Chapter 5

Findings

On the basis of data analysis and interpretation, these are the findings of the study.

- 5.1 On the basis of descriptive analysis, the findings of the study are as follows.
- 5.1(1) Among the public sector banks, bank wise analysis shows that the maximum mean of other income to total income ratio was found for State Bank of India (SBI) which was 22.57% followed by Bank of Baroda (BOB) which was 13.41% and then for PNB which was 13.13% during the study period.
- 5.1(2) Among the private sector banks, bank wise analysis shows that the maximum mean of other income to total income ratio was found for ICICI which was 43.21 % followed by AXIS bank which was 20.23% and then for HDFC bank which was 15.97% during the study period. 5.1(3) Among the public sector banks, bank wise analysis exhibits that the maximum mean of return on equity ratio was found for State Bank of India (SBI) which was 5.60 % followed by Bank of Baroda (BOB) which was 1.95% and then for PNB which was -5.52% during the study period.
- 5.1(4) Among the private sector banks, bank wise analysis shows that the maximum mean of return on equity ratio was found for HDFC Bank which was 16.71% followed by ICICI bank which was 11.36% and then for Axis bank which was 9.11% during the study period.
- 5.1(5) Among the public sector banks, bank wise analysis exhibits that the maximum mean of return on asset ratio was found for State Bank of India (SBI), which was .32 % followed by Bank of Baroda(BOB) which was .11% and then for PNB which was -.24% during the study period.

- 5.1(6) Among the private sector banks, bank wise analysis shows that the maximum mean of return on asset ratio was found for HDFC bank which was 1.74 % followed by ICICI bank which was 1.10% and then for AXIS Bank which was .88% during the study period.
- 5.1(7) Among the public sector bank, bank wise analysis shows that the maximum mean of return-on-investment ratio was found for Bank of Baroda which was 30.21% followed by PNB which was 25.93% and then for SBI which was 24.73% during the study period,
- 5.1(8) Among the private sector bank, bank wise analysis shows that the maximum mean of return-on-investment ratio was found for HDFC bank, which was 34.13 % followed by AXIS Bank which was 31.92% and then for ICICI Bank which was 18.49% during the study period. 5.1(9) Among the public sector bank, bank wise analysis shows that the minimum mean of cost of deposit ratio was found for BOB, which was 4.47% followed by PNB which was 4.96% and then for SBI which was 5.15 % during the study period,
- 5.1(10) Among the private sector bank, Bank wise analysis shows that the minimum mean of cost of deposit ratio was found for ICICI Bank, which was 4.45 % followed by AXIS Bank which was 4.70% and then for HDFC Bank which was 4.76% during the study period.
- 5.1(11) Among the public sector bank, Bank wise analysis shows that the minimum mean of cost of borrowing ratio was found for PNB which was 1.48 % followed by Bank of Baroda (BOB). Which is 1.78% and then for SBI which was 1.97% during the study period,
- 5.1(12) Among the private sector bank, Bank wise analysis shows that the minimum mean of cost of borrowing ratio was found for ICICI which was .92 % followed by AXIS bank Which was 1.58% and then for HDFC which was 5.96% during the study period,
- 5.1(13) Among the public sector banks, bank wise analysis exhibits that the maximum mean of gross profit ratio was found for SBI which was 5.09 % followed by BOB which was 2.88% then for PNB bank which was -5.44 % during the study period.

- 5.1(14) Among the private sector banks, bank wise analysis shows that the maximum mean of gross profit ratio was found for HDFC bank which was 26.90 % followed by AXIS bank which was 14.47% and then for ICICI bank which was 13.80% during the study period.
- 5.1(15) Among the public sector banks, bank wise analysis shows that the maximum mean of net profit ratio was found for State Bank of India (SBI) which was 3.57% followed by Bank of Baroda (BOB) which was 1.61% and then for PNB which was -3.43% during the study period, 5.1(16) Among the private sector banks, Bank wise analysis shows that the maximum mean of net profit ratio was found for HDFC bank which was 18.17% followed by ICICI which was 10.23% then for AXIS bank which was 9.44% during the study period.
- 5.1(17) Among the public sector bank, Bank wise analysis shows that the maximum mean of return on advance ratio was found for SBI which was .53% followed by BOB which was .17% then for PNB bank which was -.43% during the study period.
- 5.1(18) Among the private sector bank, Bank wise analysis shows that the maximum mean of ratio of return on advance was found same for HDFC and ICICI bank which was 2.68% and then for AXIS bank which was 1.42% during the study period.
- 5.1(19) Among the public sector banks, bank wise analysis exhibits that the minimum mean of operating expense to total income ratio was found for PNB which was 19.67 % followed by BOB which was 20.39 % then for SBI bank which was 27.52 % during the study period.
- 5.1(20) Among the private sector banks, bank wise analysis shows that the minimum mean of operating expense to total income ratio was found for AXIS bank which was 22.63% followed by HDFC bank which was 23.45% and then for ICICI bank which was 43.87% during the study period.
- 5.1(21) Among the public sector banks, bank wise analysis exhibits that the minimum mean of gross NPA to total asset ratio was found for SBI which was 3.50% followed by BOB which was 5.07% then for PNB bank which was 7.57% during the study period.

- 5.1(22) Among the private sector banks, bank wise analysis shows that the minimum mean of gross NPA to total asset ratio was found for HDFC bank which was .71 % followed by AXIS bank which was 2.58% and then for ICICI bank which was 3.08% during the study period.
- 5.1(23) Among the public sector banks, bank wise analysis exhibits that the minimum mean of net NPA to total asset ratio was found for BOB which was 2% followed by SBI 3.49% Which was and then for PNB which was 3.73% during the study period.
- 5.1(24) Among the private sector banks, bank wise analysis shows that the minimum mean of net NPA to total asset ratio was found for HDFC bank which was .21% followed by AXIS bank which was 1.25% and then for ICICI bank which was 1.27% during the study period.
- 5.1(25) Among the public sector banks, bank wise analysis shows that the maximum mean interest income to total asset ratio was found for PNB, which was 6.86 % followed by SBI which was 6.85% and then for BOB which was 6.29% during the study period.
- 5.1(26) Among the private sector banks, bank wise analysis shows that the maximum mean of interest income to total asset ratio was found for HDFC bank which was 8.05 % followed by AXIS bank which was 7.19 and then for ICICI bank which was 6.13% during the study period. 5.1(27) Among the public sector banks, bank wise analysis exhibits that the maximum mean of non-interest income to total assets ratio was found for State Bank of India (SBI), which was 1.97% followed by PNB which was 1.01% and then for BOB which was .98% during the study period.
- 5.1(28) Among the private sector banks, bank wise analysis shows that the maximum mean of non-interest income to total asset ratio was found for ICICI bank which was 4.67% followed by AXIS bank which was 1.82% and then for HDFC bank which was 1.53% during the study period.

- 5.1(29) Among the public sector banks, bank wise analysis exhibits that the minimum mean of operating expense total assets ratio was found for BOB which was 1.49 % followed by PNB. Which was 1.55% and then for SBI which was 2.39% during the study period,
- 5.1(30) Among the private sector banks, bank wise analysis shows that the minimum mean of operating expense to total asset ratio was found for AXIS bank which was 2.03 % followed by HDFC bank which was 2.25% and then for ICICI bank which was 4.73% during the study period.
- 5.1(31) Among the public sector banks, bank wise analysis exhibits that the maximum mean of income on asset ratio was found for State Bank of India (SBI) which was .09 followed by PNB and BOB which was same .08 during the study period.
- 5.1(32) Among the private sector banks, bank wise analysis exhibits that the maximum mean of income on asset ratio was found for ICICI bank which was .11 followed by HDFC and AXIS Banks which was same .10 during the study period.
- 5.1(33) Among the public sector banks, bank wise analysis exhibits that the mean of operating profit total asset ratio was found same for State Bank of India (SBI), PNB and Bank of Baroda (BOB) which was.02% during the study period.
- 5.1(34) Among the private sector banks, bank wise analysis exhibits that the maximum mean of operating profit total asset ratio was found same for HDFC, ICICI and AXIS Bank which was .03% during the study period.
- 5.1(35) Among the public sector banks, bank wise analysis shows that the maximum mean of current ratio was found for BOB, which was 1.62 followed by PNB which was 1.35 and then for SBI which was .87 during the study period.
- 5.1(36) Among the private sector banks, bank wise analysis shows that the maximum mean of current ratio was found for AXIS bank which was .93 followed by HDFC which was .73 and then for ICICI bank which was .68 during the study period.

- 5.1(37) Among the public sector banks, bank wise analysis shows that the maximum mean of demand and saving bank deposit to total deposit ratio was found for State Bank of India (SBI)which was .43 followed by PNB which was .41 and then for BOB which was .33 during the study period.
- 5.1(38) Among the private sector banks, bank wise analysis shows that the maximum mean of demand and saving bank deposit to total deposit ratio was found same for ICICI and AXIS Bank which was .47 followed by HDFC Bank which was .44 during the study period.
- 5.1(39) Among the public sector banks, bank wise analysis exhibits that the maximum mean of total investment to deposit ratio was found for State Bank of India (SBI), which was 37.27 % followed by PNB which was 32.09% and then for BOB which was 25.35% during the study period.
- 5.1(40) Among the private sector banks, bank wise analysis shows that the maximum mean of total investment to deposit ratio was found for ICICI bank which was 63.62 % followed by AXIS bank which was 33.50% and then for HDFC bank which was 32.46% during the study period.
- 5.1(41) Among the public sector banks, bank wise analysis exhibits that the maximum mean of absolute liquid ratio was found for BOB which was .49 followed by PNB bank which was .27 and then for SBI which was .15 during the study period.
- 5.1(42) Among the private sector bank, Bank wise analysis shows that the maximum mean of absolute liquid ratio was found for AXIS bank which was .21followed by ICICI bank which was .19 and then for HDFC bank .17 during the study period.

5.2 Comparative analysis of Public and Private Sector banks financial performance in Pre and Post Demonetization phase.

5.2(1) Other Income to Total Income Ratio: In pre demonetization phase, it is found that every year in both the banks, the composition of other income in total income is almost increasing

but the ratio for private sector banks is more than public sector banks. In post demonetization period, public sector banks ratio decreased more than private sector banks. The fluctuation is more in public sector banks than private sector banks. It shows that private banks efficiently generated income from other resources in pre and post demonetization period.

5.2(2) Return on Equity Ratio: In pre demonetization period, return on equity ratio of private banks is continuously decreasing where public sector banks return on equity ratio is fluctuating. It is found that private sector banks return on equity ratio is more than public sector banks except the year 2015-16, where it suddenly increased for public sector banks. In post demonetization period, in the very first two year of public sector banks, it decreased sharply and even reached to its negative and then it started improving where in private sector banks, it was also fluctuating but the variation is low. It demonstrates that in post demonetization period, private sector banks did not affected much where public sector banks were affected much. It indicates that public sector banks were less efficient at creating profit and increasing shareholder return then private sector banks in pre and post demonetization phase.

5.2(3) Return on Asset Ratio: In pre demonetization period, return on asset ratio of public sector banks is almost constant every year except the year 2015-16 when it was increased. In private sector banks, it is also almost constant every year except the year 2016-17 when it was declined. In post demonetization period, private sector banks are able to maintain its consistency throughout the year but public sector banks return on asset ratio was drastically decreased and even reached to its negative. It is found that in pre and post demonetization period private sector banks return on asset ratio is more than public sector banks. The finding indicates that private sector banks have deployed their assets more efficiently than the public sector banks and have been able to earn more profits on the assets during the pre and post demonetization phase.

5.2(4) Return on Investment Ratio: In pre and post demonetization period, both public and private sector banks return on investment ratio was fluctuating. It was also observed that

although, private sector banks return on investment ratio was more volatile than public sector banks but most of the time, it was more than the public sector banks pre and post demonetization period. It demonstrates that the private sector banks made good investment decisions in both the period.

- 5.2(5) Cost of Deposit Ratio: In pre demonetization period, cost of deposit ratio was same for both the banks (public and private sector). Post demonetization period, private banks controlled its cost efficiently then public sector banks. However, Public sector banks also managed costs in the final year of the post-demonetization period. It shows that post demonetization period, overall private sector banks were able to manage the liquidity in a better way.
- 5.2(6) Cost of Borrowing Ratio: In pre and post demonetization period, cost of borrowing of private sector banks is higher than public sector banks. One possible reason can be that because private sector banks are more aggressive in terms of raising funds through deposits and other sources due to which private sector banks cost of borrowing is high.
- 5.2(7) Gross Profit ratio: In pre demonetization period, gross profit ratio of private sector banks was more than public sector banks except the year 2015-16 where it was very high for public sector banks. In post demonetization period, private sector banks gross profit ratio was more than public sector banks. In both the period, overall, private sector banks performed better to generate profit.
- 5.2(8) Net Profit ratio: In pre demonetization period, Net profit ratio of public and private sector banks was fluctuating. It was found that public sector banks ratio was more volatile than private sector banks. It was also noticed that every year private sector banks net profit ratio was more than public sector banks except the year 2015-16 where public sector banks ratio was significantly high. Post demonetization period, public sector banks ratio drastically decreased initially and after that it started improving. Private sector banks ratio was not affected much and remained consistent and increased in the final year of post demonetization period. The

reason behind the falling net profit ratio of public sector banks is that during post demonetization period, public sector banks NPA suddenly increased in the initial two years but not in private banks where there is normal hike in NPA. It shows that in pre and post demonetization period, private sector banks performed better to generate profit.

5.2(9) Return on Advance Ratio: In pre demonetization period, public sector banks return on advance ratio was constant every year where in private sector banks it was showing decreasing trend. It was also found that private sector banks return on advance ratio was higher than public sector banks. In post demonetization period, almost every year private banks performance is better than public sector banks. Last year of post demonetization period only, public and private sector banks performance was same. It demonstrates that private sector banks are more efficient at providing advances, realizing returns from it, and timely recovery of those funds from borrowers.

5.2(10) Operating Expense to Total Income ratio: The operating expenses to total income ratio of public sector banks is less then private sector banks in pre and post demonetization period. Private sector banks operating expense to total income is significantly higher than public sector banks. It reveals that public sector banks were more effective at controlling their operating expenses than private sector banks in pre and post demonetization period.

5.2(11) Gross NPA to Total Asset ratio: In pre and post demonetization period, gross NPA to total asset ratio is more for public sector banks than private sector banks. For the public sector banks, in the initial year of post demonetization period, it was the highest and it was significantly higher than private sector banks in both the period.

5.2(12) Net NPA to Total Asset ratio: In pre and post demonetization period, Net NPA to total asset ratio was more for public sector banks than private sector banks. It shows that private sector banks worked responsibly as concern to NPA than the public sector banks in pre and post demonetization period.

- 5.2(13) Interest Income to total Assets ratio: In pre demonetization period, the interest income to total asset ratio for both the banks was almost consistent except the last year of pre demonetization period. It was also observed that private sector banks interest income to total asset ratio was little more than public sector banks. In post demonetization period, most of the year, public and private sector banks interest income to total asset ratio was almost same. It shows that post demonetization period, both the banks sufficiently generated interest income by utilizing its assets.
- 5.2(14) Noninterest income to total assets ratio: In pre and post demonetization period, the non interest income to total asset ratio was more for private sector banks then public sector banks. It shows that private banks were more efficient in generating income other than interest bearing income and it always helps banks to generate more profit.
- 5.2(15) Operating Expense to total assets ratio: In pre and post demonetization period, public sector banks more efficiently controlled its operating cost then private sector banks.
- 5.2(16) Income on asset ratio: In pre demonetization period, for both public and private sector banks, income on assets ratio was consistent. It was also observed that private sector banks income on asset ratio was more than public sector banks during that period. Post demonetization period, private sector banks efficiently managed to generate its income then public sector banks. It shows that private banks were more efficient in generating income by utilizing its assets in both the period.
- 5.2(17) Operating Profit to Total Asset Ratio: In pre and post demonetization period, both public and private sector banks were able to maintain its consistency on earning operating profit on their total assets but the ratio is little higher in case of private sector banks. It shows that private sector banks are earning little more operating profit on their assets then public sector banks.

- 5.2(18) Current Ratio: It evaluates a company's capacity to raise sufficient funds to meet all of its financial obligations as they fall due. The ratio increases as the company's liquidity increases. In pre and post demonetization period, public sector banks had a higher liquidity then private sector banks which means that public sector banks are efficient enough to meet its short-term obligations.
- 5.2(19) Demand and Saving Bank Deposit to Total Deposit Ratio: The casa ratio displays the portion of the total deposit that comes from current and savings accounts. In pre demonetization period, in public sector banks, it was fluctuating and for private sector banks, it was increasing. Where in post demonetization period, public sector banks were showing increasing trend but for private sector banks, it was showing decreasing trend most of the time. As a rule, the higher the casa ratio, the more successful the bank is at obtaining financing at a low cost. Post demonetization period, CASA ratio of public sector banks has increased. However, in pre and post demonetization period, demand and saving bank deposit to total deposit of private sector banks is significantly higher than private sector banks.
- 5.2(20) Total investment to Deposit Ratio: In pre demonetization period, the total investment to deposit ratio for both the banks is fluctuating but private sectors bank's ratio is fluctuating more than public sector banks. In post demonetization period also private sector banks, total investment to deposit ratio is more volatile than public sector banks. In spite of this private sector banks investment from their deposit is higher than public sector banks in pre and post demonetization period.
- 5.2(21) Absolute liquid Ratio: The comparison between both the banking sectors in terms of absolute liquid ratio reveals that in pre demonetization period, public sector banks have significantly higher amount of cash than private sector banks where post demonetization this difference has decreased. Private sector banks significantly improved its cash position while the public sector banks had been fallen. Although in pre and post demonetization period, public

sector banks were sound enough in terms of availability of cash to meet the demand deposits than private sector banks.

5.3 FACTOR AFFECTING THE PROFITABILITY OF BANKS

5.3.1 SBI BANK

- 5.3.1(A) On the basis of correlation analysis, it shows that there is a low degree of positive correlation between the variables interest earned and profit after tax. It is an indication of the low contribution of interest earned by the bank towards its profit after tax.
- 5.3.1(B) On the basis of correlation analysis, it shows that there is a low degree of positive correlation between the variables other income and profit after tax. It is an indication of the low contribution of other income by the bank towards its profit after tax.
- 5.3.1(C) The correlation analysis shows that there is a low degree of positive correlation between the variables operating expenses and profit after tax. Surprisingly, this expense has a positive impact over the profitability after tax which indicates that operating cost is fully or sometimes over absorbed.
- 5.3.1(D) The correlation analysis shows that there is a negative and weak correlation between the variables interest paid on deposit and profit after tax. This indicates that profit after tax is negatively affected by interest paid on deposits but the degree of impact is low.
- 5.3.1 (E) The correlation analysis shows that there is a negative and moderate correlation between the Net NPA and profit after tax. This indicates that Net NPA is negatively affecting the profit after tax.

5.3.2 PNB BANK

5.3.2(A) On the basis of correlation analysis, it shows that there is a low degree of positive correlation between the variables interest earned and profit after tax. It is an indication of the low contribution of interest earned by the bank towards its profit after tax.

- 5.3.2(B) On the basis of correlation analysis, it shows that there is a low degree of negative correlation between the variables other income and profit after tax. This indicates that profit after tax is negatively affected by other income but the degree of impact is low.
- 5.3.2(C) The correlation analysis shows that there is a low degree of negative correlation between the variables operating expenses and profit after tax. This indicates that profit after tax is negatively affected by other operating expenses but the degree of impact is low.
- 5.3.2 (D) The correlation analysis shows that there is a low degree of positive correlation between the variables interest paid on deposits and profit after tax. Surprisingly, this expense has a positive impact over the profitability after tax.
- 5.3.2(E) The correlation analysis shows that there is a negatively moderate correlation between the NET NPA and profit after tax. This indicates that Net NPA is negatively affecting the profit after tax.

5.3.3. BOB BANK

- 5.3.3(A) The correlation analysis shows that there is a low degree of negative correlation between the variables interest earned and profit after tax. This indicates that profit after tax is negatively affected by interest earned but the degree of impact is low.
- 5.3.3(B) The correlation analysis shows that there is a low degree of negative correlation between the variables other income and profit after tax. This indicates that profit after tax is negatively affected by other income but the degree of impact is low.
- 5.3.3(C) The correlation analysis shows that there is a low degree of negative correlation between the variables operating expenses and profit after tax. This indicates that profit after tax is negatively affected by operating expenses but the degree of impact is low.
- 5.3.3(D) The correlation analysis shows that there is a low degree of negative correlation between the variables interest paid on deposit and profit after tax. This indicates that profit after tax is negatively affected by interest paid on deposits but the degree of impact is low.

5.3.3(E) The correlation analysis shows that there is a high degree of negative correlation between the NET NPA and profit after tax. This indicates that Net NPA has badly affected the profit after tax.

5.3.4 HDFC BANK

- 5.3.4(A) The correlation analysis shows that there is a high degree of positive correlation between the variables interest earned and profit after tax. It is an indication of the high contribution of interest earned by the bank towards its profit after tax.
- 5.3.4(B) The correlation analysis shows that there is a high degree of positive correlation between the variables other income and profit after tax. It is an indication of the high contribution of other income received by the bank towards its profit after tax
- 5.3.4(C) The correlation analysis shows that there is a high degree of positive correlation between the variables operating expenses and profit after tax. Surprisingly, this expense has a strong positive impact over the profitability after tax which indicates that operating cost is fully or sometimes over absorbed.
- 5.3.4(D) The correlation analysis shows that there is a high degree of positive correlation between the variables interest paid on deposit and profit after tax. This expense also has a strong positive impact over the profitability after tax.
- 5.3.4(E) The correlation analysis shows that there is a high degree of positive correlation between the variables profit after tax and NPA. This indicates that HDFC bank has controlled efficiently its NPA.

5.3.5 ICICI BANK

5.3.5 (A) On the basis of correlation analysis, it shows that there is a low degree of positive correlation between the variables interest earned and profit after tax. It is an indication of the low contribution of interest earned by the bank towards its profit after tax.

- 5.3.5(B) On the basis of correlation analysis, it shows that there is a low degree of positive correlation between the variables other income and profit after tax. It is an indication of the low contribution of other income received by the bank towards its profit after tax.
- 5.3.5 (C) The correlation analysis shows that there is a low degree of positive correlation between the variables operating expenses and profit after tax. This expense has a positive impact over the profitability after tax which indicates that operating cost is fully or sometimes over absorbed.
- 5.3.5(D) The correlation analysis shows that there is a low degree of positive correlation between the variables interest paid on deposit and profit after tax. This expense has a positive impact over the profit after tax.
- 5.3.5(E) The correlation analysis indicates that there is a negative and moderate correlation between the NET NPA and profit after tax. This indicates that Net NPA has somehow negatively affected profit after tax.

5.3.6 AXIS BANK

- 5.3.6(A) The correlation analysis indicates that there is a negative and moderate correlation between the variable interest earned and profit after tax. This indicates that interest earned has somehow negative impact on the profit after tax.
- 5.3.6(B) The correlation analysis indicates that there is a negative and moderate correlation between the variables other income profit after tax. This indicates that other income has somehow negative impact on the profit after tax.

- 5.3.6(C) The correlation analysis shows that there is a negative and moderate correlation between the variables operating expenses and profit after tax. This indicates that operating expenses has somehow negative impact on the profit after tax.
- 5.3.6(D) The correlation analysis shows that there is a negative and moderate correlation between the variables interest paid on deposit and profit after tax and. This indicates that interest paid on deposit has somehow negative impact on the profit after tax.
- 5.3.6(E) The correlation analysis shows that there is a negatively strong correlation between the NPA and profit after tax. This indicates that NPA has badly affected the profit after tax.