International Journal of Research in Finance and Marketing (IJRFM)
Available online at : http://euroasiapub.org/current.php?title=IJRFM
Vol. 6 Issue 11, November - 2016, pp. 103~110
ISSN(o): 2231-5985 , ,Impact Factor: 5.861 | Thomson Reuters ID: L-5236-2015

ANALYSIS OF EARNING QUALITY OF PUBLIC SECTOR BANK: A STUDY OF SELECTED BANKS

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Abstract

The present study is conducted to analyse the earning quality of selected public sector banks. The study used exploratory-cum-descriptive research design. Three public sector banks named State bank of India (SBI), Punjab National Bank (PNB) and Bank of Baroda (BOB) were selected for the study and period of the study is 2011 to 2016. Secondary data used for the study and collected from the various websites, journal and annual reports. Average and ANOVA used as tool of analysis. The results of the study revealed that SBI performed better in terms of return on assets and non-interest income to total funds. On the other hand, PNB at the top for operating profit to average working fund and interest income to total funds. It also found that there is no significance difference in return on assets, operating profit to average working fund, and non-interest income to total funds among selected bank. The study suggested that the banks should get better the operational efficiency, boost the interest and non interest income.

Keywords: *SBI, PNB, BOB, earning quality, interest income, etc.*

INTRODUCTION

Performance of the economy of any country is largely depends on the banking sector. The efficiency, productivity, profitability, stability and a shock-free economy is possible only when a country is having a sound and healthy banking sector. Now, Banking has become convenient and instant, with the account holder not having to wait for hours at the bank counter for getting a draft or for withdrawing money from his account. The banking system of India should not only be hassle free, but it should be able to meet new challenges posed by the technology and other external and internal factors. India's banking system has several outstanding achievements to its credit, last three decades. The most striking is its extended reach. It is no longer confined to only metropolitans or cosmopolitans in India. In fact, Indian banking system has reached even to the remote corners of the country. This is one of the main reasons of India's growth process. The Narasimham Committee report recommended wide ranging reforms for the banking sector in

1992 to introduce internationally accepted banking practices. Every business entity is judged by its earnings because it is one of the parameters to measure the financial performance of any organizations. But, in the context of banks, quality of earning is also important. The quality of earnings being an important criterion determines the ability of a bank to earn consistently in future. It basically determines the quality of bank's profitability and its ability to maintain quality, sustainability and growth in earnings in the future. The parameter gains importance in the light of the argument that a large part of a bank's income is earned through non core activities like interest and dividend on investments, treasury operations, and corporate advisory services and so on. So, not only earnings, but the quality of earning is also to be seen in the context of sustainability, competitiveness, healthy growth, income from core activities *etc.* for the banking sector.

REVIEW OF LITERATURE

Shannugam and Das (2004) examined to measure the technical efficiency of banks in India during the period 1992-99 by using stochastic frontier approach. For analysing the efficiency of banks, four outputs, *i.e.,* interest margin, non-interest income, investment and credit; and four inputs, *i.e*., deposits, borrowings, labour and fixed assets have been used. The results revealed that there has been dominance of deposits in producing all the outputs during the study period and an improvement in banking industry has been found in raising non- interest income, investments and credits. The study indicated that state bank group and private owned foreign group performed better than their counterparts. **Singh and Kohli (2006)** examined the performance of 30 private sector banks by using CAMEL Model. The study also analyzed the strengths and weaknesses of the banks through SWOT analysis. The study concluded that the banks with innovative new products, better utilization of manpower resource and which offered strong brands have performed in a better way. **Prasad and Ravinder (2011)** studied the profitability by using various parameters like operating profit margin, gross profit margin, net profit margin, earning per share, return on equity, return on assets, price earnings ratio and dividend payout ratio of four major banks in India, *i.e.,* State Bank of India, Punjab National Bank, ICICI Bank and HDFC Bank for the period 2005-06 to 2009-10. The study revealed that State Bank of India performed better in terms of earning per share and dividend payout ratio, while Punjab National Bank performed better in terms of operating profit margin and return on equity. The study also found that HDFC Bank outperformed in terms of gross profit margin, net profit margin, return on assets and price-earnings ratio. It also concluded that HDFC Bank on the top position followed by Punjab National Bank, State Bank of India and ICICI Bank. **Chaudhry (2012)** analyzed the performance of selected public and foreign banks in India on the basis of CAMEL Model, by using six banks in all, selecting three banks from each category *i.e.* SBI, PNB and BOB from public sector and Citibank, Standard Chartered and HSBC from foreign banks in India for a period of 12 years, *i.e.* 2000 to 2011. It found that the quality of earnings is a very important criterion which explains the sustainability and growth in earnings in the future. Therefore, from the investors' point of view, PNB and Standard Chartered are in a better position as their earnings quality is better in their respective groups which is evident from the ratio of operating profits to average working funds. **Chaudhry (2012)** examines the performance of selected private and foreign banks in India on the basis of CAMEL Model, Sample selected as six banks in which three banks from each category i.e. ICICI, HDFC and AXIS from private sector; and Citibank, Standard Chartered and HSBC from foreign banks in India for a period of 12 years, i.e. 2000 to 2011. It found that the investors' point of view, HDFC and Standard Chartered are in a better position as their earnings quality is better in their respective groups which is evident from the ratio of operating profits to average working funds. **Chaudhry (2012)** analyzed the performance of selected public and private banks in India by using CAMEL Model. As per Sample three banks selected from each category i.e. State Bank of India (SBI), Punjab National Bank (PNB) and Bank of Baroda (BOB) from public sector and ICICI, HDFC and AXIS from private sector banks in India for a period of 12 years, i.e. 2000 to 2011. It found that the quality of earnings explains the sustainability and growth in earnings in the future. Therefore, PNB and HDFC are in a better position as their earnings quality is better in their respective groups which is evident from the ratio of operating profits to average working funds. **Mohina and Chaudhry (2013)** conducted to analyze the earnings quality of selected private sector banks namely ICICI Bank, Indusind Bank, Axis Bank and HDFC Bank by using CAMEL Model ratios from the period 2001-02 to 2010-11. It found that the ratio of Operating Profits to Average Working Funds and Spread or Net Interest Margin (NIM) to Total Assets shows that there is no significant difference in the earnings quality of the selected banks. Whereas, the ratio of Operating Profits to Average Working Funds and Non-interest Income to Total Income reveals that there is significant difference in the earnings quality of the private sector banks under study. **Dhevika, Latasri and Gayathri (2013)** examined the financial position of City Union Bank, borrowings of the bank, the liquidity position and solvency of the bank through ratio analysis. Financial Performance refers to the achievement of the bank in terms of profitability. Profitability of a bank denotes the efficiency with which a bank deploys its total resources to optimize its net profits and thus serves as an index to the degree of asset utilization and managerial effectiveness. **Sai and Sultana (2013)** evaluated the performance of the selected two banks based on the financial ratios from the perspective of pre and post-merger. The study found that there is significant difference among the Net profit margin, Operating profit margin, Return on capital employed, Return on equity and Debt-Equity ratio of Indian overseas bank and HDFC bank but no significant difference with respect to Gross profit margin of Indian overseas bank. **Gupta (2014)** analysed the financial performance of ICICI Bank and offer suggestions for the improvement of efficiency in the bank. The study also focused on operational control, profitability and solvency *etc.* ICICI bank emerged as a pioneer venture on the horizon of offering an expanded range of banking products and financial services for corporate and retail customers through its diverse delivery channels and specialized subsidiaries in the areas of investment banking, asset management, venture capital and insurance. **Gajera and Pithadia (2015)** analysed the capital adequacy of private and public sector banks of India by taking financial ratios of two parameters indicating capital adequacy of commercial banks. It found that there was significance difference in financial performance with respect to capital adequacy ratio in four types of banks *i.e.* SBI and its associate's banks, nationalized banks, old private and new private sector banks. **Kundu and Sharma (2016)** analysed the earning quality of the selected nationalised commercial banks in India. The performance of ten nationalised banks was considered as a sample. The study found that there is no significance difference between the Interest Income to Total Income and Non Interest Income to Total income of selected Nationalised banks. Hence it may be suggested that nationalised commercial banks have to focus more on interest and non interest incomes to cope up with the economy by improving their operational efficiency.

The above literature discloses that no intensive research work was made to analyse the earning quality of banking sector. Therefore, the present study is undertaken to fill the gap.

OBJECTIVES OF THE STUDY

The specific objectives' of the study is as under:

- To study the return on assets of the selected banks;
- To examine the operating profit to average working fund of the selected banks;
- To analyse the interest income to total funds of the selected banks; and
- To examine the non-interest income to total funds of the selected banks.

Hypotheses of the study

To validate the results of the study, following hypotheses have been formulated,

H_{01}: There is no significance difference among return on assets of the selected banks.

H_{02}: There is no significance difference among operating profit to average working fund of the selected banks.

H_{03}: There is no significance difference among interest income to total funds ratio of the selected banks.

H_{04}: There is no significance difference among non-interest income to total funds ratio of the selected banks.

RESEARCH DESIGN AND SAMPLE DESIGN

The research design of the present study is used exploratory-cum-descriptive. Three public sector banks namely State Bank of India (SBI), Punjab National Bank (PNB), and Bank of Baroda (BOB) were selected for the study, and period of the study is 2011 to 2016. Secondary data used for the study are collected from the various websites, Journal and annual reports. Average and Analysis of Variance (ANOVA) techniques were used for the analysis.

RESULT AND DISCUSSION

Return on Assets (ROA)

The return on assets measures how effectively a company can earn a return on its investment in assets. In other words, it shows how efficiently a company can convert the money used to purchase assets into net income or profits. The ratio is calculated as under:

ROA = Net Profit / Average Total Assets

Table 1 depicts the return on assets of the selected banks in which maximum return on assets of SBI (0.97 percent) in 2013 and minimum return on assets (0.46 percent) in 2016, whereas Maximum return on assets of PNB (1.33 percent) in 2011 and minimum return on assets (-0.55 percent) in 2016. On the other hand, Maximum returns on assets of BOB (1.18 percent) in 2011 and minimum (-0.80 percent) in 2016. Average return on assets of SBI, PNB and BOB are 0.73 percent, 0.70 percent and 0.58 percent, respectively.

Statically, ANOVA results shows that there is no significance difference in return on assets among selected bank. Therefore, the null hypothesis (H_{01}) is accepted at 5 percent level of significance.

Operating Profit to Average Working Fund

This ratio indicates how much a bank can earn from its operations net of the operating expenses for every rupee spent on working funds. This is arrived at by dividing the operating profit by average working funds. Average Working Funds (AWF) are the total resources (total assets or liabilities) employed by a bank. It is daily average of total assets / liabilities during a year. The better utilization of funds will result in higher operating profit. Thus, this ratio will indicate how a bank has employed its working funds in generating profit.

Table 2 shows the maximum operating profit to average working funds of SBI (2.38 percent) in 2012, whereas 2.72 percent Ratio of PNB in 2011 and 2.22 percent ratio of BOB in 2011. On the basis of average, PNB (2.12 percent) at top; followed by BOB (1.78 percent), SBI (1.73 percent). On the other hand, ANOVA results presents that there is no significance difference in Operating Profit to Average Working Fund among selected bank. Therefore, the null hypothesis (H_{02}) is accepted at 5 percent level of significance.

Interest Income to Total Funds Ratio

Interest income is a basic source of revenue for banks. The interest income to total income indicates the ability of the bank in generating income from its lending. This ratio measures the income from lending operations as a percentage of the total income generated by the bank in a year. Interest income includes income on advances, interest on deposits with the RBI, and dividend income. Interest Income to Total Funds ratio shows the proportionate contribution of interest income in Total Funds.

Table 3 shows the Interest income to total funds of selected banks. Interest income to total funds of SBI ranging to 7.15 percent to 8.32 percent, 2011 and 2012, respectively. Whereas, PNB covers 7.55 percent to 8.94 percent in 2016 and 2013, respectively. On the other hand, Interest income to total funds of BOB ranging 6.31 percent to 7.58 percent from 2011 to 2016. On the basis of average of the Interest Income to Total Funds of Banks, PNB (8.29 percent) at top, followed by SBI (7.90 percent) and BOB (6.93 percent).

Likewise, ANOVA results depicts that there is a significance difference in Interest Income to Total Funds among selected bank. Therefore, the null hypothesis (H_{03}) is rejected at 5 percent level of significance.

Non-Interest Income to Total Funds Ratio

This measures the income from operations other than lending as a percentage of the total income. A fee-based income account for a major portion of a bank's other incomes. The bank generates higher fee income through innovative products and adapting the technology for sustained service levels. Non-interest income is the income earned by the banks excluding income on advances and deposits with the RBI. Non-Interest Income to Total Funds shows the proportionate contribution of Non-Interest Income to Total Funds.

Table 4 presents the Non-Interest Income to Total Funds of selected banks, in which maximum ratio of SBI (1.39 percent) in 2011 and lower ratio (1.18 percent) in 2015. Whereas, Highest ratio of Non-Interest Income to Total Funds of PNB (1.09 percent) in 2016 and lowest ratio 0.89 percent in 2014. On the other hand, Highest ratio of Non-Interest Income to Total Funds of BOB (1.00 percent) in 2011 and lowest ratio (0.64 percent) in 2015. On the basis of Average of Non-Interest Income to Total Funds of banks, SBI (1.20 percent) at the top, followed by PNB (1.00 percent) and BOB (0.78 percent).

Statically, ANOVA result shows that there is no significance difference in Non-Interest Income to Total Funds among selected bank. Therefore, the null hypothesis (H_{04}) is accepted at 5 percent level of significance.

CONCLUSION

Earnings are considered to be of high quality when they are sustainable, healthy and growing. The banks have entered into different areas and they can earn income from other sources than their core income. It found that SBI at the top on the performance basis of return on assets and Non-Interest Income to Total Funds. On the other hand, PNB performed better in term of Operating Profit to Average Working Fund and Interest Income to Total Funds. It also found that there is no significance difference in return on assets, Operating Profit to Average Working Fund, and Non-Interest Income to Total Funds among selected bank. The study recommended that the banks should increase the interest and non interest income through the fully utilization of the resources and improve the operational efficiency. The following key factors to be consider when assessing the credit union earning are level, growth trends, and stability of earnings, particularly return on average assets; Quality and composition of earnings and assets. The quality of the earning can be improved with the help of improvement in core activity of the banking sector.

REFERENCES

Alam, Hassan Mobeen; Raza, Ali; & Akram, Muhammad (2011). A Financial Performance Comparison of Public Vs Private Banks: The Case of Commercial Banking Sector of Pakistan. *International Journal of Business and Social Science*, 2 (11), June, 56-57

Chaudhry, S. (2012). Performance Appraisal of Indian Banking Sector: A Comparative Study of Selected Public and Foreign Banks. *International Journal of Research in Commerce, IT & Management*. 2 (6), 163-172.

Chaudhry, S. (2012). Performance Appraisal of Indian Banking Sector: A Comparative Study of Selected Public and Private Sector Banks. *International Journal of Research in Commerce & Management*. 3 (6), 155-164.

Chaudhry, S. (2012). Performance Appraisal of Indian Banking Sector: A Comparative Study of Selected Private and Foreign Banks. *International Journal of Research in Computer Application & Management*. 2 (6), 171-180.

Dhevika, V.P.T., Latasri, O.T.V. & Gayathri H. (2013). A Study on Financial Performance Analysis at City Union Bank. *International Journal of Advanced Research in Management and Social Sciences*, 2 (7), 53-67.

Gadhia, N. M., (2015). A Study of Earning Quality of Selected Public & Private Sector Banks in India. *Indian Journal of Applied Research*. 5 (7), 567-569.

Gajera, A. & Pithadia, V., (2015). Financial Performance Evaluation of Private and Public Sector Banks with reference to Capital Adequacy Ratio. *Indian Journal of Research. 4*(5), 492-494.

Gupta, R. & Sikarwar, N. S (2013). A Comparative Study of Growth Analysis of Punjab National Bank of India and HDFC Bank Limited. *International Journal of Application or Innovation in Engineering & Management (IJAIEM),* 2 (2), February, 60.

Gupta, S. (2014). An Empirical Study of Financial Performance of ICICI Bank- A Comparative Analysis. *IITM Journal of Business Studies (JBS),* 1 (1).

Kundu, S. S. & Sharma, D. K. (2015). An Analysis of Earnings Quality among Nationalised Commercial Banks. *International Journal of Engineering Technology, Management and Applied Sciences*, *3*, 252-256, November.

Mohina & Chaudhry, S. (2013). Analysis of Earnings Quality of Private Sector Indian Banks. *In* Kundu, S. C; Punia, B. K; Saxena, S. & Mittal, S. K., *Researches in Business and Management - Academic and Professional Perspective*. *New Delhi:* Wisdom Publication.

Phor, Minaxi (2014). Capital Structure: A Comparative Study of SBI and ICICI. *Abhinav International Monthly Refereed Journal of Research in Management & Technology*, 3 (5), May.

Prabhu, G. G. & Chandrasekaran, G. (2015). A Comparative Study on Financial Performance of State Bank of India and ICICI Bank. *IMPACT: International Journal of Research in Business Management*, 3 (4), April.

Prasad, K.V.N. & Ravinder, G. (2011). Performance Evaluation of Banks: A Comparative Study on SBI, PNB, ICICI and HDFC. *Advances in Management*, 4 (2) September, 43-53.

Sai, V. R. N. & Sultana, S. T. (2013). Financial Performance Analysis in Banking Sector – A Pre & Post Merger Perspective. *International Monthly Refereed Journal of Research In Management & Technology*, 2, 56-66.

Shannugam, R. K. & Das, A. (2004). Efficiency of Indian Commercial Banks during the Reform Period. *Applied Financial Economics*, 14, 681-686.

Singh, Anurag. B. & Tandon, Priyanka (2012). A Study of Financial Performance: A Comparative Analysis of SBI and ICICI Bank. *International Journal of Marketing, Financial Services & Management Research*, 1(11), November, ISSN: 2277 -3622

Singh, D. & Kohli, G. (2006). Evaluation of Private Sector Banks in India- A SWOT Analysis. *Journal of Management Research*, 6 (2), August, 84-101.

Sharma, D. K. & Makin, R., (2012). Analysis of Capital Adequacy of Selected Private Sector Banks. *Kautilya: Haryana Economic Journal*. 2(2), 58-64.

http://www.moneycontrol.com

Annual reports of SBI, PNB and BOB.

Table 1: Return on Assets (Percent)

Year	SBI	PNB	BOB
2011	0.71	1.33	1.18
2012	0.88	1.17	1.12
2013	0.97	1.02	0.82
2014	0.65	0.68	0.69
2015	0.68	0.56	0.48
2016	0.46	0.55	0.80
Average	0.73	0.70	0.58
Rank	1	2	3
ANOVA (*p* value)	0.565		

Source: Secondary. **Note**: * Significance value at 5 percent level of significance

Table 2: Operating Profit to Average Working Fund (Percent)

Year	SBI	PNB	BOB
2011	2.17	2.72	2.22
2012	2.38	2.59	2.19
2013	1.46	2.19	1.88
2014	1.34	1.98	1.61
2015	1.18	1.74	1.53
2016	1.85	1.49	1.26
Average	1.73	2.12	1.78
Rank	3	1	2
ANOVA (*p* value)	0.297		

Source: Secondary. **Note**: * Significance value at 5 percent level of significance

Table 3: Interest Income to Total Funds (Percent)

Year	SBI	PNB	BOB
2011	7.15	8.03	6.97
2012	8.32	8.74	7.58
2013	8.25	8.97	7.34
2014	8.12	8.41	6.76
2015	7.94	8.05	6.62
2016	7.60	7.55	6.31
Average	7.90	8.29	6.93
Rank	2	1	3
ANOVA (*p* value)	0.000		

Source: Secondary. **Note**: * Significance value at 5 percent level of significance

Table 4: Non Interest Income to Total Funds (Percent)

Year	SBI	PNB	BOB
2011	1.39	1.08	1.00
2012	1.12	1.01	0.85
2013	1.11	0.90	0.73
2014	1.10	0.89	0.74
2015	1.18	1.02	0.64
2016	1.31	1.09	0.72
Average	1.20	1.00	0.78
Rank	1	2	3
ANOVA (*p* value)	4.507		

Source: Secondary. **Note**: * Significance value at 5 percent level of significance