

**EFFECTS OF INFLATION ACCOUNTING ON THE  
FINANCIAL PERFORMANCE OF RETAIL STORES IN  
KWA-ZULU NATAL, SOUTH AFRICA**

**By**

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## DECLARATION

This research thesis is work originally prepared by me (Author) and has never been submitted for a Degree in any institution other than the Durban University of Technology for examination purposes.

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## **DEDICATION**

I dedicate this thesis to my entire family and relatives. They love, motivate and make me believe I am a good example that inspires the younger generation in my family.

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## ABBREVIATIONS

<b>CCA</b>	-	Current Cost Accounting
<b>CPI</b>	-	Consumer Price Index
<b>CPP</b>	-	Current Purchasing Power
<b>CVA</b>	-	Current Value Accounting
<b>DP</b>	-	Dependent Variable
<b>DSGE</b>	-	Dynamic Scholastic General Equilibrium
<b>EFA</b>	-	Explanatory Factor Analysis
<b>FIFO</b>	-	First in First out
<b>GDP</b>	-	Gross Domestic Product
<b>GPI</b>	-	General Price Index
<b>IAS</b>	-	International Accounting Standards
<b>IFRS</b>	-	International Financial Reporting Standards
<b>IV</b>	-	Independent Variable
<b>JSE</b>	-	Johannesburg Stock Exchange
<b>KMO</b>	-	Kaiser-Meyer-Olkin
<b>KZN</b>	-	Kwa-Zulu Natal
<b>NPM</b>	-	Net Profit Margin
<b>OPM</b>	-	Operating Profit Margin
<b>PCA</b>	-	Principal Component Analysis
<b>RCA</b>	-	Replacement Cost Accounting
<b>RSA</b>	-	Republic of South Africa
<b>ROA</b>	-	Return on Asset
<b>ROE</b>	-	Return on Equity

- SA** - South Africa
- SARB** - South African Reserve Bank
- SPSS** - Statistical Package for Social Sciences
- US** - United States

## ABSTRACT

This thesis has been executed in South Africa. The research conductor intended to investigate the effects of inflation accounting on the performance of retail stores in Kwa-Zulu Natal, South Africa. The study used a mixture of open-ended and closed-ended questions on the questionnaire, combining quantitative and qualitative approaches in research. A total of 200 questionnaires were administered to 5 respondents per store in each of the two different branches of the 20 stores in Kwa-Zulu Natal listed on the Johannesburg Stock Exchange. The investigator used primary data to collect information and the Statistical Package for Social Sciences program to code and analyse data. The Explanatory Factor Analysis and Linear regressions were also employed in this study. The empirical study showed the impact of businesses preparing their financial statements on a historical cost basis and the different issues affecting the financial performance of the retail business. The outcome of the research highlighted positive relationships between the variables used. This study's findings corroborated prior research findings. As the inflation rate increases, the more noticeable it becomes on the financial statements. Suggestions to resolve some of these concerns are mentioned in the study. If retailers consider these recommendations, hopefully more stores will increase their financial performance and the accuracy of the results.

**Keywords:** Inflation Accounting, Financial Performance, Retail Stores, Kwa-Zulu Natal and South Africa.

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**CHAPTER ONE**

**INTRODUCTION**

**1.1 Background to the Study**

Inflation is a continuous problem that affects the accounting system in many countries, causing structural economic issues. These problems will always carry a risk of economic instability until resolved. The best way to correct such problems is to adjust financial statements, with inflation accounting being a necessity in order to achieve this correction. Hyperinflation (high inflation) inhibits financial statements, drawn up on historical cost requirements, from creating financial information that would be comparable and comprehensible for the business. Rapu, Gaiya, Eboreime, Nkang, Audu, Golit and Okafor (2016) mention that high inflation is detrimental to an economy for several reasons: it distorts prices; depletes savings; discourages investment; leads to and/or fuels capital flight; hinders growth; economic planning becomes difficult; and exacerbates possible social and political disturbances. A slight increase in the rate of inflation can significantly affect a business's operations and financial position results.

Benjamin, Dorothee and Tawiah (2015) define inflation accounting (price level accounting) to provide a better understanding of what it is. The writers explained that it is a process of adjusting the financial statements when there is a material amount of price inflation. This material amount makes historical information on the financial statements irrelevant or less useful. Numerous techniques can be used for inflation accounting including the current purchasing power method, current cost accounting and replacement cost accounting (Benjamin *et al*, 2015). Brou and Krueger (2016) report that uses of financial ratios are one of the most entrenched tools to evaluate the strength of a

company. The world is absolutely moving towards an economic globalization and an indistinct market. With this globalization, the demand for quality advice and strategic financial solutions across the world is becoming more and more necessary. Brou *et al.* (2016) state further that financial ratios alone are unintelligible without a performance specification. Financial ratio averages tend to differ across industries, as every other industry has its specific set of policies and practices pertaining to the conduct of business. Financial statements together with their ratios would make more sense if price level accounting is used rather than using historical bases from the existing accounting system. Most of the time, accountants are dependent on accounting book values and historical cost assumptions which are infrequently equivalent to market values. This causes recurring problems for the company's financial statements. According to Javed (2019), economic income will differ from the accounting income when accountants are unable to recognise the unrealized costs attributed, or gains and losses. Inflation is the general price level of an economy which brings a reduction in supply and raises the accessible loan amounts demand, leading to upward movements of interest rates (Brou *et al.*, 2016).

Inflation and interest rates will always need scrutiny when it comes to making decisions and preparing the financial reports of the business. Inflation and stock markets will move inversely with interest rates. Kganyago (2019) mentions that Inflation expectations near six percent or above for South Africa bring discomfort for the South African Reserve Bank (SARB) and currently, inflation forecasts reveal that inflation will be stable at four and a half percent at the end of 2021 as an inflation expectation. Communications by SARB will try to win over wage and price-setters that inflation will remain at a rate lower than it has been historically. Numerous research studies have been undertaken on the causation factors of inflation in South Africa, most of which were undertaken earlier than the year 2000. This period symbolises a shift in the political and economic structure in South Africa and also a shift in the operations department of the SARB.

Kganyago (2019) explains further that when inflation exceeds the 6 percent level, banks normally raise the repo rate. Therefore, commercial banks find it rather difficult to obtain funds from the Reserve Bank. This effect causes aggregate demand to drop resulting in a fall in inflation pressure. Because of this, consumption activities and investments will become lower in the macro-economy. The target range of inflation is kept within the range of 3 to 6 percent. SARB uses the repo rate as a short-term policy in maintaining this target. Inflation accounting prevents financial statements from being reported incorrectly when inflation and interest rates shift drastically. Brou *et al.* (2016) highlights that a company's statement of comprehensive income is distorted by inflation in three easily distinguishable courses of action. Firstly, the distortion occurs because of fixed assets that include property, plant and equipment from the business's statement of financial position. Secondly, financial statements are valued on historical costs. Therefore, there are significant understatements of assets when comparisons are made with present market values. Thirdly, generalization will not be easy, but the distinctive current or historical cost would be an addition to the assets, which would improve the company's debt or equity ratio along with its equity position (Otambo, 2016).

Inflation accounting is very important for the business because on many occasions, Income taxes owed and reported earnings are overstated when the asset figures decrease. This is caused by the understatement of depreciation based on historical cost (Mishra, 2018). Furthermore, the net income is affected in various manners based on the adoption of cost flow techniques in inventory valuation and interest expense in company profits. A downward movement is expected in taxes owed as the debt value is weakened by inflation. This clearly explains the understatement of earnings and the exaggeration of past interest expenses. Above-average fixed values disallow companies from making more sales but make a disappointing number of sales to be expected, which is not a good sight for users who use financial information to make financial decisions.



Ratios are very important for the business because they show performance and the position of the business. False figures in the financial statements will make the ratios inaccurate and the information unreliable. According to Brou *et al.* (2016), firms with a low return on assets (ROA) generally employ more debt financing. Although this is so, managers, creditors and investors should use past costs on their financial statements to make decisions. The company's sustainable growth rate will be reduced by inflation. If adjustments to inflation are continuously made, there would be little comparative effect on the sustainable growth rate. Sowden-Service (2019) highlights that the return on equity has its own shortfalls, namely: *Temporal analysis* which affects long-term decisions and is not entirely recognised because this represents earnings for a single year only. *Valuation divergence* – an excess Return on Equity (ROE) might not be one and the same with a surplus on return on investment to its shareholders because of the book value and equity market value separation. *Risk ignorance* – ROE focuses on the returns and does not pay attention to the risks connected to achieve those returns (Trivedi, 2018).

Rangasamy (2017) explains that the consumer price index (CPI) clearly shows the annual percentage change of the inflation rate. This CPI tracks down the rate of shifts in goods and service prices being bought by South African consumers. Gupta, Reid and Pierdzioch (2014) state that forecasting losses has significant results that rationality will no longer require forecast mistakes to be non-partisan. Gupta *et al.* (2014) argue with various macroeconomists and leaders of trade unions that many faults were found pertaining to the current monetary policy approach. The inability to reduce the unemployment cost of fighting inflation (sacrifice ratio) is one of its major short comings. The important part of being able to identify the causes of inflation is tracking an effective anti-inflationary policy that aims at achieving price stability, which is widely acknowledged in theory and practice (Madito and Odhiambo, 2018).

## 1.2 Research Problem

Inflation accounting is better known as 'price level accounting'. It is a special accounting technique used to adjust the financial statements. The company's financial statements are adjusted when there is a material amount of price inflation, causing historical information on the financial statements to be irrelevant or less useful. Inflation accounting involves finance and economics, which is declared as conflicting with accounting principles. Accounting bodies are working on various methods to address inflation effects on financial accounting (Benjamin *et al.* 2015).

According to Javed (2019), the existing accounting system is established based on historical cost. Ebiaghan (2019) describes the historical cost technique as an unsuitable method because of its use and how less reliable it is. What makes financial statements less reliable is the way they are presented (e.g. recording assets as their original acquired costs in the statement of financial position). If the company's financial statements are unreliable, then the information being presented would not be useful. According to Amaefule, Okoye, Kalu and Nwosu (2018), historical cost is quite good when one needs to take a measurement of assets. Problems are encountered when prices shift overtime between the date when assets were bought and the current date. Therefore, these historical costs will no longer be relevant if the main reason to take a measurement is to show the most recent economic gain reflected by the financial performance.

Financial statements, together with financial ratios, would make more sense to the company if inflation accounting is used. Retail stores and other business sectors would rather ignore financial statement adjustments and continue to use historical cost figures which in the end affect their financial performance. According to Javed (2019), inflation accounting is usually avoided by retail businesses because they believe it is very detailed and has too many calculations which make the financial statements far from easy to understand. While this complexity is a factor, retail stores do not look at this from a different perspective. Inflation accounting shows the true value of the business and

reviews any suspicious amounts which may be performed on a historical cost basis that may show big amounts of tax and profits. Historical cost accounting is increasingly becoming a dissatisfying method of financial statements reporting, which makes room for the consideration of a different technique (Benjamin *et al.* 2015).

Mclindoe-Calder (2018) indicates that people affected by inflation can agree that price stability is the focal point for monetary policy worldwide. Adaptations of inflationary targeting frameworks by Central Banks have shown how committed they are with regard to price stability. Kganyago (2019) found that price stability assists in protecting the standard of living of people in South Africa and their purchasing power. The main aim of price stability is ascertained by having a target range for inflation after the government has been consulted. Furthermore, the weak economic performance of South Africa in 2016 came as a huge surprise. This proves how much of an impact inflation has on the economy, especially in terms of slowing down business growth. The main cause of the high increase in South African inflation in 2016 was partly due to increases in food prices because of the drought, which forced this increase.

Kganyago (2019) highlights that investors use the company's financial performance in order to make correct investment decisions. Therefore, the financial statements should not be misleading. Historical cost accounting is increasingly becoming a dissatisfactory method of preparing financial statements. Room should be made to consider using a different technique, like inflation accounting. The dispute behind historical cost accounting is the assumption of inflation rates being non-existent or being brushed aside, which causes a conclusive decrease in the value of the company and the undervaluation of aged assets. "Financial statements should be at fair value at the balance sheet date. Therefore, any asset or liability that attracts interest has already incorporated inflation; hence an adjustment for inflation on these assets and liabilities will result in a double treatment of inflation, which distorts the basic concepts of objectivity and financial performance" (Benjamin *et al.* 2015).

In the light of what has been spotted by the researcher about inflation and its effects on the financial statements of companies, this study will examine the effects of inflation accounting on the financial performance of retail stores in Kwa-Zulu Natal, South Africa. To realistically overcome the disruption of hyperinflation, this research is conducted to have a better understanding on how financial statements are evaluated, adjusted and treated.

### **1.3 Aims and Objectives**

The aim of conducting this study is to assess the effects of inflation accounting on the financial performance of retail stores in Kwa-Zulu Natal (KZN), South Africa.

The specific objectives are to:

- i. determine the influence of inflation on organisational decisions;
- ii. comprehend the factors that lead to statement adjustments for retail stores in KZN;
- iii. examine the effects of inflation accounting on the financial performance of KZN retail stores; and
- iv. establish the impact of organisational decisions on performance amongst retail stores in KZN.

### **1.4 Research Questions**

- i. What is the need to consider inflation when making organisational decisions in KZN retail stores?
- ii. What factors lead to statement adjustments for retail stores in KZN?
- iii. How does inflation accounting have an effect on the financial performance of KZN retail stores?
- iv. What are the impacts of organisational decisions on performance amongst retail stores in KZN?

### **1.5 Significance of the Study**

This study is significant because it will assist companies operating under a hyperinflationary economy to evaluate and adjust financial statements more realistically in order to overcome the changes made by inflation developments. It is worthy to note that accounting methods estimates and interpretations of financial statements are a recurrent issue in accounting. Annual reports must be accurate in order to make forecasts and improve the business quality and performance. However, financial ratios would not be useful to the company if the accounting is incorrect because they have to give a clear indication of the business's financial position and performance. Furthermore, this study offers valuable information for analysing companies operating under hyperinflation economies, even if not excessive inflation, and the reasonableness of forecasts. This research also helps those affected by inflation to expect and be aware of the inflationary gap when real gross domestic product increases, which causes the economy to increase its consumption.

### **1.6 Scope of the Study**

This study is confined to the Republic of South Africa (RSA) on the African continent because of the high inflation rate that characterises the country, accessibility of the retail stores and the fact that the researcher is located where the study is conducted. Therefore, the Kwa-Zulu Natal (KZN) province of the RSA is selected as the research focus area. The constraint of this study is that this research is based on a sample of KZN retail store respondents in South Africa. Only 200 questionnaires will be handed out to 1 Financial Manager, 1 Store Manager, 1 Sales Associate, 1 Store buyer and 1 Team leader of the logistics department per retail store. Questionnaires are administered to respondents of 2 different branches in each of the 20 KZN retail stores listed on the Johannesburg Stock Exchange (JSE). This will limit the number and the feedback from respondents who may have different views and opinions but may not be able to communicate their views as they are not related to the questions asked from the questionnaire. The study is focussed more on inflation rather

than deflation, even though both are harmful to the economy as they lead to a monetary loss in the public monetary system. Deflation discourages people from spending their monies and monetary policy gets less effective, while inflation enhances the quantity of money in the economy. Hence, this study will focus on a more positive one (inflation) which increases the economy, rather than the economy falling apart. The research study might have little credibility due to some sampling errors. The time limitation on the research might have an impact on the amount of information gathered, which is beyond the control of the researcher and did not in any way affect the significance of the study.

# **CHAPTER TWO**

## **LITERATURE REVIEW**

### **2.0 Introduction**

An in-depth literature review is provided in this chapter, evaluating all the different theories and research performed by dissimilar writers, experts and economists, expanding on knowledge regarding the effects of inflation accounting on the financial performance of retail stores in KZN, South Africa. This research is focused more on the African countries affected by hyperinflation. An analysis of the aims and objectives of previous studies will be concentrated on, allowing the researcher to identify any gap which may exist.

### **2.1 Empirical Review**

Mukoka (2018) defines inflation as a proliferation of prices and a fall in the purchasing value of money. There are certain policies aimed at controlling inflation tax allowances and excise duties, which were expanded in line with inflation. Inflation accounting is an uncommon accounting technique that can be used during high inflation periods, whereby financial statements are modified in accordance with price indexes (Benjamin *et al*, 2015). Modifying financial statements using this inflation accounting technique will assist companies to not be fully dependent on the cost accounting basis alone.

Inflation accounting could have a very negative impact on the financial ratios of the company if the financial statements of the business are themselves misleading. Sowden-Service (2019) mentions that financial ratio's use two numerical values. These values are taken from the enterprise's financial statements. Many standard ratios can be used to evaluate the organisation's gross financial condition, namely: Liquidity (current and acid test ratios); activity (creditors, inventory, current and non-current turnover); debt, profitability (Return on Equity, Return on Asset, Operating Profit Margin and Net Profit Margin); and financial structure ratios (Gearing and equity ratios).

Sowden-Service (2019) indicates that the set of International Accounting Standards (IAS) clearly shows how certain types of transactions and other events should be accounted for in the company's financial statements. Companies should abide by the national statutory requirements of the relevant country. Sowden-Service (2019) indicates that not every company will follow these standards, but it is mostly beneficial to make use of the standards because it enables the maintenance of lucidity, answerability and efficiency in financial markets. In addition, this allows businesses and individual investors to make educated financial decisions (Sowden-Service, 2019). Overall, users of financial statements are able to clearly and concisely see all the affairs of a company they would like to make investments in.

### **2.1.1 Empirical Review on the Consideration of Inflation in Organisational Decisions for Retail Stores**

Phiri (2017) states that his research was conducted with the aim to understand more about how people would react to inflation and expectations, based on the amount of knowledge they have. Phiri (2017) highlights that individuals failed to understand the link between inflation together with prices and were unaware of past and future inflation measures. This could mean that the respondents have limited understanding on the whole inflation concept and therefore fail to have knowledge on food prices and inflation. Managing inflation expectations is very important because it is the core aspect of monetary policy (Phiri, 2017).

According to Hillier, Hodgson and Ngole (2016), secretive cultures prevent users from seeing the upward movements of inflation in the financial statements because it is easy to undertake concealed earnings and asset values. Businesses engage in these concealments in order to avoid the responsibility of accounting to external investors. Hiller *et al.* (2016) mention that the valuation impact of International Financial Reporting Standards (IFRS) on capital markets is now a foundational international matter in question. With over 120 countries that are developed or under-developed, they should be adopting IFRS. The



effectiveness of financial statements for economic decisions depends entirely on the accounting principles used in preparing data and its validity.

Mikolajun and Lodge (2016) argue about whether globalization has rendered national inflation less responsive to domestic capacity restrictions. A sudden expansion in the demand for goods would translate into higher imports rather than into prices or foreign competition curbs wage/price increases. Wage or price increases mostly affect industries that are open to global competition. Huge rises in costs tend to lower the sensitivity of wages to productivity increases. Mikolajun *et al.* (2016) agree on the factors causing this change, namely increases in the accuracy of accounting data measurement; the trend of the accounting profession attempting to put in place theoretical bases or principals of accounting; and having innumerable investment alternatives.

Bohlmann, Bohlmann, Inglesi-Lotz and Van Heerden (2016) state that a high level of inflation is caused by the general equilibrium impact of significantly high electricity prices. The supply disturbance will cause inflation to increase, with less electricity available at higher prices. Inflation has become more evident on financial statements as it increases even when the inflation rate is low. Bohlmann *et al.* (2016) mention further that inflation adjustments alter the figures in the company's financial reports. Hindering the reflection of inflation effects on financial statements would be exchange rate fluctuations. Inflation is a global issue and has a significant economic outcome for entities operating in an environment under inflation. Benjamin *et al.* (2015) add that the basic principle of credit transactions is ignored by inflation accounting. It directly calculates monetary gain or loss on the credit price, with an expectation that credit price and market price are one and the same. "Inflation accounting may argue that this price difference is just to discourage credit sales or purchases, or to compensate for the risk of default but not to take care of inflation" (Benjamin *et al.*, 2015).

Kganyago (2019) highlights that South Africa is going through load-shedding or electricity outage schedules to manage supply shortfalls. The growth rate will

likely be reduced by 1.1% if these interruptions continue in 2019. Load-shedding has been a recurring issue in South Africa since 2007. It makes financial statement figures look bad because of the losses in sales and decreases in investments for businesses. More information about output is shown by forecasts that in 2021, the economy's supply volume will be re-aligned. Therefore, demand on the other hand will likely not have an intense inflationary movement. Although South African inflation has become less intense than expected, it is still above the 4.5 percent mark (Kganyago, 2019). To address this current situation, high administered prices and taxes will be demanded. These negative occurrences block a strong rebound in growth.

Chisadza, Dlamini, Gupta and Modise (2016) established that when oil prices are being moved up, this movement places the South African economy in a corner. These price increases further affect and expand the overall amount of money that the country owes. Bad results are reflected on the South African economy through several means: the effect of a falling Gross Domestic Product (GDP) and an increase in petrol or diesel on vehicles moving from point A to B. Other uses will lead to an indirect cost effect through higher production costs which firms will pass on to consumers by bringing up food and (or) retail costs. Shumba, Zindiye and Donga (2017) report that during 2014, Zimbabwe's economic growth moved quite slowly from 3.8 percent to an approximation of 1.5 percent during the 2015 year. Slow movements were due to fragile domestic demands, very rigid liquidity conditions, unreasonable public debt, drought, poor infrastructure, institutional weaknesses and an over-valued exchange rate. South Africa might face a similar crisis if the correct measures are not taken.

Mukoka (2018) investigated the notion that GDP is commonly known to adversely impact inflation. An average increase in inflation of ten percent allows GDP pressure to shift from 0.2 to 0.3. This is significant in future cases, even if inflation has a compact impact on growth rate. Mukoka (2018) examined how the economy usually recovers from the inflation dilemma that causes a decrease

in the growth rate. In addition, policy makers came up with different market policies that sought to stabilise the prices of goods and services. From 2009 to 2017, the country recorded an inflation average of 2.8 percent against an average GDP of 3.5 percent, which is acceptable by all standards. The decrease in growth is only for a short while because after this inflation catastrophe, the economy will recuperate very fast to its previous level.

According to Madito and Odhiambo (2018), money supply expansion is expressed by way of an upward pressure being applied on prices by changes in structural and cost factors. Secondly, an analysis of the three fundamental structural causes of inflation states that underlying factors yield the basis against which the inflation process occurs. It also explicates the endangerment of the economy regarding inflation. However, the underlying factors cannot provide an easily understandable explanation on what good could come out of the rate of inflation or the reasoning behind the question of why it descends or gains momentum in different cases. These still remain important factors in the determination of inflation. Lastly, it may be argued that there is an existence of imported Inflation, which is drawn from the price on exports which other African countries encounter because of the South African inflation influence.

Taylor (2015) posits that countries that target inflation have lesser evaporative exchange rates. If the Central Bank chooses to respond less to inflation, there will be a lower price stability and greater output stability. Furthermore, the South African Reserve Bank (SARB) uses a flexible inflation-targeting framework. As a result, it may attenuate any output variability from the monetary policy response to the shock. Targeting inflation can be advantageous in several ways, namely: it is transparent, decreases shocks, causes the acceleration of accountability and is easily understood (Taylor, 2015). In addition, negative results may also arise due to the fact that low growth may be produced and much discretion may be used.

Policy rates that are below average have better chances of levelling up risks that will further increase financial imbalances, while the relationship between

economic growth and inflation is known to have an upswing in the supply of money. Therefore, inflation is created, which leads to capital accumulation growth that creates an economic increase effect (Norges Bank, 2014). Gupta *et al.* (2014) state that South Africa's economy and the financial sector has power and influence over other African countries. South Africa's economic links are also boosted by influential prominent market countries such as China and India. Inflation has been quite moderate when being compared against previous years, but this should not give investors a reason to overlook inflation developments. Investors must act with reasonable care in consideration of the future by maintaining their equity levels so that they are shielded against the erosive effects of inflation.

According to Taylor (2015), capital controls are thus one of the reasons why the output and price stability trade-off curve will shift adversely. It also conflicts with the goal of a more amalgamated global economy and higher long-term economic growth. Gupta *et al.* (2014) agree on the rising prominence of emerging market economies, that it can lead to improved policy frameworks for institutions and the ability to implement counter-cyclical economic policies effectively.

### **2.1.2 Empirical Review on the Factors that lead to Statement Adjustments**

Forecasting maybe defined as a calculation of a certain event and can also be a financial trend. It may be done in different situations like tracking the amount of inventory a business requires (Hyndman and Athanasopoulos, 2018). According to Gupta, Kanda, Modise, and Paccagnini (2015), forecasts are a linchpin for deciding on monetary and inflation targets. Therefore, Central Banks use their monetary policy instruments to bring inflation forecasts close to the targeted inflation, which is between three to six percent. Gupta *et al.* (2015) iterate that Dynamic Scholastic General Equilibrium (DSGE)-based forecast variables are in companion with the smallest errors when they are compared to other benchmarks. Moreover, Over-parameterization leads to out-of-sample forecasting errors, a loss of degrees of freedom and inefficient estimates.

Forecasters may or may not be able to observe forecasts performed by others when submitting their findings. Moreover, it tends to lean against the straggled consensus when forming their forecasts (Reid, Pierdzioch & Gupta, 2014).

Kganyago (2019) outlines that only the beginning of 2016 has forecasts become accurate with random errors. Sadly, South African growth remains embarrassingly weak because of high nominal interest rates, even though its real interest rates are comparable to its peers. Additionally, it appears to be practicable that the end results of growth might begin to be way better because of the reform measure implementation. Likewise, it has become quite discernible that the legacy of state capture will disallow growth in the country for many years to come and load shedding is one indication of this problem. Gupta *et al.* (2014) found that a small group of forecast interactions from business quarters and trade unions (also known as price-setters) would be very useful for monetary policy decisions. It would be useful for a country like South Africa since it is an inflation-targeting economy. Besides, wage negotiations are affected resulting from their forecast behaviours. Therefore, this boosts inflation power even more.

Gupa *et al.* (2014) state that Forecasters have tested the quality of being based on inflation forecasts by assuming that people who predict future trends and events have no power of an unknown negative variable. It is however unclear why forecast errors having different signs should lead to an equal proportion of losses. Furthermore, representatives do not have a perspective of viewing over prediction and under prediction as equivalent. Therefore, financial analysts or professional economists face a trade-off between two competing incentives, which are: to forecast accurately and having the strategy to bias forecasts in some manner.

According to Balcilara, van Eyden, Gupta, Thompson and Majumdar (2015), output growth on manufacturing and the bill rates on treasury are mostly affected by financial shocks. These financial shocks occurred during changes that were happening, while the South African economy gives non-linearly

feedback to financial crises. Non-linear specifications have no advantages in terms of point forecasting but deliver better distribution. As a result, the great recession has provided a forceful reminder that financial market disruptions can cause large microeconomic fluctuations (Alessandri & Mumtaz, 2014). Hassan (2015) reports that the Central Bank will take part in currency market alterations. Alteration is made on account of the currency being asymmetrical and it is considered over-valued so that possible losses occurring in the export department is mitigated. The threat to financial stability is weakened by the fact that government and private sector firms borrow domestic currency in South Africa and issue securities locally (Hassan, 2015).

Le Roux and Kavila (2016) state that Zimbabwe adopted 'dollarization' as a way of dealing with hyper-inflation. This was characterised by the significant loss of credibility of the country's political and monetary institutions. On the other hand, a one percent increase in South African inflation leads to a 0.3 percent increase in inflation in Zimbabwe. Changes in the South African consumer price index are expected to influence price formation in Zimbabwe. Le Roux *et al.* (2017) mentions that inflation in a dollarized economy cannot by itself have an influence on external factors. Since Zimbabwe relies mostly on South Africa's imports, the SA Rand/US Dollar exchange rate is most likely to have an influence on the inflation dynamics in Zimbabwe. Cakmakli and Altug (2015) illustrate that the inflation process behaves in a more volatile manner in Turkey than in Brazil. The reason behind this is the large seasonal component, with an unconditional mean of the annual inflation rate of 8.2% (5.4% for Brazil), followed by an unconditional standard deviation of 9.4% (2.7% for Brazil). In addition, if the discrepancy is small, inflation targeting will provide further information for the prediction of future inflation.

When financial statements are being analysed, numbers are reported in relative terms. Strengths and weaknesses of companies are able to be pinpointed easily. Its significance is in decision-making, to evaluate the historical health of the company and to predict an entity's future financial wellbeing. Additionally,

the preparation of the cash budget is an important part of the planning process to monitor cash performance (control process). Therefore, the best way to improve the flow of cash is to reduce all the unnecessary stock levels. Moreover, selling excess non-current assets, cutting expenses by identifying areas of waste and deferring capital expenditures increases the cash flow (Birt, Chalmers, Beal, Brooks, Byrne & Oliver 2008).

Karapinar, Zaif and Bayirli (2012) examined the effects of inflation accounting practices on companies' financial ratios. The sample group in which the examination was done excluded financial companies. Results revealed that the current ratio, acid test ratio, equity ratio, creditors turnover ratios, ROA, OPM and NPM all increased. The decreasing ratios are the gearing ratio, inventory turnover ratios, current turnover ratios, non-current turnover ratios and ROE. The result in current ratios is a sign that investments of inventory amongst companies' assets can reach high amounts. The Gearing ratio dropped to 0.31, which had been 0.46 previously. The reason for this decrease is that equity items are non-monetary (Karapinar *et al.* 2012). Peavler (2019) indicates that small businesses often use financial statements to analyse financial ratios. Likewise, comparisons of financial statements with its ratios are most common for businesses. Karapinar *et al.* (2012) add that owners of the business are offered information about trends within their industry and company through ratio analysis. One can say that ratios are meaningless without comparisons against trend data or industry data. Furthermore, without any comparisons, the financial ratio analysis would be regarded as useless. It would be wise to compare industry average ratios along with benchmark companies because they are regarded as being the most important and accurate (Karapinar *et al.* 2012). According to Peavler (2019), business owners should also be mindful that the causation factors are not given by the ratio analysis but only reveals the figures. Furthermore, a company's balance sheets are distorted because the figures may be distorted by inflation. Such distortions may have occurred since the collection of that data.

Schwarzer (2018) reports that general market could possibly have imperfections that causes congestion and factor immobility. Adding on, this could lead to inflation, even without full employment. According to Schwarzer (2018), different arguments by various economists show that unions acted as monopolies, while others were skeptical of applying that framework to union behavior. Moreover, the level of market power of unions is in line with price stability. Schwarzer (2018) adds that market power has everything to do with possible inflation. One may say that knowing where the level of market power is at is much more important information than knowing whether market power is moving upslope or down slope. Moreover, a one-time cost-push due to the growing market power of unions is possible. Unions exploit upswings in market power to establish maximum real income and real wages. Lastly, during the period of inflation, holders of monetary assets suffer losses in purchasing power and holders of liabilities enjoy gains because they will repay less expensive currencies.

Future purchasing power is usually assumed to be a great cause of shocks surfacing because companies are able to increase prices for goods and services. Besides, future purchasing power is a better hedge against inflation than fixed income investments (McIndoe-Calder, 2018). The gain or loss from holding monetary items is reported as an increment of gains or losses on the income statement. In addition, preparation is in a set of financials which are adjusted for the effects of general price level changes. Performance can be inflated if numbers of inflation remain unadjusted (McIndoe-Calder, 2018). Vermeulen (2015) investigates contradicting research which reveals that inflation is regarded as a way to create employment. Consequently, it builds long-term economic growth and countries that adopt inflation targeting have some advantage along with benefits. If this relationship between inflation and unemployment is sustainable, it could be manipulated to have more advantages and create more jobs opportunities. Vermeulen (2015) mentioned that the idea of having macroeconomic policies (including commitments made by certain institutions to stabilize prices) to add onto the targeted labour market



interventions in addressing the scarcity of expertise issues will in future form a sub-structure of growth in employment. The higher the inflation rate, the lower the unemployment rate. This confirms that the Philips curve is often used as an argument for SARB critics under the inflation targeting framework (Rapu, Gaiya, Eboreime, Nkang, Audu, Golit & Okafor, 2016). Furthermore, in order to attain economic development, it is vital to employ a full monetary policy to create a stable financial environment. Du Plessis (2015) recommends that in order to effectively curtail inflation, the current restrictive monetary policy stance must be consolidated further in order to curtail aggregate demand pressure and stimulate the flow of capital. Moreover, identifying assumptions need to be obtruded upon and economists play a significant role in achieving this.

According to Shumba, Zindiye and Donga (2017), Zimbabwe faces instability in its political point of view. It is characterized by policies created by native people who have an influence in that area. As a result, this causes excessive direct and indirect taxation, unreliable power supply and corruption. As in South Africa, amongst many the problems faced in the economy, the Central Bank consistently leads the price-setting process through its strategic frameworks. This could improve coordination and reduce inflation costs in the economy (Viegi & Dadam, 2015). Bohlmann *et al.* (2016) states that if cost-push inflation needs to be reduced, and then it is best to improve the productive capacity for the country over the medium to long-term, while Last in-First out (LIFO) understates inventory value and over-states the cost of sales. There will be an over-estimation of the cost of sales because of the under-estimation of inventory value using the First in-First out (FIFO) method. Reported earnings will therefore be lowered because of the understatement or overstatement of values. Bohlmann *et al.* (2016) state further that firms using this particular method for inventory cost valuation are considered to be more matching costs or prices in inflammatory areas of the country.

Hassan (2015) indicates that when a reduction in nominal interest rates and return on rand assets is made, low and stable inflation can be employed. One of

the ways to do this is by a bargaining role in the inflation-targeting policy framework. In addition, the amount of capital coming in and going out of the country is determined by the flow of the rand exchange rates. The expansionary impetus can cause the economy to be at its worst. Alley (2016) suggests the effectiveness of monetary policy instruments in achieving policy targets and realising desired macroeconomic objectives. All of this depends on the accuracy of estimates of money demand parameters and their stability. Policies are able to create measures that can reduce the exchange rates. It passes on to inflation, decreases the unpredictability of exchange rate, cuts down the monetary-induced capital flow and finally helps to improve macroeconomic consequences (Taylor, 2015).

## **2.2 Theoretical Review**

### **2.2.1 Demand-pull Theory of Inflation**

The focus of this theory is on the upswing in total demand and where inflation originates. According to Khandan and Hosseini (2016), included in the total demand is: investment, consumption, net exports and government expenditure. Khandan *et al.* (2016) add that the inflationary gap increases when the total supply (which is at the maximum employment mark) is below the value of total demand. A greater level of inflation is led by the broader gap existing between the total supply and total demand. One of the causes of inflation is the production factors and Keynesians do not disagree, even reaching full employment (Khandan *et al.* 2016). Furthermore, this theory has policies that raise a downward shift in every component of aggregate demand, which are an effective minimization of inflation and demand pressure. One way in which inflation could be combated is by increasing taxes because by doing so, less or no difference will be made during tough hyperinflation conditions if the amount of money is controlled, or by a reduction in the expenses.

### **2.2.2 Structural Theory of Inflation**

This type of inflation influences the structural factors. The analysis of structural inflation acknowledges such an experience. The aim is to get to the bottom of

this everlasting problem and disturbance that assesses a lawful relationship between these circumstances (Totonchi, 2011). Totonchi (2011) agrees that having structuralism and including certain cohorts is not necessary in order to change the present policy foundation of eradicating inflation. Therefore, the control of inflation through government intervention in the market structure and by adopting decisive plans for a just division of inflation pressure would not create an opposition. In fact, more stress will be created with these arrangements. Common anti-inflationary measures, like budgeting policy, monetary contraction and magnification of the service sector, should be observed as a level of competition (Totonchi, 2011). In addition, varied society crust has enormous share in the national income which is part of the factors of disguised inflation in the developed investment territory. It can be argued that structuralism is more effective in less-developed countries that encounter hyperinflation.

### **2.2.3 Cost-push Theory of Inflation**

Faulkner (N.d) states that this theory involves the wage-push or the profit-push theory of inflation. Wages and prices increase in each activity of inflation regardless of the cause of inflation as they underpin the increase in one another. If cost-push theory is justifiable, then a known third force outcome should not be a result because of wage-push or profit-push inflation (Faulkner, N.d). Moreover, it may be “arise in total demand or money supply or what not and the rate of inflation should have been made by an autonomous rise in wages or profits”. According to Faulkner (N.d), this inflation occurs when the economy is dominated by “Oligopolists”. Consequently, they can charge higher prices for their particular commodities, thus making use of their monopolistic situation to obtain abnormal profits. Nevertheless, Wage-Push Inflation and Trade-unions are coherent and much more powerful in fancier economies. Faulkner (N.d) mentions that labourers can triumph in obtaining greater money-wages than getting the amount of productivity permits. So far, when wage-earners demand greater money wages, they concede with the knowledge of demand increases.

This burden is borne by customers in the form of exorbitant prices. Therefore, the Government follows this full-employment policy.

#### **2.2.4 Current Purchasing Power Accounting Theory**

Asuquo, Adenike, Ogar, Ebahi and Okon (2017) agree that when an adjustment of the historical cost of an asset is made to current cost, the spot-on prices of the asset will be revealed. Hence, it would be wise to use the General Price Index (GPI) as this clearly shows the movement in price levels in both statements of profit or loss and other comprehensive income and the statement of financial position. General and consumer prices are examples of indexes/indices used to re-state units and is done on previous costs, also taking note of non-monetary items that need to be adjusted (Asuquo *et al.* 2017). Thus, this method assists the reporting regarding equal purchasing power units. Due to financial statements that have re-stated statements of financial position and re-stated statements of profit or loss and other comprehensive income, it would be necessary to prepare these using the historical cost. Lastly, in order to successfully prepare a statement involving the current purchasing power, historical cost-based financial statements would be the correct basis.

#### **2.2.5 Replacement Cost Theory**

The Replacement Cost theory enables companies to conserve their capital congruently. Asuquo *et al.* (2017) agree that entities that will continue their existence into the foreseeable future are expected to keep restoring their assets. Restoration may be made with the replacement costs used. This will then be compared with the most recent revenues obtained through these assets. However, replacement cost looks further into matters influencing people, like government embargos and costs that limit the resources needed by individuals. "This theory ensures that assets are measured in values that reflect current price changes and specific phenomena that affect individual assets, which could result in variations in the prices of such assets" (Asuquo *et al.* 2017). One of the merits of this theory is that it creates an advantage for businesses because the

amounts shown in the financial statements are the actual figures of those particular assets.

### **2.3 Theoretical Framework**

The different theories of inflation can be summarised as follows: **Cost push** - high production costs cause aggregate supply to increase; **Demand pull** - the aggregate supply constraint develops because of the increase in aggregate demand, while developing countries like South Africa face the challenging effects of inelasticity in the structure of the economy. Demand increases, production cost increases and retail price increases result in a high cost of living, hence inflation developments occur due to these imbalances. Likewise, Inflation Accounting theories are also included because, without inflation, there would not be a need to make inflation adjustments. All these theories are significant to this study, hence the integration of inflation theories with Inflation Accounting theories. This study will be hinged on the Current Purchasing Power Accounting theory because it assists in reporting regarding equal purchasing power units. It further uses general and consumer price indexes to re-state units done on historical costs, without forgetting non-monetary items that need to be adjusted. Therefore, the chosen theory is more connected to this study.

### **2.4 Conceptual Review**

#### **2.4.1 Financial Performance and Financial Performance Analysis**

According to Otambo (2016), financial performance evaluates the outcome of a company's operations and its policies in terms of money. This evaluation reflects the business' return on investment and return on assets. It is shown after a certain time period, which reflects the overall health and compliance of the company. Moreover, a comparison could be made on the company's performance with other companies in the same business sector. Tekaten (2019) highlights that financial performance analysis is a way of pointing out how strong or weak the company is. It may be done as a way to find out the connection between the statement of financial position and statement of profit or loss and other comprehensive income. Likewise, the analysis process includes selecting

information carefully from financial statements in order to make predictions of the company's financial statements. According to Teketen (2019), the financial performance of the business can be obtained by scrutinising financial information trends; making comparisons from one company to another; take note of financial ratios and also assessing the financial state from previous years, current and years still to follow. Furthermore, analysing a company's financial state answers questions such as: After a certain period, what would the financial position of the business be? How well did the company perform financially after a particular time period? On the other hand, financial statements do not fully show information pertaining to a company's financial operations but have valuable information that pinpoints very significant factors like profitability and the financial state of the business (Teketen, 2019).

#### **2.4.2 Significance of Financial Performance Analysis**

Different groups of people may have an interest or be affected by the way a business performs financially. In addition, various groups (investors, management, creditors and so forth) that scrutinize and analyse financial performance vary depending on the type of interest related to (Metcalf & Titard, n.d). Financial performance analysis is significant to these groups because it assists investors to assess the risks of investments; allows management to have an indication of the financial position of the company (whether it has improved or not); and helps creditors to determine any credit risk that may arise.

#### **2.4.3 Techniques used to Analyse Financial Performance**

Many accounting techniques are used for financial performance analysis. Inflation accounting is unique because of its ability to take note of inflation while other accounting techniques are unsuccessful in doing so (Sulucay, 1992). As a result, inflation accounting is the preferred accounting technique to give out accurate information for analysing financial performance. This study only focuses on ratios that are important for retail stores. The Return on asset (ROA) ratio is the most suitable for this study. The choice behind selecting this particular ratio from the many explained ratios is that the ROA ratio measures

how effective the economic unit is when using its assets to generate profit for retailers. In addition, the choice was determined by information accessibility. The economic unit stands a better chance of increasing if this ratio is higher (Amahalu, Abiahu, Obi & Okika, 2016).

Ratios reveal the relationship between two or more things in a numerical way. This relationship can either be shown as a percentage, a fraction or a proportion of numbers (Sowden-Service, 2019). Furthermore, Sowden-Service (2019) explains the following ratios and how the business' performance is affected:

### **Current Ratio**

The current ratio is a measure of liquidity and is calculated by dividing the current assets by the current liabilities. This ratio assists the business to have an indication of the liquid assets available to meet the period of the next twelve months of financial commitments that were made. The Current ratio also shows how weak or strong the business is. If the value is low, this may indicate that the business is struggling to meet its current obligations. Having a high percentage outcome will indicate a higher performance for the retail store. This high percentage could also mean that the company is not using its current assets in a well-organised and competent way.

### **Return on Assets Ratio**

The calculation of the Return on assets is done by dividing net income plus long-term interest expense by total assets. The usage of assets valued at original cost and the usage of assets valued at fair market value are two options in which the calculation can be done. A small alteration may be made for the inclusion of assets like land, as well as the adjustments of salaries and wages not yet paid. The return on investment obtained in the entity is measured by this particular ratio. Therefore technically, the return on assets gives people information about earnings that were generated from the capital invested. Investors are given a clear indication on how the company has been performing. A large figure will point out the strong performance of the business.

### **Working Capital Ratio**

Working Capital is expressed as a percentage of the expenses (working capital divided by cash expenses for the year). To perform the calculation of working capital, current liabilities need to be taken away from the current assets. One is able to determine the business' current liabilities obligations for the following year by the positive or negative results of the current assets at hand. It is recommended to calculate and analyse the working capital accessible when analysing liquidity. Working capital not only indicates a ratio, but also shows liquidity with regard to the rand currency. This measure is worth a great deal but would also need one to make further analysis. If there is a high percentage, this will mean that the business is well-performing.

### **Debt Structure Ratio**

This liquidity measure is computed by making a division of current liabilities by total liabilities. Briefly, this ratio is made up of a certain number of assets that the company has and that are financed by debt. A company would want to use this ratio to know what the total debt is, currently due for the business in the following twelve months. When this ratio is calculated and the results show a low percentage, it will indicate that a company's performance is high.

### **Equity Ratio**

The Equity ratio is a solvency ratio. Market value equity divided by the assets in total will give one an equity ratio. Equity is represented by the total assets that are owned by the company. To have a meaningful understandable financial performance of the company, assets are adjusted to make a further analysis. Having a high ratio will mean that the business has new investors who are keen to finance the company by investing in it. A higher percentage shows a much better performance for the company.

### **Debt to Equity Ratio**

This ratio's calculation is done by making a division of the liabilities in total against the entity's equity. Shown by this ratio is the relatedness between the



usage of the debt and the equity involved for the ability of the company being financed. The Debt equity ratio also computes how risky the company is for future reference. If the leverage ratio reflects more fixed responsibility, then exposure to danger increases. Investors would rather want to invest in a business with a low debt-to-equity ratio because just in case the company falls out, their interests are more likely to be protected, while, additional lending capital would not be attracted if the company has a high percentage. Performance is higher if a low percentage is reflected.

### **Return on Equity Ratio**

Net-income divided by retained earnings or equity will give one the return on equity results. Either the original cost of assets or fair market value assets can be used to perform this calculation. If salaries have not been paid, then an adjustment is required to account for this. This ratio provides information on how exactly the company is in debt in its capital structure. The return on equity ought to be more than the return on assets. If a greater return on assets is expected to be more than the ROE, this will stipulate that the business is not getting enough money to settle interest on money that has been taken. A large figure will show a better performance of the retail business.

### **Asset Turnover Ratio**

The Asset turnover ratio is an efficiency ratio which is calculated by dividing gross revenue by total assets. The Asset turnover ratio shows the degree to which the company makes use of its assets in order to have its revenue generated. When the asset turnover ratio is high, this means that better assets are used more efficiently, although this ratio would differ from one business to another depending on the location and the type of business being carried out. If the result reveals a low percentage, the company is more likely to be having production or management issues. A high performance by the retail company is indicated if the percentage is also high.

### **Gross Margin Ratio**

The Gross margin (profitability) ratio is calculated by subtracting the cost of goods sold from total revenue and divide by total revenue. Gross margin ratio is completely different from the profit margin ratio. This calculation measures how efficient the company's financial performance is and gives a clear picture of the company's ability to grow in dimension or complication, as well as measures how profitably the business can make sales from its inventory. One way to increase this ratio is to purchase cheap inventory and keep the costs as low as possible. The higher the percentage is, the higher the level of business performance.

### **Net Operating Profit Margin Ratio**

The calculation of this ratio is performed by subtracting overhead and administrative costs from the contribution margin. The margin is then divided by gross revenue. A consideration for adjusting *not yet paid* salaries and wages should be made. Depreciation usually has strong effects on performance. Tax rates should not be applied when the calculation is made, rather use a straight line as a basis. High performance is noted because of the high percentage.

### **Amortization Expense Ratio**

The abovementioned ratio calculation is done by dividing amortization expenses by gross revenue. Measured by this ratio is depreciation, which is linked to the sales. The amortization expense ratio will be high if the company has new assets. The trend line should be monitored for this ratio. There is a mutual relationship between the amortization expense and the return on assets. Low inflows of economic benefits will result from a high amortization expense. The results will show a high performance if the calculation outcome shows a low figure.

#### **2.4.4 Demand-pull**

Amadeo (2019) describes demand-pull inflation as a well-known cause of inflation that begins with the rise in consumer demands. The rise occurs when

the total demand for goods and services are greater than the supply. Moreover, supply shortages cause sellers to increase their prices when additional supply is not available. Surbhi (2016) suggests that this supply shortage is influenced by monetary factors. Some of those factors force the aggregate demand to increase rapidly. Furthermore, evidence cannot be manipulated that inflation is able to exist without excess demand. In addition, monetary policy assures that future levels of prices will be more stable and will behave in a more acceptable way. Amadeo (2019) indicates that inflation could be both demand-pull and cost-push, but these forces cannot be either one of them alone.

#### **2.4.4.1 Causes of Demand-pull Inflation**

According to Mikolajun and Lodge (2016), **Economic growth** results in a reduction in borrowing costs and increases in investments and spending. In addition, exports become cheaper and imports are more expensive, leading to an increase in domestic demand as it is expected that there will be more spending than saving. **Inflation expectations** – When people become aware that they should expect inflation to avoid high price increases in future, they would rather buy things now than at a later stage in order to save (Surbhi, 2016). This creates demand-pull inflation because of the increase in the demand for goods or services, which becomes difficult to stop. Amadeo (2019) agrees that real factors are resultant from an upward pressure in government spending. If there are no changes in tax revenue or decreases in tax rates, there would not be any difference in government spending. **Discretionary fiscal policy** – This policy is applied when the government decreases taxes, which in the end causes consumer demand to increase sharply (Surbhi, 2016). **Powerful brand products** – some brands are more recognisable than others. Therefore, there will be high demand for certain products, for instance cars and cell phones. Lastly, **technological innovation** – This attracts people who think it is a must-have and will be a new improvement in their lives. This attraction is caused by the latest trends and new features, which raises demand.

### **2.4.5 Cost-push Inflation**

Surbhi (2016) states that “Cost-push inflation means the increase in the general price level caused by the rise in prices of the factors of production due to the shortage of inputs i.e. labour, raw material, capital, etc.” As a result, this decreases output supply which usually requires inputs. The rise in prices of the goods appears from the supply side because suppliers understand that consumers use goods or services and will pay for it regardless. Amadeo (2019) denotes that cost-push inflation begins with a drop in total supply, influencing the increase in the cost of that supply. Factors of cost-push forces, such as union power, become a determinant of the natural rate of unemployment. Moreover, the structural rate of inflation solely depends on the path of monetary policy (Schwarzer, 2018).

#### **2.4.5.1 Causes of Cost-push Inflation**

Surbhi (2016) state that profit-push inflation occurs when monopoly power is used by firms operating in the monopolistic and oligopolistic markets. Monopoly power is used to increase their profit margins. This forces employers to increase the price of the goods and services they provide. Wage-push inflation arises whenever labour unions exercise their monopoly power to enhance their money or wages above the competitive level. When this is done, it causes an upward movement in production costs. Lastly, supply shock inflation is influenced by Inflation (Surbhi, 2016). It originates from an unexpected downswing in the supply of useful consumer goods or the main industrial inputs.

### **2.4.6 Structural Inflation**

Nyoni (2018) describes this type of inflation as damaging or as shortening the supply. Consequently, changes in governance force external prices to increase prevalence in low or developing countries. In addition, structural inflation tends to focus more on the supply side of the economy and is mainly influenced by the functioning problems in the economy. Nyoni (2018) adds that this type of inflation arises when certain procedures are not able to adopt the structure of

production in a manner that would be efficient along with economical movements.

#### **2.4.6.1 Causes of Structural Inflation**

When the cost of living increases above the set limit, it leads to price and demand increases. Nyoni (2018) states that export growth rate in an economy that is still finding its way up can be dragging and unstable, resulting in the inadequacy of support for the growth rate requirements in the economy. Furthermore, it is argued whether developing countries are responsible for inflation because of their weak economic structure. Export growth being sluggish is barely structural. It is merely an outcome of being unable to achieve the goal of export opportunity exploitation due to over-valued exchange rates (Nyoni, 2018). Moreover, although foods products can be imported, they are costlier than those which are domestic. Therefore, it becomes quite impossible to import huge quantities of agricultural products due to constraints from foreign exchange. According to Nyoni (2018), the inconsistent growth rate of exports and constraints in foreign exchange are the main causes of the industrialization policy, which is based on import substitution. In addition, firms require more funds from banks and the government needs more funds in order to finance larger deficits. This will contribute to the upward shifts in expenses of its employees, contributed to by the upswings of prices. Thus, monetary expansion and inflation rates will be forced to increase (Nyoni, 2018).

#### **2.4.7 Inflation Accounting**

According to Mishra (2018), this process involves making adjustments in the business's financial reports or financial statements. Price indexes are used to make an indication of how the financial position in the financial statements should look during inflation times. This includes taking note of the company's transactions at current value. Besides, this special technique aims to show exactly how increases in costs occur. Nevertheless, down movements in the purchasing power of currency negatively influence the re-financing costs of

entities' useful assets. These are some of the issues related to historical cost accounting during inflationary periods.

#### **2.4.7.1 Methods used for Inflation Accounting**

Mishra (2018) further describes different methods of how to use this accounting technique, namely:

##### **Current Purchasing Power (CPP)**

As movements in prices are experienced, the adjustments of financial statements need to be made and that is when this method takes over. Many value items are changed with the assistance of the general price index being used. By doing so, amounts are adjusted accordingly and past costs at current purchasing power are dealt with. This method focuses more on the purchasing power of money, rather than upswings or downswings of item values. Moreover, the reason why this method has been developed is to take note of movements in money worth, as this affects the mark of the general price. This method also contributes when there has been a level of cost changes, causing a shift in cost together with revenue. Financial statements are then presented in constant figure terms.

##### **Replacement Cost Accounting (RCA)**

Recorded on the company's statement of financial position are the replacement costs of assets and liabilities, instead of recording their previous costs. One can say that this method is a definite step up from the previously mentioned technique (CPP). This is concluded by taking note of the individual price index. The price index contains certain relevant asset items that are included on the company's financial statements. The current purchasing power method does not focus on this.

##### **Current Value Accounting (CVA)**

The measurement of all the assets and liability elements in the financial statements is done at current value. The current value is an amount for which

the asset may be disposed of or paid in full at the present date. Opening and closing balances of total assets at the end of the reporting period or changes from beginning and the end will be regarded as a gain or a drop in the financial statements. A constituent of subjectivity is picked up in this particular technique. It is quite a mission to figure out the current figures that would be applicable.

### **Current Cost Accounting (CCA)**

For this method, the asset element of financial statements is reflected as a cost that is current. Therefore, gains are ascertained through the date of disposal of the assets basis and not its actual figure. The most important part of this method is how the financial statements are prepared on the present figures of each item and not on past amounts.

#### **2.4.7.2 Constructive and Deconstructive Effects of Inflation Accounting**

Huge amounts of profit have been noted in a lot of different businesses. However, it does not end there because they also experience an extreme level of financial problems. According to Javed (2019), if one looks at this from a different perspective, the main reason for this cause is that taxes and dividends are being settled from the anticipated capital, leading to an increase in the amount of more than what it should be on the gains obtained from a historical cost basis adaptation. Moreover, in order to have this corrected and have a fairly presented statement of financial position, a recommendation would be to make use of inflation accounting instead of using a past cost basis. Before making use of this recommendation, companies should be aware of the advantages and disadvantages.

#### **Merits**

An inflation accounting technique allows a business to show or have a sensible picture of their gains as a result of present cost coordinates with present revenues. The reasonability of replacement on assets is shown as the rightful value and depreciation is levied on present figures (Javed, 2019). On the other hand, companies are enabled to continue with their capital by not paying

attention to amounts that need to be paid for taxes and dividends from capital still outstanding, caused by gains previously inflated from the basis of historical amounts. What is more, the statement of financial position is fairly presented. It will reflect amounts which are true if price level accounting methods are considered to be used. This type of accounting also reviews any suspicious things which may be giving a wrong impression on historical costs that attempts to show huge amounts of tax and profits.

### **Demerits**

According to Javed (2019), not any business would be able to afford this type of accounting technique because it is known to be very costly compared to most other used methods. Less depreciation will be charged, and gains are overstated when adjustments on price level are made because of cost reduction caused by deflation. Therefore, this technique would not be useful to an ordinary person, other than an experienced individual or a person who specializes in that field, because of its detailed and very complex calculations. Complexity will make the financial report or financial statements far from easy to understand. Javed (2019) states that most people agree that price level accounting seems like a great idea in theory but not practically. Furthermore, this technique is just used to hypnotise individuals into believing that it is the suitable method. In addition, adjustments need to be constantly made, which includes using different amounts, removing certain values and replacing some figures. On the other hand, the valuation process is said to be subjective because inflation accounting is unable to apply this technique to figure out the real value of the assets. Moreover, if one looks at this realistically, it's not that easy to make an adjustment to most recent figures.

### **2.4.8 Historical Cost Accounting (HCA)**

While some people might have a positive view and others may not have great feedback on this type of technique of basing costs, one is able to draw one's



own conclusion from the different writers as to whether this method is indeed misleading and unreliable, or not.

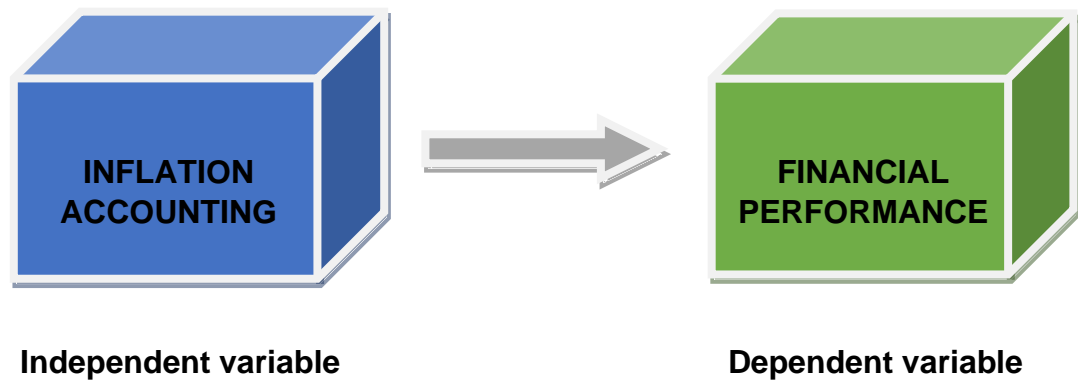
Ebiaghan (2019) indicates that what makes the old base cost method weak would be its use and how reliable it is in the way the balance is presented, which is shown in the statement of financial position. If reliability is questioned, then the information being presented would very likely not be useful. Additionally, the historical cost basis fails to reveal exactly whether the business obtains enough cash flow in order to be able to keep up with its real capital. Thus, there is a need to make the necessary adjustments during the periods of inflation encountered. Hashim, Jumaah and Jasim (2019) explain that bygone costs are much easier to interpret since it pays attention to costs which are fixed. This is convenient because they are accessible at any time. Furthermore, the old cost method can be used with ease as it is stable in nature and has a variety of outputs. Hashim *et al.* (2019) highlight that there would be doubt for using this technique as it fails completely to reveal the true figure of assets in periods still to come. The American system of accounting usually uses historical cost as a basis. If fair value replaces the old accounting method, this can improve the accuracy of figures or may possibly cause disorder. Moreover, the regulating authorities know about the implications of using fair value and the previous cost accounting basis as they may lead to creating the wrong idea about information provided in the financial statements, which might cause systematic risks.

According to Amaefule, Okoye, Kalu and Nwosu (2018), historical cost is quite good when one needs to make a measurement of assets. However, problems are encountered when prices shift after sometime between the date assets were bought and the current date. Therefore, these past costs will no longer be relevant if the main reason to do a measurement is to show the most recent economic gain reflected in the financial statements. Amaefule *et al.* (2018) adds that another disadvantage of using this basis is that the figures of assets that are used to obtain sales increase the gain. Tax and dividends are then overpaid.

The fair value measurement is thus preferred over the historical method of accounting.

## 2.5 Conceptual Framework

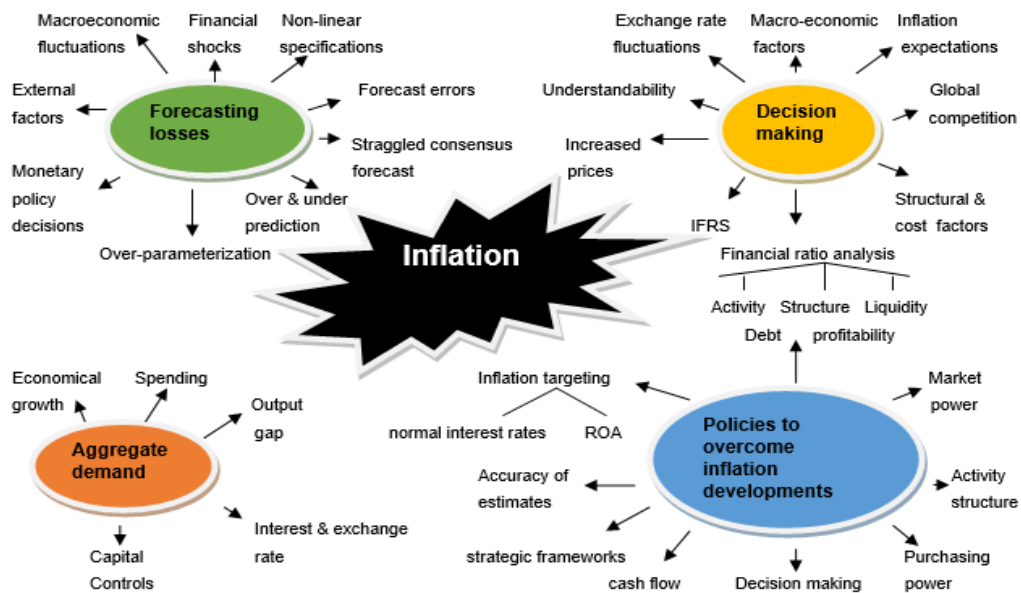
**Figure 1: Conceptual Framework One**



Source: Author's Design (2020)

Figure 1 depicts the relationship between inflation accounting (control variable) and the financial performance (response variable) of retail stores.

**Figure 2: Conceptual Framework Two**



Source: Author's Design (2020)

Figure 2 shows some of the influential aspects of inflation on the retail stores. The integral segments outlined are: decision-making that the retail stores has to consider; policies that will overcome and control inflation developments; factors contributing to forecasting losses; and an overview on how aggregate demand has an effect on retail stores through inflation. These segments all have a common relationship with inflation. Inflation is a contributing factor of disruption in the retail business environment.

## **2.6 Summary of Literature and Identification of Gaps**

After a clear review of literature relevant to this study, it was evident that inflation accounting will continuously be an important argument for many years and that inflation will always have a precarious effect on financial statements. Studies from various scholars referred to in this investigation indicate a positive relationship between inflation accounting and the financial performance of retail stores. Inflation may affect companies in several ways, although situations might differ from one company to another. If management does not keep an eye on inflation, it could have a problematic and a dangerous effect on a company's financial statements.

When a study pays attention to dissimilar concepts or uses variables that are different, a conceptual research gap arises. Secondly, a contextual research gap was identified because the studies have different geographical information, as well as different sectors. Different methods were used in previous studies to analyse the same concept. However, the conductor of this study found limited studies on this subject matter in South Africa. It is wise to have an approach that is uncommon in order to make comparisons, thereby; a gap for research methodology is picked up. A need to compare results exists. It is advisable that more studies like this study are conducted.

Due to these different results, as well as research gaps, the study established the effects of inflation accounting on the financial performance of retail stores in

KZN, South Africa. This study will help to fill that gap for future scholars wanting to conduct a similar study. Furthermore, it will assist readers to have a better knowledge, not only in South Africa but around the globe. By applying inflation accounting applications and appropriate policies, the gaps identified in this case study will be filled. This will enable users to make informed and effective decisions in the company, thereby keeping the business at its most favourable operational level. The statement of financial position and statement of profit or loss and other comprehensive income is adjusted according to inflation fluctuations. It is recommended to calculate its effects, even when inflation is at low rates, rather than not assessing it at all.

## **2.7 Chapter Conclusion**

The literature review reveals the consideration of inflation when making organisational decisions for retail stores; reviews the factors that lead to statement adjustments; provides a conceptual review, conceptual framework, theoretical review and identification of literature review gaps. For the purposes of this study, the next chapter will focus on the research methodology based on the research design, population size, sampling, data collection, data analysis, validity and reliability, justification of methodology, anonymity and ethical consideration.

## CHAPTER THREE

### METHODOLOGY

#### 3.0 Introduction

This chapter focuses on the research methodology. Explaining clearly and concisely the study's research design, target population, sampling design, data collection and data analysis.

#### 3.1 Research Design

A questionnaire is used for this study that consists of both open-ended and closed-ended questions. Hence, this study follows a pragmatic research paradigm. The qualitative aspect of the research will be based on the open-ended questions in the questionnaire where respondents can discuss the questions asked. In addition, the quantitative aspect of the research will be based on the data gathered from the five-point Likert scale closed-ended section of the questionnaire.

#### 3.2 Population

Retail stores in the Kwa-Zulu Natal (KZN) province have been selected for the analysis on its financial performance. There is an approximation of 30 retail stores listed on the Johannesburg Stock Exchange (JSE) in South Africa<sup>1</sup> but only a sample of 20 out of 30 listed JSE retail stores will be visited because other listed JSE stores are inaccessible in the KZN area. Only those that are easily accessible are selected because the researcher is in close proximity to where the research is held. There is countless number of retail stores in South Africa. Therefore, to reduce the large number and make the sampling easier, only listed retail stores will be visited.

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<sup>1</sup>: [www.jse.co.za](http://www.jse.co.za)

### **3.3 Sampling Technique and Sample**

Based on some restrictive factors, retail stores from some areas in the province are inaccessible due to them being in a remote area. Hence the selection of retail stores being visited in KZN due to easy accessibility. A convenience sampling technique which falls under a non-probability sampling technique is used. According to Etikan, Musa and Alkassim (2016), the convenience sampling technique is used when the researcher uses information that is readily available. This technique is useful when randomization is impossible on a large population.

### **3.4 Data Collection - Primary data**

In order to achieve the four objectives of this study, the ordinal and likert questionnaire will be designed. Ordinal data is used to reveal a systematic order of the information that is collected. While, the Interval scales show the order of the feedback, distance and employs equal units of size for the scale. A likert scale is measured on 5-point values starting from (1) “strongly disagree” up to (5) “strongly agree” to interpret the ranking levels (Kumar, 2014).

The questionnaire issued to respondents will be dropped and picked up later (timing might be challenging for the respondents to have the questionnaire answered). The questionnaires which are unable to be completed after being issued will be collected the next day at the agreed time with the respondent. The research conductor has another option to wait for the questionnaire and get it immediately after being answered by the respondent (if the respondent is able to answer the questionnaire immediately). The questionnaire should take about 20 minutes each to complete.

A total of 200 questionnaires will be administered to respondents from 2 different branches per store in each of the 20 JSE-listed KZN retail stores. Specifically, 5 questionnaires will be administered to each visited store. The respondents are: Financial managers, Store Managers, Sales associates, Store buyers and Team leaders of logistics departments. Responses from the administered questionnaires will be useful to measure the objectives of the study. The

researcher chose to use the questionnaire because it is not intricate or biased, allowing the respondents to answer open and closed-ended questions.

### **3.5 Data Analysis**

A mixed method approach will be used for this study, comprising both quantitative and qualitative data analyses. The mixed method falls under the Pragmatic Paradigm. Kumar (2014) defines the quantitative method as a method that is more precise, tested for reliability and validity, well-structured, defined in detail and recognised. On the other hand, a qualitative method is less detailed and either has lesser attributes or does not have them at all (Kumar, 2014).

The quantitative analysis will be based on the responses from the closed-ended set of questions on the likert scale questionnaire, which will be coded and analysed using the Statistical Package for the Social Sciences (SPSS). The qualitative analysis will be done on the open-ended aspect of the questionnaire. This will be analysed using the Explanatory Factor Analysis (EFA) to determine the factor structures of items employed to measure each of the constructs measured in this study. The next test that will be done is the Cronbach's alpha test to determine the reliability of each construct. The Kaiser-Meyer-Olkin (KMO) will also be employed to establish the adequacy of the sample size for this study. Hayakawa (2020) stated that the KMO test is used to measure the suitability of data for factor analysis. Lastly, linear regression will be done to determine the influence of the independent variables against the dependent variables.

### **3.6 Data Validity and Reliability**

Bryman and Bell (2015) postulate that validity refers to whether an indicator devised to gauge a concept, really measures that concept, whilst reliability refers to a measure that is consistent towards a concept. There are three (3) factors involved when assessing if a measure is reliable: stability, internal reliability and inter-rater reliability. Therefore, for the quantitative analysis, this study will use Cronbach's alpha test to determine the reliability of each construct and

Cronbach's alpha coefficient will be performed to ascertain the internal consistency of factors that are to be extracted. Furthermore, Bartlett's test of Sphericity will be used to determine the significance level, which will justify why the EFA is performed. Furthermore, face and content validity will be the validity tests carried out on the data. For the qualitative analysis, trustworthiness is established. Trustworthiness constructs such as credibility, transferability, dependability and conformability will be used.

### **3.7 Justification of Methodology**

The use of secondary data was initially the preferred method for the study, but the researcher could not find the correct model structure. Using primary data was the second option, which will be adopted since it is more suitable for this study.

### **3.8 Anonymity**

All the participants' identities will be protected during the study and they will be referred to as being anonymous. Any retail store's identity will be clearly stated in the study.

### **3.9 Ethical Consideration**

The four ethical aspects have been considered to ensure that there is no invasion of privacy, no harm to participants, no lack of informed consent and no deception. All these will be adhered to during the research study.

### **3.10 Ethical Clearance**

The Ethical clearance required to administer the questionnaires will be received from the Faculty of Accounting and Informatics, Durban University of Technology, South Africa.

### **3.11 Potential Outputs**

The thesis will be published and made available in the DUT library and on the internet for national and international researchers conducting a similar study.



Additionally, four research papers will be published from this research work as each objective is publishable.

### **3.12 Chapter Conclusion**

Outlined in this research chapter were the methods applied and procedures adhered to during the course of the study. The following chapter will focus on the presentation and discussion of results obtained from the respondents.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION OF RESEARCH FINDINGS

#### 4.0 Introduction

This chapter presents the results of the research findings of this study, which investigated the effects of inflation accounting on the performance of retail stores in KZN, South Africa. The outcome of the analysis is presented per study objective.

During the data collection process, information was gathered using 200 questionnaires which were administered to respondents from 2 different branches in each of the 20 retail stores. The study surveyed five employees in each branch per store. The handing out of questionnaires was done once the respondent had read and signed the consent letter, which was kept separately to ensure anonymity. The researcher received 161 completed questionnaires from respondents. This is very good because it implies that the response rate is 80.5%<sup>2</sup>, although a small portion of questionnaires were partially complete due to time limitations that the respondents had. On the other hand, 39 (19.5%) questionnaires were returned unanswered by the participants.

Once the questionnaire collection process was complete (in which the conductor had to wait or drop and pick up later), data was coded and statistically analysed afterwards using the Statistical Package for the Social Sciences (SPSS) program. The findings are discussed according to the parts of the questionnaires, namely: Part A – demographic information and Part B – a scale to assess the effects of inflation accounting on financial performance.

#### 4.1 Quantitative Analysis

##### 4.1.1 Descriptive Analysis of Demographic Data

The demographic section of the survey questionnaire elicited six (6) categories of demographic data from the survey respondents, which includes gender, age

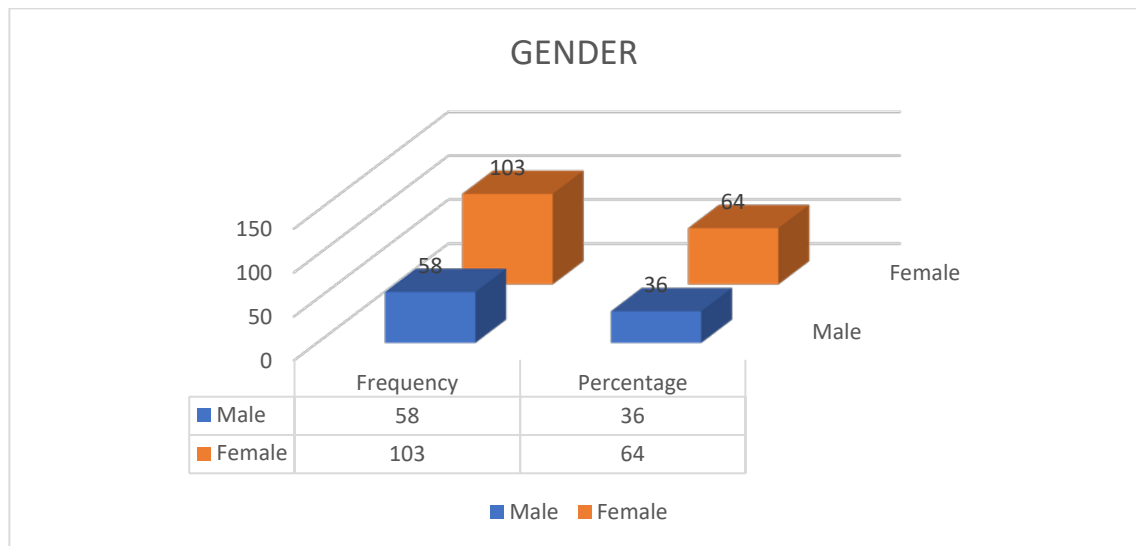
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<sup>2</sup>:  $161/200*100$

group, marital status, educational background, work department and work experience. The following bar charts in the Figures depict the respondents' demographic details.

#### 4.1.1.1 Gender

**Figure 4.1: Gender of participants**



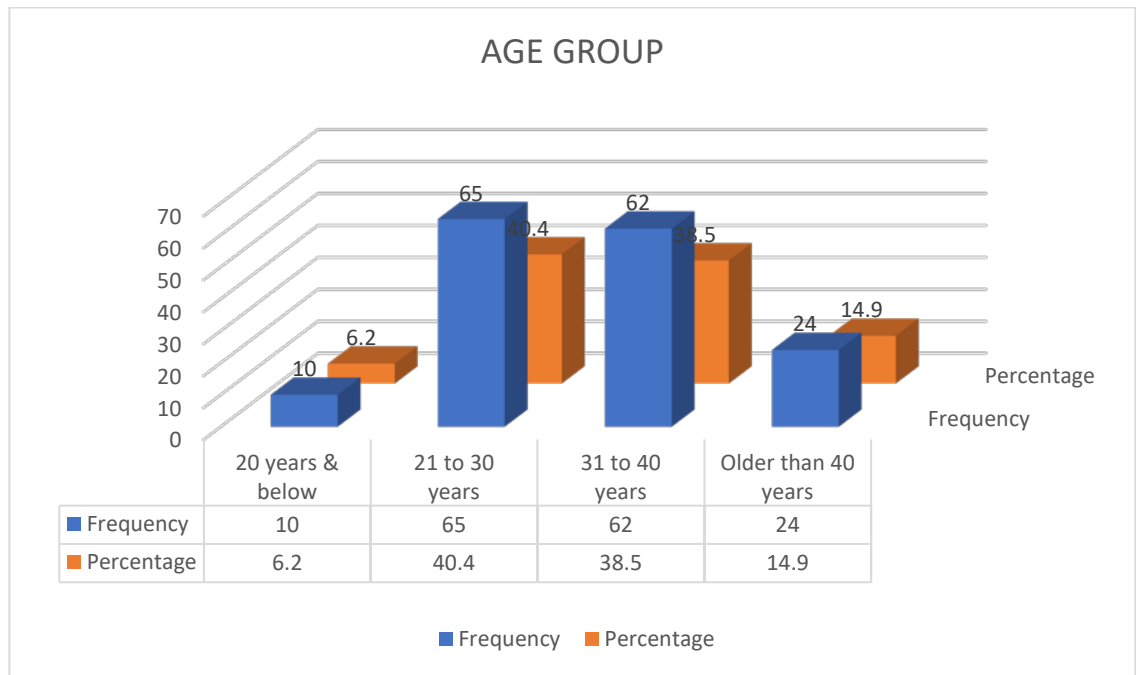
Source: Researcher (2020)

**Figure 4.1: Demographic background of respondents classified by their gender**

As shown Figure 4.1, 58 of the total respondents (representing 36%) were male, while 103 (representing 64% of the total respondents) were female. Based on the outcome of the statistical analysis, most of the study participants were female.

### 4.1.1.2 Age Group

Figure 4.2: Age



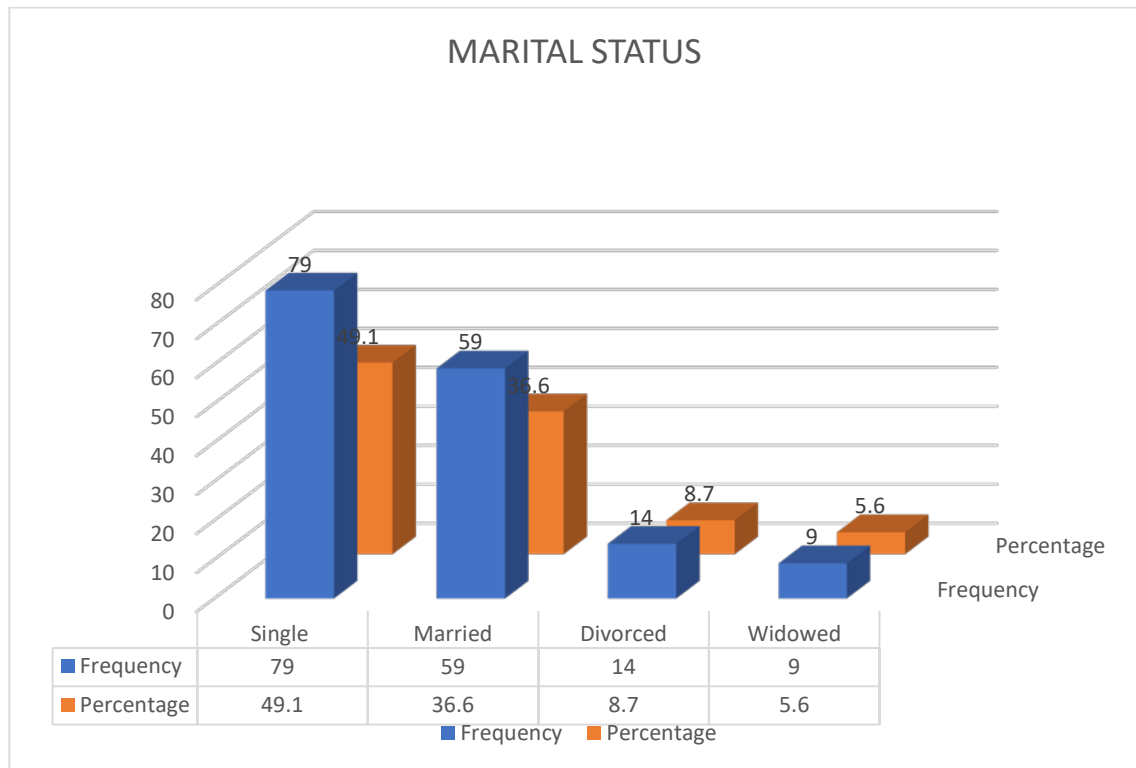
Source: Researcher (2020)

**Figure 4.2: Demographic background of respondents sorted by their age groups**

Figure 4.2 shows that respondents within the age category of 20 years and below were 6.2%; 21 to 30 years of age were 40.4%; 31 to 40 years were 38.5%; while respondents above 40 years of age were 14.9%. Based on this outcome, most of the survey respondents were above 30 years old (53.4%).

### 4.1.1.3 Marital Status

Figure 4.3: Marital status



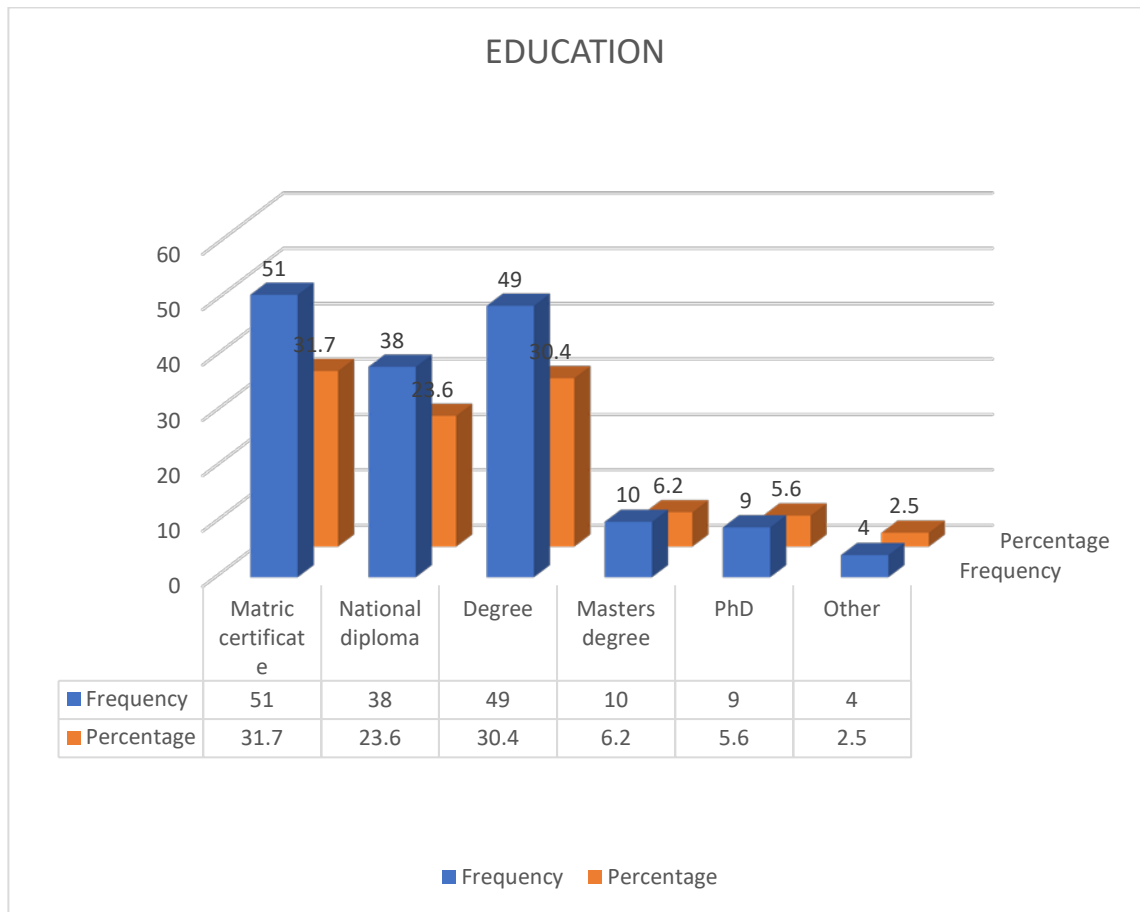
Source: Researcher (2020)

**Figure 4.3 Demographic backgrounds of respondents classified by their marital statuses**

Figure 4.3 shows the marital statuses of respondents as follows: single was 49.1%; married were 36.6%; divorced were 8.7%; while widowed were 5.6%. Results show that many respondents were single (49.1%).

#### 4.1.1.4 Educational Background

**Figure 4.4: Educational Background**



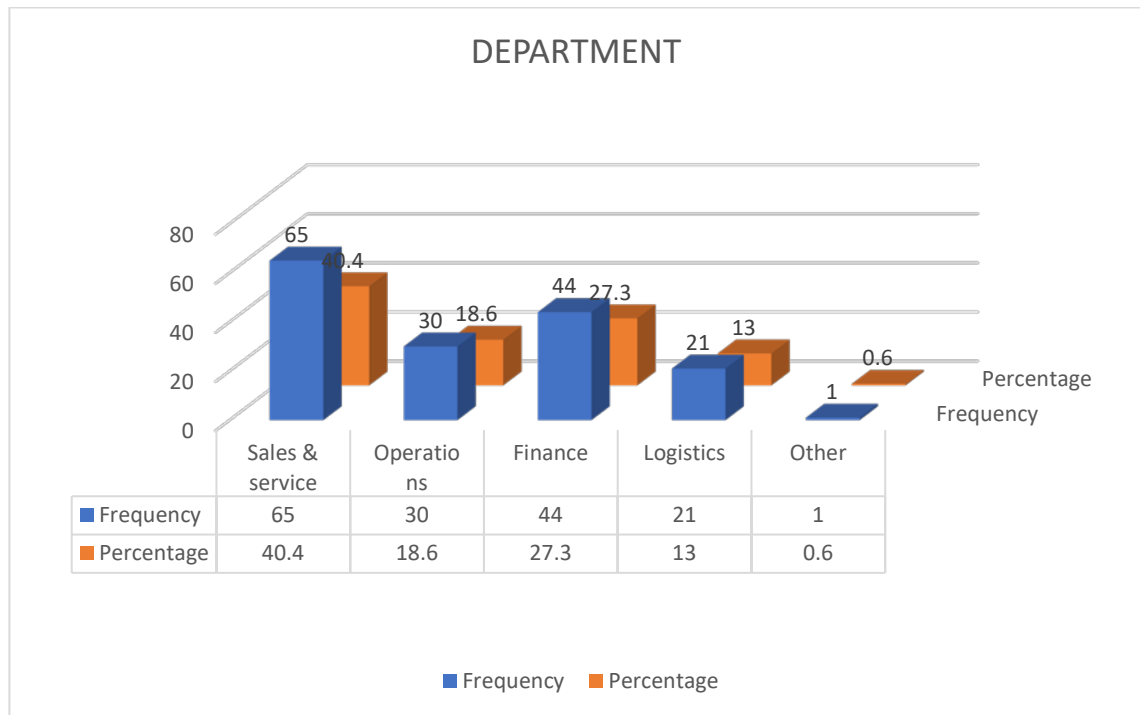
Source: Researcher (2020)

**Figure 4.4 Demographic backgrounds of respondents arranged according to their educational backgrounds**

Figure 4.4 highlights that respondents with Matric certificates were 31.7%; National diplomas were 23.6%; Degrees were 30.4%; Master’s Degrees were 6.2%; PhD’s were 5.6%; and those with other certificates were 2.5%. Results illustrate that most respondents have Matric certificates (31.7%).

#### 4.1.1.5 Work Department

**Figure 4.5: Work Department**



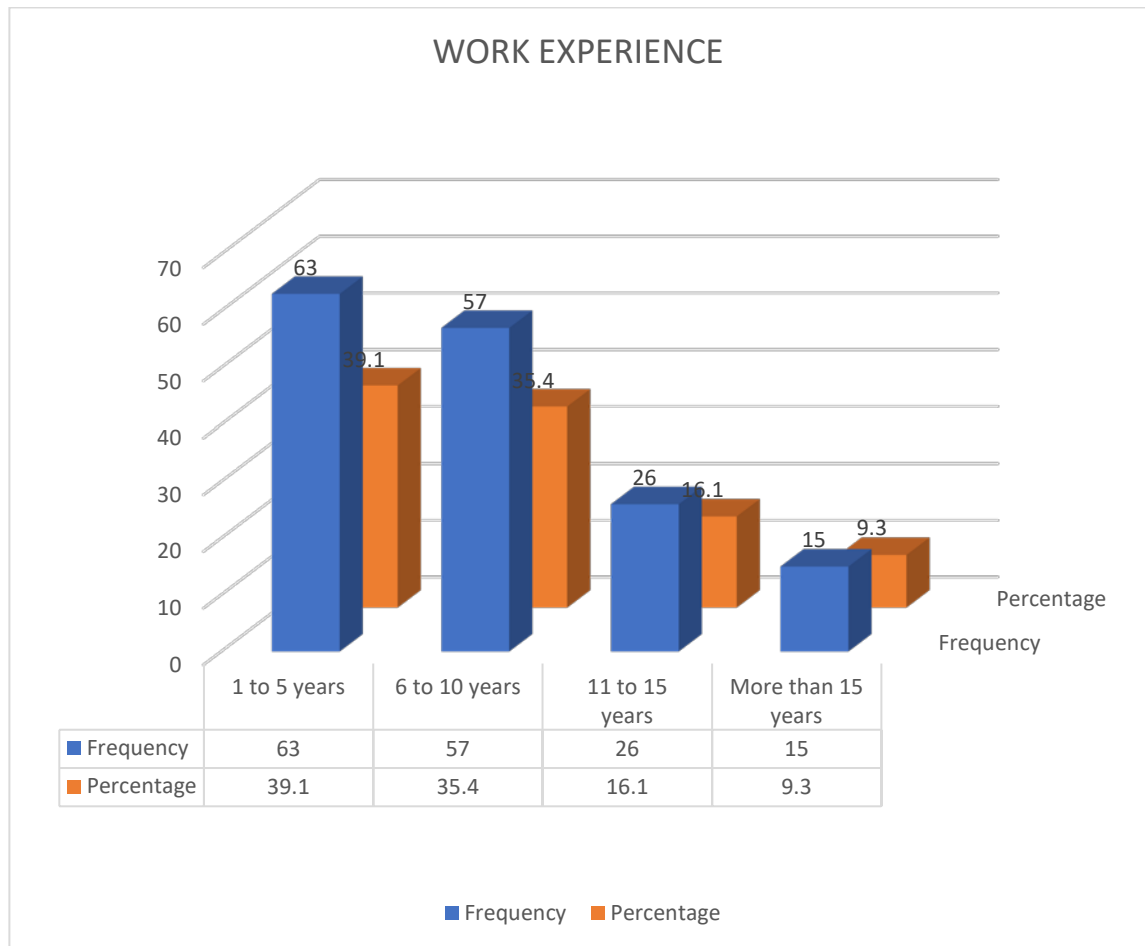
Source: Researcher (2020)

**Figure 4.5 Demographic backgrounds of respondents classified by their work departments**

The bar chart in Figure 4.5 shows that respondents who work in the department of Sales and service were 40.4%: Operations 18.6%: Finance 27.3%; Logistics 13% and other 0.6% respectively. Results show that the highest responses received were from the Sales and service department (40.4%) and the least were received from other departments (0.6%). It would make sense for the highest number of participants to come from the sales and service department because it is known to be the biggest department in retail stores.

#### 4.1.1.6 Work Experience

**Figure 4.6: Work Experience**



Source: Researcher (2020)

**Figure 4.6: Demographic background of respondents categorized by their work experience**

Figure 4.6 showcases work experience of the survey respondents. According to the statistical analysis, 39.1% of the respondents have work experience between 1 to 5 years, while 35.4% have worked 6 to 10 years; 16.1% have 11 to 15 years of work experience; and the remaining 9.3% have work experience above 15 years. Results reveal that a majority of respondents have worked between 1-5 years (39.1%), which implies that these respondents would be the ones who are new to the retail environment.



## **4.2 Analysis of Research Objectives**

This study has used inferential statistics to make generalizations on the effects of inflation accounting on the financial performance of retail stores in KZN, South Africa. It has been valuable to determine the influence of inflation on organisational decisions; to comprehend the factors that lead to statement adjustments for retail stores in KZN; to examine the effects of inflation accounting on the financial performance of KZN retail stores; and to establish the influence of organisational decisions on performance amongst retail stores in KZN. The exploratory factor analysis test was prepared to diminish the dimensions and eradicate redundant questions or responses that did not have any impact on the variable against the answer. The next test done was the Cronbach's alpha test to determine the reliability of each construct. Lastly, a linear regression was performed to determine the influence of the independent variables on the dependent variables.

### **4.2.1 Explanatory Factor Analysis Test (EFA)**

An Exploratory Factor Analysis (EFA) was conducted to determine the factor structures of items employed to measure each of the constructs evaluated in this study. Furthermore, the EFA was used to minimize dimensions and edge out any missing data. The EFA has been very useful in order to guarantee the process of linearity. The Principal Component Analysis (PCA) has been used to establish which factors need to be extracted. Joliffe and Cadima (2016) describe PCA as a technique that is used to cut down the dimensionality of datasets, increase interpretation and to lower the loss of information.

The Kaiser-Meyer-Olkin (KMO) test was employed to establish the adequacy of the sample size for this study. The KMO test is used to measure the suitability of data for factor analysis. According to Hayakawa (2020), the KMO entry level is from the value of 0.5 but 0.6 is mediocre, whilst 0.7 and 0.8 is good, 0.9 great and above 0.9 is considered excellent. In conducting the EFA, items with a factor loading of 0.5 and above were retained, while items with loadings of below 0.5 and items that cross loaded were dropped in the final analysis. The reason

for dropping loadings below 0.5 is to avoid feedback or questions that do not have an influence on the variable as some factors are not strong enough. De Boeck, Cho and Wilson (2016) highlight that if one is aware of the success rate of cognitive test items, one will have a better understanding of what is being measured and one would also have a construction item.

In order to determine the reliability of each construct, Cronbach’s alpha test of reliability is employed. In addition, Cronbach’s alpha coefficient is calculated to ascertain the internal consistency of factors that were extracted.

#### 4.2.2 Exploratory Factor Analysis

**Table 4.1: Sampling Adequacy**

<b>Kaiser-Meyer-Olkin measure of Sampling adequacy</b>		
<b>Bartlett’s test of Sphericity</b>	Approx. Chi-Square	.756
	df	12230.236
	Sig.	.000

Source: Researcher (2020)

As illustrated in Table 4.1, the KMO for this study is 0.756, which is of the adequacy of the sample. The Bartlett Test of Sphericity is significant at ( $p < 0.001$ ), which justified why the EFA was performed. The Tables below showcase factor loadings of the items measuring each of the constructs in this study.

**Table 4.2 Factor: Organisation Decision (OD)**

<b>OD items extracted</b>	<b>Factor loadings</b>
<b>OD 1</b>	<b>.724</b>
<b>OD 2</b>	<b>.707</b>
<b>OD 3</b>	<b>.650</b>
<b>OD 4</b>	<b>.503</b>
<b>OD 5</b>	<b>.637</b>

<b>OD 8</b>	<b>.613</b>
<b>OD 9</b>	<b>.599</b>
<b>OD 11</b>	<b>.611</b>
<b>OD 12</b>	<b>.615</b>
<b>OD 13</b>	<b>.688</b>
<b>OD 14</b>	<b>.586</b>
<b>OD 15</b>	<b>.505</b>
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.891</b>	<b>12</b>

Source: Researcher (2020)

Table 4.2 illustrates the factor loadings of the items retained for *organisation decision*. Of the 15 items used to measure the constructs, only three items below the threshold of 0.5 were dropped; while the items retained after conducting the EFA include: **OD 1** - My organisation decisions include a careful scrutiny of every possible alternative ( $\sigma = 0.724$ ), followed by **OD 2** - My organisation decisions include an appraisal of every possible alternative ( $\sigma = 0.707$ ), **OD 3** - I am aware that decision-making in management is an essential skill required for businesses as it determines the success of the retail store I work for ( $\sigma = 0.650$ ), **OD 4** - The person responsible becomes accountable for bad decisions made for the retail store ( $\sigma = 0.503$ ), **OD 5** - Inflation alters figures in the company's financial statement even when the rate is low; this change affects the business operations ( $\sigma = 0.637$ ), **OD 8** - Having enough cost information plays a big role in making decisions for my organisation ( $\sigma = 0.613$ ), **OD 9** - I have a good understanding of environmental factors (technological, economical etc.) for the retail store I work for ( $\sigma = 0.599$ ), **OD 11** - It's always wise to have a retail strategy in order to meet the store objectives ( $\sigma = 0.611$ ), **OD 12** - The store I work for has management with good leadership skills on employees, communication and customer service skills ( $\sigma = 0.615$ ), **OD 13** - Timing of decisions made is very important in order to view any conditions which may exist at a particular time ( $\sigma = 0.688$ ), **OD 14** - I'm aware that employee

participation in decision-making makes the execution easier for the retail store ( $\sigma = 0.586$ ) and **OD 15** - Decision-making is negatively affected when financial data is outdated ( $\sigma = 0.505$ ) respectively. The 12-items retained for the measure of this construct (organisation decision) have good reliability with a Cronbach's alpha of 0.891. Good reliability is an indication of the internal consistency of the construct measures (Sekaran & Bougie, 2016; Wilson, 2014).

**Table 4.3 Factor: Statement Adjustments Factors (SAF)**

SAF Item extracted	Item factor loadings
SAF 2	.513
SAF 3	.621
SAF 11	.559
<b>Cronbach's alpha</b>	<b>No. of items</b>
.653	3

Source: Researcher (2020)

Table 4.3 above indicates the factors retained for the measurement of *statement adjustments adjusted factors*. Of the 11 items used to measure the constructs, eight items below the threshold of 0.5 were dropped. The factor loadings of the items retained include: **SAF 2** - Ratios help to predict an entity's future financial wellbeing ( $\sigma = 0.513$ ), followed by **SAF 3** - Forecasting accurately & having the strategy to bias forecasts in some manner are two competing incentives ( $\sigma = 0.621$ ) and **SAF11** - Forecasting too many products or having high volumes of stock can affect cost aspects like; inventory holding cost and obsolescence cost ( $\sigma = 0.559$ ) respectively. The Cronbach's alpha for the 3-items retained is 0.653.

**Table 4.4 Factor: Factors Affecting Price Determination (FAP)**

FAP items extracted	Factor loadings
FAP 1	.640
FAP 2	.689

<b>FAP 3</b>	<b>.759</b>
<b>FAP 4</b>	<b>.662</b>
<b>FAP 5</b>	<b>.698</b>
<b>FAP 6</b>	<b>.696</b>
<b>FAP 7</b>	<b>.627</b>
<b>FAP 8</b>	<b>.593</b>
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.860</b>	<b>8</b>

Source: Researcher (2020)

Table 4.4 illustrates the factor loadings of the items retained for *factors affecting price determination*. Of the 8 items used to measure the constructs, no items were dropped since the threshold was above 0.5 for all the items. The items retained after conducting the EFA include: **FAP 1** - Extent of competition in the market ( $\sigma = 0.640$ ), **FAP 2** - Pricing objectives ( $\sigma = 0.689$ ), **FAP 3** - Marketing methods used ( $\sigma = 0.759$ ), **FAP 4** - Utility and demand ( $\sigma = 0.662$ ), **FAP 5** - Government and legal regulations ( $\sigma = 0.698$ ), **FAP 6** -Structural and cost factor changes ( $\sigma = 0.696$ ), **FAP 7** - Capital controls ( $\sigma = 0.627$ ) and **FAP 8** - Political decisions ( $\sigma = 0.593$ ) correspondingly. The Cronbach's alpha for the 8-items retained is 0.860.

**Table 4.5 Factor: Factors Contributing to Slow Economic Growth (FC)**

<b>FC items extracted</b>	<b>Factor loadings</b>
<b>FC 1</b>	<b>.660</b>
<b>FC 2</b>	<b>.658</b>
<b>FC 3</b>	<b>.668</b>
<b>FC 4</b>	<b>.748</b>
<b>FC 5</b>	<b>.705</b>
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.812</b>	<b>5</b>

Source: Researcher (2020)

Table 4.5 above shows the factor loadings of the items retained for *factors contributing to slow economic growth*. Of the 5 items used to measure the constructs, no items were dropped since all the items were above the 0.5 threshold. The items retained after conducting the EFA include: **FC 1** - Institutional framework ( $\sigma = 0.660$ ), followed by **FC 2** - Rigid liquidity conditions ( $\sigma = 0.658$ ), **FC 3** - Fragile domestic demands ( $\sigma = 0.668$ ), **FC 4** - Overvalued exchange rates ( $\sigma = 0.748$ ) and **FC 5** - Lack of necessary infrastructure ( $\sigma = 0.705$ ). The Cronbach's alpha for the 5-items retained is 0.812.

**Table 4.6 Factor: Preference of Customers Using Products (PC)**

PC items extracted	Factor loadings
PC 1	.729
PC 2	.711
PC 3	.722
PC 4	.665
PC 7	.603
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.799</b>	<b>5</b>

Source: Researcher (2020)

Table 4.6 illustrates the factor loadings of the items retained for *preference of customers using products*. Of the 7 items used to measure the constructs, only two items below the threshold of 0.5 were dropped, while the items retained after conducting the EFA include: **PC 1** - Ability of the store to identify problem areas ( $\sigma = 0.729$ ) is the core reason of customers' preference, followed by **PC 2** - The quality and variety of products and services ( $\sigma = 0.711$ ), **PC 3** - Store location ( $\sigma = 0.722$ ), **PC 4** - having the correct pricing ( $\sigma = 0.665$ ) and lastly **PC 7** - upgraded systems ( $\sigma = 0.603$ ) in that respective order. The Cronbach's alpha for the 5-items retained is 0.799.

**Table 4.7 Factor: Inventory (INV)**

INV items extracted	Factor loadings
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<b>INV 1</b>	<b>.627</b>
<b>INV 2</b>	<b>.616</b>
<b>INV 3</b>	<b>.540</b>
<b>INV5</b>	<b>.686</b>
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.787</b>	<b>4</b>

Source: Researcher (2020)

Table 4.7 above shows the factor loadings of the items retained for *inventory*. Of the 5 items used to measure the constructs, only one item below the threshold of 0.5 was dropped. The items retained after conducting the EFA include: **INV 1** - Our retail store has a clear understanding on how to maintain the correct inventory levels ( $\sigma = 0.627$ ), followed by **INV 2** - If inventory items are out of stock sooner, there won't be a need for price reduction because greater profit will be expected when the store makes more sales ( $\sigma = 0.616$ ), **INV 3** - The inventory we have in our store is an asset for the business and becomes revenue once sales are made ( $\sigma = 0.540$ ) and **INV 5** - Having a product mix builds a loyal customer base for the retail store I work for ( $\sigma = 0.686$ ). The Cronbach's alpha for the 4-items retained is 0.787.

**Table 4.8 Factor: Pricing (P)**

<b>P items extracted</b>	<b>Factor loadings</b>
<b>P 1</b>	<b>.687</b>
<b>P 2</b>	<b>.550</b>
<b>P 3</b>	<b>.656</b>
<b>P 4</b>	<b>.695</b>
<b>P 5</b>	<b>.629</b>
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.835</b>	<b>5</b>

Source: Researcher (2020)

Table 4.8 illustrates the factor loadings of the items retained for *pricing*. Of the 5 items used to measure the constructs, none of the items was dropped as no items were below the 0.5 threshold. The items retained after conducting the EFA include: **P 1** - Hyperinflation reduces customer spending when price tags are increased on retail goods. ( $\sigma = 0.687$ ), followed by **P 2** - Not having the right mark-up percentage on goods may negatively affect the retail store in comparison with other retailers ( $\sigma = 0.550$ ), **P 3** - A need for mark-downs is necessary if goods stay too long on shelves, although this reduces profit from those items ( $\sigma = 0.656$ ), including **P 4** - It is more likely for retailers to increase its gross profit if the store lowers any cost of sale element ( $\sigma = 0.695$ ) and **P 5** - Price discrimination is disallowed as it will affect the retail store in a number of ways ( $\sigma = 0.629$ ) respectively. Cronbach's alpha for the 5-items retained is 0.835.

**Table 4.9 Factor: Usefulness of Inflation Accounting Technique (UIA)**

UIA items extracted	Factor loadings
UIA 1	.750
UIA 2	.777
UIA3	.753
UIA4	.694
UIA 5	.806
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.939</b>	<b>5</b>

Source: Researcher (2020)

Table 4.9 illustrates the factor loadings of the items retained for the *usefulness of the inflation accounting technique*. Of the 5 items used to measure the constructs, none of the items was dropped as no items were below the 0.5 threshold. The items retained after conducting the EFA include: **UIA 1** - Ability to spot misleading deeds ( $\sigma = 0.750$ ), followed by **UIA 2** - The retail store would be able to pick up wrong matching concepts ( $\sigma = 0.777$ ), **UIA 3** - Allows a fair balancing statement of financial position ( $\sigma = 0.753$ ), **UIA 4** - Safety of owners'



equity ( $\sigma = 0.694$ ) and **UIA 5** - Reasonable comparison of profitability ( $\sigma = 0.806$ ) accordingly. Cronbach's alpha for the 5-items retained is 0.939.

**Table 4.10 Factor: Inflation Accounting Technique (IAT)**

IAT items extracted	Factor loadings
IAT 1	.783
IAT 2	.764
IAT 3	.684
IAT 4	.653
IAT 5	.629
<b>Cronbach's alpha</b>	<b>No. of items</b>
.844	5

Source: Researcher (2020)

Table 4.10 illustrates the factor loadings of the items retained for the *inflation accounting technique*. Of the 5 items used to measure the constructs, none of the items were dropped as there was no item below the 0.5 threshold. The items retained after conducting the EFA include: **IAT 1** - It has a lot of complex calculations ( $\sigma = 0.783$ ), followed by **IAT 2** - Good in theory not practically ( $\sigma = 0.764$ ), **IAT 3** - Constant adjustments need to be made ( $\sigma = 0.684$ ), **IAT 4** - Not everyone would be able to use this technique ( $\sigma = 0.653$ ) plus **IAT 5** - It is very costly ( $\sigma = 0.629$ ). Cronbach's alpha for the 5-items retained is 0.844.

**Table 4.11 Factor: Systems to Measure Performance (MP)**

MP items extracted	Factor loadings
MP 1	.866
MP2	.816
MP3	.832
MP4	.812
MP5	.749
<b>Cronbach's alpha</b>	<b>No. of items</b>
.946	5

Source: Researcher (2020)

Table 4.11 illustrates the factor loadings of the items retained for *systems to measure performance*. Of the 5 items used to measure the constructs, none of the items were dropped as there was no item below the 0.5 threshold. The items retained after conducting the EFA include: **MP 1** - Assessing your store expectations ( $\sigma = 0.866$ ), followed by **MP 2** - Return on Asset ( $\sigma = 0.816$ ), **MP 3** - Productivity measures ( $\sigma = 0.832$ ), **MP 4** - Checking customer satisfaction ( $\sigma = 0.812$ ) and **MP 5** - Return on equity ( $\sigma = 0.749$ ) respectively. Cronbach's alpha for the 5-items retained is 0.946.

**Table 4.12 Factor: Performance Monitor (PM)**

PM items extracted	Factor loadings
PM 1	.750
PM 2	.557
PM 3	.600
PM 4	.609
<b>Cronbach's alpha</b>	<b>No. of items</b>
.849	4

Source: Researcher (2020)

Table 4.12 illustrates the factor loadings of the items retained for *performance monitor*. Of the 5 items used to measure the constructs, only one item below the threshold of 0.5 was dropped. The items retained after conducting the EFA include: **PM 1** - By conducting a competitor analysis ( $\sigma = 0.750$ ) is most likely to be used by the store to monitor its performance, followed by **PM 2** - By assessing the store's efficiency ( $\sigma = 0.557$ ), **PM 3** - By conducting a customer analysis ( $\sigma = 0.600$ ) and **PM 4** - By conducting market analysis ( $\sigma = 0.609$ ). Cronbach's alpha for the 4-items retained is 0.849.

**Table 4.13 Factor: Standpoints Considered when Introducing Performance Measurement (SC)**

SC items extracted	Factor loadings
SC 1	.598
SC 2	.682
SC 3	.687
SC 4	.770
SC 5	.682
<b>Cronbach's alpha</b>	<b>No. of items</b>
.830	5

Source: Researcher (2020)

Table 4.13 shows the factor loadings of the items retained for *standpoints considered when introducing performance measurement*. Of the 5 items used to measure the constructs, none of the items were dropped as there was no item below the 0.5 threshold. The items retained after conducting the EFA include: **SC 1** - Financial ( $\sigma = 0.598$ ), as well as **SC 2** - Shareholders' ( $\sigma = 0.682$ ), **SC 3** - Customers' ( $\sigma = 0.687$ ), **SC 4** - Employees' ( $\sigma = 0.770$ ) and **SC 5** - Retail stores' internal business processes ( $\sigma = 0.682$ ) respectively. Cronbach's alpha for the 5-items retained is 0.830.

**Table 4.14 Factor: Non-Financial Performance Measures (NFP)**

NFP items extracted	Factor loadings
NFP 1	.740
NFP 2	.688
NFP 3	.723
NFP 4	.744
NFP 5	.720
<b>Cronbach's alpha</b>	<b>No. of items</b>
.924	5

Source: Researcher (2020)

Table 4.14 shows the factor loadings of the items retained for *non-financial performance measures*. Of the 5 items used to measure the constructs, none of the items were dropped as there was no item below the 0.5 threshold. The items retained after conducting the EFA include: **NFP 1** - Encouraging development ( $\sigma = 0.740$ ) is indeed an important non-financial performance measure for the retail store, followed by **NFP 2** - Creating a positive work environment ( $\sigma = 0.688$ ), **NFP 3** - Retaining and attracting high value customers ( $\sigma = 0.723$ ), **NFP 4** - Store I work for to become a leading retail store ( $\sigma = 0.744$ ) and **NFP 5** - Facilitating the integration of the retail store's plans with financial plans ( $\sigma = 0.720$ ). Cronbach's alpha for the 5-items retained is 0.924.

**Table 4.15 Factor: Employee Performance Review (EPR)**

EPR items extracted	Factor loadings
EPR 1	.579
EPR 4	.688
EPR 5	.663
EPR 6	.707
EPR 7	.656
<b>Cronbach's alpha</b>	<b>No. of items</b>
<b>.903</b>	<b>5</b>

Source: Researcher (2020)

Table 4.15 represents the factor loadings of the items retained for *employee performance review*. Of the 7 items used to measure the constructs, only two items below the threshold of 0.5 were dropped. The items retained after conducting the EFA include: **ERP 1** - Able to meet deadlines ( $\sigma = 0.579$ ), followed by **ERP 4** - Have good attendance ( $\sigma = 0.688$ ), **ERP 5** - Produce quality and accurate work ( $\sigma = 0.663$ ), **ERP 6** - Have good communication skills ( $\sigma = 0.707$ ) and **ERP 7** - Collaboration skills and teamwork ( $\sigma = 0.656$ ). Cronbach's alpha for the 5-items retained is 0.903.

### 4.2.3 Analysis of Research Objective One

Research objective One was formulated to determine the influence of inflation on organisational decisions. Linear regression was found appropriate to determine the influence of the independent variable (IV) (i.e. inflation) on the dependent variable (DV) (i.e. organisational decisions). Table 4.16 illustrates the regression analysis.

**Table 4.16 Influence of Inflation on Organisational Decisions**

Variables in the equation	B	Beta	t	p-value	R <sup>2</sup>	F	df	p-value
Constant	32.009		13.566	<.0005	.237	49.269	1; 159	<.0005
Inflation	.852	.486	7.019	<.0005				

*IV – Inflation*

*DV – Organisational decisions*

Source: Researcher (2020)

The outcomes of the regression analysis are summarized in Table 4.16. The R<sup>2</sup> value of 0.237 shows that inflation accounts for 23.7% of the variance in organisational decisions and there is a significant linear relationship between inflation and organisational decisions,  $F(1, 159) = 49.269, p < .0005$ . Inflation (IV), is a significant predictor of organisational decisions (DV),  $B = 0.852, p < 0.0005$ . Based on this outcome, Research objective One which aimed to determine the influence of inflation on organisational decisions is achieved. Consistent with this finding, Naudon and Perez's (2017) study found that inflation influences organisational decisions.

### 4.2.4 Analysis of Research Objective Two

Research objective Two aimed at comprehending the factors that lead to statement adjustments for the retail stores in KZN. Descriptive statistics was found appropriate in achieving Research objective Two, as shown in Table 4.17.

**Table 4.17 Factors that lead to Statement Adjustments**

<b>S/N</b>	<b>Items</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
1.	Forecasting accurately & having the strategy to bias forecasts in some manner are two competing incentives	-	2 (1.2%)	31 (19.3%)	88 (54.7%)	40 (24.8%)
2.	Future trends & events, forecasting methods and policies and Under- or Over-prediction are factors that contribute to forecasting losses for the retail stores.	-	1 (0.6%)	38 (23.6%)	85 (52.8%)	37 (23%)
3.	Forecasting too many products or having high volumes of stock can affect cost aspects like inventory holding cost and obsolescence	1 (0.6%)	2 (1.2%)	29 (18%)	86 (53.4%)	43 (26.7%)

	cost.					
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Source: Researcher (2020)

Table 4.17 highlights the factors that lead to statement adjustments for the retail stores. These are items that make the statement adjustment factors variable:

*“Forecasting accurately & having the strategy to bias forecasts in some manner are two competing incentives”*. This item had 54.7% of the survey respondents in agreement, while 24.8% strongly agreed that this is a factor that leads to statement adjustments.

*“Future trends & events, forecasting methods and policies and Under- or Over-prediction are factors that contribute to forecasting losses for the retail stores”*. This item had 52.8% of the survey respondents in agreement and 23% strongly agreed that this is a factor that causes statement to be adjusted.

*“Forecasting too many products or having high volumes of stock can affect cost aspects like inventory holding cost and obsolescence cost”*. This item had 53.4% of the survey respondents in agreement and 26.7% strongly agreed that this is a factor that results in statement adjustments.

The item which had the highest agreement response percentage was: ***Forecasting too many products or having high volumes of stock can affect cost aspects like inventory holding cost and obsolescence cost.*** The results show that this item is the major factor that has an impact on statement adjustments.

Based on this outcome, Research objective Two aimed at comprehending the factors that lead to statement adjustments for the retail stores in KZN has been accomplished. The analysis is in line with Ojala, Kinnunen, Niemi and Troberg (2019) who also comprehended the factors that lead to statement adjustments.

#### **4.2.5 Analysis of Research Objective Three**

Research objective Three was formulated to examine the effects of inflation accounting on performance. Linear regression was found appropriate to

determine the effects of the independent variable (IV) (i.e. inflation accounting) on the dependent variable (DV) (i.e. financial performance). Table 4.18 displays the regression analysis.

**Table 4.18 Effects of Inflation Accounting on Financial Performance**

Variables in the equation	B	Beta	t	p-value	R <sup>2</sup>	F	df	p-value
Constant	21.337		10.640	<.0005	.154	28.959	1; 159	<.0005
Inflation accounting	-.555	-.393	-5.381	<.0005				

*IV – Inflation accounting*

*DV – Financial performance*

Source: Researcher (2020)

The results of the regression analysis are summarized in Table 4.18. The R<sup>2</sup> value of 0.154 shows that inflation accounting accounts for 15.4% of the variance in performance and there is a significant linear relationship between inflation accounting and financial performance,  $F(1, 159) = 28.959, p < .0005$ . Inflation accounting (IV), is a significant predictor of financial performance (DV),  $B = 0.555, p < 0.0005$ .

Based on this outcome, Research objective Three, which aimed to examine the effects of inflation accounting on the financial performance of KZN retail stores, is attained. The study findings agree with Ebiaghan (2019) who also established the effects of inflation accounting on financial performance.

#### **4.2.6 Analysis of Research Objective Four**

Research objective Four has been prepared to establish the impact of organisational decisions on performance. Linear regression was found appropriate to determine the influence of the independent variable (IV) (i.e. organisational decisions) on the dependent variable (DV) (i.e. performance). Table 4.19 demonstrates the regression analysis.



**Table 4.19 Impact of Organisational Decisions on Performance**

Variables in the equation	B	Beta	t	p-value	R <sup>2</sup>	F	df	p-value
Constant	24.159		8.252	<.0005	.119	21.382	1; 159	<.0005
Organisational decisions	-.279	-.344	-4.624	<.0005				

*IV – Organisational decisions*

*DV – Performance*

Source: Researcher (2020)

The outcomes of the regression analysis are summarized in Table 4.19. The R<sup>2</sup> value of 0.119 shows that organisational decisions account for 11.9% of the variance in performance and there is a significant linear relationship between organisational decisions and performance,  $F(1, 159) = 21.382, p < .0005$ . Organisational decisions (IV), is a significant predictor of performance (DV),  $B = -0.279, p < 0.0005$ .

Based on this outcome, Research objective Four, which aimed to establish the influence of organisational decisions on performance among retail stores in KZN, has been achieved. Findings of this study are in line with Dirsu, Woorlu, Osibanajo, Salau, Borishade, Meninwa and Atolagbe (2018) who found a constructive interconnection between organisational decisions and performance in the hospitality industry.

### **4.3 Qualitative Data Analysis**

This section presents the report on the qualitative data collected using questionnaires. Five respondents in each store were given questionnaires to answer. The aim of this portion of questions in the questionnaire was to gather data and find out about their level of understanding regarding statement adjustment factors and inflation accounting.

Almost half of the respondents did not give a response to the open-ended questions. One of the reasons for non-responses could be that they did not have knowledge of what was being asked. The researcher asked a few of the

respondents the reason for leaving the open-ended questions blank and the responses received were: *“I left it blank because I was unsure about answers to the questions”*, *“I did not have time to complete this part”* or *“I was just clueless”*.

The study was guided by the following open-ended questions

### **Statement adjustments factors**

**1. Why is it important to check whether the data is correct and valid when dealing with forecasts?**

There were different responses to this question, but most respondents had a perspective that *“checking the correctness of data improves accuracy of forecasts”* and *“helps to manage stock better and assist forecasters not to make unnecessary mistakes”*. Judging from this response, it is evident that checking data for correctness and validity is important when dealing with forecasts.

**2. What methods are being implemented to improve the accuracy of forecasts in the store you work for?**

Some of the feedback from respondents that stood out were; *“by having a model that will help maintain consistency”*, *“having a system that will help track the order history”* and *“have more training to improve forecasting skills”*. These responses are some of the ways in which the accuracy of forecasts could be improved.

**3. Is there training offered to forecasters in your retail store to up-skill themselves in order to produce more positive results? If yes, please list the type of training below.**

Majority of the respondents replied *“no”* or *“not sure”* to this question. Training one’s staff is one of the essential ways to improve on forecasting skills. If retail stores do not offer training to their staff, it could affect the performance outcome.

The results from these questions conclude that statement adjustment factors do influence the financial performance of the retail stores.

### **Inflation accounting**

- 1. What do you understand by the term “inflation accounting” (price level accounting)?**
- 2. Does your retail store use inflation accounting techniques? Please provide a reason for your answer.**
- 3. Would you recommend other retailers to use this accounting technique? Please substantiate your answer.**

A majority of the respondents failed to provide answers to this inflation accounting based question, while most of those who responded gave unrelated answers. Not many respondents knew or were familiar with this type of accounting technique. Many respondents were unsure about whether their store uses inflation accounting or not. Additionally, most respondent recommended this accounting technique to be used by retailers. Their recommendation was confusing because they did not know what inflation accounting initially was. It is very important for retail businesses to use this accounting technique to improve their financial performance. Based on the outcome, inflation accounting does influence the financial performance of retail stores.

### **4.4 Chapter Conclusion**

The objective of the study was to assess the effects of inflation accounting on the financial performance of retail stores in KZN, South Africa. Organisational decisions of the retail stores were measured using inflation and three items were used that make the statement adjustment factors variable; followed by the financial performance of the retail stores, which was measured by inflation accounting; and lastly, the performance of the retail stores which was measured by organisational decisions.

The study indicated the  $R^2$  value of 0.154, which shows that inflation accounting accounts for 15.4% of the variance on performance and that there is a significant linear relationship between inflation accounting and financial performance,  $F(1, 159) = 28.959, p < .0005$ . In addition, the item used to

measure statement adjustment factors which had the highest agreement response percentage was: *Forecasting too many products or having high volumes of stock can affect cost aspects like; inventory holding cost and obsolescence cost.* The results showed that this item was the major factor that has an impact on statement adjustments.

Moreover, the study highlighted the  $R^2$  value of 0.154 showing that inflation accounting accounts for 15.4% of the variance on performance and that there is a significant linear relationship between inflation accounting and financial performance,  $F(1, 159) = 28.959$ . Furthermore, the  $R^2$  value of 0.119 shows that organisational decisions account for 11.9% of the variance in performance and there is a significant linear relationship between organisational decisions and performance,  $F(1, 159) = 21.382$ .

The KMO for this study was 0.756, which is of the adequacy of the sample. The Bartlett Test of Sphericity revealed that the EFA was ideal since it had a significant level of  $p < 0.001$ . Consistent with this study finding, Naudon *et al.* (2017) found that inflation influences organisational decisions in their study. In addition, the analysis of this study is in line with Ojala *et al.* (2019) who comprehended the factors that lead to statement adjustments and the findings of this study also agree with Ebiaghan (2019) who established the effects of inflation accounting on financial performance. Furthermore, the findings of this study are in line with Dirisu *et al.* (2018) who found a constructive interconnection between organisational decisions and performance in the hospitality industry. Overall, this study corroborates with prior research findings.

Regarding the qualitative section, the findings showed that respondents had limited or no understanding about inflation accounting, hence there was definitely a gap in knowledge. On the other hand, the respondents were informed about statement adjustment factors like forecasting, even though very little training was being offered to employees who are responsible for forecasts.

This chapter has focused on the presentation and analysis of collected data. Data was collected using a primary data technique. Questionnaires were utilized to obtain raw information from respondents which was coded, presented and analysed separately. The following chapter will focus on the summary of the research findings, conclusions, recommendations and suggestions for further research.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 Introduction**

In the context of what has been eminent in the literature review and findings from the questionnaires, the current chapter presents the summary, conclusion, limitations, recommendations and lastly, future study suggestions.

#### **5.1 Summary of Findings**

The study has made it known that inflation is a continuous issue for retail stores. Using inflation accounting ensures the accuracy and reliability of information contained in the company's financial statements. This enables users of financial statements to have a comprehensible depiction of the business' financial performance. Furthermore, it was evident that the historical cost basis is not good to be used in the financial statements as it overlooks the importance of taking note of inflation. The main aim of this research was to assess the effects of inflation accounting on the performance of retail stores in KZN, South Africa.

The first chapter presented the background of this study, which expressed why inflation accounting is a more preferred accounting method than the historical cost basis for financial statements. Problem areas of the research were addressed. The aim and objectives for conducting this study were also stated, while mentioning the research questions that will guide the research. In addition, the importance of this study was outlined. Lastly, the extent to which the researcher noticed that there are little or no studies similar to this study that considered doing research on retail stores was illustrated. Therefore, the effects of inflation accounting on the performance of retail stores were investigated.

The second chapter highlighted the variables of this study. The Literature review consisted of an empirical review which pointed out the needs for considering inflation when making organisational decisions and factors that lead to statement adjustments for retail stores in KZN. Different theories were given, and each theory was explained as to how they connect with the study in the

theoretical review. Therefore, this study was hinged on the Current Purchasing Power theory. Different concepts were defined and explained in the conceptual review, while the conceptual framework gave a picture of the study. In the end, different results as well as research gaps were identified and the study established the effects of inflation accounting on the financial performance of retail stores in KZN, South Africa.

The third chapter of this study indicated where the research has been conducted, which was in KZN, because retail stores could be accessed easily. The study used both qualitative and quantitative research techniques. The investigator used primary data collection. Twenty retail stores consisting of two branches each which are listed on the JSE were visited. Stores listed on the JSE were visited to cut down on the large number of retail stores. The researcher used questionnaires which consisted of open and closed-ended question to collect information. Ethical clearance required to administer questionnaires was received from the Faculty of Accounting and Informatics, Durban University of Technology, South Africa. The four ethical aspects were adhered to in this study to ensure that there was no invasion of privacy, no harm to participants, no lack of informed consent and no deception. All the participants' identities were protected as there were no names mentioned and consent form was kept separately from the questionnaire. The number of questionnaires distributed to respondents was two hundred. Data was coded and statistically analysed using the SPSS program. The EFA was conducted to establish the factor structures of items employed to measure each of the constructs assessed. In addition, Cronbach's alpha test of reliability was employed to determine the reliability of each construct.

The fourth chapter of this study articulated the presentation, analysis and interpretation of results obtained from the collected data. The study indicated that a majority of the participants were females who have work experience between 1-5 years. KMO for this study was 0.756, which is of the adequacy of the sample, and the Bartlett Test of Sphericity had a significant level of  $< 0.001$ .

In order to achieve the four objectives of the study, independent and dependent variables have been given away.

The first objective of the study was to determine the influence of inflation on organisational decisions. The results indicate that inflation accounts for 23.7% of the variance in organisational decisions, which has a significant linear relationship between inflation and organisational decisions. The second objective of the study was to comprehend the factors that lead to statement adjustments for the retail stores in KZN. The findings indicated that the question which had the highest agreement response percentage was: *Forecasting too many products or having high volumes of stock can affect cost aspects like; inventory holding cost and obsolescence cost.* The results show that this question is the major factor which has an impact on statement adjustments. The third objective of the study was to examine the effects of inflation accounting on the financial performance of KZN retail stores. The study showed that inflation accounting accounts for 15.4% of the variance on performance and there is a significant linear relationship between inflation accounting and financial performance. The fourth objective of the study was to establish the impact of organisational decisions on performance among retail stores in KZN. The outcome indicates that organisational decisions account for 11.9% of the variance in performance and there is a significant linear relationship between organisational decisions and performance.

Regarding the qualitative part of this study, the findings showed that respondents have limited or no understanding about inflation accounting, thus there was definitely a gap in knowledge. On the other hand, the respondents were informed about statement adjustment factors like forecasting, even though very little training was being offered to employees responsible for forecasts. Finally, this study agreed with prior research findings.

## **5.2 Chapter Conclusion**

Based on the findings from the empirical study, it appears that financial statements must be correct in order to have a clear analysis of the company's



financial wellbeing. If businesses use inflation accounting techniques, their financial statements stand to have better results than other accounting techniques which do not adjust inflation on financial statements. It is also recognized that many people do not understand the relationship between inflation and prices. As a result, they are unaware of past and future inflation measures. Due to this lack of knowledge, financial statements are affected as there is no indication of true figures recorded, especially when an inflation accounting technique is not employed. Also highlighted from the research is the need to forecast accurately, as it is an important part in the success of a retail business. It has also come to light that factors like electricity demand triggers high inflation, therefore it is necessary for businesses to adjust their financial statements so that accurate results are presented. In so doing, companies are not being misled by unadjusted figures due to inflation. In addition, it assists in making proper decisions for the business. The Historical cost basis on financial statements is mentioned to have more disadvantages than current cost. It has been clearly proven that using past costs to base figures on financial statements cannot be relied upon. Finally, suggestions are made relating to the ways in which business can improve on its financial performance and the reasons why inflation accounting should be a priority in retail businesses. In the end, Inflation accounting does have a huge influence on the financial performance of the business.

### **5.3 Recommendations**

Based on the findings of the study, the following is hereby recommended:

- a. The study advises that retail stores should consider carrying out different methods of encouraging staff to perform better. Have more training, have some staff work from different departments and have rewards for best performers. This will increase their motivation, skills and input towards the store. Furthermore, not only will it boost performance of staff, but also the stores' financial performance.

- b. It appears that inflation will continuously be high. Therefore, retail stores should be aware of changes in inflation and apply inflation accounting techniques to make adjustments in order to produce more accurate results in their financial statements. By doing so, it ensures that the business is a going-concern. The study also recommends that better policies should be made by policymakers in order to stabilize the rate of inflation so that it does not have major effect on the financial performance of the retail stores.
- c. Employees involved in forecasts should be measured against their individual track record performances. The performance track record should be monitored regularly as this will show exactly where the employee is slacking. Furthermore, there should be guidelines available to express the importance of forecasting correctly.
- d. Financial statements prepared on a historical basis and ones based on current cost should be made available to the store for comparison. This will enable the store to see the true worth of business so that investors are able to make proper decisions based on accurate results.

#### **5.4 Contribution to Existing Knowledge**

The study has supplied awareness on two aspects. Firstly, one is now able to decipher what Inflation accounting is and how valuable it is. Secondly, there is no research known in KZN, South Africa that has been done on the effects of inflation accounting on the financial performance of retail stores which have adopted primary data.

#### **5.5 Limitation of the Study**

It has come to the researcher's attention that many have limitations in their research inasmuch as this study has its own limitations. Firstly, this study had quite many people who wanted to participate, but only those within the retail field (the KZN retail store listed on the JSE) were able to take part. Furthermore, because the retail industry is very large, it is very difficult to verify whether

conclusions and findings would be the same had the study not been limited to only listed stores. Secondly, some stores could not participate due to strict confidentiality rules. Thirdly, some important aspects were not covered thoroughly due to time and budget limitations. Moreover, the accuracy of findings was mainly dependent on data that was obtained, as the study used primary data. Lastly, there are few studies similar to this study and some studies were conducted many years ago. The researcher was notable to use some of those studies as the years of references were too old. This made the collection of information difficult and the ability to get different views from different researchers became limited in order to make comparisons.

But it is pertinent to say that all these limitations do not in any way affect the potency and significant contributions of this study to the existing knowledge.

#### **5.6 Suggestions for Further Study**

The study was able to assess the effects of inflation accounting on the financial performance of retail stores in KZN, South Africa. To allow for a generalization of results, further studies can be done on other industries. Some industries may be different in the way inflation accounting affects their financial performance. In addition, further studies similar to this study should be carried out in order to measure whether related findings could be given away with regard to the effects of inflation accounting on financial performance.

The study established good findings with the application of primary data. However, secondary data may also be used for future research. A different dependent variable (to compare similarities or differences against financial performance) may also be used for further study in order to understand how inflation accounting reacts to it. Finally, investigations can be carried out to recognize factors other than those mentioned in this study or those that have not been researched before.

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## APPENDICES

### Appendix i: Questionnaire

#### PART A: DEMOGRAPHIC INFORMATION

Please mark 'X' in the box provided for answers applicable to you. (Only one answer should be given for each question).

##### 1. Gender

Male  Female

##### 2. Age group

20 years or below  21 to 30 years  31 to 40 years  
 Older than 40 years

##### 3. Marital status

Single  Married  Divorced  Widowed

##### 4. Educational background

Matric certificate  National diploma  Degree  Masters Degree  
 PhD  Other, specify \_\_\_\_\_

##### 5. Work department

Sales& service  Operations  Finance  Logistics  
 Other, specify \_\_\_\_\_

##### 6. Work experience

1 to 5 years  6 to 10 years  11 to 15 years  
 More than 15 years

**PART B: A SCALE TO ASSESS THE EFFECTS OF INFLATION ACCOUNTING ON THE FINANCIAL PERFORMANCE OF RETAIL STORES INKWA-ZULU NATAL, SOUTH AFRICA.**

**1. Organisational decisions**

**Please indicate the option that best suits your opinion with an 'X', in a box which you deem appropriate.**

<b>S/N</b>	<b>statements</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
1.1	My organisation decisions include a careful scrutiny of every possible alternative.					
1.2	My organisation decisions include an appraisal of every possible alternative.					
1.3	I am aware that decision making in management is an essential skill required for businesses as it determines the success of the retail store I work for.					
1.4	The person responsible becomes accountable for bad decisions made for the retail store.					
1.5	Inflation alters figures in the company's financial statement even when the rate is low; this change affects the business operations.					
1.6	My organisation monitors inflationary trends to make forecasts.					
1.7	Inflation is a motivation for stock investors because they are certain about their income flow and expect high real rates of returns.					
1.8	Having enough cost information plays a big role in making decisions for my organisation.					
1.9	I have a good understanding of environmental factors (technological, economical etc.) for the retail store I work for.					
1.10	I am aware of competition and always consider better ways to improve the business.					
1.11	It's always wise to have a retail strategy in order to meet the store objectives.					
1.12	The store I work for has management with good leadership skills on employees, communication and customer service skills.					
1.13	Timing of decisions made is very important in order to view any conditions which may exist at a particular time.					

1.14	I'm aware that employee participation in decision making makes the execution easier for the retail store.					
1.15	Decision making is negatively affected when financial data is outdated.					

## 2. Statement adjustments factors

### 2.1. Please state your agreement with the following statements:

S/N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2.1.1	Ratios help to evaluate the historical health of the company.					
2.1.2	Ratios help to predict an entity's future financial wellbeing.					
2.1.3	Forecasting accurately & having the strategy to bias forecast in some manner are two competing incentives					
2.1.4	Future trends & events, forecasting methods & policies and under or over-prediction are factors that contribute to forecasting losses for the retail stores.					
2.1.5	A reduction of unnecessary stock levels and selling excess non-current assets can improve the flow of cash for the retail store					
2.1.6	The retail store I work for uses the length of sales cycle method, historical data method or rolling forecast method to make forecasts.					
2.1.7	Having the least amount of forecast errors for our store helps to improve the pricing decision and retail performance.					
2.1.8	Forecasts are more accurate for the retail store when they are made for nearer time periods than longer time periods.					
2.1.9	I do understand that a good forecaster should have good communication skills, keep up with different trends and deliver understandable forecasts.					
2.1.10	If our store forecasts too little products, it may lose sales and miss the opportunity of making sales of companion products.					
2.1.11	Forecasting too many products or having high volumes of stock can affect cost aspects like; inventory holding cost and obsolescence cost.					

Please rate the following questions by using a scale indicated in the box that best suits your opinion by making an 'X', where you deem appropriate.

**Rating scale:**

Strongly disagree = 1

Neutral = 2

Strongly agree = 3

**3. Factors affecting price determination for the retail store**

S/N	Items	1	2	3
3.1	Extent of competition in the market			
3.2	Pricing objectives			
3.3	Marketing methods used			
3.4	Utility and demand			
3.5	Government and legal regulations			
3.6	Structural and cost factor changes			
3.7	Capital controls			
3.8	Political decisions			

**4. Factors contributing to a slow economic growth affecting retailers' performance.**

S/N	Items	1	2	3
4.1	Institutional framework			
4.2	Rigid liquidity conditions			
4.3	Fragile domestic demands			
4.4	Overvalued exchange rates			
4.5	Lack of necessary infrastructure			

**5. Preference of customers using products/ services from this retail store rather than competitor's store.**

S/N	Items	1	2	3
5.1	Ability to identify problem areas			
5.2	The quality and variety of products and services			
5.3	Store location			
5.4	Have the correct pricing			
5.5	Innovative store			
5.6	Social retailer			
5.7	Upgraded systems			



## 6. Inventory

S/N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6.1	Our retail store has a clear understanding on how to maintain the correct inventory levels.					
6.2	If inventory items are out of stock sooner, there won't be a need for price reduction because greater profit will be expected when the store makes more sales.					
6.3	The inventory we have in our store is an asset for the business and becomes revenue once sales are made.					
6.4	Having inventory closely aligned with demand is one way to reduce cost of sales for the retail store.					
6.5	Having a product mix builds a loyal customer base for the retail store I work for.					

## 7. Pricing

S/N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7.1	Hyperinflation reduces customer spending when price tags are increased on retail goods.					
7.2	Not having the right mark-up percentage on goods may negatively affect the retail store in comparison with other retailers.					
7.3	A need for mark-downs is necessary if goods stay too long on shelves, although this reduces profit from those items.					
7.4	It is more likely for retailers to increase its gross profit if the store lowers any cost of sale element.					
7.5	Price discrimination is disallowed as it will affect the retail store in a number of ways.					

### 8.1. Please indicate your agreement with the following statements regarding the usefulness of inflation accounting technique.

S/N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
8.1.1	Ability to spot misleading deeds					
8.1.2	The retail store would be able to pick up wrong matching concepts					
8.1.3	Allows a fair balancing statement of financial position					

8.1.4	safety of owners equity					
8.1.5	reasonable comparison of profitability					

**8.2. Please indicate your agreement with the following statements why the retail store may decide not to use inflation accounting technique.**

S/N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
8.2.1	It has a lot of complex calculations					
8.2.2	Good in theory not practically					
8.2.3	Constant adjustments need to be made					
8.2.4	Not everyone would be able to use this technique					
8.2.5	It is very costly					

**9.1. How well are you informed about the following systems to measure performance?**

S/N	Items	To a substantial degree	To some degree	Little degree	Very little degree	Unaware
9.1.1	Assessing your store expectations					
9.1.2	Return on Asset					
9.1.3	Productivity measures					
9.1.4	Checking customer satisfaction					
9.1.5	Return on equity					

**9.2. State how likely your store monitors performance items**

S/N	Items	Most likely	Likely	unlikely	Very unlikely
9.2.1	By conducting a competitor analysis				
9.2.2	By assessing the store's efficiency				
9.2.3	By conducting a customer analysis				
9.2.4	By conducting market analysis				
9.2.5	By assessing the store's key activities				

**10. Please rank the following standpoints considered when introducing performance measurement for the retail store by using the rank scale (1-5).**

- Where;**
- 1 – Most important**
  - 2 – Important**
  - 3 – Neither important nor unimportant**
  - 4 – Unimportant**
  - 5 – Most unimportant**

<b>S/N</b>	<b>Standpoints</b>	<b>Rank (1-5)</b>
10.1	Financial	
10.2	Shareholders'	
10.3	Customers'	
10.4	Employees'	
10.5	Retail stores' internal business processes	

**11. Please indicate your motivation on the following retail store non-financial performance measures by marking '(X)' from the importance scale (1-5).**

- Where;**
- 1 – Most important**
  - 2 – Important**
  - 3 – Neither important nor unimportant**
  - 4 – Unimportant**
  - 5 – Most unimportant**

<b>S/N</b>	<b>Standpoints</b>	<b>Importance</b>				
11.1	Encouraging development	1	2	3	4	5
11.2	Creating a positive work environment	1	2	3	4	5
11.3	Retaining and attracting high value customers	1	2	3	4	5
11.4	Store I work for to become a leading retail store	1	2	3	4	5
11.5	Facilitating the integration of the retail store's plans with financial plans	1	2	3	4	5

**12. Employee performance review**

**Please state your agreement with the following qualities an employee should have in order to improve performance at work.**

<b>S/N</b>	<b>Items</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
12.1	Able to meet deadlines					

12.2	Have problem solving skills					
12.3	Being dependable					
12.4	Have good attendance					
12.5	Produce quality and accurate work					
12.6	Have good communication skills					
12.7	Collaboration skills and teamwork					

**13. Please answer the following open-ended questions concerning statement adjustments factors to the best of your knowledge.**

13.1 Why is it important to check whether the data is correct and valid when dealing with forecasts?

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13.2 What methods are being implemented to improve accuracy of forecasts in the store you work for?

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13.3 Is there training offered to forecasters in your retail store to up-skill themselves in order to produce more positive results? If yes, please list the type of training below.

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**14. Please answer the following open-ended regarding inflation accounting to the best of your knowledge.**

14.1 What do you understand by the term “inflation accounting” (price level accounting)?

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14.2 Does your retail store use inflation accounting technique? Please provide a reason for your answer.

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14.3 Would you recommend other retailers to use this accounting technique? Please substantiate your answer.

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***The end!***

***Thank you for your co-operation.***

## Appendix ii: Time Plan

### Activity

### Time Frames

Literature review	20/03/19 - 30/08/19
Proposal write up	01/09/19 - 31/12/19
Proposal submission	01/11/19 - 31/12/19
Data collection and analysis	01/01/20 - 30/04/20
Thesis writing	01/05/19 - 15/06/20
Thesis Submission	09/09/2020