

# IMPACT OF POLICY RATES ON THE SHARE PRICE OF PUBLIC AND PRIVATE SECTOR BANKS IN INDIA.

Dechacca K D, Anto Mathachan, Dr Pooja Jain

Research scholar, Research scholar, Associate Professor  
Department of commerce,

Christ (Deemed to be University), Bengaluru, India-560029.

**Abstract :** The Reserve bank of India is the apex financial institution in India which plays a vital role in functioning and regulating the supply of money in the economy. Monetary policy of the country is controlled by the RBI, which includes the policy rates such as bank rate, repo rate, reverse-repo rate and marginal standing rate which helps in balancing the money supply in the economy. The announcement of these rates has a link with the movements of the share prices in the securities market. This study aims to examine the impact of these policy rates particularly bank rate, repo rate and reverse-repo rate on the share prices of the banks. Untying the main five public and private sector banks, these banks were selected on the basis of their market capitalization. Regression has been conducted to analyze the data for a period of five years. The results showed that there is no significant influence of the policy rates on the share prices of both public and private sector bank during the period of the study.

**IndexTerms - Policy rates, bank rate, repo rate, reverse repo rate, public and private sector banks.**

## I. INTRODUCTION

The monetary authority of the country is the Reserve bank of India (RBI). RBI uses various monetary policies and controls them to attain a price stability in the economy. These monetary policies include various rates like repo rates, reverse repo rates, bank rates, and marginal standing rate. They act as an instrument in regulating bank's credit creation. They also help in balancing the money in the banking system and the RBI makes amendments to this monetary policy to stabilize the money influx in the country.

The rate at which the RBI lends money during the period of shortage of funds to commercial banks is known as Repo rate and Reverse repo rate is the vice-versa, it is the rate at which RBI borrows money from the commercial bank. The repo rate must not be confused with bank rate, bank rate is the rate at which the RBI lends money to commercial banks in the form of short-term loans. Hence, repo rate is also a matter of security whereas bank rate solely deals with loan transactions. Bringing changes to the monetary policy is an effective mechanism to manage the money floating in the economy. This increase or decrease in monetary policy has a direct impact on the public in terms of money being borrowed from and deposited in the bank. An unfavorable change in the monetary policy will increase the bank's cost of borrowing. This, in turn, reduces the supply of money into the banks thus creating a growth in the rate of interest for the customers.

The interest rate is one of the variables which will impact the share prices and are helpful to find out the intrinsic value of the stock. In the investor's perspective, it is generally observed that due to the changes in the rates within the economy the investing population of the country will be left with a limited amount to invest in newer avenues. This leads to selling the existing shares available to the investors with an intention to meet the requirements of money and vice versa. This practice of the investors in the market will directly have an impact on the share prices.

In the banks perspective, the changes in the policy rates have an impact on their performance in terms of its profitability, which in turn will influence the stock price and their returns. The policy rates announced by the RBI leads to fluctuations in the prices of the stock as it may have the propensity to vary. The stock prices may have a tendency to differ when the policy rates are announced by RBI. This action could be favorable or unfavorable on the stock prices depending on how the market reacts to these announcements. Thus, this study is conducted to determine the level of impact of these variables on the bank's share price. It will further focus on understanding how the share prices of the banks have been influenced by the policy rates.

## REVIEW OF LITERATURE

There are different factors that will influence the stock prices of the banks. For the public sector bank, productivity is considered as the influencing factor of the stock price whereas private sector banks are mainly influenced by the efficiency measures (Rawlin, Shanmugam, & Bhat, 2015). The other factors being return on equity, book value per share, dividend per share, price earnings and market capitalization have an effective relationship with the market price whereas dividend yield has no effective relationship with the market price of the share (Sharif, Purohit, & Pillai, 2015). Dividend yield, earning per share, price-earnings ratio, profitability and asset growth have greater influence in ascertaining the share price in banks. Along with the above factors, if size of the firm is also considered, then the primary influencing factor for determining the bank's share price will become the size of the firm (Bhattacharai, 2014; Pradhan & Dahal, 2016; Ghauri, 2014).

Stock markets are sensitive towards any information that may lead to fluctuation in the prices which is relevant for their future forecasts and development. When RBI makes variations in the monetary policy, the money supply in the economy is controlled. This money supply in the economy can also influence stock prices. When there is more money in the economy it will be used to dispense to the investors in the form of loans and advances. Hence they help in stabilizing the money supply in the economy (Sirucek, 2013). As money supply plays a major role in economic stability, RBI uses various controlling tools such as cash reserve ratio (CRR), statutory liquidity ratio (SLR), repo rate and reverse-repo rate in order to control the credit creation power of the commercial banks. The impact of policy rates (CRR and Repo) influences inflation and credit till five to ten months and afterward

the influence subsidies. CRR and Bank rate are two of the most generally used rates by RBI to control the credit creation power of the banks. Thus, CRR and bank rates are the most effective rates compared to the other five policy and monetary rates, including Repo, Reverse-Repo and SLR (Ahmad, 2017).

The security prices respond equally to the announcement of these rates. Correlations between the effect of reverse-repo rate and CRR announcement reveals that reverse-repo has more influence on share price movements than that of repo rate (Vanitha, Nageswar, & Srinivasan, 2013). The NIFTY 50 expansion is caused by the monetary policy alteration in the long run. Whereas in the short run, no huge changes were seen in NIFTY 50 movement. It has been noticed that there is exist a adjacent association between the monetary policy and the securities indices. These selected securities indices have affected the NIFTY 50 development for 2011-12 and 2012-13. In the year 2013- 14 and 2014-15 MSF, Repo and Reverse Repo affected NIFTY 50 motion. While during 2015-16, just reverse-repo rate impacted NIFTY 50 motion with a moderate linear relationship (Chavannavar, Patil, & Simoes, 2016). The study conducted by (Teja, Tejaswi, Madhavi, &

Ujwala, 2013) concludes that in 2013 the CRR's effect on NIFTY is greater compared to the other economic factors that affect the movements of the NIFTY. It has been noticed that at whatever point inflation rises, CRR will push the repo rate and reverse-repo rate to rise, which will affect the borrowing cost for the industries. Thus, RBI's liquidity control instrument CRR, has an essential part in impacting the interest rates and flow of liquidity from the deposit holders into the banks. When the interest rate on the deposits goes up, the cash balances will also flow upwards in the banking system. As (Talreja, 2014) notes, an increment in CRR and SLR implies that banks have less subsidies available and cash is unavailable for general use, which influences the liquidity in the market and will eventually have a negative effect on the share trading system. Hence CRR and SLR has negative impact on NIFTY movement. On the other hand, the impact of Repo Rate and Reverse Repo Rate on NIFTY movement is positive.

#### OBJECTIVES

1. To study the effect of changes in policy rates on the share prices of the public and private sector banks.
2. To compare the effect of changes in policy rates on private and public sector banks share price.

#### HYPOTHESIS

H1: There is a significant impact of repo rate on the share prices of the banks.

H2: There is a significant impact of reverse-repo rate on the share prices of the banks.

H3: There is a significant impact of bank rate on the share prices of the banks.

#### Population and Sample

The sample selection for this study includes top five private and public sector banks based on their market capitalization for a period of 5 years that is from April 2013 to march 2018. Judgmental sampling has been used for the selection of the sample. Hence, the dependent variable being share price of the banks and the independent variables are the policy rates (repo rate, reverse-repo rate, bank rate).

#### 3.2 Data and Sources of Data

The share prices of the banks and the policy rates are obtained through secondary data collection method, which is been sourced from RBI website and NSE website. Regression analysis has been conducted for analyzing the impact of the independent variables on the dependent variable.

## IV. RESULTS AND DISCUSSION

Table 4.1: Impact of repo rate on private and public sector banks

Banks	Repo rate		
	Coefficient	Prob.	R-square
<b>Private sector banks</b>			
Axis	0.192908	0.6154	0.000205
Kotak	0.024439	0.9	0.000013
Indus	0.076715	0.5796	0.000249
HDFC	-0.00295	0.9754	0.000001
ICICI	0.170716	0.6526	0.000165

Public sector bank			
<b>IDBI</b>	0.086241	0.677	0.000141
<b>Bank of Baroda</b>	0.097629	0.8097	0.000047
<b>Central Bank</b>	0.003879	0.9834	0
<b>PNB</b>	0.039825	0.9208	0.000008
<b>State bank of India</b>	0.157904	0.7612	0.000075

\*indicates significant coefficient at 5% level.

The coefficient values in Table 4.1 depicts that repo rate has positively influenced the share prices of Axis, Kotak, Indus, ICICI, IDBI, Bank of Baroda, Central Bank, PNB and State bank of India In other words, for every one unit change in the repo rate there is 0.192908, 0.024439, 0.076715, 0.170716, 0.086241, 0.097629, 0.003879, 0.039825 and 0.157904 unit change in the share price of their respective banks. However in the case of HDFC bank the coefficient value depicts a negative influence where one unit increase or decrease in repo rate will bring 0.00295 decrease or increase in share price respectively that is, one unit increase in repo rate will lead to 0.00295 decrease in share price and vice versa. The P-values of all the banks are more than 0.05 hence it cannot accept hypothesis H1 and thus it can be concluded that there is no significant impact of repo rate on the share prices of the banks.

Table 4.2: Impact of reverse-repo rate on private and public sector banks

Banks	Reverse-repo rate		
	Coefficient	Prob.	R-square
<b>Private sector banks</b>			
<b>Axis</b>	0.066025	0.8386	0.000034
<b>Kotak</b>	-0.07124	0.6642	0.000153
<b>Indus</b>	0.042702	0.7149	0.000108
<b>HDFC</b>	-0.03934	0.6264	0.000192
<b>ICICI</b>	-0.07865	0.806	0.000049
<b>Public sector bank</b>			
<b>IDBI</b>	-0.09748	0.577	0.000253
<b>Bank of Baroda</b>	-0.79647	0.816	0.000044
<b>Central Bank</b>	-0.10778	0.4932	0.000381
<b>PNB</b>	-0.11993	0.7227	0.000102
<b>State bank of India</b>	-0.07973	0.8558	0.000027

\*indicates significant coefficient at 5% level.

In the table 4.2 the coefficient values obtained between the reverse-repo rate and the selected banks shows a negative influence except Axis and Indus bank as they obtain positive values which is 0.066025 and 0.042702 respectively. All the p-values shown represents that the change is not statistically significant as the values are more than 0.05 and hence the alternative hypothesis H2 cannot be accepted.

Table 4.3: Impact of bank rate on private and public sector banks

Banks	Bank rate		
	Coefficient	Prob.	R-square
<b>Private sector banks</b>			
Axis	0.119503	0.5053	0.00036
Kotak	0.04965	0.5847	0.00024
Indus	0.06954	0.2824	0.00094
HDFC	0.041852	0.3495	0.00071
ICICI	0.122731	0.4885	0.00039
<b>Public sector bank</b>			
IDBI	0.116879	0.2268	0.00119
Bank of Baroda	0.188504	0.3196	0.0008
Central Bank	0.15101	0.0827	0.00244
PNB	0.239164	0.2009	0.00133
State bank of India	0.134462	0.5797	0.00025

\*indicates significant coefficient at 5% level.

From table 4.3, in case of bank rate and the share prices of the banks, the coefficient values for all the selected banks represent a positive influence of bank rate with the share prices of the banks. The p- values for all the banks in case of bank rate are more than 0.05 and hence the changes are not significant as a result the alternative hypothesis H3 cannot be accepted.

Thus, as the p-values in case of both private and public sector banks shown in table 1, table 2 and table 3 are more than 0.05, it can be inferred that the changes in the policy rates are not associated with the changes in the banks share price. In other words, the share prices are independent of the policy rates.

### Findings

The findings of the article depicts that among the top five public sector and private sector banks in India selected for this study, the repo rate has a negative influence with the share prices of HDFC Bank, whereas the share prices for all the other nine banks have insignificantly positive influence with repo rate. In case of reverse-repo rate, an insignificant positive influence exists with the share prices of Axis Bank and Indus Bank whilst negative influence exists with the share prices of all the other eight banks. However, the bank rate has insignificant positive influence with the share prices of all the ten banks selected for study. The results attained are not statistically significant and the alternative hypothesis are not accepted. Thus, we can conclude that neither repo rates, reverse repo rates nor bank rates have a significant impact on the share prices of banks in India.

### Conclusion

The study focused on analyzing the impact of the policy rates such as bank rate, repo rate and reverse repo rate on the share prices of the top five public and private sector banks selected on the basis of their market capitalization. The data analyzed revealed that there is no significant impact of policy rates on the share prices of the selected banks during the period of the study. The effect could be appreciated in the short run but they are insignificant while considered in the long run. As both the public and private sector banks results are insignificant, there is no scope to go ahead with the second objective of the paper to compare the effect of changes in policy rates on private and public sector banks share price. Thus, it is concluded that the share prices of the banks are independent from these policy rates and are largely affected by the other variables connected to them. As the study comprised only the three policy rates being bank rate, repo rate and reverse repo rate of just the top five public and private sector banks, there could be a further study conducted on the other variables which could influence the share prices in the banking sector.

### REFERENCES

- [1] Silky, J., & Simranjeet Kaur, S. (n.d.). An Empirical Study on the Impact of Private Sector and Public Sector Banks on Bank Ex-index of . *Anvesha*, 14-25.
- [2] Širuček, M. (2013). Impact of money supply on stock bubbles. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 61(7), 2835–2842.
- [3] <https://doi.org/10.11118/actaun201361072835>
- [5] Hein, S. E., & Stewart, J. D. (2002). Reserve Requirements: A Modern Perspective. *Federal*

Reserve Bank of Atlanta *ECONOMIC REVIEW*, 1–12. Retrieved from papers2://publication/uuid/2F67FDA3-AA90-4AE5-B764-A0D4949DB742

- [6] Talreja, P. (2014). ASIAN JOURNAL OF MANAGEMENT RESEARCH Policy rate changes and the movement of stock market (With special reference to nifty). *Asian Journal of Management Research*, 91(1), 91–100.
- [7] Lohia, S. (2011). Performance of the Indian Banking Industry over the Last Ten Years Performance of the Indian Banking Industry over the Last Ten Years.
- [8] Mohan, T. T. R. (2003). Long-run Performance of Public and Private Sector Bank Stocks. *Economic and Political Weekly*, 38(8), 785–788.
- [9] Wall, R., Journal, S., York, N., York, N. Y. N., & Feb, N. Y. (2016). Oil Price Fears Weigh on European Banks ; Concern over exposure to possible energy sector bankruptcies hits sector as oil price plummets, 4–7.
- [10] Chavannavar, P. M. B., Patil, S. C., & Simoes, M. M. (2016). Monetary Policy Effect on Nifty 50 and Sectoral Indices – A Study from Indian Stock Markets. *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, V(Xii), 59–69.
- [11] Vanitha, S., Nageswari, P., & Srinivasan, P. (2013). Impact of reverse repo rate and cash reserve ratio in National Stock Exchange ( NSE ) CNX bank index, 3(1), 72–81.
- [12] Dalglish, T., Williams, J. M. G. , Golden, A.-M. J., Perkins, N., Barrett, L. F., Barnard, P. J., ... Watkins, E. (2007). [ No Title ]. *Journal of Experimental Psychology: General*, 136(1), 23–42.
- [13] Mohammad Khan Ghauri, S. (2014). Determinants of changes in share prices in banking sector of Pakistan. *Journal of Economic and Administrative Sciences*, 30(2), 121–130. <https://doi.org/10.1108/JEAS-05-2013-0014>
- [14] Journal, S., & Jun, N. (2018). Determinants of Bank-Market Structure : Efficiency and Political Economy Variables Author ( s ): Francisco González Stable URL : <http://www.jstor.org/stable/25483516>
- [15] Determinants of Bank-Market Structure : Efficiency and Political Economy Variables, 41(4), 735–754.
- [16] Teja, K. R., Tejaswi, M., Madhavi, B., & Ujwala, G. (2013). Cash Reserve Ratio Impact on Stock Market ( India ) in Long Run. *International Journal of Marketing, Financial Services & Management Research*, 2(8), 85–93.
- [17] Nautiyal, N., & Kavidayal, P. C. (2018). Analysis of Institutional Factors Affecting Share Prices: The Case of National Stock Exchange. *Global Business Review*, 19(3), 707–721. <https://doi.org/10.1177/0972150917713865>
- [18] Maccarthy, J. (2016). The Effect Of Cash Reserve Ratio ( CRR ) On The Financial Performance Of Commercial Banks And Their Engagement In CSR In Ghana, 4(3).