



**IMPACT OF SHARE PRICE VOLATILITY ON
PERFORMANCE OF SELECTED COMPANIES IN NSE**

by

S KALAIVANAN
Reg. No. 1120400045

Under the guidance of

Ms. S.Sangeetha
Assistant Professor
(Senior Grade)

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BONAFIDE CERTIFICATE

Certified that this project report titled, “**IMPACT OF SHAREPRICE VOLATILITY ON PERFORMANCE OF SELECTED COMPANIES IN NSE, SHAREKHAN LIMITED, COIMBATORE** ” is the bonafide work of **Mr. S KALAIVANAN (Reg No.1120400045)** who carried out the project under my supervision. Certified further, that to the best of my knowledge the report herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Faculty Guide
Ms. S. Sangeetha,
Asst. Prof. (SRG),
KCTBS

Director
Dr.Vijila Kennady,
KCTBS.

Submitted for the project viva voice examination held on _____

Internal Examiner

External Examiner

DECLARATION

I, hereby declare that this project report entitled as, **“IMPACT OF SHAREPRICE VOLATILITY ON PERFORMANCE OF SELECTED COMPANIES IN NSE, SHAREKHAN LIMITED-COIMBATORE”** has undertaken for academic purpose submitted to Anna University in partial fulfillment of requirement for the award of degree of Master of Business Administration. The project report is the record of the original work done by me under the guidance of Ms S.Sangeetha, Asst Prof (SRG) during the academic year 2011-2012.

I, hereby declare, that the information given in this report is correct to the best of my knowledge and behalf.

Place: Coimbatore

Date:

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(S KALAIVANAN)

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SYNOPSIS

Sharekhan limited is one of the leading share broking concerns. The company is having branches all over the world. In recent trends, the investors of sharekhan limited are under the dilemma of selecting the appropriate profitable shares at the right time as a result of the high volatility in the stock market. This project will research and compare the volatility, risk, return pattern among selected companies in order to find out which company's shares are highly volatile and also suggest the best investment option for the investors of sharekhan limited according to their risk taking ability.

The research also predicts the highly volatile shares and finding the profitable shares for the investors in the present scenario.

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CHAPTER 1 INTRODUCTION

1.1 ABOUT THE STUDY

Indian financial market has seen drastic growth and innovation in the history of past 20 years. It has been witnessing major operational and structural changes as a result of on-going financial sector reforms initiated by the Government of India since 1991 in the wake of liberalization.

The major activities of these reforms have been to improve market efficiency, enhancing transparency and bringing the Indian capital market up to international standards. With over 25 million shareholders, India has the third largest investor base in the world after USA and Japan. Over 7500 companies are listed on the Indian stock exchanges (more than the number of companies listed in developed markets of Japan, UK, Germany, France, Australia, Switzerland, Canada and Hong Kong.).The Indian capital market is significant in terms of the degree of development, volume of trading, transparency and its tremendous growth potential. India's market capitalization was the highest among the emerging markets.

Stock prices are changed every day by the market. Buyers and sellers cause prices to change as they decide how valuable each stock is. Basically, share prices change because of supply and demand. If more people want to buy a stock than sell it - the price moves up. Conversely, if more people want to sell a stock, there would be more supply (sellers) than demand (buyers) - the price would start to fall. Volatility in the stock return is an integral part of stock market with the alternating bull and bear phases. In the bullish market, the share prices soar high and in the bearish market share prices fall down and these ups and downs determine the volatility and return of the stock market .In the present project, it is attempted to test the price fluctuations taking FMCG,PHARMACUETICALS, AUTOMOBILE, BANK and INFRASTRUCTURE industries as sample sectors.

1.2 THEORITICAL BACKGROUND OF THE STUDY:

VOLATILITY

Volatility refers to the amount of uncertainty or risk about the size of changes in a security's value. Stock market volatility indicates the degree of price variation between the share prices during a particular period and it is a symptom of a highly liquid stock market.

Pricing of securities depends on volatility of each asset. An increase in stock market volatility brings a large stock price change of advances or declines. It has an impact on business investment spending and economic growth through a number of channels. Changes in local or global economic and political environment influence the share price movements and show the state of stock market to the general public.

TYPES OF VOLATILITY:

There are two main types of stock volatility including **historical volatility** and **implied volatility** that are used in the options markets.

➤ **Historical volatility**

Historical volatility, often referred to as actual volatility and realized volatility, is the measure of a stock's price movement based on historical prices (stock price history) and it is used to measure how active a stock price typically is over time. It measures the fluctuations in the share price, and more specifically it is measured by taking the daily percentage price changes in a stock and calculating the average over a specific time frame.

➤ **Implied volatility**

Implied volatility is the current volatility of a stock and is estimated by its option price. In other words, the implied stock price volatility is that level of volatility that will calculate a fair value that is equal to the current trading option price.

Fundamentals

Clearly, the most direct influence on a stock's price is a change in the economic fundamentals of the business. If revenues and profits are on a steep upward trend with no indication of leveling off, you can expect to see the stock price rise as investors bid up this attractive company.

On the other hand, if the profit picture is flat or, worse, declining with no change in sight, look for investors to abandon the stock and the price to fall. These are simple examples of changes in fundamentals. Other, more complex and subtle changes can occur that may not dramatically affect the stock price immediately (increased debt, a poor acquisition and so on can also trigger price changes). The changes in the underlying business have a direct impact on the stock's price. Smart investors spot the subtle changes before they become price-movers and take the appropriate action.

Sector Changes

Changes in the stock's sector can have positive or negative impact on price too. Some sectors or industries are cyclical in nature and you should know that would affect price. However, when whole sectors catch of fire or burn up even those companies that have solid fundamentals are pulled along with the rest of the sector.

Market Swings

The market goes up and the market goes down. That's about all you can say with certainty concerning the stock market .As the market moves up and down, your stock may move with or against it. Most large-cap stocks will follow the market to some degree, but smaller companies may not get the same push every time.

In general, a strong market move either up or down will carry more stocks with it than not, so your stock may be up or down for no other reason than the market was up or down.

➤ Price volatility presents opportunities to buy assets cheaply and sell when overpriced.

- When certain cash flows from selling a security are needed at a specific future date, higher volatility means a greater chance of a shortfall.
- Higher volatility of returns while saving for retirement results in a wider distribution of possible final portfolio values.
- Higher volatility of return when retired gives withdrawals a larger permanent impact on the portfolio's value.

Stock Exchange:

A stock exchange is an institution, organization or association that serves as a market for trading financial instruments such as stocks, bonds and their related derivatives. The stock exchange provide a trading platform, where buyers and sellers can meet to transact their securities .Stock exchanges in India, under the overall supervision of the regulatory authority, the Securities and Exchange Board of India (SEBI). Exchanges make money in several different areas. Listings, sales, and selling market statistics are some of the various ways that they produce revenue. There are the 2 important markets in stock exchange

- **Primary market**
- **Secondary Market**

Bombay Stock Exchange (BSE):

The Bombay Stock Exchange is the oldest exchange in Asia. In 1956, the BSE became the first stock exchange to be recognized by the Indian Government under the Securities Contracts Regulation Act. The Bombay Stock Exchange developed the BSE SENSEX in 1986, giving the BSE a means to measure overall performance of the exchange.

In 2000 the BSE used this index to open its derivatives market, trading SENSEX futures contracts. The development of SENSEX options along with equity derivatives followed in 2001 and 2002, expanding the BSE's trading platform. Historically an open outcry floor trading exchange, the Bombay Stock Exchange switched to an electronic trading system in 1995. It took the exchange only fifty days to make this transition. This automated, screen-based trading platform called BSE

On-line trading (BOLT) currently has a capacity of 8 million orders per day. The BSE has also introduced the world's first centralized exchange-based internet trading system, BSEWEBx.co.in to enable investors anywhere in the world to trade on the BSE platform.

The equity market capitalization of the companies listed on the BSE was US\$1 trillion as of December 2011, making it the 6th largest stock exchange in Asia and the 14th largest in the world. The BSE has the largest number of listed companies in the world.

National Stock Exchange (NSE):

The National Stock Exchange of India was set up by Government of India on the recommendation of Pherwani Committee in 1991. Promoted by leading financial institutions essentially led by IDBI at the behest of the Government of India, it was incorporated in November 1992 as a tax-paying company. In April 1993, it was recognized as a stock exchange under the Securities Contracts Regulation, 1956. NSE commenced operations in the Wholesale Debt Market segment in June 1994. The Capital market (Equities) segment of the NSE commenced operations in November 1994, while operations in the Derivatives segment commenced in June 2000. NSE has a market capitalization of around US\$985 billion and over 1,646 listings as of December 2011.

The NSE's key index is the S&P CNX Nifty, known as the NSE NIFTY, an index of fifty major stocks weighted by market capitalization. NSE is mutually owned by a set of leading financial institutions, banks, insurance companies and other financial intermediaries in India but its ownership and management operate as separate entities. NSE is the third largest Stock Exchange in the world in terms of the number of trades in equities. It is the second fastest growing stock exchange in the world with a recorded growth of 16.6%. NSE also set up as index services firm known as India Index Services & Products Limited (IISL) and has launched several stock indices.

Index

An index is a basket of identified stocks, and its value is computed by taking the weighted average of the prices of the constituent stocks of the index. A market index for example consists of a group of top stocks traded in the market and its value changes as the prices of its constituent stocks change. In India, Nifty Index is the most popular stock index and it is based on the top 50 stocks traded in the market.

The **S&P CNX Nifty**, also called the Nifty 50 or simply the Nifty, is a stock market index and one of several leading indices for large companies which are listed on National Stock Exchange of India. Index based derivatives and index funds. Nifty is owned and managed by India Index Services and Products Ltd. (IISL), which is a joint venture between NSE and CRISIL (Credit Rating and Information Services of India Ltd). (IISL) is India's first specialized company focused upon the index as a core product. IISL has marketing and licensing agreement with Standard & Poor's for co-branding equity indices. 'CNX' in its name stands for 'CRISIL NSE Index'. The S&P CNX Nifty currently consists of 50 major Indian companies.

CHAPTER 2

ABOUT THE ORGANIZATION

2.1 SHAREKHAN LIMITED:

A stockbroker is a regulated professional broker who buys and sells shares and other securities through market makers or Agency Only Firms on behalf of investors.

Typically, a broker who receives an order from a customer will communicate with a company employee located at a particular exchange, who will **execute the order** at the exchange and report details of the transaction to the broker. Customers typically keep their securities in an account with the broker. Brokers charge customers **commissions** for conducting transactions and **fees** for maintaining their accounts.

2.2 HISTORY OF THE ORGANIZATION-SHAREKHAN LTD

Sharekhan is one of the leading share broking and retail brokerage firms in the country. It is the retail broking arm of the Mumbai-based **SSKI Group (Shripal Sevantilal Kantilal Ishwarlal Pvt. Ltd)**, which has more than **88 years** of experience in the stock broking business. SSKI is a veteran equities solutions company with **more than 8 decades** of trust and credibility in the Indian stock markets. It helps the customers/people to make informed decisions and simplifies investing in stocks.

Sharekhan brings to you a user- friendly online trading facility, coupled with a wealth of content that will help you stalk the right shares. SSKI named its online division as a Sharekhan and it is into retail broking. The business of the company **overhauled 10 years ago on February 8, 2000**. It acts as a discount brokerage house to a full service investment solution provider. It has specialized research product for the small investors and day traders.

About Sharekhan:

- SSKI named its online division as SHAREKHAN and it is into retail broking.
- The business of the company **overhauled 10 years ago on February 8, 2000.**
- It acts as a discount brokerage house to a full service investment solutions provider.
- It has specialized research product for the small investors and day traders.
- Largest chain of **640 shares shops in 280 cities** across India.
- The site was also launched on February 8, 2000 and named it as www.sharekhan.com.
- The **Speed Trade account** of Sharekhan is the next generation technology product launched on **April 17, 2002.**
- It offers its customers with the trade execution facilities on the NSE and BSE, for cash as well as derivatives, depository services.
- Ensures convenience in Trading Experience: Sharekhan's trading services are designed to offer an easy, hassle free trading experience, whether trading is done daily or occasionally. Sharekhan providing the customers with a multi-channel access to the stock markets.
- It gives advice based on extensive research to its customers and provides them with relevant and updated information to help him make informed about his investment decisions.

BRAND NAME:

The company as a whole in its offline business has named itself as **SSKI Securities Private Limited – Shripal Sevantilal Kantilal Ishwarlal Securities Private Limited.** The company has preferred to name themselves under a blanket family name.

But, in its online division started since 1997, the company preferred to name itself as "SHAREKHAN". The Brand name "SHAREKHAN" itself suggests the business in which the company is dealing so that the customer could easily identify the product or service category.

Sharekhan completes 10 years in Retail Broking Business:

Sharekhan Ltd, India's leading online retail broking house with a strong online trading platform, has completed a decade in the business offering services such as portfolio management, trade execution in equities, futures & options, commodities and distribution of mutual funds, insurance and structured products.

SHAREKHAN'S MISSION & VISION:

Mission

- "To educate and empower the retail investor to help him/her take better investment decisions."

Vision:

- "To be the best retail broking brand in the Indian equities market."

Growth:

In a short span of **10 years**, the company has scripted a remarkable growth story. Starting from beginnings in **8th February 2000** as an online trading portal, Sharekhan today has a pan-India presence as well as global footprint in UAE and Oman with over **1,529 outlets** serving **9,50,000 customers** across **450 cities**.

Sales turnover & profit of last year:

According to the Individual - Audited financial statement for the Year of 2011, total net operating revenues increased with 0.32%, from INR 478.56 tens of millions to INR 480.07 tens of millions. Operating result decreased from INR 173.4 tens of millions to INR 140.67 tens of millions which means -18.88% change. The results of the period increased 32.41% reaching INR 247.29 tens of millions at the end of the period against INR 186.76 tens of millions last year. Return on equity (Net income/Total equity) went from 49.58% to 54.30%, the Return On Asset (Net income / Total Asset) went from 22.93% to 25.61% and the Net Profit Margin (Net Income/Net Sales) went from 39.03% to 51.51% when compared to the same period of last year. The Debt to Equity Ratio (Total Liabilities/Equity) was 212.07% compared to 216.17%

of last year. Finally, the Current Ratio (Current Assets/Current Liabilities) went from 2.15 to 2.27 when compared to the previous year.

Awards:

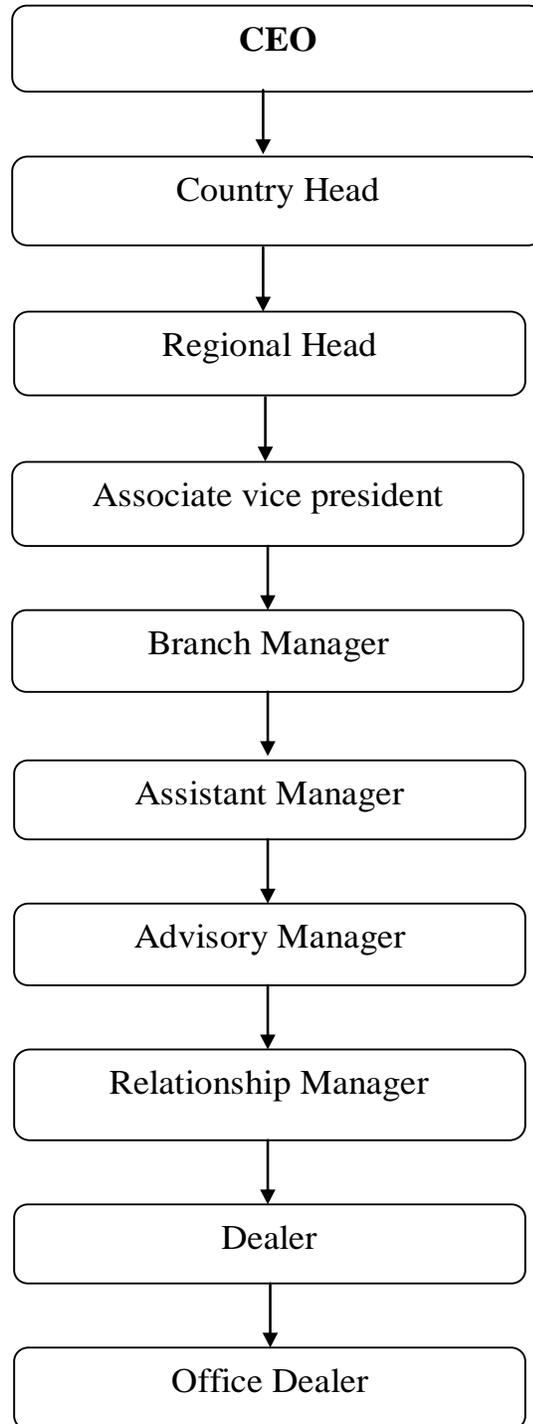
- It was awarded “Top Domestic Brokerage House” Four times by EURO and ASIA money
- It was a winner of Best Financial Website
- India’s most preferred brokers within 5 years “Awaaz customers award 2005”
- A wired companies along with Reliance, HIL, Infosys , etc by “Business Today” 2004
- CNBC Award winner ,2004

Products offered :

- Depository Services
- Internet Trading
- Commodity Derivatives
- Mutual Fund Distribution
- IPO services
- Insurance Services

Future Plan:

- The Sharekhan Ltd has planned to expand its branches all around Tamilnadu, at present it has 150 branches in and around the Tamilnadu, they are going to come out with 234 branches in Tamilnadu within a couple of years
- They have plan to expand across the Tamilnadu also

ORGANIZATIONAL STRUCTURE

1.3 Statement of the problem:

- Most of the investors are not able to predict the volatility of share price. So they are not able to select the right stock for their investment according to their risk ability
- Unprediction of share price leads to wrong investment and huge loss by the investors

1.4 Scope of the Study:

- The study will be helpful in knowing that how to analyze the share price behaviour before go for an investment.
- To have a better understanding of the stock market trend will facilitate allocation of financial resources to the most profitable investment opportunity.
- The volatility of stock price is due to several economic and non-economic factors. The study is aimed at ascertaining the behaviour of selected stock price.

Theoretical Background of tools

Standard deviation (SD):

Standard deviation measures the volatility of the returns from a mutual fund scheme over a particular period. It tells you how much the fund's return can deviate from the historical mean return of the scheme. If a fund has a 12% average rate of return and a standard deviation of 4%, its return will range from 8-16%.

Treynor's Measure:

It is based on the concept of characteristics line. It is interpreted as stating the reward (return minus the risk free rate) in relation to the portfolios beta risk.

The equation for the Treynor's measure for the performance of portfolio p, T_p equals

$$T_p = [ER_p - RF] / \beta_p$$

Where

T_p = Treynor's portfolio index

ER_p = Expected market return on portfolio p

RF = Risk Free rate of interest

β_p = Beta coefficient of portfolio p

Sharpe Measure:

Sharpe adjusts the portfolio returns for total risk σ_p which includes both systematic risk and the diversifiable risk. Generally, if the mutual funds or other portfolios are well diversified, the Sharpe and Treynor measures will give them the same rankings. If the measures give different rankings, the portfolio ranked higher by Treynor but lower by Sharpe may not be well diversified.

$$S_p = [ER_p - RF] / \sigma_p$$

Jensen Measure:

A risk-adjusted performance measure that represents the average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. This is the portfolio's alpha. In fact, the concept is sometimes referred to as "Jensen's alpha". Jensen's Measure is calculated as

$$\alpha_p = ER_p - [RF + \beta_p (ER_m - RF)]$$

Where

ER_p = Expected market return on portfolio p

RF = Risk Free rate of interest

β_p = Beta coefficient of portfolio p

ER_m = Expected Market return

Beta:

It measures a fund's volatility compared to that of a benchmark. It tells you how much a fund's performance would swing compared to a benchmark. A fund with a beta of 1 means, it will move as much as the benchmark. If a fund has a beta of 1.5, it means that for every 10% upside or downside, the fund's NAV would be 15% in the respective direction.

Average Return:

The simple mathematical average of a series of returns generated over a period of time. An average return is calculated the same way a simple average is calculated for any set of numbers; the numbers are added together into a single sum, and then the sum is divided by the count of the numbers in the set.

Correlation:

Correlation is a statistical measurement of the relationship between two variables. Possible correlations range from +1 to -1. A zero correlation indicates that there is no relationship between the variables. A correlation of -1 indicates a perfect negative correlation, meaning that as one variable goes up, the other goes down. A correlation of +1 indicates a perfect positive correlation, meaning that both variables move in the same direction together.

Value of r	Interpretation
$r = 0$	The two variables do not vary together at all.
$0 < r < 1$	The two variables tend to increase or decrease together.
$r = 1.0$	Perfect correlation.
$-1 < r < 0$	One variable increases as the other decreases.
$r = -1.0$	Perfect negative or inverse correlation.

R-Squared:

R-Squared is a statistical measure that represents the percentage of a fund portfolio's or security's movements that can be explained by movements in a benchmark index. Mutual fund investors should avoid actively managed funds with high R-squared ratios, which are generally criticized by analysts as being "closet" index funds.

Covariance:

Covariance provides a measure of the strength of the correlation between two or more sets of random variates. This is a measure of the degree to which returns on two risky assets move in tandem. A positive covariance means that asset returns move together. A negative covariance means returns move inversely.

Skewness:

Skewness is a measure of the degree of asymmetry of a distribution. If the left tail (tail at small end of the distribution) is more pronounced than the right tail (tail at the large end of the distribution), the function is said to have negative skewness. If the reverse is true, it has positive skewness. If the two are equal, it has zero skewness.

Skewness is extremely important to finance and investing. Most sets of data, including stock prices and asset returns, have either positive or negative skew rather than following the balanced normal distribution (which has a skewness of zero). By knowing which way data is skewed, one can better estimate whether a given (or future) data point will be more or less than the mean.

- If Skewness is less than -1 or greater than $+1$, the distribution is highly skewed.
- If Skewness is between -1 and $-\frac{1}{2}$ or between $+\frac{1}{2}$ and $+1$, the distribution is moderately skewed.
- If Skewness is between $-\frac{1}{2}$ and $+\frac{1}{2}$, the distribution is approximately symmetric.

Kurtosis:

A statistical measure used to describe the distribution of observed data around the mean. Kurtosis is the degree of peakedness of a distribution. It is sometimes referred to as the "volatility of volatility."

- $Z_{g2} < -2$, the population very likely has negative excess kurtosis (kurtosis < 3 , platykurtic), though you don't know how much.
- If Z_{g2} is between -2 and $+2$, you can't reach any conclusion about the kurtosis: excess kurtosis might be positive, negative, or zero.
- If $Z_{g2} > +2$, the population very likely has positive excess kurtosis (kurtosis > 3 , leptokurtic), though you don't know how much.

Reasons for selecting the companies:

For this study the daily closing price of 5 select companies listed in NSE were taken and their price movements were obtained and studied. The stocks are belong to the following sectors,

- FMCG
- PHARMACUETICALS
- AUTOMOBILE
- INFRASTRUCTURE
- BANK

The Sectors are selected on the basis of development in those sectors during the recent years. Huge investments have been made in these sectors during recent years and the share price fluctuations are also high.

WHY BANKING SECTOR :

The banking industry in India seems to be unaffected from the global financial crises which started from U.S in the last quarter of 2008. Despite the fallout and nationalization of banks across developed economies, banks in India seems to be on the strong fundamental base and seems to be well insulated from the financial turbulence emerging from the western economies. The Indian banking industry is well placed as compare to their banking industries western counterparts which are depending upon government bailout and stimulus packages.

The strong economic growth in the past, low defaulter ratio, absence of complex financial products, regular intervention by central bank, proactive adjustment of monetary policy and so called close banking culture has favoured the banking industry in India in recent global financial turmoil. Although there will no impact on the Indian banking system similar to that in west but the banks in India will adopt for more of defensive approach in credit disbursal in coming period. In order to safe guard their interest, banks will follow stringent norms for credit disbursal. There will be more focus on analyzing borrower financial health rather than capability.

The report “**Indian Banking Sector Forecast to 2012**” contains comprehensive research and rational analysis on various segments, like assets size, income level and number of cardholders, in the Indian banking industry. It also analyzes the current performance and key market trends, and helps clients to understand various products available in the market and their future scope.

The forecast given in this report is not based on a complex economic model but is intended as a rough guide to the direction in which the market is likely to move. The future projection is done on the basis of the current market scenario, past trends, and rules and regulations laid by the regulator and supervisor of the financial system, Reserve Bank of India (RBI).

In India banks have been categorized into four categories. They are

- Public sector banks
- Private sector banks
- Foreign banks
- Co-operative banks

Script taken for analysis is SBIN

WHY FMCG SECTOR:

Fast Moving Consumer Goods (FMCG) sector is booming from last several years and given steady returns to its investors despite slowdown in the economy. The India Brand Equity Foundation (IBEF) estimates a total market size in excess of US\$13.1 billion for FMCG industry in 2012. FMCG sector has several multinational players with strong presence in India. There is stiff competition among domestic companies, unorganized segment and MNC companies to increase their sales year-on-year, due to which they operate on low operational cost and margins

The sector can further classified goods into premium and mass segments:

- **Premium segment:** Serve mostly to the higher / upper middle income consumers which comprise 25% of total population.
- **Mass segment:** Serve to consumers in semi-urban or rural areas of India which comprise 75% of total population.

FMCG in recent years

- FMCG sector is performing well due to strong characteristics and dependence on consumption in domestic market. The returns table (above) portrays that it registered lower drop in 2008 i.e. during slowdown in the economy. The performance of FMCG sector was laggard in 2009 when economy was recovering and major sectors started performing well contributing to growth in SENSEX. However, performance of BSE FMCG index in 2010 was outstanding on back of fiscal stimulus but got hit again in 2011 due to European debt crisis and domestic reasons.

- In 2011, SENSEX was volatile and gave negative returns of 25% at end of year whereas; FMCG is the only sector which gave strong returns of 9% in 2011
- BSE FMCG index is currently not cheap, its trading at price to earnings ratio multiple of 27 times one year forward earnings as compare to BSE SENSEX now valued at around 13 times the forward earnings. The FMCG sector valuations are at 108% premium over SENSEX.

Key Drivers for growth in FMCG Sector

- Rapid increase in the rate of urbanization,
- Rise in disposable incomes enabling the companies to focus on premium product brands,
- Constant innovation in existing products from customer feedback,
- Penetration to rural markets with strong distribution channels,
- Rise in rural non-agricultural income and benefits from government welfare programmes contributes to top-line growth for FMCG companies,
- Investment in this sector stocks also attracts investor's attention because the demand for FMCG products is throughout the year

Script taken for analysis is ITC

WHY INFRASTRUCTURE SECTOR :

Infrastructure is the basic physical and organizational structure needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. The term typically refers to the technical structures that support a society, such as roads, water supply, sewers, power grids, telecommunications, and so forth. Viewed functionally, infrastructure facilitates the production of goods and services; for example, roads enable the transport of raw materials to a factory, and also for the distribution of finished products to markets. In some contexts, the term may also include basic social services such as schools and hospitals.

Infrastructure sector contribution to Indian Economy

Infrastructure Sector Growth Rate in India GDP came to 3.5% in 1996-97 and the next year, this figure was 4.6%. The Growth Rate of the Infrastructure Sector in India GDP increased after the Indian government opened the sector to 100% foreign direct investment (FDI). This was done in order to boost the Infrastructure Sector in the country. The result of opening the sector to the private sector has been that Infrastructure Sector Growth Rate in India GDP has increased at the rate of 9%. It is estimated that the Growth Rate of the Infrastructure Sector in India GDP will grow at the rate of 8.5% between 2006 and 2010.

Recently the government of India during the budget for the financial year 2012-13 have allotted huge amount of investment for developing the infrastructure in India and it also provides tax free bond worth of Rs.60,000 crores for the (PPP)public private partnership companies.

Investment opportunities:

Global private equity (PE) funds looking for high return on investments are going to target Indian infrastructure companies in the coming years, says a report by research agency , India is attracting the highest number of unlisted, closed-end funds that focus on a single country, making it the most preferred choice among emerging markets. India is expected to require around US\$ 1 trillion worth of infrastructure investment over the next five years.

Scrip taken for analysis is RELIANCE INFRA

WHY PHARMACEUTICAL SECTOR

The Indian pharmaceutical industry is growing at about 8 to 9 percent annually according to “A Brief Report Pharmaceutical Industry in India,” published in January 2011. The Pharmaceutical industry in India meets around 70% of the country's demand for bulk drugs, drug intermediates, pharmaceutical formulations, chemicals, tablets, capsules, orals and injectables. There are approximately 250 large units and about 8000 Small Scale Units, which form the core of the pharmaceutical industry in India (including 5 Central Public Sector Units).

Current Scenario:

India's pharmaceutical market grew at 15.7 per cent during December 2011. Globally, India ranks third in terms of manufacturing pharmacy products by volume. According to McKinsey, the Pharmaceutical Market is ranked 14th in the world. By 2015 it is expected to reach top 10 in the world beating Brazil, Mexico, South Korea and Turkey. More importantly, the incremental market growth of US\$ 14billion over the next decade is likely to be the third largest among all markets. The US and China are expected to add US\$ 200bn and US\$ 23bn respectively.

Indian consumer currently spends nearly 1% of his total income on drugs and pharmaceuticals, which will not alter significantly in the current decade.

“However, with the rise in the per capita income, the spending is going to be triple (approximately \$33) by 2020”, Motiwala

Budget 2012:

Union Budget 2012-13, as expected, is positive for the pharmaceutical sector. The government has again increased budgetary allocation for healthcare spending, which would be an overall positive for the sector. Indian pharmaceutical companies have been investing on the R&D front to tap opportunities in the domestic and global markets. To encourage the same, the weighted deduction on R&D expenditure to 200% (in-house research) was extended for a further period of five years. R&D sops would continue to be positive for the sector as a whole.

Scrip taken for analysis is CIPLA**WHY AUTOMOBILE SECTOR :**

The automotive industry in India is one of the largest in the world and one of the fastest growing globally. India's passenger car and commercial vehicle manufacturing industry is the sixth largest in the world, with an annual production of more than 3.9 million units in 2011. According to recent reports, India overtook Brazil and became the sixth largest passenger vehicle producer in the world, growing 16 to 18 per cent to sell around three million units in the course of 2011-12.

The Indian Automobile Industry manufactures over 11 million vehicles and exports about 1.5 million each year. The dominant products of the industry are two-wheelers with a market share of over 75% and passenger cars with a market share of about 16%. Commercial vehicles and three-wheelers share about 9% of the market between them. About 91% of the vehicles sold are used by households and only about 9% for commercial purposes. The industry has a turnover of more than USD \$35 billion and provides direct and indirect employment to over 13 million people.

Scrip taken for analysis is TATA MOTORS

Table no.1.4.1 : Table showing the overall Automobile production in INDIA during the year 2004-2011

Type of Vehicle	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Passenger Vehicles	1,209,876	1,309,300	1,545,223	1,777,583	1,838,697	2,357,411	2,987,296
Commercial Vehicles	353,703	391,083	519,982	549,006	417,126	567,556	752,735
Three Wheelers	374,445	434,423	556,126	500,660	501,030	619,194	799,553
Two Wheelers	6,529,829	7,608,697	8,466,666	8,026,681	8,418,626	10,512,903	13,376,451
Total.	8,467,853	9,743,503	11,087,997	10,853,930	11,175,479	14,057,064	17,916,035

**Table no.1.4.2: Table showing the overall Automobile sales in INDIA
during the year 2004-2011**

Type of Vehicle	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Passenger Vehicles	1,061,572	1,143,076	1,379,979	1,549,882	1,552,703	1,951,333	2,520,421
Commercial Vehicles	318,430	351,041	467,765	490,494	384,194	532,721	676,408
Three Wheelers	307,862	359,920	403,910	364,781	349,727	440,392	526,022
Two Wheelers	6,209,765	7,052,391	7,872,334	7,249,278	7,437,619	9,370,951	11,790,305
Total	7,897,629	8,906,428	10,123,988	9,654,435	9,724,243	12,295,397	15,593,156

**Table no.1.4.3: Table showing the overall Automobile exports in
INDIA during the year 2004-2011**

Type of Vehicle	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Passenger Vehicles	166,402	175,572	198,452	218,401	335,739	446,145	453,479
Commercial Vehicles	29,940	40,600	49,537	58,994	42,673	45,009	76,297
Three Wheelers	66,795	76,881	143,896	141,225	148,074	173,214	269,967
Two Wheelers	366,407	513,169	619,644	819,713	1,004,174	1,140,058	1,539,590
Total	629,544	806,222	1,011,529	1,238,333	1,530,660	1,804,426	2,339,333

1.5 Objectives of the study:

Primary Objective:

To study the impact of share price volatility on performance of selected companies in NSE

Secondary Objective:

To compare the volatility among the selected companies for the study period.

To identify the most volatile and least volatile company's share among all the selective sector

To suggest the better investment option for investors based on their risk ability.

CHAPTER 2

REVIEW OF LITERATURE

Dr.Raj Kumar(2009)¹ in his paper “**Volatility in the Indian stock market: a case of individual securities**” examined the volatility in the individual stocks listed at NSE using daily closing prices of 29 selected companies. The companies have been selected from the list of S&P CNX Nifty covering the period from 1996-97 to 2006-07. The data have been analyzed by working out standard deviation of daily returns. The study reveals that ACC, HDFC, ITC, MTNL, SBIN and SIEMENS have been comparatively less volatile than other securities. On the other hand, the securities viz. BAJAJAUTO, DRREDDY, GLAXO, GRASIM, HDFCBANK, INFOSYSTCH, M&M, ONGC, TATAPOWER and VSNL were highly volatile during the period of study. Further, the study finds that the period after 2000-01 has registered comparatively less volatility than preceding period.

Padhi.P (2006)² “**Stock market volatility in India: a case of select scripts**” explained the stock market volatility at the individual script level and at the aggregate indices level using ARCH, GARCH and ARCH in Mean model and it was based on daily data for the time period from January 1990 to November 2004. The analysis reveals the same trend of volatility in the case of aggregate indices and five different sectors such as electrical, Machinery, mining, non-metallic and power plant sector. The GARCH (1, 1) model is persistent for all the five aggregate indices and individual company. This paper analyzes the time variation in volatility in the Indian stock market during 1979-2003. We examine if there has been an increase in volatility persistence in the Indian stock market on account of the process of financial liberalization in India. Further, we examine the shifts in stock price volatility and the

¹ Dr. Raj kumar2009 “**volatility in the Indian stock market: a case of individual securities**” Journal of academic research in economics.

² Padhi.p2006 “**stock market volatility in India: a case of select scripts**” Journal of academic research in economics

nature of events that apparently cause the shifts in volatility. He also make an attempt to characterize the evolution of the stock market cycles over time in India and examine if in recent times the stock market cycles have exhibited greater amplitude and volatility.

In an overall sense, therefore, the aim of this paper is to give economic significance to changes in the pattern of stock market volatility in India during 1979-2003. Monthly stock returns have been used for analysis. Asymmetric GARCH model has been used to estimate the element of time variation in volatility. The model is further augmented with dummy variables, an outcome of the structural change analysis, to examine volatility persistence. For the characterization of the stock market cycles, the Pagan and Sussoumov (2003) methodology is adopted.

Mr.Kiran Manda (2010)³“**Stock market volatility during the 2008 financial crisis**” stated that From 2004 to early 2007, the financial markets had been very calm. The market volatility, as measured by the S&P 500 volatility and the VIX index, have been below long-term averages. However, the financial crisis of 2008 changed this: most asset classes experienced significant pullbacks, the correlation between asset classes increased significantly and the markets have become extremely volatile. During this time, the S&P 500 lost about 56% of its value from the October 2007 peak to the March 2009 trough and the VIX Index more than tripled, highlighting the leverage effect that Black (1976) described in his paper on the study of stock market volatility. Finally they found that The stock market volatility, as measured by the volatility of S&P 500 Index, increased from 13.4% during the Pre-Crisis period to 43.6% during the Crisis (325% of Pre-Crisis level). Even after the S&P 500 Index rebounded from its March 2009 lows, the market volatility reverted only to 20.9%, which is 156% of the Pre-Crisis level

³ Mr.Kiran Manda(2010)³ “**stock market volatility during the 2008 financial crisis**”

Mr.Harvinder Kaur (2004)⁴ **“Time Varying Volatility in the Indian Stock Market”**
⁴states that the pattern of volatility in the Indian stock market during 1993-2003 in terms of its time varying nature, presence of certain characteristics such as volatility clustering, ‘day-of-the week effect’ and ‘calendar month effect,’ and whether there exists any ‘spill over effect’ between the domestic and the US stock markets. It contributes to the body of knowledge by providing a holistic treatment to the subject of stock market volatility in India and providing evidence on its main characteristic features with the help of econometric techniques and employing GARCH models.

SathyaSwaroopDebasish(2008)⁵ **“Impact of Futures Trading Activity on Stock Price Volatility of NSE Nifty Stock Index”**⁵ This paper attempts an empirical examination of effect of futures trading activity on the jump volatility of the stock market by taking a case of NSE Nifty stock index. Two alternative measures of the intensity of futures trading activity employed are the monthly stock index futures trading volume and the monthly open interest in the NSE Nifty index futures contract. This study examines whether activities in the futures market and other relevant factors have Granger-caused jump volatility of stock prices. The study finds that futures trading activity (measured in both trading volume and open interest) is not a force behind the episodes of jump volatility. Moreover, the volatility of other macroeconomic variables, such as inflation and risk premium, are not responsible for the volatility in stock prices of NSE Nifty.

⁴ Mr.Harvinder Kaur(2004)⁴ **“Time Varying Volatility in the Indian Stock Market”**

⁵ SathyaSwaroopDebasish(2008)⁵ **“Impact of Futures Trading Activity on Stock Price Volatility of NSE Nifty Stock Index”**

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Type of research

The study is primarily descriptive in nature. It analyses the performance and present status of the selected stocks listed in NSE.

3.2 Data

The Data used for this study is secondary data.

3.4 Sources of Data :

Data collected was collected from the websites of

- NSE(www.nseindia.com)
- Money control(www.moneycontrol.com)
- Trade tiger (sharekhan trading software)

3.5 Time Period:

The period of study is for 1 year from April 2011 to March 2012.

3.6 Statistical Tools Used:

- Simple average
- Standard deviation
- Skewness
- Kurtosis
- Correlation
- Covariance
- Treynor's measure
- Sharpe's measure
- Jensen measure

3.7 Limitations of the study:

- Data has been collected for 1 year only
- The study concentrated only on selected NIFTY 50 companies of selected Sectors

CHAPTER 4
ANALYSIS AND INTERPRETATION

Table No: 4.1

TABLE SHOWING THE ANALYSIS OF SHAREPRICE VOLATILITY USING VARIOUS TOOLS

Indices	Average return	Standard deviation	Correlation	Covariance	Beta	Rp-Rf	Skewness	kurtosis
CNX NIFTY	-0.0469	1.2965	1	1.6742	1	-8.2125	0.1448	-0.0200
RELIANCE INFRA	-0.1127	2.9954	0.6355	2.4582	0.6355	-8.2783	-0.0751	0.9827
CIPLA	-0.0301	1.4935	0.3994	0.7703	0.3994	-8.1957	-0.0647	1.8692
ITC	-0.0967	1.3351	0.0753	0.1465	0.0850	-8.2623	0.0789	0.036
SBIN	-0.1304	2.2649	0.7295	2.1338	0.7295	-8.2960	-0.4104	1.0964
TATA MOTORS	-0.0797	2.7794	0.0315	0.1133	0.0315	-8.2453	-0.3500	0.3047

The companies are selected on the basis of investor preference of sharekhan limited

Table No: 4.2

TABLE SHOWING THE ANALYSIS OF SHAREPRICE VOLATILITY USING VARIOUS TOOLS

Indices	Sharpe's Measure	Treyner's Measure	Jensen's alpha	Ranking Based on		
				Jensen's Alpha	Sharpe's Measure	Treynors Measure
CNX NIFTY	-6.3341	-8.2124	-8.2594	6	7	1
RELIANCE INFRA	-2.7636	-13.0262	-5.3737	4	1	3
CIPLA	-5.487	-20.5197	-3.3036	3	4	4
ITC	-6.1881	-97.1970	-0.7991	2	6	5
SBIN	-3.6628	-11.3706	-6.1831	5	3	2
TATA MOTORS	-2.9664	-261.1314	-0.3400	1	2	6

The companies are selected on the basis of investor preference of sharekhan limited

CHAPTER 5

5.1 FINDINGS

AVERAGE RETURN:

- All the shares have shown negative return while conducting the study. The least negative return share is CIPLA Ltd, the value is -0.0301 and the most negative return share is SBIN and the value is -0.1304.
- The price movement of the share is same towards the nifty index or market movement.
- Among all the shares the average return is more in CIPLA Ltd.

CORRELATION:

- Here the CNX NIFTY is having an exact correlation value of 1 and all the other stock values are positively correlated. So it is assumed that all the selected company's shares are having relationship with the movement of CNX NIFTY.

COVARIANCE:

- Here the covariance value of RELIANCE INFRA is higher than the all. So it shows the strength of relationship between its value and CNX NIFTY.

BETA:

- Beta analysis measured the shares volatility of each share in the market. Here the beta value is

High in the shares of

SBIN= 0.7295

RELIANCE INFRA= 0.6355

CIPLA= 0.3994

Low in the shares of

ITC= 0.0850

TATA MOATORS= 0.0367

SKEWNESS:

- The Skewness value of the shares are -0.0647 for CIPLA , -0.0751 for RELIANCE INFRA , -0.3613 for TATA MOTORS, -0.4104 for SBIN and 0.0718 for ITC .
- Hence all the Skewed values are between -1/2 and +1/2 .So it is concluded that the distribution is approximately symmetric.

KURTOSIS:

- Hence the value of all the companies are between -2 and +2 the kurtosis for the study might be positive, negative, or zero.
- Hence the value of all the company is positive and it is <3. So it is platykurtic. Among these CIPLA value is higher than all the other companies and ITC value is smaller than all.

TREYNOR'S MEASURE:

- The companies of CIPLA, ITC and TATA MOTORS companies are well diversified according to Sharpe's and Treynors ranking. Among the selected companies CIPLA ranking is same in both the test. So it is analysed that share price of CIPLA is highly volatile than others.

INFERENCE:

**Table no5.1. TABLE SHOWING THE RISK AND RETURN PATTERN OF
SELECTED COMPANIES**

Nature of shares	Total risk	Systematic risk	Returns
CIPLA LTD	Low	Very High	Very High
RELIANCE INFRA	Very high	High	Low
TATA MOTORS	High	Low	High
ITC	Very low	Very low	Moderate
SBIN	Moderate	High	Very low

- Among all the selected companies shares CIPLA and TATA MOTORS are having high return earning ability than others. Both risk and return pattern of the companies are high.
- The company shares of RELIANCE INFRA includes high risk, but the return earning capacity is low.
- ITC's risk pattern is lower than others and the return is moderate.

5.2 SUGGESTIONS:

- From the above table the analysis shows the pattern of risk and return for all the selected stocks. The risk and return is classified as very high, high, moderate, low, very low.

For Risk Appetite:

- This investment is basically for very high risk takers. The investor whose ability to take high risk and expecting high return can select the company CIPLA and TATA MOTORS for his investment. Because the company's risk pattern is high and the return is also high due to high volatility of share price.

For Risk Averters:

- The investor whose return expectation is moderate and their risk taking ability is low can go for the investment in ITC Ltd. Because the risk pattern for this share is very low when compared with other shares. The return will be moderate for the investor.

5.3 CONCLUSION:

An investor can succeed in his investment only when he is able to select the right shares. Before going for an investment the investor should keenly watch the situation of market price movements, economy, company announcements and changes, volatility of shares etc .This study made will help the investors to analyse the volatility of share price and find the right investment.

SCOPE OF FURTHER STUDY

- The study focused only on five sectoral Indices among 13 sectoral Indices. Further study can be made for all the sectors.
- Hence the study focused only one company for each sector, the future study can be made for many companies from the entire sector or many companies from single sector.

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