Journal of Advances and Scholarly Researches in Allied Education
Vol. 13, Issue No. 2, July-2017, ISSN 2230-7540

A Study on the Effect of Monetary Policy on Indian Stock Market with Reference to Bombay Stock Exchange

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Abstract – The Monetary policy make use of various instruments like CRR, SLR, Repo, Reverse Repo, Bank rate and MSF to control the money supply of the country. The S&P index BSE 30 is influenced by the monetary policy of RBI. The monetary policy may have a favourable or adverse impact on the stock market. Any change in the monetary policy has a direct impact on stock return and overall economy of the nation. The stock price tends to fluctuate before and after the monetary policy is announced. The study aims to determine the impact of monetary policy over Indian stock market. This study has used secondary data which are collected from various authenticated sources. The Collected data were analysed through average and Correlation methods.

The study revealed that there is a perfect negative relationship between monetary policy and BSE 30. This means the relationship is inverse as one variable increase the other variable decrease.

Keywords: Economy, Monetary Policy, CRR, SLR, Repo, Reverse Repo, Bank Rate, MSF, Stock Market, BSE

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INTRODUCTION

Most of the economies in the world are being regulated and controlled by two agencies, the ruling Government and the Central bank. The former is entitled as fiscal policy and the latter is called monetary policy. Both of these policies act as a double edged weapon which tries to balance between the ups and downs in an economy. In this holy action, the fiscal policy tries to regulate the economy using governmental spending on a regular basis through the purchase and sales of bonds in the open market and through a fixed instrument called budget. The main character of this policy is that it is subjected to change every year and the primary focus of this policy is centred on economic growth. But the main issues centred on the so called fiscal policy are that they are subjected to political interference of the ruling party. This is evident from the policy of several countries; the protectionist policies recently used by US over China shows the detriment of the Trump administration over the Xi's government. Moreover china has used the same policy over US in response to its action. During the period between post-independence and pre liberalization policies of 1991 India has also followed the same policy even though majority of the policies were driven out of good intention of the government for the protection of the domestic market but somewhat were politically motivated. Budget is also not out of these issues sometimes they use budget as a tool for election strategy.

Stock market cut in interest rate will cause the positive impact. If rates are being cut then bank savings will be unattractive. Thus, depositors may move to the stock market, which results boost in the security prices. The liquidity in the stock market is generated by the central bank with monetary policy. Stock market volatility is depends on the monetary policy rates.

NEED AND SIGNIFICANCE

Monetary policy is considered to be the regulatory tool of the economy which may in time adjust the liquidity in the economy through making changes in the money supply. Evidences from the previous studies show that monetary policy instruments directly or indirectly affect the various sectors of the economy and stock market. This study tries to closely analyze whether monetary policy and stock market moves in the same direction or in the opposite direction and which sector is highly influenced by monetary policy. This study will be a perfect guideline

for investors and other individuals which help them to take investment decision.

SCOPE OF THE STUDY

Even since the global financial crisis made India a hotspot of investment in 2008 Indian stock market touched all-time highs. This study focuses on determining the influence of monetary policy over stock market taking BSE 30 which represents US$461 billion of the free float market capitalization. The study on BSE 30 and sectoral indices has been conducted for 4 years from 2014 to 2017. Here the monetary policy instruments like Repo Rate, Reverse Repo Rate, Bank Rate, Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR) and Marginal Standing Facility (MSF) are being considered for testing their impact on stock market.

STATEMENT OF THE PROBLEM

Monetary policy is an important instrument which propels economic growth of a country by regulating and controlling the economy. The previous studies clearly show that there is a direct relationship between monetary policy and fluctuations in stock market. A lot of studies in this perspective had been done in the global sphere but in the case of Indian stock market such studies were minimal, as compared with NSE the situation of BSE is much worse and this is considered to be the research gap. This study clearly focuses on finding whether there is any relationship established between the monetary policy of the central bank and BSE 30.

OBJECTIVES OF THE STUDY

The study tries to find out the impact of monetary policy over BSE 30 for which the following objective are considered

1. To identify factors of monetary policy influencing BSE 30
2. To find out the degree of relation between monetary policy and BSE 30
3. To make suggestion regarding the fluctuation of price in BSE 30

METHODOLOGY OF THE STUDY

The objective of the current study is accomplished by conducting a survey. The survey processes that will be adopted in present study consist of the following stages;

HYPOTHESIS

The hypothesis has been framed for this study to fulfill its objectives on the basis of above objectives

H0: There is no association between monetary policy and BSE 30

H1: There is association between monetary policy and BSE 30

SOURCE OF DATA

For this study data from various sources have been used. Data relating to monetary policy were collected from the website of Reserve Bank of India (RBI) and annual publications of RBI. Further these information were cross examined through information obtained from the website of The Hindu newspaper, The Hindu Business Line, and the You Tube channel of Reserve Bank of India. Information relating to the BSE 30 were obtained from the official website of BSE

TOOL USED FOR THE STUDY

In this study Correlation technique, bar diagram, line chart and average methods were employed for analyzing the collected data.

LIMITATION OF THE STUDY

- This study mainly depends on secondary data. Even though the data were strictly cross checked, minute errors are not ruled out
- This study focuses only on a period of nearly four financial years

ANALYSIS

Testing Of Hypothesis

Hypothesis

H0: There is no association between monetary policy and closing price of BSE 30

H1: There is association between monetary policy and closing price of BSE 30

Coefficient of Correlation is used for analyses and interpretation

Correlation is a measure of linear relationship between two variables. It expresses the extent to which two variables vary together. Correlation coefficient shows the magnitude and direction of the relationship. A correlation coefficient includes a range of values that exist from -1 to +1. The values which are nearer to +1 show a firm association and nearer to 0 signify no relation. When correlation coefficient is positive, the association, or correlation between the variable is positive. This is, because as one variable surges in value, the value of other variable also surges.

Correlations

		CRR	SLR	Bank rate	Repo	Reverse repo	MSF	Closing
CRR	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	24	24	24	24	24	24	24
SLR	Pearson Correlation	.[a]	1	.927**	.903**	.758**	.927**	-.840**
	Sig. (2-tailed)	.		.000	.000	.000	.000	.000
	N	24	24	24	24	24	24	24
Bank rate	Pearson Correlation	.[a]	.927**	1	.987**	.861**	1.000**	-.634**
	Sig. (2-tailed)	.	.000		.000	.000	.000	.001
	N	24	24	24	24	24	24	24
Repo	Pearson Correlation	.[a]	.903**	.987**	1	.930**	.987**	-.579**
	Sig. (2-tailed)	.	.000	.000		.000	.000	.003
	N	24	24	24	24	24	24	24
Reverse repo	Pearson Correlation	.[a]	.758**	.861**	.930**	1	.861**	-.384
	Sig. (2-tailed)	.	.000	.000	.000		.000	.064
	N	24	24	24	24	24	24	24
MSF	Pearson Correlation	.[a]	.927**	1.000**	.987**	.861**	1	-.634**
	Sig. (2-tailed)	.	.000	.000	.000	.300		.001
	N	24	24	24	24	24	24	24
Closing Price	Pearson Correlation	.[a]	-.840**	-.634**	-.579**	-.384	-.634**	1
	Sig. (2-tailed)	.	.000	.001	.003	.064	.001	
	N	24	24	24	24	24	24	24

**. Correlation is significant at the 0.01 level (2-tailed).
a. Cannot be computed because at least one of the variables is constant.

The above table shows the relationship existed between various factors of monetary policy with the closing price of S&P Index. The correlation analysis using SPSS revels that there exist a perfect negative relation between all variables of monetary policy with Closing price of S&P index except CRR.

Here the level of significance selected .05 is less than the significance computed

- SLR correlation coefficient is -.840 and it is statistically significant ($p<0.05$)
- Bank rate correlation coefficient is -.634 and it is statistically significant ($p<0.05$)
- Repo rate correlation coefficient is -.579 and it is statistically significant ($p<0.05$)
- Reverse repo rate correlation coefficient is -.384 and it is statistically significant ($p<0.05$)
- Marginal Standing Facility correlation coefficient is -.634 and it is statistically significant ($p<0.05$)

Therefore Null hypothesis (H0) is rejected and alternative hypothesis (H1) is accepted

Rejected H0: There is no association between monetary policy and closing price of BSE 30

Accepted H1: There is association between monetary policy and closing price of BSE 30

FINDINGS, SUGGESTIONS AND CONCLUSION

This study is to find out the impact of monetary policy over Indian stock market by taking into account BSE 30 S&P index. This study has mainly depended upon secondary data collected from the official websites of Reserve Bank of India and Bombay Stock Exchange. The data consisted of information related to monetary policy and closing price of BSE S&P index from the financial year 2014-15 to 2017-18. Further the data were subjected to correlation and the same is used for analysis of data.

FINDINGS

- The study found that SLR is the most important factor which is having a bearing over the market. Out of the eleven gain period the market turns upward in seven situations where SLR has been revised. This is also evident from the correlation results where the SLR is having a perfect negative relation with closing price with a value of -.840.
- Further the study has found that the stock market is being influenced by all factors of monetary policy except Cash Reserve Ratio. Whereas the CRR has kept constant during the period.
- The correlation results signify the degree of relation established between each factors of monetary policy with the closing price of BSE. As per the result it is found that Statutory Liquidity Ratio is the primary factor which is having more bearing on the market. It is followed by Bank rate, Marginal standing Facility, Repo rate and Reverse repo rate. It is also found that Cash Reserve Ratio holds least impact over the market.
- SLR is significant, because when SLR is high, banks have to maintain such amounts in their vaults directly. In such a situation it will have a direct impact over the market than the much popular LAF Repo and Reverse Repo rates.
- The impact made by monetary policy over the market is situational. Sometimes it makes a drastic influence over the market and during some other period the impact will be minimal.
- It is evident that sometimes the market moves against the normal notion i.e. there were situations of gain in the market when the policy was kept constant and loss when changes in the policy were made

SUGGESTIONS

- The policy makers should be fully aware of the monetary transmission mechanism

because different mechanism may imply that different targets are optimal or appropriate. The stock market channel, for example, suggests that the price level is the appropriate target of monetary policy; the money channel and the creditworthiness channels imply that the interest rate should be targeted; the bank-dependent borrower channel suggests the quantity of credit. Therefore, policymakers as a matter of necessity should fully understand the appropriate mechanism operational in their country and the channel through which monetary impulses affect stock market performance.

- Central bankers and stock market should be aware of the relationship between monetary policy and stock market performance in order to better understand the effect of policy shift. There should be a balance between countering inflation and stock market movement. The authorities should not compensate stock market movement as against inflation and vice versa.

- The central bank through monetary policy can influence the asset prices over a long run. Under such a situation the apex bank should give adequate importance in regulating market activities and ultimately such interventions can reduce the frequency of asset price bubbles which hinder the market development in the long run.

- The performance of the market depends upon investors' confidence and the general condition of the economy. Therefore, the policy makers need to make the environment free from fear and try to ensure the market development.

- The monetary authorities should be fully aware of their statements, making a statement even orally will have a long lasting effect over the world economy. This is evident from the statement made by Janet Yellen (ex-chairperson Federal Reserve, USA) during the time of Quantitative easing.

- The central bank at the same time should consider that price stability is their primary target and by recognizing its limitation it should not too much overheat the economy and the result will be much worse than expected. the authorities should fully aware that there is a limit to which monetary policy can influence the market.

CONCLUSION

The present study investigates the level of relationship between monetary policy and its impact over stock market. This study has used secondary data over a period from the financial year 2014-15 to 2017-18. Data were collected from the websites of RBI and BSE. Variables like CRR, SLR, Bank rate, Repo rate Reverse repo rate, MSF and closing price of BSE 30 were considered for the study. The data were subjected to correlation test using IBM SPSS (Statistical Package for the Social Science)

Through this study we have found that there a significant relationship is established between monetary policy and stock market movement. The relationship is inverse and the same satisfies the general conclusion when credit rate increases market will be costlier and investors will leave the market and vice versa.

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