# Forecasting the Future of Bank Investment: Estimation through Income from Investment of top Banks in India 

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#### Abstract

Forecasting involves making predictions about the future and in banking forecasting is used by bank income from investment to estimate the future income from investment or other data for subsequent periods. By forecasting the future income from bankinvestment, the future uncertain events can be predicted by the investors for go certain bank on expectation towards future income from investments. For the study purpose top five banks were taken under three sector of banks such as public sector banks, private sector banks and foreign banks. For forecasting the future of income from bank investment simple moving average method was used to analysis. The study suggest investors can invest in any banks based upon their future desires and expectations.Bank Investment has implied with three aspects such as aggressive risk taker,moderately risk taker and conservative risk taker. Aggressive risk taker can invest in any bank such as private sector banks, public sector banks and foreign banks. Moderate risk taker can go for public banks and foreign banks and conservative risk taker can prefer public banks investment.Overall, for the year 2016 - 2022 State bank of India has generated highest income from investment compared with other bank investment income and the lowest bank income from investment for the year 2016-2022 is CTBC Bank Co. Ltdaccording to the simple moving average forecasting technique.


Keywords: Bank Investment forecasting,Future expected return, Future InvestmentInvestors Predilections,, Risk Portfolio

## Introduction

Banks may prosper by fundamentally altering how financial services are integrated into daily living since banking is rapidly evolving.The banking sector is at a turning point at current scenario. The key measures for banks are at a historically at low point. All the bank investment price to book value has fallen to less than one third the value of other industries. That gap makes that bank investors to think about future bank investment and there remains an uncertain profit growth in the future banking investment. The current profitability of the bank investment is less and uncertain profit growth in the future. Margins have shrunk by more than $25 \%$ over the last 15 years, and another $20 \%$ reduction is predicted in the following ten years, according to several banks, who have recently pushed for significant improvement. Regulation and increasing intersection competition are considered to be the bigger threat in global trends. We also believe that banks that effectively navigate this change will become bigger, more profitable, and develop more quickly while creating opportunities for value. Banking is confronting a future market by fundamental restructuring.In the next era, banks can realign to compete in new arenas, organized around distinct customer needs Knowing the future value of banking investment enables investors to make sound investment decisions based upon anticipated needs and external economic factors such as inflation can affect the future value of the asset by eroding its value.

## Literature Review

Tarun Poddar (2023)- Banking Investment has now competed with various company in every sector including startups and venture firms rather than traditional form of banking investment. As fast development of business activities is penetrating in using bonds and stocks to obtain finance in the twenty-first century, investment banks have become exceptionally significant. For case, the United States has over 100000 investment banks indicating strong and robust transaction and trading environment in capital markets.

David Tomljenovic (2023)- Traditionally, the investment banking industry was built upon personal relationships and network, however, a relationship-driven approach to many of the core functions in an investment bank has had the effect of obstructive the espousal of new ways of doing business.

GiacomoFalchetta, BrunoMichoud, ManfredHafner (2022)- Private investors are the key actors capable of channelling such large capital requirements.Off-grid businesses routinely struggle to maintain project finances since the sector still wants to prove that it is developed
and profitable. By proper forecasting the risk on sustainable development goals can be attained with ensuring energy required by private infrastructure developers and financiers

Geoffrey J. Warren (2021)- Evaluation of risk should not be based on returns and their volatility, but rather through forming distributions of accumulated wealth over the horizon of interest in order to generate measures of shortfall versus objectives. Concerns when evaluating risk in this context include potential for losses that are sustained through the investment horizon, path dependency, the influence of current market conditions, especially initial expected returns, discount rate and reinvestment rate effects.

Varghese Nithya Raju, Gajanan Pandit Wader (2021)- The presence of a large number of internet users would promote further development in investment avenues. Although the risks of online investment options are growing, but IT laws by SEBI and RBI is available to secure e-commerce experience. Public sector bank employees are well aware and educated about investment options in the market, by analysing their behaviour. In fact, during covid 19 pandemic these sectors investment was constantly growing by various safety measures. All government and corporate needs to look at prudently to create a robust and safe infrastructure for carrying out investment activity through gateway. Through there are more than a hundred categories of options for the investment, generally the investors prefer to invest in Mutual funds and banking products more comparative to other options, it is propitious time that, regulators of corporate securities in India also make an all-out effort to apply this time-tested remedy. This would accelerate the pace of development of investment market and its participants as well.

Eike C. Nwankpa (2019)- From the study the financial Inclusion was proxied by Private sector fixed and time deposits in commercial banks, while Net Asset Values and Number of Funds were used as indices of the independent variable. It was suggested that the fund managers and the authorities work together to increase financial inclusion by enhancing investor education, creating additional CIS distribution channels, registering more funds, and diversifying CIS offerings to appeal to a wider

Biswas, BhaskarChandra, Buddhadeb (2018)- The study shows that the growth option of gilt funds the performance of income funds of private sector banks in India is better than gilt funds of public sector banks in India and ICICI Prudential Long Term Gilt Fund-Growth and Kotak Gilt Investment Regular Plan -Growth are the best fund in selected gilt funds fund of public and private sector banks in India. Through various analysis, it can be concluded that in
case of growth option of income funds the performance of income funds of public sector banks in India is better than income funds of private sector banks in India and Canara Robeco Income Fund -Growth is the best fund in selected income funds fund of public and private sector banks in India.

## Research Gap

From the review of literature, the research gap has been identified and developed. In bank investment the choice of bank should be based upon certain expectation and return value on future so it is necessary for the investors to predict the future before going to invest in particular banking sector. To predict the future value of banking income from investment forecasting technique should be used and according the bank investment should be made by the investors.

## Objectives of the study

Following a review of existing literature, this study sought to forecast the future banking investment through income from investment of various banks in India. The study has the following objective:

To forecast future values of selected banks and suggest the investors about future ambiguity in banking investment.

## Research Methodology

The methodology adopted for this study is based on Secondary data which are collected from various financial research reviews, news reviews and reports.For this study, year wise data of selected bank income from investments for the six years from 2016 to 2022 is considered. This covers 15 different banks based upon their observations such as private investment bank, public investment bank and foreign bank. The data is obtained from database on Indian economy of Reserve Bank of India. Formula used for the study is simple moving average method which is considered to be one of the forecasting techniques. A simple moving average smooths out volatility and makes it easier to view the price trend of a future bank investments. If the simple moving average points up this means that the income from bank investments price is increasing. If it is pointing down, it means that the income from bank investments price is decreasing.

Formula: Simple moving Average method = Number of Income from Investment within the time period/Number of total periods

## Results and Findings

Table showing Database on Indian economy of income from Investment of various banks (Values in cores)

| Years | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | Average | Simple <br> Moving <br> average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bank Of Baroda | 17617.21 | 17077.12 | 18097.36 | 12786.72 | 10420.16 | 10596.33 | 10673.22 |  |  |
| Indian Bank | 10964.82 | 11166.89 | 5278.82 | 5043.42 | 5113.15 | 4423.95 | 4153.23 |  |  |
| Punjab National Bank | 23487.18 | 24634.46 | 15332.6 | 14105.97 | 13946.98 | 12577.17 | 12033.65 |  |  |
| State Bank of India | 84877.2 | 79808.09 | 68204.72 | 74406.16 | 70337.62 | 60564.88 | 53134.67 |  |  |
| Union Bank of India | 19942.84 | 20573.7 | 10572.86 | 9003.34 | 8779.97 | 8695.1 | 7535.15 |  |  |
| Public Sector | 156889.3 | 153260.3 | 117486.4 | 115345.6 | 108597.9 | 96857.43 | 87529.92 | 835966.7 | 139327.8 |
| ICICI Bank Limited | 16409.27 | 16539.78 | 14673.21 | 12796.88 | 11568.17 | 11377.07 | 10625.35 |  |  |
| Axis Bank Limited | 14618.91 | 12558.21 | 11246.03 | 11349.07 | 9983.3 | 9622.82 | 9377.59 |  |  |
| HDFC Bank Ltd. | 26046.13 | 23214.27 | 20633.32 | 19997.46 | 16222.37 | 15944.34 | 14120.03 |  |  |
| Kotak Mahindra Bank Ltd. | 6689.26 | 6833.41 | 5257.25 | 4872.77 | 3933 | 3681.04 | 3456.01 |  |  |
| Yes Bank Ltd. | 2878.09 | 2680.07 | 4260.92 | 6048.42 | 4102.53 | 3796.84 | 3508.21 |  |  |
| Private Sector Banks | 66641.66 | 61825.74 | 56070.73 | 55064.6 | 45809.37 | 44422.11 | 41087.19 | 370921.4 | 61820.23 |
| Bank Of America, National Association | 767.48 | 1309.74 | 1796.67 | 875.22 | 706.96 | 681.12 | 961.88 |  |  |
| CTBC Bank Co., Ltd. | 30.48 | 26.01 | 22.91 | 13.85 | 10.44 | 8.62 | 6.61 |  |  |
| Barclays Bank PLC | 686.72 | 548.88 | 609.77 | 635.18 | 513.2 | 512.98 | 561.06 |  |  |
| Citibank N. A | 5404.79 | 5859.75 | 6204.25 | 5053.05 | 4274.94 | 4099.96 | 4565.68 |  |  |
| Deutsche Bank AG | 2664.05 | 2496.76 | 1958.16 | 1513.87 | 973 | 819.18 | 1026.76 |  |  |
| Foreign Banks | 9553.52 | 10241.14 | 10591.76 | 8091.17 | 6478.54 | 6121.86 | 7121.99 | 58199.98 | 9699.997 |
| Source: Reserve Bank of India |  |  | Source formatted form-Authors complied data - values in crores |  |  |  |  |  |  |

## Findings from the Study

The table represent the income from investments of various banks. For the study top five investments banks were analysed on the basis of public sector banks, private sector banks and
foreign banks. The public sector bank such as bank of Baroda, Indian bank, Punjab national bank, state bank of India and union bank of India were taken for analysis, the private sector banks such as ICICI bank limited, Axis Bank Limited, HDFC Bank Ltd, Kotak Mahindra Bank Ltd and Yes Bank and under foreign investment bank Bank of America, CTBC bank,Barclays Bank, Citibank and Deutsche bank were taken for analysis. Public sector bank investment is considered to be high compared to other banking Investment its simple moving average value is 139327.8 cores and the private sector bank investment is considered to be low compared to other income from Bank investment value and its simple moving average value is 61820.23 cores, foreign bank investment is considered to be modest compared to other bank investment bank and its simple moving average value is 61820.23 cores.

From the public sector bank state bank of India has generated highest income from bank investment on the year 2022 and its value is 84877.2 crores and on the year 2016 Indian bank investment income is considered to be lowest and its value is 4153.23From the Private sector banks HDFC Bank Ltdhas generated highest income from bank investment on the year 2022 and its value is 26046.13 crores and on the year 2022Kotak Mahindra bank investment income is considered to be lowest and its value is 2680.07 cores.23From the foreign sector banksCitibank N A Bank has generated highest income from bank investment on the year 2020 and its value is 6204.24 crores and on the year 2016CTBC Bank Co Ltd bank investment income is considered to be lowest and its value is 6.61 cores.

## Concluding Observation and Suggestions

Income from bank investments is widely changing from the past six years. There is a stable increase and decrease in the income from bank investments. From the findings it is concluded that public sectorbank Investment is relativelyharmlessto invest by investors for their future since is moving average value is high compared to other banks and the foreign investment bank is considered to be moderately safe for investor for their future and the private sector bank is considered to be uncertain and dicey as its value is very low compared to other bank income.Overall, for the year 2016 - 2022 State bank of India has generated highest income from investment compared with other bank investment income and the lowest bank income from investment for the year 2016-2022 is CTBC Bank Co.Ltd.

Finally, the study suggest investors can invest in any banks based upon their future desires and expectations.Bank Investment has implied with three aspects such as aggressive risk taker,moderately risk taker and conservative risk taker. Aggressive risk taker can invest in any
bank such as private sector banks, public sector banks and foreign banks.Moderate risk taker can go for public banks and foreign banksand conservative risk taker can prefer public banks investment.

## Social Relevance of the Study

The present study on Forecasting the future of Bank Investmenthas implied with three aspects of risksuch as aggressive risk taker, moderately risk taker and conservative risk taker accordingly the individual portfolio. The research highlighted the future of bank income from investment and its expected value through simple moving average method. The investors can select the bank investment based upon the analysis and benefited in future. Banks are considered to be main source of economic improvement of the economy and it also provides various societal improvement objectives for the welfare of the country. If more bank investment made by the investors, it promotes the economic and social benefits towards country. Thus, from the studyit helps the investors to choose the particular bank based upon their individual and social need.

## Scope for Further Research

This research study on Forecasting the future of Bank Investment: Estimation through income from investment of top banks for the year 2016-2022 by using simple moving average method. Further study can be attempted by using other methods to forecast the future of bank investment and accordingly suggest the investment benefits to bank investors.

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