International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 2 Volume No.7 March - April – 2023
DOI:10.46647/ijetms.2023.v07i02.062 ISSN: 2581-4621

The Share Price Movement Of Indian Banking Shares, can alter the GDP, based on the interest rate

Dr P V Gurunath Reddy[1], Galla Venkataswamy[2], Battana Hari[3]
[1]*Associate Professor, Unity Degree College, Visakhapatnam, AP*
[2,3]*Assistant Professor, Unity Degree College, Visakhapatnam, AP*

ABSTRACT
The stock market is the altimeter of Indian budgeting. Trading in the Stock market is subject to market risk, and therefore returns can be affected, although it provides diversification to the portfolio of Retail investors, HNI & FII clients. The investment pattern of each category affects the growth of the country. As investments are reduced due to the risk aversion factor, the GDP fell to 6.0 percent for Q1 FY23, which is the lowest of the two years as per the economic survey of the Ministry of finance, resulting in a domestic slowdown in Q2 FY23. This research work aims to study the effects of an array of fundamental factors like – interest rate risk, counterparty risk, and regulatory risk on the share price movement of **Top 5 (SBI, Canara Bank, Union Bank of India, Punjab National Bank, Bank of Baroda)** performing public Banking sector stocks listed on the Indian stock exchange. So, the long-term investors should look on to the fundamentals and invest wisely to earn even in the current economic slowdown situation of FY 23. The results suggest that these three factors affect most of the share prices, namely- interest rate risk, counterparty risk, and regulatory risk and explained only interest rate risk taking into consideration.

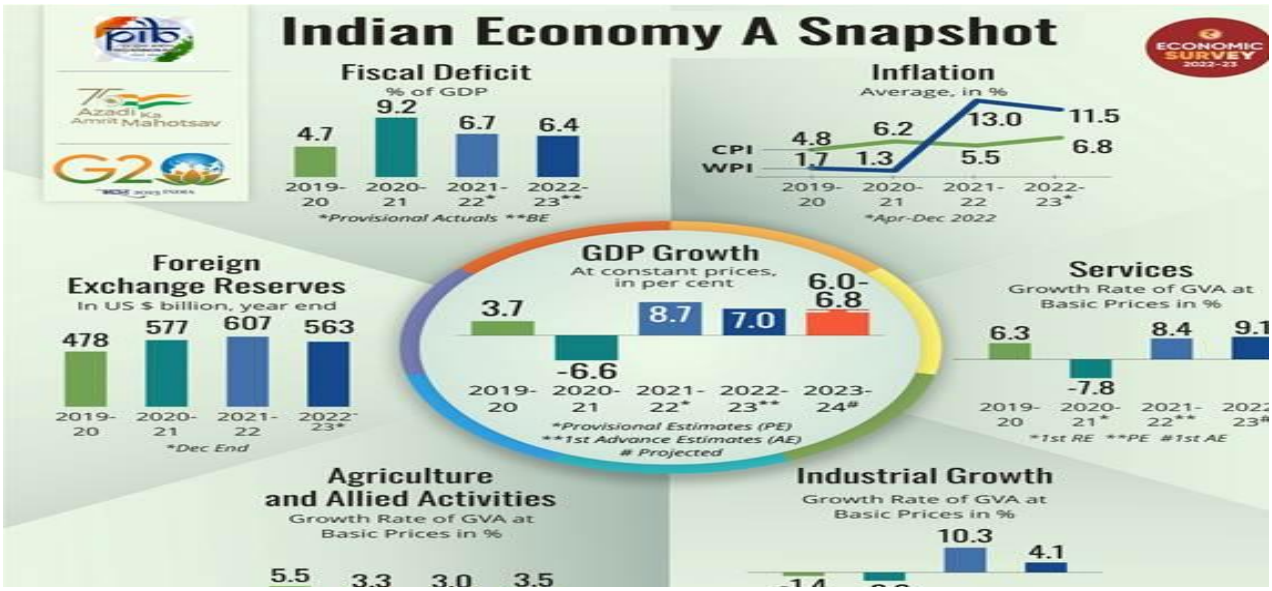


Figure 1

List of PSU Banks	Number of Branches	Number of ATMs	Headquarter
State Bank of India (SBI)	24000	58559	Mumbai

International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 2 Volume No.7 March - April – 2023
DOI:10.46647/ijetms.2023.v07i02.062 ISSN: 2581-4621

Punjab National Bank (With Merger of Oriental Bank of Commerce and United Bank of India)	11437	8985	New Delhi
Bank of Baroda (With Merger of Dena Bank & Vijaya Bank)	8581	10318	Vadodara
Canara Bank (With Merger of Syndicate Bank)	10391	12829	Bengaluru
Union Bank of India (With Merger of Andhra Bank and Corporation Bank)	9500	13300	Mumbai
Bank of India	5825	5000	Mumbai
Indian Bank (With Merger of Allahabad Bank)	6000+	6104	Chennai
Central Bank of India	2876	4666	Mumbai
Indian Overseas Bank	2995	3400	Chennai
UCO Bank	2377	4000	Kolkata
Bank of Maharashtra	1860	1897	Pune
Punjab & Sindh Bank	1045	1554	New Delhi

1. INTRODUCTION

The Indian Banking Sector is the finest employer public sector in India. As per Indian economy survey, the GDP was 8.7 during 2021-22, 7.0 during 2022-23, 6.0 during 2023-24 in percent. All top-rated banking Firms have diversified their business and offer 5 most important banking services are **checking and savings accounts, loan and mortgage services, wealth management, providing Credit and Debit Cards, Overdraft services**. As the GDP is higher, the interest rates are low and for the lower GDP, the interest rate is high, this shows that the GDP is negatively related to the interest rates of various banks. Which explains there is a relation between GDP and interest rate. GDP(Gross Domestic Product/ growth)is an indicator of the economic health of a country. It is a measure of the economic performance of a country, it also gives indication of the size of the economy.As GDP is such an important indicator, it becomes essential to understand the factors impacting the growth.With deeper understanding and information of the factors impacting GDP, the Government formulates policies and rolls out schemes for the growth of the economy. Stock exchange and interest rate are two crucial factors of economic growth of a country. The impacts of interest rate on stock exchange

International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 2 Volume No.7 March - April – 2023
DOI:10.46647/ijetms.2023.v07i02.062 ISSN: 2581-4621

provide important implications for monetary policy, risk management practices, financial securities valuation and government policy towards financial markets.

2.LITERATURE REVIEW

Empirical studies evaluating the relationship between growth, inflation and interest rate have historically found all three combinations vizThere exists a positive, negative and no relation between inflation, interest rate and growth.

Friedman (1973:41) summarised the inconclusive nature of the relationship between inflation and economic growth as, historically, all possible combinations have occurred: inflation with and without development, no inflation with and without development.

Udoka and Roland (2012) found that interest rate is one of the determinants of economic growth.

Interestingly, Bruno and Easterly (1996) observed that episodes of high inflation have witnessed negative growth. McKinnon, R.I. (1973) and Shaw, E (1973) state that higher real interest rates bring about higher levels of savings that consecutively encourage economic growth. They concluded that real interest rates and economic growth are positively associated.

3.DATA & METHODOLOGY

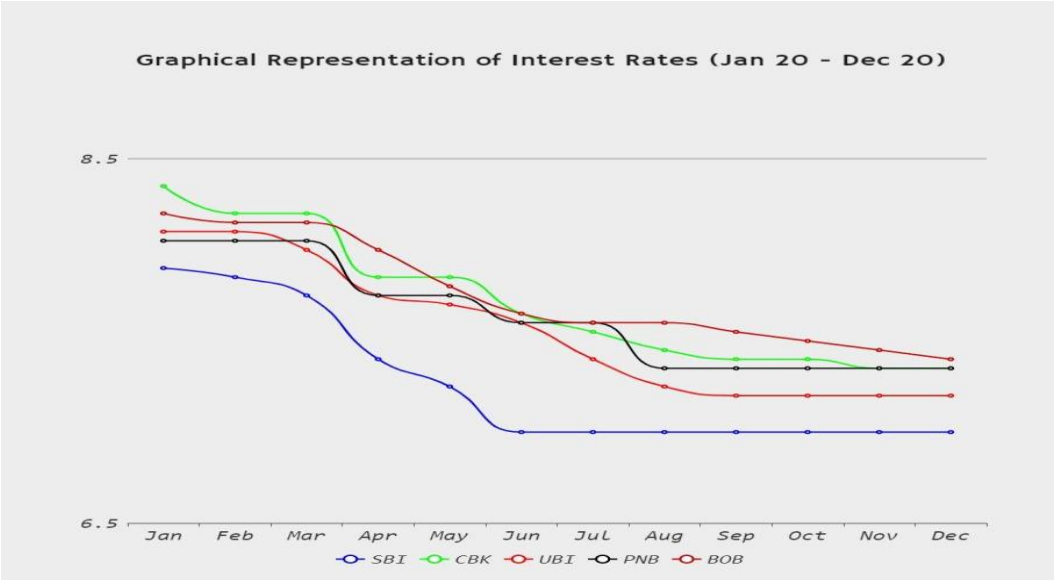
For this study, the data has been collected from secondary sources i.e., from RBI, Office of Economic Adviser and Central Statistics Office, India. The study is conducted for a period from January 2020 to December 2022.

Data :

From Jan 20 - Dec 20

Name of the Bank	Jan-2020	Feb-2020	Mar-2020	Apr-2020	May-2020	June-2020	July-2020	Aug-2020	Sep-2020	Oct-2020	Nov-2020	Dec-2020
State Bank of India	7.9	7.85	7.75	7.4	7.25	7	7	7	7	7	7	7
Canara Bank	8.35	8.2	8.2	7.85	7.85	7.65	7.55	7.45	7.4	7.4	7.35	7.35
Union Bank of India	8.1	8.1	8	7.75	7.7	7.6	7.4	7.25	7.2	7.2	7.2	7.2
Punjab National Bank	8.05	8.05	8.05	7.75	7.75	7.6	7.6	7.35	7.35	7.35	7.35	7.35
Bank of Baroda	8.2	8.15	8.15	8	7.8	7.65	7.6	7.6	7.55	7.5	7.45	7.4

Table 1



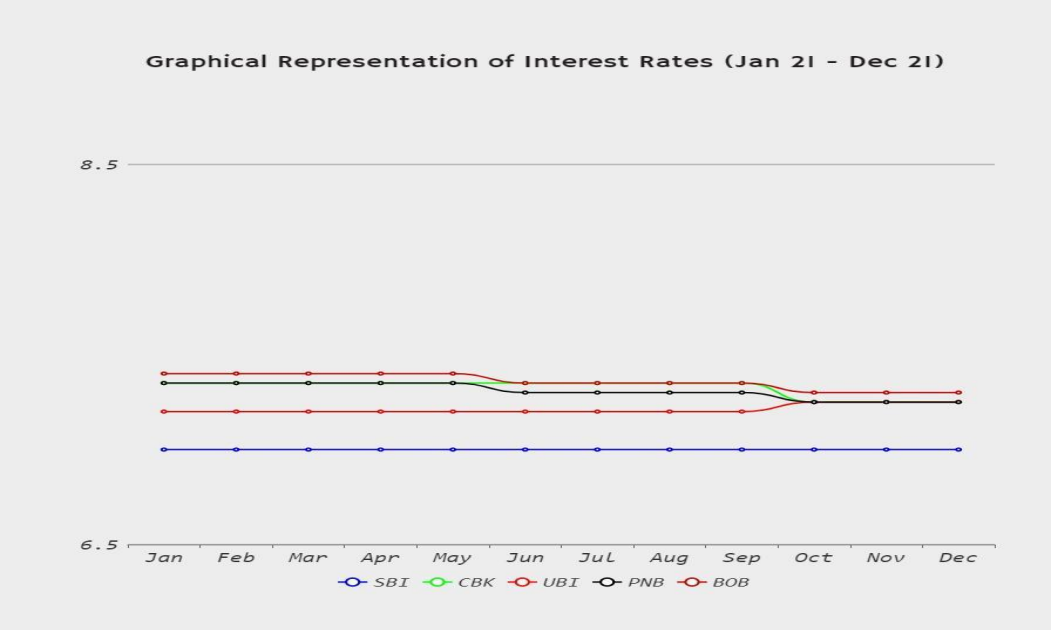
Graph 1

International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 2 Volume No.7 March - April – 2023
DOI:10.46647/ijetms.2023.v07i02.062 ISSN: 2581-4621

Data : From Jan 21-Dec 21

Name of the Bank	Jan-2021	Feb-2021	Mar-2021	Apr-2021	May-2021	June-2021	July-2021	Aug-2021	Sep-2021	Oct-2021	Nov-2021	Dec-2021
State Bank of India	7	7	7	7	7	7	7	7	7	7	7	7
Canara Bank	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.35	7.25	7.25	7.25
Union Bank of India	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.25	7.25	7.25
Punjab National Bank	7.35	7.35	7.35	7.35	7.35	7.3	7.3	7.3	7.3	7.25	7.25	7.25
Bank of Baroda	7.4	7.4	7.4	7.4	7.4	7.35	7.35	7.35	7.35	7.3	7.3	7.3

Table 2



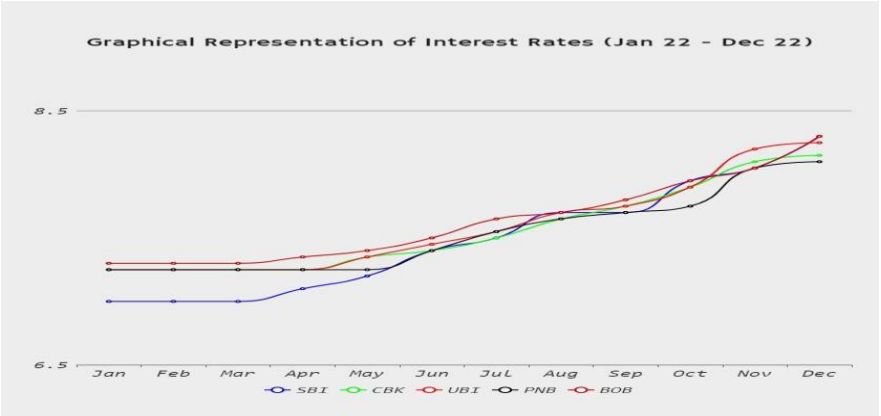
Graph 2

Data :

From Jan 22-Dec 22

Name of the Bank	Jan-2022	Feb-2022	Mar-2022	Apr-2022	May-2022	June-2022	July-2022	Aug-2022	Sep-2022	Oct-2022	Nov-2022	Dec-2022
State Bank of India	7	7	7	7.1	7.2	7.4	7.5	7.7	7.7	7.95	8.05	8.3
Canara Bank	7.25	7.25	7.25	7.25	7.35	7.4	7.5	7.65	7.75	7.9	8.1	8.15
Union Bank of India	7.25	7.25	7.25	7.25	7.35	7.45	7.55	7.7	7.75	7.9	8.2	8.25
Punjab National Bank	7.25	7.25	7.25	7.25	7.25	7.4	7.55	7.65	7.7	7.75	8.05	8.1
Bank of Baroda	7.3	7.3	7.3	7.35	7.4	7.5	7.65	7.7	7.8	7.95	8.05	8.3

Table 3



Graph 3

International Journal of Engineering Technology and Management Sciences
Website: ijetms.in Issue: 2 Volume No.7 March - April – 2023
DOI:10.46647/ijetms.2023.v07i02.062 ISSN: 2581-4621

From the tables 1 to 3, graphs 1 to 3 can understand the variations in interest rates during Jan 20 to Dec 22, which says about rate movement towards higher, and leads to GDP lower from 8.7 to 6.0 as shown in figure 1 [1].

4.Methodology :

A sample of week ending values of a bank stock index is used as a proxy for the bank industry.
The weekly closing interest rates for the 13-week Treasury bill, the 5 year Treasury note, the 10-year Treasury note, and the 30-year Treasury bond were used in the study. Data was taken from January 2020 through December 2022. During this time period, there was both a rising and a falling stock market. There was also a period of relatively high interest rates and a period of falling rates. Therefore, the results should be robust to a variety of market trends.
Independent variables other than interest rate variables used in the study include the price of gold, the value of the U.S. dollar.
One of the common problems associated with using time series economic data is that the series is often non stationary. Since regression techniques require that data in a series be normally distributed, it is necessary to convert the non stationary series into a stationary one. Therefore, first differences of the data were computed and used in the regression analysis. Stepwise regression was used to find the best set of variables to explain changes in bank stock prices [2].
Linear regression model is deployed for analysing the relationship between the variables. The dependent variable is GDP (growth) and independent variables are Inflation and Interest rate, likewise was prepared for the top 5 banks that appeared in the abstract [3].

5. Conclusion :

The results of this study corroborate those from previous studies, i.e. bank stock prices are sensitive to changes in interest rates. From the figure 1, as well as tables 1,2 and 3 with representation of graphs 1,2 and 3, we can conclude that interest rates are higher, due to fall in prices of shares of top 5 banks, can be one of the major part to fall in GDP of India

6. References :

[1] GDP – Inflation – Interest Rate: Nexus in India
Ms. Ramya Gowda, International Journal of Humanities and Social Science Invention (IJHSSI) ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714 www.ijhssi.org ||Volume 9 Issue 8 Ser. III || August 2020 || PP 42-48
[2] Variables Explaining Bank Stock Prices, Jimmy D. Moss, Lamar University, USA Gisele J. Moss, Lamar University, USA.
The Journal of Applied Business Research – July/August 2010 Volume 26, Number 4
[3] Modelling for the Relationship between Monetary Policy and GDP in the USA. .Using Statistical Methods Andre Amaral, Taysir E. Dyhoum, Hussein A. Abdou and Hassan M. Aljohani
[4] LENDING AND DEPOSIT RATES OF SCHEDULED COMMERCIAL BANKS
https://www.rbi.org.in/Scripts/Pr_DataRelease.aspx?SectionID=369&DateFilter=Year
[5] Best FD Interest Rates in India 2023
https://www.etmoney.com/fixed-deposit
[6] FD Interest Rates for 2022
https://rtocodelist.in/all-bank-interest-rates-in-india-2/
[7] Factors affecting share prices: A literature revisit
https://aip.scitation.org/doi/abs/10.1063/5.0045110?journalCode=apc
[8] Impact Of Fundamental Factors On The Share Price Movement Of Indian It Stocks
https://ejmcm.com/article_15317_88b7e10f30178a94d16620c09451b442.pdf
[9] Bernanke B, Laubach T, Mishkin F, Posen A (1999) *Inflation Targeting: Lessons from the International Experience*. Princeton University Press.

DOI:10.46647/ijetms.2023.v07i02.062 ISSN: 2581-4621

[10] Woodford M (1999a) "Commentary: How Should Monetary Policy Be Conducted in an Era of Price Stability". In: *New challenges for Monetary Policy*, Federal Reserve Bank of Kansas City, p. 277–316.
[11] Colander D, Haas A, Goldberg M, Juselius K, Kirman A, et al. (2009) "The Financial Crisis and the Systemic Failure of Academic Research", *Crit Rev* 21:249–267.
[12] Werner R (2012) "Towards a New Research Programme on 'Banking and the Economy'—Implications of the Quantity Theory of Credit for the Prevention and Resolution of Banking and Debt Crises." *International Review of Financial Analysis*, vol. 25, 1–17.
[13] Boivin, J., and M. Giannoni. Forthcoming. "Has Monetary Policy Become More Effective?" Review of Economics and Statistics 88.
[14] Christiano, L. J., M. Eichenbaum, and C. L. Evans. 2005. "Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy." Journal of Political Economy 113 (1): 1–45.
[15] Mankiw, N. G., and R. Reis. 2002. "Sticky Information versus Sticky Prices: A Proposal to Replace the New Keynesian Phillips Curve." Quarterly Journal of Economics 117 (4): 1295– 1328.
[16] Rudebusch, G. D. 2005. "Assessing the Lucas Critique in Monetary Policy Models." Journal of Money, Credit, and Banking 37 (2): 245–72
[17] Taylor, J. B. 1979. "Estimation and Control of a Macroeconomic Model with Rational Expectations." Econometrica 47 (5): 1267– 86.
[18] Taani, K. & Bani Khaled, A. 2011. The effect of financial ratios, firm size and cash flows from operating activities on earnings per share: International journal of social sciences and humanity studies, 3(1), 197-205.
[19] Kelly, S., McClean, J. & McNamara, R. (2008). The low P/E effect and abnormal returns for Australian industrial firms.
[20] Spyrou, I. S. (2001). Stock returns and inflation: evidence from an emerging market. Applied Economics Letters, 8, 447-450.
[21] Thompson, A. R. and Ward, M. J. D. (1995). The Johannesburg Stock Exchange as an Efficient Market: A Review. Journal of Studies in Economics and Econometrics, 19(3), 33-63.
[22] Roux, F. J. P. and Gilbertson, D. P. (1978). The behaviour of share prices on the Johannesburg Stock Exchange. Journal of Business Finance and Accounting, 5(2), 223-232.
[23] Uddin, M. G. S. and Alam, M. M. (2007). The Impacts of Interest Rate on Stock Market: Empirical Evidence from Dhaka Stock Exchange. South Asian Journal of Management and Sciences, 1(2), 123-132.
[24] Urrutia, J. L. (1995). Tests of Random Walk and Market Efficiency for Latin American Emerging Markets. Journal of Financial Research, 18, 299-309.