



A Cross Sectional Study To Analyse The Impact Of Inflation On Company

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ABSTRACT

The inflation accounting technique enables a company to exhibit or have a realistic image of its profits based on current costs and current sales. As a result, the goal of this research is to see if inflation has a substantial impact on the performance of manufacturing companies. In this study, a cross-sectional design will be used. Based on the population, fifty manufacturing companies will be picked. In order to determine how changes in gross profits are affected by the rate of inflation, this study will employ cluster random sampling and correlation analysis. The results of the study reveal that gross profit and inflation rate have a positive association.

Keywords: Inflation, Accounting, Companies, Manufacturing, Cost.

I. INTRODUCTION

Inflation accounting aims to bring reality to financial statements by revising them to represent the financial performance and position of a company over a given period in a truthful and fair manner. Items such as cash and debtors are stated at current purchasing power on the balance sheet, which is created for a certain point in time. Other items, like inventory, are expressed in monetary units that represent recent purchasing power.

Other items on the balance sheet, such as furnishings, land, plant, and equipment, are also stated at historical cost.

When the general price level rises rapidly, a company's reported profits are inflated because a large share of its assets are valued at historical cost. If profits are inflated, costs and expenses must be downplayed as well. This could lead to the reporting of fictitious earnings.

In order to transform monetary units with variable levels of purchasing power into a single monetary unit, accountants employ inflation accounting [10].

II. REVIEW OF RELATED STUDIES

Mbambo et al., (2020) The inflation accounting technique enables a company to exhibit or have a realistic image of its profits based on current costs and current sales. This study looked at the impact of inflation accounting on organisational decisions and financial performance in Kwa-Zulu Natal retail businesses [11]. A quantitative research method was applied in this investigation. A total of 161 completed surveys were collected from respondents in Kwa-Zulu Natal's top 20 retailers. In this investigation, the Exploratory Factor Analysis and linear regressions were used. With such coefficients ($F(1, 159) = 49.269, p < .0005$; $F(1, 159) = 28.959, p < .0005$), the empirical study indicates how inflation accounting strongly effects organizational decisions and financial performance of the retail firm [15]. The findings of this study revealed that the factors used had positive associations. As a result, the study suggests that retailers always take inflation into account and use inflation accounting procedures to make adjustments in order to publish more accurate financial statements [13]. The basis of financial performance measurement using historical cost accounting is currently the subject of heated debate. This has a favourable impact on their decision-making and financial performance [11].

Pramod Patjoshi (2019) Over a period of time, the price remains constant. It tends to fluctuate for a variety of reasons, resulting in two sorts of economic conditions: inflation and deflation. Inflation is defined as an increase in the general price level due to production impacts, whereas deflation is defined as a decrease in the general price level. Customers, Suppliers, Employees, Financial Institutions, Government, Shareholders, and Management are the various stakeholders investigated in this study. For a period of five years, the financial accounts of 42 manufacturing companies from seven different industries have been restated in current purchasing power (2004-05 to 2008-09). To create two sets of ratios, the ratios were calculated using both historical and modified values from financial statements [13]. The impact of inflation on significant stakeholders was studied using the Current Purchasing Power approach and financial ratio analysis in this study.

Asuquo et al., (2017) The study examines the impact of inflation accounting on the calculation of corporate income in Nigerian listed manufacturing companies. It looked at the historical cost and present cost accounting companies in relation to the profit level of the company in terms of depreciation, tax, and dividend [14]. The study was conducted using historical and current cost extracts from six manufacturing companies for the period [2011-2015]. The data was analysed using multiple regression (ordinary least square approach), and it was discovered that accounting systems [10] have a substantial effect on firm income, and that the profit under historical cost accounting was larger than that under current cost accounting. It was suggested that companies' profitability levels be evaluated using the purchasing power of money in order to

determine the company's true worth.

Tawiah et al., (2015) Accounting's main role is to present what happened during a particular period through reporting, not what should have happened or what will happen. Despite coming into the concept of reporting a business event, historical cost accounting has recently come under fire for falling behind economic developments due to the usage of original cost [12]. The principles of uniform monetary measure and corresponding ideas have been a barrier in historical cost accounting. Because of the rising unhappiness with historical cost accounting as a means of reporting financial statements [11], an alternate technique of accounting for price level fluctuations has become necessary. Unfortunately, due to its unattractiveness, this solution has not been implemented. In light of this, the purpose of this study is to examine some fresh problems and make recommendations about current inflation accounting approaches. Aside from the usual drawbacks of inflation accounting, this article examines the restatement of items under inflation accounting in light of basic accounting, economics, and finance principles. Furthermore, new doubts have been raised about the consistency and logic of how some items are treated under price level adjustments accounting. Inflation accounting, according to the article, is not only incompatible with accounting principles, but also with allied fields such as economics and finance [13]. In practise, inflation accounting generates fictitious or imaginary profits that do not exist, making the capital maintenance idea a purely theoretical concept because much of the profit generated by inflation accounting is unrealized or holding gain. Inflation accounting confuses the basic goal of documenting what occurs over a period of time or at a specific point in time. The most significant impediment to the adoption of price level changes accounting is what it is not: inflation accounting is not present value, net realisable value, current market values, or fair value, and most of the opposition to its usage is based on this fact. In response to these concerns, the paper suggests that, because the existing system is based on historical cost accounting, inflation accounting can only be meaningful with a new accounting system.

Karapinar et al., (2012) The influence of inflation accounting on important financial parameters is investigated in this research. The financial statements of 132 companies listed on the Istanbul Stock Exchange (ISE) are examined for this purpose. The financial ratios of the companies were subjected to a paired samples t test analysis. Only current ratios, equity ratios, and noncurrent turnover ratios demonstrate a substantial difference between adjusted cost based financial ratios and historical cost based financial ratios, according to the findings. Companies in the financial industry are not included in the study. Companies reporting under the International Financial Reporting Standards (IFRS) for the study period of 2001-2004 are also excluded. The research is useful for analysing companies that operate in high-inflation environments.

III. ADOPTED RESEARCH MODEL

The study's conceptual framework implies that there is a link between India's inflation rate and manufacturing businesses' profit companies, either through a direct relationship between the two variables or because inflation increases the cost of production, which then influences profit levels.

Firms' expectations of future pricing may influence their current decision when making price/output decisions. In anticipation of a supplier raising their pricing, a company may raise its own prices. When there is inflation in the economy, the price system sends out subtle signals to the suppliers, who will immediately perceive an increase in the price level as a sign of increased costs. An increase in the minimum wage or in the sales tax would raise the producers' costs. The pay distribution is compressed when the minimum wage is implemented. Firms respond to rising labour costs by cutting jobs, cutting profits, or raising pricing. According to conventional economic theory, minimum wages do not diminish earnings since low-wage businesses are typically too small and competitive to absorb such expenses. Firms respond to minimum wage hikes by lowering employment in competitive markets where prices are believed to be fixed. When the minimum wage is legalised, however, it results in a cost shock across the business. The transition from the previous sales tax system to a consumer-based tax system [14], such as the value-added tax, will allow businesses to pass on rising production costs to consumers, resulting in higher prices for goods and services.

When there is inflation, prices are affected by changes in the overall price level, resulting in price system static or noise. This behaviour will obfuscate the information sent by pricing, lowering the market system's efficiency. Because producers couldn't tell whether the increase in price was a legitimate outcome of inflation or a true signal of increasing demand, the decline in efficiency imposes real economic costs, lowering profit margins. Because gathering information takes time and effort, producers' reactions to price changes are likely to be slower and more cautious. Because product prices remain relatively constant, the profit margin is reduced as the aggregate price level rises.

Under competitive pressures and with inflation projected to persist, traditional economic theory predicted that the firm's prices, necessary rate of return, and, for an unlevered corporation, costs, earnings, dividends, and stock prices would rise at the same rate as prices generally. Such a hypothesis would have predicted an unusually strong positive connection between a company's earnings and, at the very least, expected inflation. Profits are affected by inflation because it reacts to sales volume, influences cost levels, and changes the relationship between costs and prices. Pricing policy is especially significant in inflation since manufacturing companies often set prices based on cost. Whether prices are established on the basis of original cost or current replacement cost, the level of profit varies.

IV. RESULT AND ANALYSIS

The companies are chosen based on their active trade across industries. From 2016 to 2020, data in the form of inflation rate, gross profit, and cost of production were collected. Both data sets are subjected to normality and reliability tests, with the findings presented in Tables 1 and 2.

Table 1 : Reliability Test on Cost of Production and Gross Profit of Selected Companies

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.994	.998	10

The reliability test on both data sets shows a value of 0.994. This indicates that a high reliability value and a good measure of consistency. The normality test on the same data set is indicated in Table 2 below.

Table 2: Normality Test on Cost of Production and Gross Profit of Selected Companies

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
COST 2016	.324	50	.000	.509	50	.000
COST 2017	.324	50	.000	.509	50	.000
COST 2018	.324	50	.000	.509	50	.000
COST 2019	.324	50	.000	.509	50	.000
COST 2020	.324	50	.000	.509	50	.000
PROFIT 2016	.353	50	.000	.566	50	.000
PROFIT 2017	.353	50	.000	.566	50	.000
PROFIT 2018	.352	50	.000	.565	50	.000
PROFIT 2019	.352	50	.000	.565	50	.000
PROFIT 2010	.352	50	.000	.564	50	.000

From 2016 to 2020, the normalcy test reveals a substantial p-value for both the cost of production and gross profit. This suggests that the cost of production and gross profit data distributions are significantly different from the normal distribution, indicating that the data distribution is non-normal. This indicates that non-parametric statistical analysis, the Spearman's correlation coefficient, and Kendall's tau are being used. Table 3 shows the findings of the correlation analyses.

Table 3: Spearman's Correlation Coefficient and Kendall's Tau Analysis

		Cost of Production	Gross Profit
Kendall's tau	Inflation rate	0.993	0.834
Spearman rho		0.941	0.672
		Gross Profit	
Kendall's tau	Cost of Production	0.664	
Spearman rho		0.804	

Both Spearman rho and Kendall's tau are used in the correlation coefficient analysis. Kendall's tau is a non-parametric correlation that's utilized when there's a small data set with a lot of linked rankings, such in this study. Kendall's statistic, according to Howell (1997), is a better measure of the population correlation than Spearman's statistic. Kendall's tau value for the first coefficient analysis of inflation rate and cost of production is 0.993. We may conclude that there is a significant association between the inflation rate and the cost of production because the significant value (p) is 0.001, which is less than 0.05, and the correlation value is positive.

The Kendall's tau value for the second correlation coefficient study between the cost of production and the gross profit is 0.664. We may conclude that there is a significant association between the cost of production and the gross profit because the correlation coefficient is positive and the p value is 0.000 (less than 0.05). The correlation coefficient between inflation rate and gross profit has a Kendall's tau value of 0.834 and a p value of 0.02. (less than 0.05). We can deduce that the rate of inflation and the gross profit of companies have a substantial link.

The findings show that the rate of inflation has a considerable impact on the value of a company's cost of production and gross profit. A positive result also indicated that if the rate of inflation rises, the cost of manufacturing will rise as well, hence increasing the value of profit. Cost increases in most industries would be absorbed into production costs. Whether the cost increases are passed on to customers will, however, be determined by the sorts and elasticity of the products and services. Furthermore, the imposition of a value added tax in the economy [14] would ensure that all consumers, regardless of the sort of products and services purchased, would be subject to the

indirect tax. Based on business pricing policies, this type of indirect tax would appear in the price tag, creating an increase in the price level of goods and services in the economy.

V. CONCLUSION

According to the findings of the study, gross profit and inflation rate have a positive association. Although the effects of inflation are not recognised in nominal financial statements, such effects will have economic consequences [12], according to Yaniv Konchitchki (2011), even when inflation is relatively low. In addition, inflation has an impact on profits through affecting sales volume, impacting cost levels, and modifying the cost-price relationship. Benabou and Gertner (1993) study the influence of inflation uncertainty on price dispersion by introducing a stochastic shock to producer costs. Consumers in this paradigm are unable to differentiate between aggregate and relative shocks. Consumers might choose to supplement their knowledge with search and must determine whether the cost of searching is justified based on costs.

As a result, the inflation risk may not apply to other sectors, as various sectors may experience different effects from inflation. Future study could include a greater scope, either in terms of time or the number of industry groups, to improve representativeness. In addition, a company's performance should be measured using a variety of performance metrics other than gross profit. In addition, numerous sources of literature and material should be used to gather more detailed information from past studies, which will help to ensure the validity of the current study. Finally, more research may be done to determine whether inflation has an impact on a company's performance, as past researchers have suggested that inflation may not be the most important factor affecting a company's performance.

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