failed in the United Kingdom and the United States of America. In terms of this policy, a central bank targets the growth of the money supply to control inflation. This policy finds support from the proponents of the monetarist theory who argue that inflation is a consequence of excess liquidity of money in the economy . The SARB has never applied this policy in the past(Maumela and Odihambo 2011). Proponents of this model argue that its main advantage is that it gives the central bank full control to adjust monetary policy in responding to inflation. It prevents govement from monetizing its debts(Maumela and Odihambo 2011).The main disadvantage of monetary targeting is that there's is no accurate measurement tool of available money in the circulating in the economy. This makes it difficult to manage the aggregate of money in the makert.

Exchange rate targeting is a monetary policy framework in which a country pegs its exchange rate against the currency of another country or against a commodity such as gold(Mishkin 1999). Exchange rate targeting has previously been applied in Western Europe during the 1980's with success. This framework is normally applied by countries which have a high dependence on imported goods. Exchange rate targeting is easy to understand, it helps keeps the costs of internationally traded goods low (Mishkin 1999). Exchange rate targeting is more suited for small undeveloped economies which are import dependant. It is not feasible for the requirement of growing emerging makert economies(Maumela and Odihambo,2024). A major disadvantage of this framework is the central bank of the domestic country subjugates its autonomy to the central bank of the anchor country. This renders the central bank of the host country vulnerable in that it does not have monetary policy instruments to respond to exogenous shocks to its currency(Maumela and Odihambo 2011).

In order for exchange targeting framework to be effective, an enabling legal and economic framework with a commitment to competitiveness and credibility is required.(CNB 2023). Exchange rate targeting is not feasible for South Africa's, because its economy is too advanced for exchange rate targeting. Furthermore, the cause of south Africa's inflation is not import prices but mainly costs push factors.

In terms of the GDP income targeting monetary policy framework govement and the central bank set a national income target. If the targeted national income is exceeded, the central bank increase interest rates to bring control inflation. Govement determines the national income by determining the amount of money spent in the economy (Beckwourth & Hendrickson 2016). The purpose of this framework is to control spending in the economy and to ensure that supply can meet demand.

The advantages of GDP targeting are that central banks only have to target a single variable, it calls upon policy makers to take steps ensure that output is sufficient to meet the increase in national income in order to ensure price stability(Beckwourth & Hendrickson 2016). The major weakness of GDP targeting is that it is very difficult to accurately measure the data on GPD (Hassan & Leowald 2013). National income statistics are not produced as frequent as inflation statistics (Hassan & Leowald 2013). No country has ever employed GDP targeting therefore it has not been tested in practise. This kind of framework would only be suitable for demand pull inflation countries; it would be ineffective an economy like South Africa whose inflation is mainly caused by cost pull factors.

1.18 RECOMMENDATIONS

The report establishes that supply-side factors, particularly labour costs, are major drivers of inflation in South Africa, rendering inflation targeting, which primarily relies on interest rate adjustments, somewhat inadequate. As Akinboade & Neidemier (2002) note, this approach fails to directly address these key inflation causes. The structural nature of South Africa's inflation suggests that the South African Reserve Bank (SARB)'s efforts are alone insufficient, necessitating broader economic interventions, including government action. South Africa's inflation is structural in nature and therefore the SARB's powers in combating inflation are limited therefore other role players in the economy such as government must play a role in combating inflation.

Madito and Odihambo (2018) argue that while inflation targeting has helped stabilize inflation, its effectiveness could be enhanced through complementary fiscal policy measures. Mngayi (2021) recommends reducing union power to mitigate wage-driven inflation. Furthermore, Madito (2017) suggests governmental policies focusing on reducing import tariffs for non-locally produced goods, promoting industrialization, and providing producer support. Special economic zones could also be used to decrease production costs and increase efficiency (Madito 2017).

According to Rossouw financial makert soundness, efficient institutional set up and a commitment to slow down inflation are necessary pre- conditions to ensure to the success of an inflation targeting framework (Rossouw, 2007).

Kganyago (2023) proposes controlling public sector pricing, such as municipal rates, which have been flagged by the SARB as contributing to inflation. Walsh (2023) emphasizes the need for government intervention to restrain municipal tax increases and enhance local government debt management. These sentiments are echoed by Rossouw (2007) who argues that the credibility of inflation targeting is negatively affected by administered prices which are often above inflation. Govement musty implement policy measure to ensure that administered prices are within the inflation target range.

Sloman (1994) points out that reducing the public sector wage bill or increasing taxes can lead to a decrease in consumer spending, a deflationary measure. The success of inflation targeting also depends on its ability to anchor market-wide inflation expectations. However, this report finds that it has been less effective in influencing the expectations of key cost drivers like unions and price setters, as their decisions often precede inflation targets (Kabundi and Schaling, 2013).

To improve its effectiveness, the SARB should enhance transparency about its future inflation management strategies (Kabundi and Schaling, 2014). Adusei (2013) suggests incentivizing domestic production and imposing tariffs on certain imports to minimize the impact of external price shocks, although caution is advised to avoid retaliatory trade measures that could harm South Africa's GDP.

Increasing domestic production of essential goods can reduce reliance on imports, thereby mitigating import price-driven inflation (Undji & Kaulihowa, 2015). However, increasing tariffs on goods that South Africa produces could provoke counter-tariffs and negatively impact the country's GDP. Ackach, Hanson and Agboyi (2015**)** propose an alternative strategy in reducing inflation which is reducing imports through placing an emphasis on producing goods locally can protect the country from import priceses.

Akedenic and Catherine (2022) suggest that policy makers should adopt production structures which reduce energy imports. They recommend a speedy adoption of renewable energy to reduce production costs.

Wyngrad (2019) recommends developing policies to stabilize the exchange rate to reduce import cost fluctuations. She also advocates for government support for small businesses, tax reduction, and more flexible labour laws, including allowing wage adjustments in response to inflation changes. These measures aim not only to control inflation but also to stimulate job creation and GDP growth.

1.19 CONCLUSION

The study embarks on an analysis of the factors driving the increase in inflation in South Africa from 2007 to 2023. It discovers that labour costs remain a primary factor influencing the nation's inflation rates. Additionally, while the paper acknowledges some degree of success in reducing inflation through inflation targeting, it emphasizes the need for supplementary measures. Inflation targeting, being a monetary policy, is limited in its capacity to fully address issues arising from cost-push factors and structural challenges. The report then presents several recommendations for policymakers to consider in addressing inflation. One key suggestion is for the South African Reserve Bank (SARB) to enhance its efforts in managing inflation expectations. The current inflation targeting strategy does not effectively influence the expectations of trade unions and price setters, who play a significant role in price determination. Therefore, the paper proposes that more robust actions are necessary to align these key stakeholders with the inflation targeting goals.

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