

**AN ANALYSIS OF FUND AND NON-FUND INCOME OF PUBLIC SECTOR
COMMERCIAL BANKS IN INDIA - WITH SPECIAL REFERENCE TO BANK OF
BARODA**

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ABSTRACT

The research paper basically focuses on the trend analysis of fund and non- fund income of Bank of Baroda from 2015-16 to 2019-2020. Our analysis has revealed that the despite the switch over from traditional banking system to universal banking system, yet the share of fund income holds the majority share in the net income of bank. The component wise analysis of bank's income structure has revealed that the share of core- non fund income is the highest followed by treasury income and recovery from written- off accounts.

Keywords: Fund Income, Non- Fund Income, Net Income

INTRODUCTION

The policy of liberalization of the union government coupled with the spread of Information Technology Enabled Services has stimulated the Indian banking system to gradually switch over from the traditional banking regime towards the universal banking system. This switch over from traditional banking activities to universal banking approach has encouraged the commercial banks to diversify their fund based income generating mechanism to non fund based income generating operations. Bank of Baroda which is the third largest public sector bank in India, with 131 million customers, a total business of US\$218 billion, and a global presence of 100 overseas offices. Based on 2019 data, it is ranked 1145 on Forbes Global 2000 list. The bank at present offers a large variety of non- fund services to its customers. These services include domestic Letter of Credit facility to the clients for procurement of goods on DA/DP basis as per their needs at very competitive rates. Considering the international network of branches coupled with

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worldwide correspondent relationship arrangements, the clients enjoy market acceptability and comfort in business deals. Bank Guarantee facility to the clients is offered for guaranteeing their financial obligations in the domestic as well as international market. In case of Letters of Credit received by the clients, bank offers Letter of credit advising as well as Letter of credit confirmation services under correspondent relationships with domestic as well as international banks. Sometimes in business deals done on credit basis, buyers are required to offer adequate comforts to the sellers such as bank guarantee or co-acceptance of bills by the bankers. Bank of Baroda offers co-acceptance of bills facility to the top rated clients. Bank of Baroda has tie-up arrangement with National Insurance Company (NIC), under which bank arranges for issuance of general insurance policies to the clients thereby taking away their worries of timely and adequate insurance cover of the assets. The bank also provides solvency certificate to the clients in case it is required for providing to Government authorities, other corporates in business deals / bids etc. Bank also provides credit reports of the clients to other banks and also obtains credit information required by the clients on their counter parties, through correspondent relationship.

REVIEW OF LITERATURE

Stiroh and Rumble (2006) studied the quarterly data of U.S. financial holding companies from 1997 to 2002 to investigate the diversification benefits of offering a range of financial services and shifts in activities that generate fees, trading income and other non-interest income. It was found that diversification gains were more than offset because of the costs involved in increased exposure to non-interest activities on account of its high volatility.

Analyzing a unique data set of U.S. domestic bank holding companies over the period 1990-1999, Geyfman (2010) concluded that U.S. domestic bank holding companies that had expanded into securities activities were more diversified (with higher returns and lower overall risk) and less likely to go bankrupt (with higher Z-scores) relative to their stand-alone traditional commercial banking and non-traditional banking subsidiaries.

Baele, Jonghe and Vennet (2007) explored the impact of bank diversification on competitive advantage in terms of long-term performance/risk profile compared to their specialized competitors using the panel data of 17 European banks from the period 1989-2004. The results indicated that a higher share of non-interest income increases the bank's franchise value and

systematic-risk, whereas the impact on the bank's idiosyncratic risk is non-linear and downward-sloping.

Mercieca, Schaeck and Wolfe (2007) investigated a sample of 755 small European banks for the period 1997-2003 and determined that there was no direct diversification benefit within and across business lines. The shift into non-interest income activities negatively affected the small banks return (mean ROA and ROE, risk-adjusted ROA and ROE) and positively affected the banks risk (standard deviation of ROA and ROE, Z-score). The diversification indicators included non-interest income share and Herfindalh Hirschmann Index (HHI) measures.

Quarterly data of eight Canadian banks over the period 1988-2007 were analyzed to study the impact of off-balance-sheet activities on bank's returns (Calmes and Theoret, 2010). The study found that bank's risk-return trade-off displayed a structural break around 1997. During the period 1988-1996, the share of non-interest income negatively affected the bank's returns and a risk premium emerged to price the risk associated with non-interest income activities. But during the period 1997-2007, the share of non-interest income did significantly affect a bank's return.

Some studies choose samples from multiple countries. Demirguc-Kunt and Huizinga (2010) studied an international sample of 11334 banks in 101 countries over the period 1995-2007 to examine the impact of non-interest-generating activities on return and risk. The empirical results suggested that a higher level of non-interest income share increases the bank risk, although the rate of return on assets also increases.

Elsas, Hackethal and Holzhauser (2010) examined the effect of revenue diversification on bank value using the panel data from nine countries (Australia, Canada, France, Germany, Italy, Spain, switzerland, UK, and USA) over the period 1996-2008. The findings indicated that diversification increases bank profitability and hence market value. Furthermore, the study indicated that this positive relationship between diversification and bank value also holds during a financial crisis.

Recently, a lot of questions were raised about the financial health of commercial banks in India. Sinha, P., Taneja, V.S. & Gothi, V. (2009) in their paper analyzed the Indian bank's riskiness and the probability of book-value insolvency under the framework developed by Hannan and Hanweck (1988) with special reference to global trust bank. They observed that the Z statistic obtained for public sector banks are much higher than that obtained for private sector banks signifying that public sector banks are safer as compared to private banks and the probability of

book value insolvency is lower. Moreover, when they applied the Hannan and Hanweck framework to GTB for the year 2003, they found the Z-statistic for GTB as 1.93, which is much less than the survivors Z-score whose average score was 37.62. The bank ultimately became sick with huge bad debts in 2004. However, the RBI managed the crisis by merging it with Oriental Bank of Commerce.

Chunhachinda, P. & Li Li (2014) analyzed the income structure and investigated the impact of Asian bank's income structure on competitiveness, profitability and risk over the period 2005-2011. The cross-sectional regression results reveal that higher exposure of net non-interest income in Asian banks increases market risk and asset risk, but lower insolvency risk, ROA and ROE. However, higher exposure of net fees and commissions reduces return volatility, market risk and asset risk, but increases insolvency risk, ROA and ROE. Further, the exposure of trading and derivatives and other securities tends to decrease the bank's competitiveness.

OBJECTIVES, SCOPE AND METHODOLOGY

1. The first and foremost objective of this paper is to analyze the trend of fund and non- fund income of Bank of Baroda.
2. The second objective is to study the components of non- fund income of Bank of Baroda.

This paper is confined to the study of third largest commercial bank in India i.e. Bank of Baroda. The time period of study is five years i.e. from 2015-16 to 2019-20

The trend analysis of fund and non- fund income has been examined graphically and with the help of other statistical tools.

ANALYSIS

Bank's income structure is measured by two variables, namely the ratio of non-fund income to net operating income and the ratio of fund income to net operating income, where net operating income is the sum of the fund income and non- fund income. This distribution of net income is shown in table-I.

Table – I
Distribution of Bank of Baroda's Income

Distribution of Income	2015-16	2016-17	2017-18	2018-19	2019-20
Non- Fund Income (Rs. crores)	10250	8405	6657	6758	4999
Fund Income (Rs. crores)	27451	25678	15522	13513	12740
Net Income (Rs. crores)	37701	34083	22179	20271	17739
% of Non-fund Income to Net Income	27.19	24.66	30.01	33.34	28.18
% of Fund Income to Net Income	72.81	75.34	69.99	66.66	71.82

Source: Bank of Baroda's annual report from 2015-16 to 2019-20

From the table I it is evident that that the ratio of fund income to net income hold the majority share in the net income of bank. And the ratio of non- fund income to net income lags far behind. The bank still needs to focus on activities needed to generate non- fund income of bank because even in the terminal year of analysis non- fund income is almost above 1/4th of bank's net income while fund income holds around 70% share in net income of the bank. This is indeed a cause of concern for the bank.

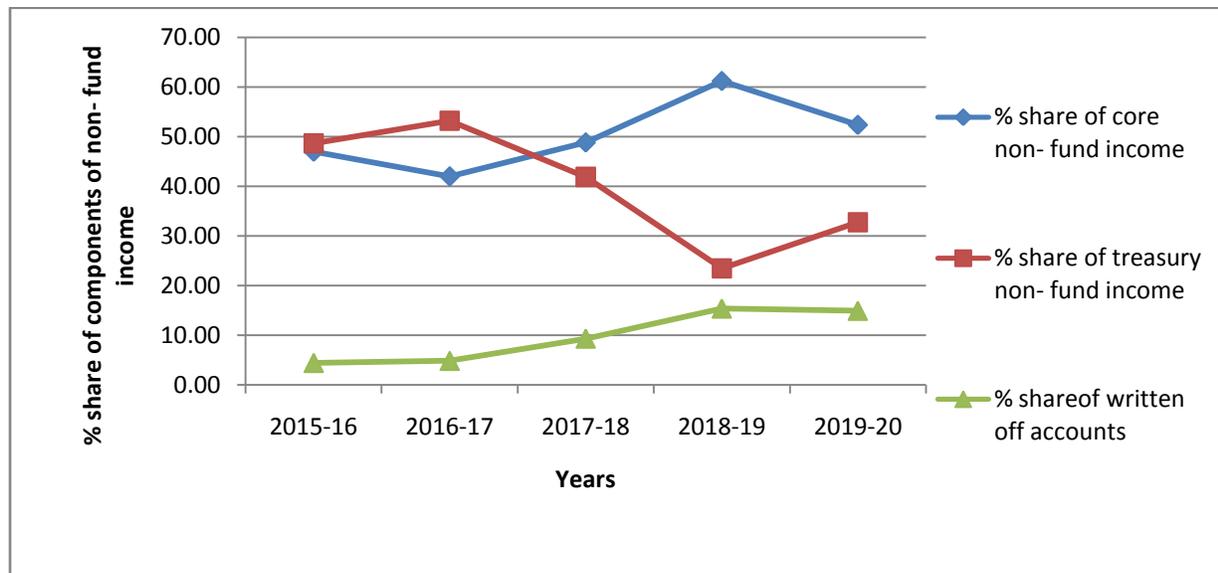
In order to study this cause further, we have investigated the three different components of bank's non- fund income. First is the core non-interest income which includes commission on letter of credit, letter of guarantee, processing charges, exchange on inland remittances, income from foreign exchange business, commission from government business and other activities. Second is the treasury income which includes profit on sale of investment and exchange on foreign currencies. The third component is the recovery from the written-off accounts. The entire component-wise distribution of the non-fund income is depicted in table-II

Table- II**Distribution of Bank of Baroda Non-Fund Income**

Distribution of Non- Fund Income	2015-16	2016-17	2017-18	2018-19	2019-20
Non- Fund Income (Rs. crores)	10250	8405	6657	6758	4999
Core Non-Fund Income (Rs. crores)	5365	5141	3249	2837	2347
Treasury Income (Rs. crores)	3353	1970	2787	3594	2431
Recovery from written- off accounts (Rs. crores)	1532	1294	621	327	221
% of core non- fund income	52.34	61.17	48.81	41.98	46.95
% of treasury income	32.71	23.44	41.87	53.18	48.63
% of recovery from written- off accounts	14.95	15.40	9.33	4.84	4.42

Source: Annual report of Bank of Baroda from 2015-16 to 2019-20

From table-II it is evident that the core non-interest income is the principal component of the non-fund income of the bank since it has the maximum share among all the components of the non-fund based income of the bank. This is followed by the treasury income and then by the recovery from written- off accounts. The percentage share of all the three components is depicted in figure I:

FIGURE- I**PERCENTAGE SHARE OF COMPONENTS OF NON- FUND INCOME**

Bank must definitely put efforts so as to increase the share of treasury income and recovery from written- off accounts.

CONCLUSION

Indian banks are moving towards modern banking changing a face of traditional banking of Indian economy .It is a great change of banking industry. They having a installing an information technology for banking business and they trying to provide technology based banking products and services to their customers. Indian banks also trying to Universalization of banking products and services to one top banking shop for customer delight, but comparatively private and foreign banks existing in Indian economy are having a higher level of modernization and those providing numbers of modern services to their customers. For a long term success of banking institution to require effective management of credit risk and diversified into fee based activities. Non-traditional activities of banks are more sophisticated and versatile instrument for risk assessment. Therefore Bank of Baroda needs to focus on activities generating larger amount of non- fund income and must also increase its process of recovery.

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