



# IMPACT OF PROMPT CORRECTIVE ACTION FRAMEWORK ON PROFITABILITY OF SELECT PUBLIC SECTOR BANKS IN INDIA

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## ABSTRACT

Since 1990 as part of economic and banking sector reforms credit terms are liberalized, after 2008 subprime crisis credit sanction terms are further liberalized where huge funds from banking sector flow to corporate sector. As a result this corporate sector has grown significantly. However, the serial financial crisis turned huge bank assets into bad loans which adversely affects their profitability. Consequently, Indian banking sector has reported huge non-performing assets which deteriorated its profitability significantly, this also led instability in banking sector. To avoid further loss due to banking sector instability on economy RBI triggered prompt correct action framework on banking sector particularly public sector banks which accounts to 90 percent of total industry non-performing assets. Therefore, the study on impact of prompt corrective action framework on profitability of banking sector gained significance. For the purpose of the study, the eleven public sectors banks have considered those adopted PCA frame work in India are since 2014-15. The financial ratios were used for the analysis of the data. Present study is comparative study. The study found that, net interest margin and operating profit of all selected banks reported down trend during the study period, consequently net profit ratio, return on equity and return on advances are turned into negative values which indicates bad impact of banks profitability.

**Key Words:** Non-Performing Assets (NPAs), Prompt Corrective Action, Profitability, Financial Stability and Public Sector Banks (PSBs).

## Introduction

Banking sector is back bone of every economy which mobilized the funds and grant credit to corporate and individuals. Credit is engine for the economic growth of the country. In present India banking sector is moving from traditional phase to modern phase through expansion of its activities to new financial services. Since 1990 as part of economic and banking sector reforms credit terms are liberalized, after 2007-08 crisis credit sanction terms are further liberalized where huge funds from banking sector flow to corporate sector. As result of corporate sector has grown significantly. However,

bubble may bust any time, the serial financial crisis such as subprime crisis turned huge bank assets into bad loans which adversely affects their profitability. Consequently, Indian banking sector has reported huge non-performing assets which deteriorated its profitability significantly, this also led instability in banking sector. To avoid further loss due to banking sector instability on economy RBI triggered prompt correct action framework on banking sector particularly public sector banks which accounts to 90 percent of total industry non-performing assets. Therefore, the study on impact of prompt corrective action framework on profitability of banking sector gains significance.

### **Prompt Corrective Action Framework**

Prompt Correct Action Framework is operating in India since 2002. PCA-intends to restore back financial health, limit further losses, prevent erosion of capital and creating platform of stability for the banks. PCA framework is a sub-part of RBI's overall Financial Stability Framework which is intended to regulate normal operations of banks which are suffering with unprofitable and unhealthy financial position. Under this framework RBI identifies banks which are undercapitalized with poor assets quality and reporting losses and uses some tools and techniques which improve asset quality, capital availability and profitability of the banks during this period. Consequently, banks financial positions will improve, after this, RBI gives relaxation to these banks to act freely in the financial system. Therefore, PCA formwork acts only as early structural intervention of RBI in case of banks which are suffering with unhealthy financial position. Thus, Prompt Corrective Action framework is effective tool use by RBI to restore the healthy financial position of the banks through better capitalization, preservation of capital, improve in asset quality and provisioning of losses. PCA framework is revised in 2017.

### **Research Problem**

Profitability of banking sector is a major aspects which disclosure the operational efficiency and financial status of the banks. Profit generation is an essential objective of every business organization for survival and expansion. Besides, profitability of banking sector indicates strategies of banks in aspects of deposits mobilization, credit appraisal, credit expansion, quality of assets and dealings with non-performing assets. Recently, banking sector particularly, public sector has under gone into high stress on profitability due reaching of non-performing assets to peak level. RBI addressed this issue as part of financial stability responsibility. Non-performing assets reached to that level which triggers the implementation of prompt corrective action framework during 2015-2019. As part of PCA framework RBI regulated public sector deposits and advances, cost etc which result in adverse impact on banks profitability. Therefore, assessing the impact of PCA framework on profitability of banking sector in general and public sector in particular is need of hour.

### **Review of Literature**

(2020)<sup>1</sup> Kapil kumar and Vinay have compared the financial performance of two public and two private sector banks during 2011-2019. The banks are SBI, PNB, HDFC and ICICI bank. The study found that among four banks HDFC bank reported strong financial position in aspects of income, net profit and return on net worth. On the other stream, PNB bank reported poor financial soundness among four banks during the study period. (2019)<sup>2</sup> Mayo et all examined the micro economic factors on the financial performance of banking sector in Zimbabwe during 2010-17. The study found that growth, credit risk, capitalization, managerial efficiency and liquidity are major micro economic variables in measuring the financial performance of banking sector in Zimbabwe. (2019)<sup>3</sup> Bolarinwa et all examined the impact of managerial cost efficiency on profitability of banking sector through standard measure of efficiency in the context of developed and developing countries. The study revealed that, cost efficiency is strong determinant of profitability in banking of developing countries than well developed countries. (2018)<sup>4</sup> Athma et al examined the major determinant factors of profitability 26 public sector banks in India during 2012-2017. In the study CAMELS framework is used to assess overall performance of selected banks. The study found that, total investment to total assets, operating profit to total assets ratio and provisions against loans are major determinants and must be focused by public sector banks to improve their profitability. (2018)<sup>5</sup> Abdul kalam and Paolao have examined the impact of banking specific and country specific factors on the profitability of banking sector in 11 Asian countries through

panel data technique. The study observed that, increase in institutional factors such as financial and regulatory structure lead reduction in non-competitive and abnormal profits. (2015)<sup>6</sup> Amaresh et al. all examined the determinants of profitability of banks in India during post reforms period i.e. 1995-2012. The study found that, net interest margin, operating profit, NPAs and wage bills are high influencing factors of banks profitability.

### Objectives of the Study

- To analyze the impact of prompt corrective action framework on Net Interest Margin
- To study the impact of prompt corrective action framework on Operating Profit
- To analyze the impact of prompt corrective action framework on Net Profit
- To measure the impact of prompt corrective action framework on Return on Equity
- To analyze the impact of prompt corrective action framework on Return on Advances
- To measure the impact of prompt corrective action framework on Return on Investment

### Research Methodology

Present study is based purely on secondary data collected from company annual reports and RBI for the period of 2010-2019. Present study focused on how prompt corrective action framework has affected the profitability of selected public sector banks. The profitability of banks is measured in the ratios of Net Interest Margin, operating profit, Net profit ratio, Return on Equity, Return on Advances and Return on Investments. The change in these variables during pre and post PCA period is clearly discussed empirically in the study. The banks selected for analysis are namely Dena Bank (DB), Allahabad Bank (AB), United Bank of India (UBI), Corporation Bank (CB), United Commercial Bank (UCO), Bank of India (BOI), Central Bank of India (CBI), Indian Overseas Bank (IOB), Oriental Bank of Commerce (OBC), Bank of Maharashtra (BOM) and IDBI bank.

### Data Analysis and Interpretation

Table 1 exhibits about impact of prompt correction action frame work on Net Interest Margin of select public sector banks during the study period 2010-2019. Net Interest Margin is calculated as =  $(\text{Interest earned} - \text{Interest paid}) / \text{average total assets}$ . Interest earned comprises of interest earned on loans, investments and mortgages whereas interest paid comprises of interest paid to bank deposit and other sources of funds. It indicates operational efficiency of the banks in generating profits out of its core banking functions of collecting and granting functions. Positive NIM indicates high efficient and negative indicates inefficiency of the banks. NIM is decrease when there is large demand for savings accounts compared to loans as the bank is required to pay out more interest than it receives. NIM increase when there is higher demand in loans than savings accounts then it receives more than pay. The study revealed that, AB has reported average Net Interest Margin of 2.69 percent before prompt corrective action period, thereafter, it has decreased to average of 2.33 percent during post prompt corrective action period. Similarly, BOI has reported average Net Interest Margin of 2.26 percent before prompt corrective action period, thereafter, it has decreased to average of Net Interest Margin on of 1.93 percent during post prompt corrective action period. Similarly, BOM has reported average Net Interest Margin of 2.67 percent before prompt corrective action period, thereafter, it has decreased to average of Net Interest Margin on of 2.35 percent during post prompt corrective action period. Similarly, CBI has reported average Net Interest Margin of 2.25 percent before prompt corrective action period, thereafter, it has decreased to average of Net Interest Margin on of 2.16 percent during post prompt corrective action period. Similarly, DB has reported average Net Interest Margin of 2.39 percent before prompt corrective action period, thereafter, it has decreased to average of Net Interest Margin on of 1.95 percent during post prompt corrective action period. Similarly, IOB has reported average Net Interest Margin of 2.43 percent before prompt corrective action period, thereafter, it has decreased to average of Net Interest Margin on of 2.03 percent during post prompt corrective action period. Similarly, OBC has reported average Net Interest Margin of 2.51 percent before prompt corrective action period, thereafter, it has decreased to

average of Net Interest Margin on of 2.11 percent during post prompt corrective action period. Similarly, UCO has reported average Net Interest Margin of 2.38 percent before prompt corrective action period, thereafter, it has decreased to average of Net Interest Margin on of 1.84 percent during post prompt corrective action period. Similarly, UBI has reported average Net Interest Margin of 2.32 percent before prompt corrective action period, thereafter, it has decreased to average of Net Interest Margin on of 1.52 percent during post prompt corrective action period. On the other hand, CB has reported average Net Interest Margin of 2.0 percent before prompt corrective action period, thereafter, it has marginally increased to average of 2.02 percent during post prompt corrective action period. Similarly, IDBI has reported average Net Interest Margin of 1.63 percent before prompt corrective action period, thereafter, it has decreased to average of 1.65 percent during post prompt corrective action period.

Table 2 explicit about Operating Profit of select public sector banks during the study period 2010-2019. Operating profit ratio measures that portion of operation profit in total income. Operating profit is results of net interest earned plus other sources of income minus interest expense plus other operating expenses. In simple words operating profit is excess of banks operations income earned than income spends on business operations. This indicates profitability of the business operations during a particular period. Increase in operating profit ratio is a good sign for banks profitability and vice versa. Total income of the banks consists of interest earned plus other income. In case operating expenses are more than operating revenue it leads to operating losses which indicates unprofitability of business operations. The study revealed that, AB has reported average operating profit ratio of 22.0 percent before prompt corrective action period, but, thereafter, it has decreased to average of 18.48 percent during post prompt corrective action period. Similarly, BOI has reported average operating profit ratio of 21.39 percent before prompt corrective action period, but, thereafter, it has decreased to average of 15.33 percent during post prompt corrective action period. Similarly, BOI has reported average operating profit ratio of 21.39 percent before prompt corrective action period, but, thereafter, it has decreased to average of 15.33 percent during post prompt corrective action period. Similarly, BOM has reported average operating profit ratio of 16.93 percent before prompt corrective action period, but, thereafter, it has decreased to average of 16.11 percent during post prompt corrective action period. Similarly, CBI has reported average operating profit ratio of 14.02 percent before prompt corrective action period, but, thereafter, it has decreased to average of 10.99 percent during post prompt corrective action period. Similarly, CB has reported average operating profit ratio of 20.58 percent before prompt corrective action period, but, thereafter, it has decreased to average of 18.16 percent during post prompt corrective action period. Similarly, DB has reported average operating profit ratio of 19.10 percent before prompt corrective action period, but, thereafter, it has decreased to average of 9.13 percent during post prompt corrective action period. Similarly, IOB has reported average operating profit ratio of 17.73 percent before prompt corrective action period, but, thereafter, it has decreased to average of 15.89 percent during post prompt corrective action period. Similarly, OBC has reported average operating profit ratio of 20.66 percent before prompt corrective action period, but, thereafter, it has decreased to average of 18.19 percent during post prompt corrective action period. Similarly, UCO has reported average operating profit ratio of 20.09 percent before prompt corrective action period, but, thereafter, it has decreased to average of 16.59 percent during post prompt corrective action period. On the other hand, IDBI has reported average operating profit ratio of 18.0 percent before prompt corrective action period, but, thereafter, it has increased to average of 18.34 percent during post prompt corrective action period. Similarly, UBI has reported average operating profit ratio of 32.29 percent before prompt corrective action period, but, thereafter, it has increased to average of 32.75 percent during post prompt corrective action period.

Table 3 explicit about Net Profit Ratio of Select public sector banks during the study period 2010-2019. Provision to income ratio Operating profit ratio, and net profit to total income ratio are interrelated ratios. Where Operating profit is excess of operating income over operating expenses whereas net profit to total income ratio arrives when provisions are deduct from operating profit. Net profit refers to that portion of operating profits over provisions. If allocation of provision is increases then net profit will also decrease or turns into net losses. If operating profits are inadequate to meet provision allocations due to substantial increase in gross non-performing assets then banks have to create provision even out of their own capital

which reduce capital adequacy and reports negative profits. Net profit ratio is calculated by dividing net profit/loss in total income of Select public sector banks. Positive net profit ratio is positive sign for banks improved performance whereas negative net profit ratio is an indication of deterioration in firm's profitability and efficiency. The study observed that, Allahabad bank has reported average positive net profit ratio of 9.33 percent before prompt corrective action period, but, thereafter, it has reported average negative net profit ratio of -14.34 percent of during post prompt corrective action period. Similarly, BOI has reported average positive net profit ratio of 8.26 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -7.81 percent during post prompt corrective action period. Similarly, BOM has reported average positive net profit ratio of 5.88 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -10.36 percent during post prompt corrective action period. Similarly, CBI has reported average positive net profit ratio of 3.47 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -10.70 percent during post prompt corrective action period. Similarly, CB has reported average positive net profit ratio of 9.82 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -10.73 percent during post prompt corrective action period. Similarly, DB has reported average positive net profit ratio of 9.31 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -20.27 percent during post prompt corrective action period. Similarly, IDBI has reported average positive net profit ratio of 6.36 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -22.43 percent which is highest among all the Select public sector banks during post prompt corrective action period. Similarly, IOB has reported average positive net profit ratio of 4.91 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -14.77 percent during post prompt corrective action period. Similarly, OBC has reported average positive net profit ratio of 8.08 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -6.21 percent during post prompt corrective action period. Similarly, UCO has reported average positive net profit ratio of 7.07 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -15.03 percent during post prompt corrective action period. Similarly, UBC has reported average positive net profit ratio of 2.77 percent before prompt corrective action period, but, thereafter, it has turned to average negative net profit ratio of -6.67 percent during post prompt corrective action period. However, the study found that in case of all Select public sector banks the Net Profit Ratio has turned from positive returns to negative returns during post prompt corrective action compared before prompt corrective action. In overall, the net profit ratio is turned from average positive returns of 6.84 percent before prompt corrective action to average negative returns of -12.67 percent during post prompt corrective action. This is mainly attributable to many fold increase in provisions to write off huge non-performing assets during post PCA period by Select public sector banks.

Table 4 shows about impact of prompt correction action frame work on Return on Equity of select public sector banks during the study period 2010-2019. Return on Equity refers to net profit to owner's equity ratio. Return on Equity is calculated as  $\text{Net Profit} / (\text{average Capital} + \text{Reserves and Surplus})$ . Return on equity is a profitability ratio which indicates that overall profitability of banks on owner's equity. Net profit refers to profit of the banks after tax. Increase in ROE indicates increase in profitability and vice versa. Return on equity is affect by banks revenue, cost, and profit and owners equity. The study observed that, Allahabad bank has reported positive Return on Equity of average of 15.64 percent before prompt corrective action, but, thereafter, it has reported -25.34 percent of negative Return on Equity during post prompt corrective action. Similarly, BOI has reported positive Return on Equity of average of 12.95 percent before prompt corrective action, but, thereafter, it has turned to -10.31 percent during post prompt corrective action. Similarly, BOM has reported positive Return on Equity of average of 11.04 percent before prompt corrective action, but, thereafter, it has turned to negative Return on Equity to -16.84 percent during post prompt corrective action. Similarly, CBI has reported positive Return on Equity of average of 6.45 percent before prompt corrective action, but, thereafter, it has reported negative Return on Equity of -15.58 percent during post prompt corrective action. Similarly, CB has reported Return on Equity of average of 17.03 percent before prompt corrective action, but, thereafter, it has reported

negative Return on Equity of -14.99 percent during post prompt corrective action. Similarly, DB has reported positive Return on Equity of average of 17.02 percent before prompt corrective action, but, thereafter, it has reported negative Return on Equity of -29.36 percent during post prompt corrective action. Similarly, IDBI has reported positive Return on Equity of average of 10.02 percent before prompt corrective action, but, it has reported negative Return on Equity of -24.0 percent during post prompt corrective action. Similarly, IOB has reported positive Return on Equity of average of 9.14 percent before prompt corrective action, but, thereafter, it has reported negative Return on Equity of -23.29 percent during post prompt corrective action. Similarly, OBC has reported positive Return on Equity of average of 10.95 percent before prompt corrective action, but, thereafter, it has reported negative Return on Equity of -9.55 percent during post prompt corrective action. Similarly, UCO has reported positive Return on Equity of average of 13.15 percent before prompt corrective action, but, thereafter, it has reported negative Return on Equity of -17.23 percent during post prompt corrective action. Similarly, UBI has reported positive Return on Equity of average of 9.85 percent before prompt corrective action, but, thereafter, it has reported negative Return on Equity of -7.61 percent during post prompt corrective action.

Table 5 shows about impact of prompt correction action frame work on Return on Advances of select public sector banks during the study period 2010-2019. Return on Advances is calculated as  $\text{Interest} + \text{Discount on advances/bills} / \text{average advances} * 100$ . Return on Advances refers to the rate of return earned by banks on advances which is core business of banks. Increase in Return on advances indicates high operational efficiency on quality of assets and down trend is a sign for poor operational efficiency and quality of assets. The study observed that, Allahabad bank has reported average Return on Advances of 10.44 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 8.64 percent of during post prompt corrective action. Similarly, BOI has reported average Return on Advances of 8.43 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 7.76 percent of during post prompt corrective action. Similarly, BOM has reported average Return on Advances of 10.23 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 8.81 percent of during post prompt corrective action. Similarly, CBI has reported average Return on Advances of 10.06 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 9.90 percent of during post prompt corrective action. Similarly, CB has reported average Return on Advances of 9.71 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 9.61 percent of during post prompt corrective action. Similarly, DB has reported average Return on Advances of 9.89 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances 9.24 percent of during post prompt corrective action. Similarly, IDBI has reported average Return on Advances of 9.91 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 9.44 percent of during post prompt corrective action. The study observed that, IOB has reported average Return on Advances of 10.17 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 9.46 percent of during post prompt corrective action. Similarly, OBC has reported average Return on Advances of 10.77 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 9.10 percent of during post prompt corrective action. Similarly, UCO has reported average Return on Advances of 9.95 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 8.20 percent of during post prompt corrective action. Similarly, UBI has reported average Return on Advances of 10.31 percent before prompt corrective action, but, thereafter, it has reported decreased average Return on Advances of 9.03 percent of during post prompt corrective action.

Table 6 shows about impact of prompt correction action frame work on Return on Investments of select public sector banks during the study period 2010-2019. Return on Investment is profitability ratio that measures the efficiency of the banks in generating return on investments. Return on investments is calculated as  $\text{Income on investments} / \text{average investments (previous + current investments)}$ . Return on investments shows uptrend when income on investments increases or average investments decrease and

Return on investments shows down trend when income on investments decrease or average investments increases. ROI uptrend indicates banks efficiency in generating good returns on their investments portfolio and ROI down trend indicates inefficiency or under performance of banks investment portfolio. The study found that, BOM has reported average Return on Investment of 7.14 percent before prompt corrective action period, thereafter, it has increased to average of 7.42 percent during post prompt corrective action period. Similarly, CBI has reported average Return on Investment of 7.28 percent before prompt corrective action period, thereafter, it has increased to average of 7.56 percent during post prompt corrective action period. Similarly, CB has reported average Return on Investment of 6.97 percent before prompt corrective action period, thereafter, it has increased to average of 7.26 percent during post prompt corrective action period. Similarly, DB has reported average Return on Investment of 7.08 percent before prompt corrective action period, thereafter, it has increased to average of 7.39 percent during post prompt corrective action period. Similarly, IDBI has reported average Return on Investment of 6.48 percent before prompt corrective action period, thereafter, it has slightly increased to average of 6.58 percent during post prompt corrective action period. Similarly, IOB has reported average Return on Investment of 7.30 percent before prompt corrective action period, thereafter, it has reported stable average of 7.30 percent during post prompt corrective action period. Similarly, OBC has reported average Return on Investment of 7.26 percent before prompt corrective action period, thereafter, it has increased to average of 7.44 percent during post prompt corrective action period. Similarly, UCO has reported average Return on Investment of 6.82 percent before prompt corrective action period, thereafter, it has increased to average of 7.31 percent during post prompt corrective action period. On the other hand, Allahabad bank has reported average Return on Investment of 7.06 percent before prompt corrective action period, thereafter, it has decreased to average of 7.04 percent during post prompt corrective action period. Similarly, BOI has reported average Return on Investment of 7.71 percent before prompt corrective action period, thereafter, it has decreased to average of 7.37 percent during post prompt corrective action period. Similarly, UBI has reported average Return on Investment of 6.53 percent before prompt corrective action period, thereafter, it has decreased to average of 6.07 percent during post prompt corrective action period.

### Findings and Suggestions

- The study found that, average net interest margin of nine selected public banks has shown declined during post PCA period relatively to pre PCA period which implies that remaining two banks (CB and IDBI) have reported increase in net interest margin during the same period. This mainly due to reason of increase in interest expenses than interest income received during the post PCA period. This is also attributable to the reason that banks increased to invest most of their funds to investments rather than granting more credit due to aim of avoiding unnecessary risk. On the other hand, selected public banks operating expenses have increased during the same period. Consequently, margin of net interest income has declined during post PCA period.
- The study found that, nine of eleven selected public banks have reported decrease in operating profit ratio during post PCA period due to the increase in operating expenses and decrease in operating income during post PCA period compared to pre PCA period. On the other hand, IDBI and UBI bank have reported marginal increase in operating profit during post PCA period. In overall, the average of operating profit has decreased to 17.27 percent during post selected public banks from an average of 20.25 percent in pre PCA period. Operating profit of all selected public banks is decreased during selected public banks, even though, they reported positive profit during pre and post PCA period. In contrast, all selected public banks reported negative net profit during post PCA period compared to pre PCA period. This is mainly due to many fold increase in provision during post PCA period. selected public banks provisions has reported nearly an average of five to seven fold increase during post PCA period compared to pre PCA period this attributable to the reason that as per RBI directions all Selected public banks cleared their huge non-performing assets through allocation of huge provisions out of operating profit and available capital which resulted into reporting of huge net losses. The study found that, average provision have increased to 53.04 percent during post PCA period from an average of 9.52 percent during pre PCA period. The study observed that, IDBI has reported highest average net losses of -22.43 percent and OBC have reported lowest net losses of -6.21 percent during post PCA period. In overall, the net profitability of all

selected public banks turned into net losses during post selected public banks due to write off huge non-performing assets through creating of huge provision out of available profit and capital. This also led to decrease in capital adequacy of selected public banks during post selected public banks.

- The study found that, Return on equity of Selected public banks turned to from positive to negative during post PCA period. The study observed that, average of ROE of all selected public banks has turned from positive of 12.11 percent during pre PCA period to negative of -17.65 percent during post PCA period. Particularly, the study reveals that high rate of negative ROE of -29.36 percent is reported by DB followed by AB by -25.34 percent, IDBI bank by -24 percent and lowest negative ROE is reported by UBI i.e. -7.61 percent during post PCA period. This is mainly due to decline in both profits and deterioration in capital which is caused by allocation of substantial increase in provision to write off non-performing assets during post PCA period. Decrease in ROE is an indication for financial weakness of the banks during PCA period. Therefore, the present study suggests to necessary steps to improve banks profitability of the banks.
- The study found that, all selected public banks reported down trend in return advances during post PCA period compared to pre PCA period i.e. from an average of 9.99 percent during pre PCA period to an average of 9.12 percent during post PCA period. The study has observed high rate of fall in return on advances in case of AB i.e. by - 1.80 percent followed by UCO by - 1.75 percent, OBC by -1.67 percent, BOM by -1.42 percent and UBO by - 1.28 percent while other banks return on advances decreased by less than one percent. This is mainly due to reason that as per PCA framework banks should not grant credit to high risk customers which is also subject to high rate of returns, consequently, selected public banks granted more credit to low risk customers and for short and medium period.
- The study witnessed that mixed results in Return on Investments during the study period. The study found that, BOM, CBI, CB, DB, IDBI, IOB, OBC and UCO banks have reported uptrend in their Return on investment during post PCA period in contrast, AB, BOI and UBI banks have reported down trend in return on investments during post PCA period compared pre PCA period. This indicates that AB, BOI and UBI bank have to change their investment portfolio to generate more return on investments. In overall, the ROI has shown slight uptrend during post PCA period i.e. an average of 7.15 percent from 7.03 percent.

### Conclusion

Indian banking sector has reported huge non-performing assets which deteriorated its profitability significantly, this also led instability in banking sector. To avoid further loss due to banking sector instability on economy RBI triggered prompt correct action framework on banking sector particularly public sector banks which accounts to 90 percent of total industry non-performing assets. The empirical study on impact of prompt corrective action framework on profitability of banking sector revealed that, net interest margin and operating profit of all selected banks reported down trend during the study period, consequently net profit ratio, return on equity and return on advances are turned into negative values which indicates bad hit of banks profitability even after PCA framework. This is mainly attributable to the reason that, as part of PCA framework to reduce the non-performing assets instead of focusing on recovery banks created huge provisions out of their operating profits to write-off huge bad assets. This strategy is adversely affected banks profitability this led to amalgamation of weak banks with financially strong banks.

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Table 1: Net Interest Margin of select Public Sector Banks in India during 2010-2019

Bank Name	Before Prompt Corrective Action						After Prompt Corrective Action					
	2009-10	2010-11	2011-12	2012-13	2013-14	Avg	2014-15	2015-16	2016-17	2017-18	2018-19	Avg
AB	2.42	2.95	3.09	2.51	2.50	2.69	2.76	2.53	2.22	1.93	2.20	2.33
BOI	2.30	2.49	2.26	2.16	2.11	2.26	1.91	1.91	1.91	1.70	2.21	1.93
BOM	1.99	2.67	3.00	2.92	2.77	2.67	2.74	2.53	1.98	2.15	2.33	2.35
CBI	1.54	2.71	2.35	2.30	2.33	2.25	2.41	2.29	2.06	1.98	2.06	2.16
CB	1.92	2.30	2.05	1.92	1.82	2.00	1.82	1.84	1.84	2.06	2.53	2.02
DB	2.07	2.75	2.66	2.37	2.10	2.39	1.92	1.88	1.83	1.98	2.15	1.95
IDBI	1.11	1.75	1.67	1.75	1.85	1.63	1.68	1.66	1.56	1.58	1.76	1.65
IOB	2.51	2.72	2.52	2.26	2.15	2.43	1.92	1.92	1.99	2.21	2.12	2.03
OBC	2.33	2.80	2.49	2.49	2.44	2.51	2.26	2.29	1.99	1.85	2.18	2.11
UCO	1.87	2.56	2.27	2.42	2.77	2.38	2.29	1.98	1.60	1.40	1.93	1.84
UBI	2.00	2.60	2.58	2.30	2.14	2.32	2.01	1.81	1.43	1.04	1.33	1.52
AVG	2.01	2.57	2.45	2.31	2.27	2.32	2.16	2.06	1.86	1.81	2.07	1.99

**Source:** Compiled from RBI Annual reports during 2010-19. **Note:** Values representing in percentages.  
Net Interest Margin: Net Interest Income to Total Assets.

**TABLE 2: Operating Profit Ratio of Select Public Sector Banks In India During 2010-2019 (Rs)**

Bank Name	Before Prompt Corrective Action						After Prompt Corrective Action					
	2009-10	2010-11	2011-12	2012-13	2013-14	Avg	2014-15	2015-16	2016-17	2017-18	2018-19	Avg
<b>AB</b>	25.79	24.67	22.41	17.90	19.22	22.00	20.51	19.88	19.05	18.05	14.90	18.48
<b>BOI</b>	22.96	22.07	21.05	20.91	19.96	21.90	15.71	13.28	21.13	16.30	10.25	15.33
<b>BOM</b>	15.30	14.03	19.29	20.42	15.61	16.93	17.23	17.33	10.86	17.38	17.73	16.11
<b>CBI</b>	14.92	15.72	13.70	13.49	12.29	14.02	12.57	8.42	11.22	10.25	12.48	10.99
<b>CB</b>	25.20	24.58	19.68	17.92	15.50	20.58	14.39	14.64	19.68	19.81	22.26	18.16
<b>DB</b>	18.29	21.99	20.72	18.20	16.28	19.10	11.58	8.14	12.16	11.60	2.15	9.13
<b>IDBI</b>	15.52	20.10	15.89	19.30	19.21	18.00	17.81	17.07	14.53	26.33	15.97	18.34
<b>IOB</b>	16.20	21.47	18.06	16.85	16.08	17.73	12.74	11.08	15.81	16.75	23.05	15.89
<b>OBC</b>	21.14	24.85	18.42	19.07	19.82	20.66	17.87	16.79	19.68	18.35	18.28	18.19
<b>UCO</b>	16.26	21.92	18.02	18.96	25.27	20.09	22.98	17.88	15.87	8.81	17.42	16.59
<b>UBI</b>	36.80	36.60	32.85	29.44	25.74	32.29	25.38	27.14	38.23	37.42	35.58	32.75
<b>AVG</b>	20.76	22.55	20.01	19.31	18.63	20.25	17.16	15.60	18.02	18.28	17.28	17.27

Source: Compiled from RBI Annual reports during 2010-19. Operating profit Ratio = Operating Profit/Total Income X 100

**Note:** Values representing in percentages.

Table: 3. Net Profit Ratio of Select Public Sector Banks In India During 2010-2019 (Rs Cr)

Bank Name	Before Prompt Corrective Action						After Prompt Corrective Action					
	2009-10	2010-11	2011-12	2012-13	2013-14	Avg	2014-15	2015-16	2016-17	2017-18	2018-19	Avg
AB	12.20	11.49	11.10	6.27	5.60	9.33	2.86	-3.57	-1.55	-24.53	-44.89	-14.34
BOI	8.50	10.20	8.42	7.71	6.47	8.26	3.59	-13.40	-3.38	-13.80	-12.08	-7.81
BOM	8.26	5.42	5.49	7.22	3.00	5.88	3.30	0.75	-8.16	-9.09	-38.59	-10.36
CBI	7.67	7.59	2.59	4.31	-4.79	3.47	2.14	-5.10	-8.86	-19.15	-22.52	-10.70
CB	13.79	13.60	10.38	8.47	2.87	9.82	2.78	-2.39	2.49	-20.33	-36.20	-10.73
DB	11.11	11.00	10.89	8.48	5.07	9.31	2.31	-8.23	-7.56	-19.05	-68.83	-20.27
IDBI	5.87	7.54	7.97	6.65	3.79	6.36	2.71	-11.65	-16.22	-27.42	-59.58	-22.43
IOB	6.21	8.05	5.37	2.50	2.42	4.91	-1.74	-11.12	-14.80	-29.08	-17.12	-14.77
OBC	9.91	11.51	6.70	6.86	5.43	8.08	2.25	0.71	-5.16	-29.10	0.27	-6.21
UCO	9.64	7.38	7.11	3.49	7.73	7.07	5.33	-13.89	-10.04	-29.30	-27.27	-15.03
UBI	5.54	7.51	7.28	3.80	-10.3	2.77	2.15	-2.47	1.89	-13.77	-21.16	-6.67
AVG	8.97	9.21	7.57	5.98	2.48	6.84	2.52	-6.40	-6.49	-21.33	-31.63	-13.93

Source: Compiled from RBI Annual reports during 2010-19. Net Profit Ratio: Net profit/ Total income X 100

Table: 4. ROE Ratio of Select Public Sector Banks In India during 2010-2019.

Bank Name	Before Prompt Corrective Action						After Prompt Corrective Action					
	2009-10	2010-11	2011-12	2012-13	2013-14	Avg	2014-15	2015-16	2016-17	2017-18	2018-19	Avg
AB	19.14	18.65	19.46	10.84	10.12	15.64	5.08	-5.57	-2.21	-38.06	-85.92	-25.34
BOI	12.56	15.79	14.0	12.25	10.14	12.95	5.57	-19.50	-5.04	-18.23	-14.37	-10.31
BOM	16.35	9.68	9.91	13.66	5.61	11.04	5.84	1.19	-16.98	-13.23	-61.01	-16.84
CBI	15.01	13.49	4.54	7.31	-8.12	6.45	3.65	-8.07	-13.96	-28.96	-30.56	-15.58
CB	21.93	21.89	19.54	16.08	5.72	17.03	5.68	-4.64	4.66	-34.42	-46.21	-14.99
DB	21.43	19.55	19.75	15.83	8.55	17.02	3.64	-12.83	-11.65	-22.78	-103.2	-29.36
IDBI	10.53	13.35	11.95	9.26	5.0	10.02	3.64	-14.08	-20.52	-37.64	-51.40	-24.00
IOB	9.63	12.73	9.88	4.47	8.97	9.14	-2.86	-18.51	-23.23	-46.63	-25.23	-23.29
OBC	14.51	15.55	9.91	10.74	4.06	10.95	3.65	1.09	-7.53	-45.33	0.36	-9.55
UCO	22.08	14.36	13.83	6.76	8.70	13.15	9.57	-22.33	-14.64	-32.02	-26.72	-17.23
UBI	9.24	11.74	11.93	6.84	9.48	9.85	4.61	-4.83	3.33	-18.19	-22.97	-7.61
AVG	15.67	15.16	13.15	10.37	6.20	12.11	4.37	-9.83	-9.80	-30.50	-42.48	-17.65

Source: Compiled from RBI Annual reports during 2010-19.

Table: 5. Return on Advances Ratio of Select Public Sector Banks in India during 2010-2019 (%)

Bank Name	Before Prompt Corrective Action						After Prompt Corrective Action						Difference
	2009-10	2010-11	2011-12	2012-13	2013-14	Avg	2014-15	2015-16	2016-17	2017-18	2018-19	Avg	
AB	9.81	10.02	11.39	10.59	10.40	10.44	10.40	9.59	8.32	7.28	7.60	8.64	-1.8
BOI	8.42	8.12	8.76	8.61	8.22	8.43	8.20	7.98	7.49	7.15	7.99	7.76	-0.67
BOM	9.03	9.19	10.67	11.10	11.18	10.23	10.47	9.64	8.34	7.80	7.80	8.81	-1.42
CBI	9.06	9.57	10.40	10.59	10.66	10.06	10.67	10.30	10.20	9.78	8.55	9.90	-0.16
CB	8.91	8.63	10.21	10.45	10.33	9.71	10.49	10.15	9.46	8.82	9.12	9.61	-0.1
DB	9.35	8.52	10.17	11.14	10.26	9.89	10.19	9.62	9.00	8.44	8.94	9.24	-0.65
IDBI	8.92	9.32	10.64	10.37	10.28	9.91	10.26	9.76	9.50	8.66	9.03	9.44	-0.47
IOB	9.95	9.27	10.76	10.57	10.28	10.17	10.32	10.02	9.33	8.76	8.85	9.46	-0.71
OBC	9.96	9.98	11.62	11.42	10.87	10.77	10.65	10.06	8.36	8.25	8.17	9.10	-1.67
UCO	9.39	9.37	10.61	10.55	9.81	9.95	9.36	9.00	8.04	7.03	7.57	8.20	-1.75
UBI	9.47	9.67	10.35	10.46	11.61	10.31	10.63	9.83	9.00	7.87	7.82	9.03	-1.28
Avg	9.30	9.24	10.51	10.53	10.35	9.99	10.15	9.63	8.82	8.17	8.31	9.02	-0.97

Source: Compiled from RBI Annual reports during 2010-19.

**Table: 6. Return on Investments Ratio of Select Public Sector Banks in India during 2010-2019 (%)**

Bank Name	Before Prompt Corrective Action						After Prompt Corrective Action					
	2009-10	2010-11	2011-12	2012-13	2013-14	Avg	2014-15	2015-16	2016-17	2017-18	2018-19	Avg
<b>AB</b>	5.71	6.54	7.62	7.95	7.46	7.06	7.38	7.12	7.34	6.67	6.71	7.04
<b>BOI</b>	7.46	6.76	8.27	8.01	8.05	7.71	8.07	7.50	7.35	6.91	7.00	7.37
<b>BOM</b>	6.54	6.94	7.04	7.77	7.41	7.14	7.25	7.93	7.56	7.21	7.14	7.42
<b>CBI</b>	7.07	7.17	7.64	7.25	7.26	7.28	7.63	7.25	8.15	7.33	7.42	7.56
<b>CB</b>	6.00	5.97	6.75	6.50	6.82	6.41	6.97	7.22	8.12	7.68	6.32	7.26
<b>DB</b>	6.82	6.92	7.39	7.04	7.21	7.08	7.33	7.67	7.75	6.93	7.29	7.39
<b>IDBI</b>	6.85	6.71	6.99	5.86	6.00	6.48	6.22	6.24	7.07	6.39	6.98	6.58
<b>IOB</b>	6.92	6.88	7.57	7.48	7.58	7.29	7.32	8.18	6.91	6.84	7.26	7.30
<b>OBC</b>	7.66	7.26	7.22	6.97	7.18	7.26	6.99	7.58	8.01	7.45	7.17	7.44
<b>UCO</b>	6.00	6.25	7.12	7.42	7.33	6.82	7.52	7.64	7.26	7.14	6.98	7.31
<b>UBI</b>	7.03	6.39	6.79	7.23	6.63	6.81	6.53	6.91	6.26	5.10	5.53	6.07
<b>Avg</b>	6.73	6.71	7.31	7.23	7.18	7.03	7.20	7.39	7.43	6.88	6.89	7.15

**Source:** Computed from company and RBI Annual reports 2010-19