



Impact Of Interest Rate And Inflation In Stock Price Of Fmcg Companies

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INTRODUCTION

Macroeconomics (from the Greek prefix macro- meaning "large" and economics) is a branch of economics dealing with the performance, structure, behavior, and decision-making of an economy as a whole, rather than individual markets. Macro economists develop models that explain the relationship between such factors as national income, output, consumption, unemployment, inflation, savings, investment, international trade and international finance. In contrast, microeconomics is primarily focused on the actions of individual agents, such as firms and consumers, and how their behavior determines prices and quantities in specific markets. While macroeconomics is a broad field of study, there are two areas of research that are emblematic of the discipline: the attempt to understand the causes and consequences of short-run fluctuations in national income (the business cycle), and the attempt to understand the determinants of long-run economic growth (increases in national income). Macroeconomic models and their forecasts are used by governments to assist in the development and evaluation of economic policy.

The macroeconomic variables can be classified into four groups. The first group reflects general economic conditions such as employment level and the industrial production index. The second group includes variables concerning interest rate and monetary policy. Those variables include interest rate, term spread, default spread, etc. The third group of variables focuses on price level, which can be general price level and inflation rate or the price of key assets such as oil prices. The last group is the variables involving international activities such as exchange rate and foreign direct investment. The focus of the macroeconomic approach is to examine how sensitive are stock prices to changes in macroeconomic variables. This approach maintains that the performance of stock is influenced by changes in money supply, interest rate, inflation rate, exchange rate, international crude oil prices, external debt, external reserve etc. The approach, believing on the economic logic that everything does depend on everything else,

stresses the interrelations between sectors as central to the understanding of the persistence and co-movement of macroeconomic time series. The Macroeconomic variables, both real and financial, do have considerable influence, positive as well as negative, on the performance of the corporate sector of the economy.

PROBLEM OF THE STUDY

FMCG Sector plays an important role in Economic contribution of the country like employment generation, Fiscal contribution; it also helps the other Ancillary Industries. So this study is designed to explore the influences of some factors on share prices of the Sector. This study will be useful for the investors who might be able to identify some basic economic variables that they should focus on while investing in FMCG Sector and will have an advantage to make their own suitable investment decisions.

OBJECTIVES OF THE STUDY

- ☐ To study the impact of Macro Economic variable (inflation & interest rate) on share price (FMCG)
- ☐ To analyse the relationship between inflation and share price.
- ☐ To analyse the relationship between Interest rate and share price.
- ☐ To find either there is any long run relationship between macro economic factors and share price or not.

SCOPE OF THE STUDY

This study helps in knowing the overall performance of the FMCG Sectors. It also helps to know about the influence of Macro Economic variables on the share price of the sector. The relationship between variables and share price movement can be known. It also helps in knowing the future growth of the FMCG Sector. The study covers a very few companies in FMCG Sector and in the future, the study may be a base to extend this research in other companies and other industries.

Research Methodology

The research methodology adopted in this study is analytical study. The research is carried out using secondary data obtained from NSE Website, companies' website etc. the research is carried out using statistical tools such as multiple regression, correlation, trend analysis.

2. DATA ANALYSIS AND INTERPRETATION

2.1 REGRESSION ANALYSIS

TABLE NO. 2.1.1 CALCULATION OF (R) VALUE OF ITC

H0: There is no significant Relationship between the Dependent Variable (share price) and the Independent variables (Interest Rate and Inflation Rate).

H1: There is significant Relationship between the Dependent Variable (share price) and the Independent variables (Interest Rate and Inflation Rate).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.014 ^a	.000	-.002	4.52429	.000	.094	1	498	.759
2	.045 ^b	.002	-.002	4.52460	.002	.930	1	497	.335

a. Predictors: (Constant), nterest rate

b. Predictors: (Constant), interest rate, inflation

R is the correlation, its value is .014 and .045 and R square is degree of determination, its value is -.002 and -.002. The degree of determination shows the extent to which the independent factors influence the share price. The impact of share price is determined to an extent of -.002% and -.002% by the interest and inflation rate.

TABLE NO. 2.1.2 DETERMINATION OF REGRESSION EQUATION FOR ITC

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.604	6.028		-.266	.790
	interest rate	23.821	77.534	.014	.307	.759
2	(Constant)	-1.990	6.041		-.329	.742

interest rate	26.551	77.591	.015	.342	.732
inflation	23.651	24.518	.043	.965	.335

a. Dependent Variable: return

INTERPRETATION

This table shows that the effect of Independent variables influences on Dependent variable share price is given in the regression equation.

$$Y = -1.990 + 26.551X_1 + 23.651X_2$$

Where, Y = Dependent variable

X₁ = Interest rate

X₂ = Inflation rate

It is observed from the data that ITC is giving a constant negative return of (1.990). But, the change in interest rates and the change in inflation rate increases the return by 27% and 24% respectively.

TABLE NO. 2.1.3 CALCULATION OF (R) VALUE OF HUL

H₀: There is no significant Relationship between the Dependent Variable (share price) and the Independent variables (Interest Rate and Inflation Rate).

H₁: There is significant Relationship between the Dependent Variable (share price) and the Independent variables (Interest Rate and Inflation Rate).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.011 ^a	.000	-.002	9.01914 0	.000	.060	1	498	.806
2	.046 ^b	.002	-.002	9.01919 6	.002	.994	1	497	.319

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- a. Predictors: (Constant), interest rate
- b. Predictors: (Constant), interest rate, inflation

R is the correlation, its value is .011 and .046 and R square is degree of determination, its value is -.002 and -.002. The degree of determination shows the extent to which the independent factors influence the share price. The impact of share price is determined to an extent of -.002% and -.002% by the interest and inflation rate.

TABLE NO. 2.1.4 DETERMINATION OF REGRESSION EQUATION FOR HUL

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.279	12.008		.273	.785
interestrate	-37.861	154.445	-.011	-.245	.806
2 (Constant)	2.480	12.035		.206	.837
interestrate	-32.171	154.551	-.009	-.208	.835
inflation	48.722	48.875	.045	.997	.319

- a. Dependent Variable: return

This table shows that the effect of Independent variables influences on Dependent variable share price is given in the regression equation.

$$Y=2.480-32.171X1+48.722X2$$

Where, Y= Dependent variable (RETURN)

X1= Interest rate

X2= Inflation rate

It is observed from the data that HUL is giving a constant positive return of 2.480. But, the change in inflation rate increases the return by 49% and the interest rate decreases by 32% respectively.

2.2 CORRELATION

TABLE NO. 2.2.1 CORRELATION BETWEEN RETURN AND INTEREST RATE FOR ITC

H0: There is no Correlation between the dependent variable and the Independent Variables.

H1: There is Correlation between the dependent variable and the Independent Variables.

Dependent Variable: share Price

Independent Variables: Inflation rate and Interest rate.

		Return	Interest Rate
Return	Pearson Correlation	1	.014
	Sig. (2-tailed)		.759
	N	500	500
Interest rate	Pearson Correlation	.014	1
	Sig. (2-tailed)	.759	
	N	500	501

The result shows that Pearson correlation is equal to 0.014. Its means, correlation between the variables have very strong relationship. (Interest rate & Share Price). The calculated value .759 is greater than 0.05 hence H0 is rejected. So, there exists correlation between the dependent variable and independent variables.

TABLE NO. 2.2.2 CORRELATION BETWEEN RETURN AND INFLATION RATE

FOR ITC

		Return	Inflation
return	Pearson Correlation	1	.043
	Sig. (2-tailed)		.341
	N	500	500
inflation	Pearson Correlation	.043	1
	Sig. (2-tailed)	.341	
	N	500	501

The result shows that Pearson correlation is equal to 0.043. Its means, correlation between the variables have very strong relationship. (Inflation rate & Share Price). The calculated value .341 is greater than 0.05 hence H0 is rejected. So, there exists correlation between the dependent variable and independent variables.

TABLE NO. 2.2.3 CORRELATION BETWEEN RETURN AND INTEREST RATE FOR HUL

H0: There is no Correlation between the dependent variable and the Independent Variables.

H1: There is Correlation between the dependent variable and the Independent Variables.

Dependent Variable: share Price

Independent Variables: Inflation rate and Interest rate.

		Return	Interest rate
Return	Pearson Correlation	1	-.011

	Sig. (2-tailed)		.806
	N	500	500
intereste	Pearson Correlation	-.011	1
	Sig. (2-tailed)	.806	
	N	500	501

The result shows that Pearson correlation is equal to -.011. Its means, the variables are negatively correlated. The calculated value .806 is greater than 0.05 hence H0 is rejected. So, there exists correlation between the dependent variable and independent variables.

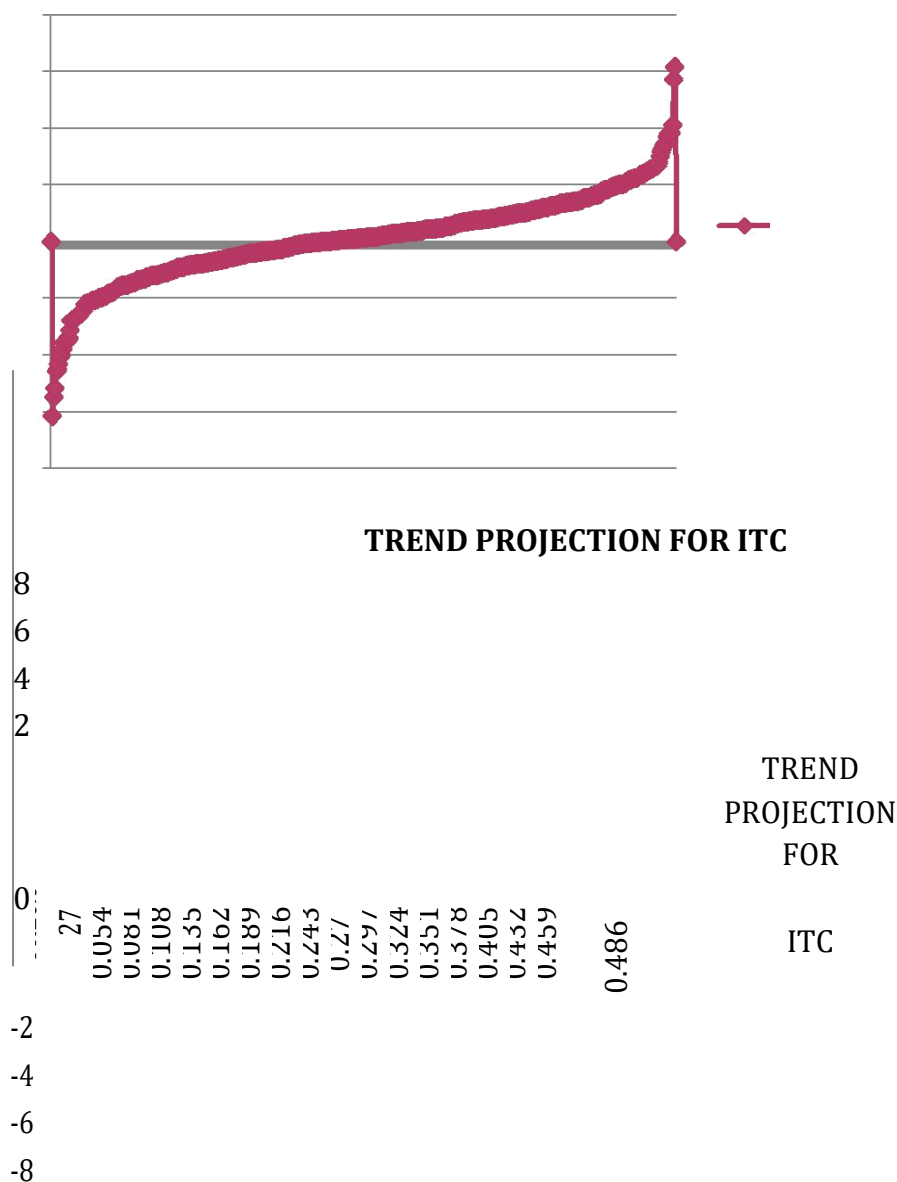
TABLE NO. 2.2.4 CORRELATION BETWEEN RETURN AND INFLATION FOR HUL

	Return	Inflation Rate
Return Pearson Correlation	1	.045
Sig. (2-tailed)		.315
N	500	500
Inflation Pearson Correlation	.045	1
Sig. (2-tailed)	.315	
N	500	501

The result shows that Pearson correlation is equal to .045. Its means, the variables are positively correlated. The calculated value .315 is greater than 0.05 hence H0 is rejected. So, there exists correlation between the dependent variable and independent variables.

2.3 TREND ANALYSIS

FIGURE NO. 2.3.1 TREND PROJECTION FOR ITC



From the above chart, it is inferred that the share price of ITC is trending upward and it is expected to make a considerable gain in the future days. 50% CHANCE OR PROBABILITY THAT STOCK WILL GAIN MORE THAN 0.59912 20% CHANCE OR PROBABILITY THAT STOCK WILL GAIN MORE THAN 0.79923

3.2 SUGGESTIONS

This research has opened up the avenue for future studies to investigate the existing links between Macro economic Variables and share prices. The following suggestions would help for further investigation into the topic and explore the research and it would also help the stake holders and the other investors to make better decisions in Investing into a particular company's stock by considering the macroeconomic variable also.

- ❑ Studies should be conducted over a longer time horizon and under normal economic conditions, to obtain more reliable data pertaining to the macroeconomic variables.
- ❑ This study selected two macroeconomic Variables, Interest Rate and Inflation rate. Further studies can be conducted using other macroeconomic variables.
- ❑ The same study can be conducted utilizing other NSE sector indexes, such as the financial sector index share price or the Automobile sector index share price as the dependent variable.
- ❑ In this study, the relationship between the Macroeconomic variables and the share price was tested using correlation. It is possible to replicate this study using other statistical tests such as regressions.
- ❑ The Relationship between the Macroeconomic variables and the FMCG Share Price can be tested for other countries in Africa and the rest of the world.
- ❑ Investors should look at the systematic risks revealed by these macroeconomic variables when structuring their portfolios and diversification strategies.
- ❑ Policymakers should seek to minimize macroeconomic fluctuations considering the effect of macroeconomic variables changes on the share price when formulating economic policy.

3.3 CONCLUSION

Investment in Stock market is an interesting business activity. Practitioners and analysts always try to predict future directions of stock market and the company's share price to spot and outperform the market. Besides this they also try to measure the risk associated with their investment. They try to find out the relationship between macroeconomic indicators and share price movement which help them to take an appropriate investment decision. Investigators might forecast how financial market changes if macro-economic variables like interest rates, different T- bills rates and inflation, consumer price index, whole sale price index and sensitive price index fluctuate on any particular direction. The stock exchange has been perceived by many as the backbone for most contemporary economies, serving a critical need of raising capital. The stock exchange serves two critical functions; it provides a critical link between companies that need funds to set up new businesses or to expand their current operations and investors that have excess funds to invest in such companies and it provides a regulated market place for buying and selling of shares at prices determined by supply and demand, notwithstanding other macroeconomic fundamentals such as

interest and inflation rates. To meet their short-term cash requirements corporations usually borrow from banks. From the Study, it is inferred that FMCG sector is a booming sector, wherein which the Investors can seek profit with considerable amount of Risk. It is thus, interpreted that the macroeconomic variables and the Share price has correlation. The objectives of this project were founded and the results are interpreted.

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