IMPACT OF CURRENCY FLUCTUATION ON MID CAP STOCKS OF BOMBAY STOCK EXCHANGE

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Abstract:

"For most people, including highly sophisticated businessmen, it remains a mystery as to how money is made in the stock markets." Mr. Vikash Gupta an investment strategist posted in one of the social sites. This statement is a myth as far as the investors have less analytical knowledge on stock trading. A strong technical and fundamental analysis can avoid the risk of choosing inefficient shares. An investor constructs a portfolio as per his risk bearing capacity. In this portfolio he can involve shares of Small Cap or Medium Cap or Large cap or currency or derivatives or a good combination of all these. Small cap shares are risky to invest, medium cap are bit less risky than the small and the large cap are comparatively less risky than the both. It is a bad idea to invest in two investment avenues at a time which have a similar price movement. One can understand the simultaneous price movement of two avenues by the help of Correlation. This article is an attempt to find the correlation between currency (USD-INR) and the mid cap stocks.

Key words: Small Cap, Medium Cap, Large Cap, Technical Analysis, Fundamental Analysis, Portfolio, Stock Market, USD- INR.

1. Introduction:

India is one of the largest economies and second fastest growing economy of the world after china as per the economy survey-2018, conducted by the Refresher journal. When we go through the Indian economy during British rule, so many economists had given their views. Edmund Burke raised the issue of mismanagement of Indian economy during British rule, because of which India was struggling to have a prosper economy. The rate of economic growth was just equal to population growth rate. There are many factors contribute to development of any economy. One of the good things happened in India during British raj was establishment of a stock exchange. The first stock market of India was started after a long gap of 67 years of the London stock market establishment. It was unorganized and after about 45 years it became organized and named as Bombay Stock Exchange. And day by day with the support of Govt. other stock exchanges were started. National Stock Exchange is one of the prominent names among them.

Stock market of India has witnessed a decent growth in terms of volume, price and value in last few years. There are wide ranges of investment avenues available to the investor. Investment in Stock Market is one of the popular investment avenues. As per The Economic Times "Domestic investors of India are out stripping the foreign investors in last two years". That means people are becoming aware of the investment avenues and finding it worthy to invest in shares. Benjamin Graham in his book, 'The intelligent Investor' quoted that "Investors follow the market to make money but this approach is as fallacious as it is popular. The underlying principles of sound investment should alter decade to decade, but the application of these principles must be adapted to significant changes in the financial mechanism and climate." A sound knowledge of investment can protect an investor from loss. So it is very important to analyze the stocks completely before investing in it. As per S. Kevin one should analyze the fundamental and technical factors before investing and that is what creates a ground for preparing a sound and optimum portfolio. But it is still an issue for a layman to find suitable stocks for investment. Though the investors are increasing day by day but still very less percentage of rural household is participating in share market. A survey conducted by SEBI in 2017 revealed that only 1% of rural household and 8.1% of urban household invest in stocks. It may be because of unawareness or risk bearing capacity or because of inabilities to identify the factors leading to risk. There are many factors which affect stock market return (whether positively or negatively), which need to be addressed in order to minimize the risk involved. And the portfolio manager must involve stocks from all the capitalization as per the risk bearing capacity of the investor. For which one has to understand the interdependency among different industry's shares as well as the factors affecting the share price movement.

Stock Market of India

The stock exchange is a vital institution for the existence of the capitalist system of the economy and for the smooth carrying out of the corporate form of business. The first organized structure of stock exchange established in year 1875 at Bombay. India's this stock exchange is also known as the oldest stock exchange of Asia continent. After that, a number of stock exchange established in different cities of India to facilitate different segment of business. At present scenario India have twenty-three number of SEBI

approved stock exchanges. The National Stock Exchange (NSE) & Over the Counter Exchange of India (OICEI) are the two biggest one other than BSE. The ministry of finance formulates the policies to regulate and control stock exchanges in India.

With all adversities like political imbalance, lose economic policies, fraudulent, improper banking acts etc., the Indian stock market got the prosperity. The SENSEX started with the base value of 100 on 1st April 1979. But it touched the four-digit figure and closed at 1001 in 25th of July 1990. And now in 2018 it has crossed 35000 points. The same has happened with Indian economy. After the sixty-seven years of Independence, India's GDP has grown in absolute number i.e. Rs. 2.7 lakhs to Rs. 57 lakhs (in crores).

Through issuance of share an organization can raise its capital from the market and can get the most important benefit of liquidity by selling the shares in the market. The companies having good capitalization are used by risk averse as less risky share to invest. So for a good economy stock markets play vital roles.

Defining the Capitalizations

The stocks of different companies are classified on the basis of their capitalization as under.

Large-cap stocks: These stocks are the first class in market capitalization. As the name itself suggests, these are stocks of well-established companies sustained for a number of years. The market capitalization of these companies is very high – above Rs20,000cr.

Mid-cap stocks: Mid-cap companies can be considered to border large-cap and small-cap companies on both ends of the market capitalization spectrum. Typically, their market capitalization lies between Rs5,000 -- 20,000cr. Mid-cap companies are considerably smaller than large-cap companies in all parameters of comparison such as revenue, profitability, employees, client base, etc.

Small-cap stocks: Small-cap stocks lie at the other end of the market capitalization spectrum. Most small-cap companies are either start-up enterprises or companies in the development stage. Understandably, they have low revenue, small number of employees and small client base. Information on these companies isn't easily available to all.

Transaction of foreign currencies:

The globalization has prompted enormous foreign currency transactions all over the world. The Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII) meaningfully escalated these globalised transactions to a marked extent. In case of export of goods and services, a country gets cash inflow and vice- versa in case of import affecting exchange of foreign currency. A foreign-currency transaction is one that requires settlement, either payment or receipt, in a foreign currency. The global foreign exchange market is the largest and the most liquid financial market in the world, with average daily transaction volume in the trillions of dollars. Foreign exchange transactions can be done for spot/forward delivery/future/option contracts. There is no centralized market for Forex transactions, rather these are executed over the counter and round the clock. The largest foreign exchange markets are located in major financial centers like London, New York, Singapore, Tokyo, Frankfurt, Hong Kong, Sydney and Bombay (The financial capital of India).

Aswini A. and Mayank Kumar in their article," Impact of FII on Stock Market in India" proved that there is a positive correlation among FII flows and Indian stock market. As USD is called as the vehicle currency, the payments from any currency first exchanged to USD. When the exchange rate changes between the original purchase or sale transaction date and the settlement date, there is a gain or loss on the exchange. Basically to hedge the risk of currency fluctuation the currency derivative segment was established. The major stock exchanges which provide currency derivative contracts in India are National stock exchange, Multi Commodity Exchange, United stock exchange. As per the data shown in the following table released by NSE, In 2017 USD-INR has the highest volume in terms of contract and value of trade (Fig) in NSE-CDS. That indicates, among all other currencies, US dollar has its significant importance in Indian market. By getting the advantages of being the vehicle currency and cash inflows by FIIs, it left all other currencies far behind in terms of volume of trade. The currency code for Indian Rupees is INR, and the currency code of US Dollar is USD.

Currency	**Volume(Contract)**	**Value (In Crores)**
USD-INR	312477915	2039544.55
EURO-INR	17924752	133213.17
JPY-INR	7472207	43557.62
GBP-INR	20380086	171725.63

2. Rationale for the study:

Firms dealing in overseas markets are always having an exposure to currency or exchange rate fluctuation as they get payables and receivables from their foreign clients CAPM model described exchange rate risk is firm specific and it is non-systematic risk. So it can be diversified and it is not priced by the market. By the emergence of currency derivatives it is easier to hedge the currency risk of the MNCs. But it is still an issue for the portfolio managers of institutional investors and individual investors to know the impact of exchange rate fluctuation on stock price volatility.

A number of research works have been done to find out the relationship between the levels of stock market returns and exchange rate fluctuation. Different Studies had been undertaken for individual stocks, broad market indices & industry induces in between the year 1974 to 1997. Some of the prominent works are: Theoretical work by Solnik (1974), Sercu (1980), and Adler and Dumas (1983), among others, show that currency risk should be a priced factor in explaining equity returns. In other words, developments in the currency market should affect the discount rate of firms. Bodnar and Gentry (1993), Bartov and Bodnar (1994), Choi and Rajan (1997), Jorion (1990, 1991), Ma and Rao (1990), Apte (1997). By and large, these investigations have failed to discover significant relationship between stock returns and exchange rate changes either at aggregate level such as a market or industry indices or at the level of individual firms.

Significant studies have been done in this area from 1998-2016. The findings and conclusion of some of the relevant researches are stated below.

A. Shetty, J. Manley results (1998) in their research of comparative study of different countries' currencies, concluded that U.S. investors generally did better investing at home than in Canada and that the currency gain has been consistently negative. G. Apte (2001) in his research concluded that the exchange rate was not really market determined and recommended for the further study. Bill B. Francis, IftekharHasan and Delroy M. Hunter(2002) in their study of correlation between international equity market and currency market concluded that there is a clear relationships between currency and equity markets are significant, bi-directional, pervasive, and coexist with the relationships between equity markets. There are significant, bi-directional mean and volatility spillovers between currency and equity markets and between US and foreign equity markets.G. C. Nath_ and G P Samanta (2003) cocluded in their study. Bhattacharya and Mukherjee (2003) investigated Indian markets using the data on stock prices and macroeconomic aggregates in the foreign sector including exchange rate concluded that there is no significant relationship between stock prices and exchange rates. And further it's unidirectional causality nature is proved by G. Agrawal, A K Srivstav and A Srivastav (2010). A. S. Noel and V. G. Noel (2012) conducted an empirical study on different currencies impact on Indian stock market and got the findings that currency fluctuation has an impact on SENSEX by using the T-test. M. jamil and N Ullah (2013) by using co integration test concluded that an appreciation of Pakistani rupee will cause the returns to rise and vice versa. Rakesh D, J K Raju, Basavangowda K G (2016) given the conclusion that Dollar price is most significant than Euro, and Pounds by using R-square method. Dollar price impacts more effect on Indian stock market.

Some of the above stated researches are conducted on international indices but the researches conducted on Indian stock market are either on SENSEX or NIFTY. But when an investor/ portfolio manager constructs a portfolio, he selects stocks from all varieties of capitalization which is the scope of the present study.

The transaction on stock market as well as on foreign exchange is growing day by day. Hence an attempt has been made to measure the effect of exchange rate (USD-INR) fluctuation on the sectoral indices of BSE in all the three different capitalization variants.

3. Objective of the Study:

The study is intended to analyze the impact of US Dollar-Indian Rupee's fluctuation on the Mid Cap Shares.

4. Limitations of the Study:

a) A period of one year is not enough to reach into a concrete conclusion.
b) In this study only one tool is used for analysis. Some other tools can also be used to get the result.
c) Correlation among other Capitalizations and other currency is not considered.
d) No primary data like:- Investors' Behavior, emotion etc. are taken into account.

5. Methodology:

1. Source of data: - The data for this study shall be collected from secondary and published sources. For the purpose the following BSE Midcap data shall be compiled for making statistical analysis.
2. Period of study: - The study will be conducted on the Mid Cap Index data of Bombay Stock Exchange and foreign exchange(USD-INR) data for a period of one year i.e. from 11thSeptember 2017to 10thAugust 2018. The impact study for a period of one year is considered to provide authentic results.

3. Statistical Techniques: The below mentioned tools and techniques shall be used for the desired data analysis of this study.
   a) Pearson's correlation for the test of interdependence: - As per Karl Pearson, Pearson's correlation coefficient is the covariance of the two variables divided by the product of their standard deviations.

Hypothesis:

The following hypotheses are formulated for testing and deriving the result of the study.

H1: Midcap index is highly correlated with currency fluctuation.

H2: Midcap index is negatively correlated with currency fluctuation.

H3: Midcap index has no correlation with currency fluctuation.

6. Data Analysis And Interpretation:

Descriptive Statistics

	Mean	Std. Deviation	N
Price of currency	65.698403	1.7433508	273
Price of index	16416.1983	719.40519	231

Correlations

		Price of currency	Price of index
Price of currency	Pearson Correlation	1	-.602**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	826.682	-177641.715
	Covariance	3.039	-772.355
	N	273	231
Price of index	Pearson Correlation	-.602**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	-177641.715	119035081.666
	Covariance	-772.355	517543.833
	N	231	231

**. Correlation is significant at the 0.01 level (2-tailed).

A two tailed test is conducted at 0.01 level. The test result through SPSS in the above tables shows that both the variables are significantly negatively correlated as Pearson Correlation's calculated value is -0.602 and significance is 0.000. That means when USD-INR increases the value of Mid Cap shares decreases and vice-versa. Hence H2 will be accepted.

7. Conclusion:

USD-INR has a negative correlation with the Mid Cap index. It implies taking the same position (either long or short) in both the avenues may help the investor to hedge their fund. At the same time it does not provide a complete and concrete strategy for trading so it is recommended to have a further research with some other statistical tools and with more data.

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