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## A STUDY ON FACTORS AFFECTING PERCEPTION OF INVESTORS TOWARDS STOCK MARKET INVESTMENT IN NAGPUR CITY

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### Abstract

The objective of the study is to identify the factors affecting the volatility in stock market and to understand the use of the tools of Fundamental analysis in predicting the volatility in Share Market. Factor analysis is performed on various factors and they are classified under four dimensions viz. Economic Volatility, Market Volatility, Behavioral Volatility and Fundamental Volatility and it is concluded that in the short run the fundamental macroeconomic factors may play a vital role in explaining the stock market volatility.

Keywords: Stock market volatility; Factor analysis; Fundamental analysis.

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### Introduction:

The primary objective of this study is to help the investors in taking their investment decisions by using the various tools of fundamental analysis. Because of the absence of proper knowledge many investors lost their money in share market. This project aims to draw a proper guideline to help the investment decision.

Due to severe global crisis, there exist a huge volatility take place in the world financial markets and Indian markets have been no exception. Understanding the stock markets as how it works & what to expect from it, is a huge piece of armour that an individual entering in to the battlefield of stock market can take with him. Extreme moments in stock prices because of fear and anticipation made life tough for a rational investor. Understanding the irrational behaviour deserves more important that it has ever had. Today's investment decisions demand a better understanding of individual investors' behavioural biases.

In the recent past there have been perceptions that volatility in the market has gone up; Inter and Intra-day volatility. News items and some clinical research papers also provided figures to evidence this argument.

### Literature Review:

**Muradoglu, Metin and Argac (2001)** examined the long-run relationship between stock returns and three monetary variables (overnight interest rate, money supply and foreign exchange rate) in Turkey. They pointed out that the whole sample period (1988-1995) showed no co-integrating relationship between stock prices and any of the monetary variables. This is also true only for the first sub-sample (1988-1989) but all the variables were co integrated with stock prices for the second (1990-1992) and third sub-samples (1993-1995). **Donatas, P., & Vytautas B.,(2009)** analyses the relationships between a group of macroeconomic variables and the Lithuanian stock market index and reveals that some macroeconomic variables lead Lithuanian stock market returns.

A detailed survey of the studies and reports related to the topic was conducted. Most of the studies were on developed countries and only a few studies were available in the Indian context. It was seen that the range of methods used varied from simple regression and correlation in a few cases to causality and co-integration tests in many cases. There was no consistent pattern of relationship and the studies were non-conclusive and in case of certain periods and of countries, it was seen that long term relationship prevailed whereas the relationship was too short term in case of certain others. Studies were more conclusive with respect to developed countries but were period specific and country specific. The validity of the period varied from very short term and event based to medium term and long term in some cases.

**Objective of the study:** The objectives of the study are:

1. To identify the factors affecting the volatility in stock market.
2. To understand the factors affecting the investment decisions.

**Hypothesis:**

1. A significant relationship is observed between Sensex volatility and the Economic Growth.

**Sampling Unit & Sample Size:**

In this study the sampling unit is **present investor and prospective investor, Financial Advisors, Stock Brokers and Financial Analysts.**

Responses of **160** respondents was received and used for analysis which included:

- ▶ 100 from present and prospective investors (mostly Businessmen)
- ▶ 30 Stock Brokers and sub brokers
- ▶ 30 Financial Advisors and Financial Analysts.

**Tools Used and Methods of Analysis:**

Statistical tools used for the analysis varied from simple graphical analysis and descriptive statistics and factor analysis to detailed time series analysis using econometric tools and statistical software SPSS ver. 20.

**Data Analysis:**

Factor analysis is performed on various factors and they are classified under four dimensions viz. Economic Volatility, Market Volatility, Behavioural Volatility and Fundamental Volatility which is as follows:

Factors like GDP, Exchange Rate, hype Created in market, Interest Rates, Inflation and Industry Performance come under one dimension so they were named as Economic Volatility. Factors like World Events, Demand and Supply, Natural Disaster and War & Terrorism are classified under next dimension which was named as Market Volatility. Factors like Scandals and Speculations are classified under dimension Behavioural Volatility and lastly the remaining factors like Company News and Politics are classified under the dimension Fundamental Volatility.

The dimensions created were as follows:

**Table: Dimensions of Fundamental Analysis**

Economic Volatility	Market Volatility	Behavioural Volatility	Fundamental volatility
GDP	World Events	Scandals	Company News
Exchange Rate	Demand & Supply	Speculations	Politics
Hype Created in Market	Natural Disaster		
Interest Rates	War & Terrorism		
Inflation			
Industry Performance			

**Descriptive Statistics**

**Table: Descriptive Statistics**

	Mean	Std. Deviation	Std. Error Mean	Ranking
World Events	1.8688	.87683	.06932	6
GDP	2.0188	.70463	.05571	8
Exchange Rate	1.4750	.52545	.04154	1
Scandals	3.1313	1.53419	.12129	14
Company News	1.9250	1.32963	.10512	7
Hype created in market	1.8438	1.13574	.08979	5
Politics	2.6500	1.47601	.11669	12
Demand & Supply	1.5625	.74974	.05927	2
Natural Disaster	2.3688	1.20597	.09534	11
Speculation	2.6625	1.21255	.09586	13
War & Terrorism	2.3188	1.36613	.10800	10
Interest Rates	1.6813	.54220	.04287	4
Inflation	2.0750	1.18984	.09407	9
Industry Performance	1.6000	.63642	.05031	3

The above table shows the descriptive statistics with mean and standard deviation of the responses received from the present and prospective investors on the fact that how much they agree that the given fundamental factor affect the stock market movement. The responses received were ranked on the basis of their mean, which shows that as per the respondents the factor which affects the stock market volatility is Exchange rate. The top 10 important factors including exchange rate as per the respondents are Demand & Supply, Industry Performance, Interest Rates charged by Banks, Hype created in market, world events, company news, GDP, Inflation and War & Terrorism respectively.

According to the respondents the least important factors are Natural Disaster, Politics Speculation and Scandals respectively.

Thus to verify this analysis, one sample t-test is applied by taking the test value of 2.5 being the Median value of the responses, and following results were obtained:

Table One-Sample Test						
	Test Value = 2.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
GDP	-8.639	159	.000	-.48125	-.5913	-.3712
Exchange Rate	-24.675	159	.000	-1.02500	-1.1070	-.9430
Hype created in market	-7.309	159	.000	-.65625	-.8336	-.4789
Interest Rates	-19.101	159	.000	-.81875	-.9034	-.7341
Inflation	-4.518	159	.000	-.42500	-.6108	-.2392
Industry Performance	-17.888	159	.000	-.90000	-.9994	-.8006

The above table gives the one-sample t-test value of economic volatility factors and where the sig. (2-tailed) value obtained in case of all the variables is 0.00 which is found to be less than the alpha value of 0.05, which means that there is significant relationship between stock market volatility and economic factors. Hence **hypothesis “A significant relationship is observed between Sensex volatility and the Economic Growth” is accepted.** Thus this can be said that volatility in Stock prices cannot be explained with the help of variable of Economic Growth.

### Conclusions:

Serious policy initiatives are required in this regard so as to make stock market a more relevant institution. Factors like GDP, Exchange Rate, hype Created in market, Interest Rates, Inflation and Industry Performance come under one dimension so they were named as Economic Volatility. Factors like World Events, Demand and Supply, Natural Disaster and War & Terrorism are classified under next dimension which was named as Market Volatility. Factors like Scandals and Speculations are classified under dimension Behavioural Volatility and the factors like Company News and Politics are classified under the dimension Fundamental Volatility.

According to the respondents, the least important factors are Natural Disaster, Politics Speculation and Scandals respectively. The decision of investment by the investors is least affected by these factors.



According to the study, the investment decision of the investors is most affected by the Exchange rate movements and Demand and Supply. Investors also consider Industry Performance as one of the important factor that influences the stock market movement.

Thus it is concluded that in the short run the fundamental macroeconomic factors may play a vital role in explaining the stock market volatility.

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