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ALLAHABAD BANK’S MERGER WITH INDIAN BANK: CAN IT HIT THE BULLS EYE?

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Abstract
Consolidation in the Banking sector is very important in terms of mergers and acquisitions for the growing Indian Banking Industry. This can be achieved through Cost Reduction and Increasing Revenue. Finance Minister of India sprung a surprise on 30th August 2019, by announcing a consolidation among 10 major Public Sector Banks by merging them into 4. BOD of Allahabad Bank approved the consolidation with Indian Bank on 16th September 2019.

***Padmaja Chunduru, Managing Director & CEO, Indian Bank**, “We warmly welcome the employees and customers of Allahabad Bank to the Indian Bank fold. We assure all that the bank would continue to deliver top-grade products and services to all its customers. We deeply value the rich legacy of both the banks which gives us a great platform to serve our clientele pan-India".*

***K Ramachandran, Executive Director, Allahabad Bank**, “It is good in the sense that the merger will bring in a lot of more synergies because two big banks are getting merged. The two banks are roughly of equal size. The core banking platform is same for both the banks”.*

The 113 years old Indian bank & 155 years old Allahabad Bank is expected to strengthen its financial base through nationwide connectivity consisting of 6,000-plus branches, 4,800-plus ATMs, 43,000-plus employees serving 120 million customers & handling business venture of over Rs 8 trillion.
The major objectives relating to this Consolidation are:

1. *Strengthen the poor asset quality (reduction in NPA),*
2. *Create banks with strong national presence*
3. *Increase the Profitability of the Merged Entity*

The expansion has been in line with Indian Bank’s focus on expanding its operations in the Indian Banking sector. The Scheme of Amalgamation envisages a share exchange ratio of 115 Indian Bank shares for 1,000 Allahabad Bank. Allahabad Bank’s shareholders wealth dropped by 25.25% post allotment of Sharers in Indian Bank.The merged Entity is expected to have a business of Rs 10 trillion by 2022. But in order to do so, it had to face steep competition with both Public Sector & Private Sector Banks of India. Therefore, it remained to be seen whether merger of the two Indian Public Sector banks in order to expand the business of Indian Bank would pay off in future.

Keywords: Indian Banking Sector, Merger & Acquisition, Merger of Public Sector Banks, Indian & Allahabad Bank, Net Interest Margin, NPA, Segmental Report, CASA, ROE, ROTA, ALM, Gap Analysis

I. Objective of the Study

1. To analysis the profitability, Liquidity, NPA, CASA, Return, Segmental Performance of both the Banks .
2. To anticipate the Revenue & Profit of Indian Bank & the Merged Entity after the Merger.

II. Review of Literature

Mergers & Acquisitions (M&A), in a banking sector, are advantageous not only to banks but also for the retail customers as well as corporate customers. M&A is one of the measures in reforming the corporate world (Gupta, 2015) which leads to expanding & diversifying the business. A number of studies have been made by the researchers in relation to mergers M&A in banking sector.

Vashisht (1987) evaluated the performance of public sector banks with regard to six indicators, viz. branch expansion, deposit, credit, priority sector advances, DRI advances, and net profit over the period 1971-83. The researcher has used composite weighted growth index to rank the banks as excellent, good, fair and poor. In order to improve the performance, he has suggested that developing marketing strategies for deposit mobilisation, profit planning and SWOT analysis.

Atma (1996) covered the growth and progress of commercial banking in India. The trends in deposits of State Bank of Hyderabad over a period of time were analysed and ratios were calculated to know the bank's financial performance. It was concluded that the progress of banking in India has been impressive and the present structure was the outcome of the processes of expansion, reorganisation and consolidation.

Gelli (1998) emphasized that if achieving size to compete on a global scale, even in the domestic market, were the objective, the banks would need an immediate series of mega – mergers. Finally, he concluded that higher levels of capital backing were vital, which only mergers can achieve.

Mantravadi and Reddy (2007) studied the impact of mergers on the operating performance of acquiring public limited companies in India by examining few pre and post – merger financial ratios during the period 1991-2003. It was observed that the mergers between the same groups of companies, there has been deterioration in performance and Return on Investment, implying that such mergers were only motivated by a potential for increasing the asset base through consolidation of different businesses rather than driving efficiency improvements.

Monika (2014) in her paper review that mergers and acquisitions expressed value mixed motives and use behavioural theories to evaluate the rationalism behind decisions. That proposal would investigate the context, process and consequences of mergers of Indian Banks. The purpose of that paper was to assess the overall financial performance and value implications of recent mergers and acquisitions in Indian Banking system. Since mergers and acquisitions have emerged as a natural process of business restructuring throughout the world and financial restructuring through mergers and acquisitions evokes a great deal of public interest and perhaps represent the most dynamic facet of corporate strategy.

Duggal, and Neha, (2015) attempted to analyze the change in financial performance after merger of banks during the period from January, 2001 to December, 2006. 26 banking merger were taken into consideration by collecting data from BSE. The study found that, Net Profit & ROCE has shown significant improvement and as a whole merger has a positive impact on performance of banks.

Shanmugam and Das, (2005), attempted to measure the technical efficiency of the Indian Banking industry from 1992 to 1999 by employing the stochastic frontier function methodology. The panel data of inputs and output of 94 Indian Commercial Banks from 1992-1999 have been compiled from the Statistical Tables relating to Banks in India published by the RBI. The results indicate that the efficiency of raising interest margin its time invariant, while the efficiencies of raising other output-non-interest income, investments and credits are time varying. The study also suggested State Bank Group and Foreign Banks are more efficient than their other counterparts.

II. Scope of Study
The study focuses on last 6 years performance of both the Banks and anticipates the Revenue and Profit after consolidation.

Period of Study The study covers a period of 6 years from 2014 to 2019.

Methodology:Sources of Data: The study is based on secondary data. Information and data has been collected from Annual Reports of Allahabad Bank, Indian Bank, RBI websites and different books, journal, magazines, and various websites.

III. Tools Applied
In this study various tools: Financial Tools – Ratio Analysis and Statistical Tools (i.e.) Mean and ANOVA, t-test has been used for data analysis.

MEAN = Sum of variable/N
Standard Deviation is used to see how measurements for a group are spread out from Mean. A low Standard Deviation means that most of the numbers are very close to the average and vice-versa.

(SD) = √∑X2/N-(∑X/N)
Coefficient of Variation is a standardized measure of dispersion of a probability distribution or frequency distribution. It is the ratio of standard deviation to mean. Higher the coefficient of variation, the greater the level of dispersion around mean and vice-versa. **Coefficient of Variation (CV) = SD/MEAN* 100.**

Hypothesis
An ANOVA is statistical hypothesis in which the sampling distribution of test statistic when null hypotheses is true. Null hypotheses have been set and adopted for the analysis of data. The null hypotheses are represented by H_0. It is a negative statement which avoids personal bias of investigator during data collection as well as the time of drawing conclusion.

IV. Limitation of the Study
1. The study is related to a period of 6 years.
2. Data is secondary i.e. they are collected from the published Annual Reports
3. Profitability, Liquidity, NPA, ALM, Gap Analysis & Returns of both the Banks have been taken for the study.

Exhibit – 1: Total Income

Millions	Allahabad Bank	Change (%)	Indian Bank	Change (%)
2014	2,10,498		1,66,275	
2015	2,18,736	3.91%	1,72,256	3.60%
2016	2,10,031	-3.98%	1,80,332	4.69%
2017	2,05,683	-2.07%	1,82,616	1.27%
2018	1,94,736	-5.32%	1,95,319	6.96%
2019	1,89,695	-2.59%	2,10,735	7.89%
Mean	2,04,897	-2.01%	1,84,589	4.88%
SD	10,809		16,176	
CV	0.053		0.088	
CAGR (%)	-2.06		4.85	

Allahabad Bank reported the highest mean value in terms of Total Income. But, the average growth, Y-O-Y growth as well as CAGR of Indian Bank have been more in comparison to Allahabad Bank as well as Positive.

Hypothesis
H_0: $\mu_1=\mu_2$ (Total Income of the Banks doesn’t differ over years)
H_1: $\mu_1\neq\mu_2$ (Total Income of the Banks differ over years)

Exhibit – 2: Total Income: Anova

ANOVA: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	1229379.5	204896.58	116845289
Indian	6	1107532.3	184588.72	261656379

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1237228346	1	1237228346	6.5375	0.028527	4.9646
Within Groups	1892508339	10	189250834			
Total	3129736684	11				

Above analysis shows that the F value (6.5375) is more than the table value (4.9646) so null hypothesis is rejected. Therefore it is concluded that Total Income of the Banks differs over years.

Interest Income: Banks provide loans & advances to industries, corporate & individuals. Interest earned on these loans is a Bank's main source of income. Beside this it also includes Income on Investments, interest on balances with Reserve Bank of India & other inter-bank funds

Exhibit – 3: Interest Income

Millions	Allahabad Bank	Change (%)	Indian Bank	Change (%)
2014	1,87,756		1,52,494	
2015	1,97,491	5.18%	1,58,534	3.96%
2016	1,89,148	-4.22%	1,62,443	2.47%
2017	1,76,944	-6.45%	1,60,392	-1.26%
2018	1,63,984	-7.32%	1,71,153	6.71%
2019	1,69,158	3.15%	1,91,821	12.08%
Mean	1,80,747	-1.93%	1,66,139	4.79%
SD	12,883		13,967	
CV	0.071		0.084	
CAGR (%)	-2.06		4.70	

Allahabad Bank reported the highest mean value in terms of Interest Income. But, the average growth, Y-O-Y growth as well as CAGR of Indian Bank have been more in comparison to Allahabad Bank as well as Positive.

Hypothesis:

H_0: $\mu_1=\mu_2$ (Interest Income of the Banks doesn't differ over years)

H_1: $\mu_1\neq\mu_2$ (Interest Income of the Banks differ over years)

Exhibit – 4: Interest Income: Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	1084480.3	180746.7167	165962390
Indian	6	996836.3	166139.3833	195078439

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Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	640122561	1	640122561	3.5460	0.089071	4.9646
Within Groups	1805204145	10	180520414			
Total	2445326706	11				

Above analysis shows that the F value (3.5460) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that Interest Income of the Banks doesn't differ over years.

Interest Expenses: Banks accept deposits from both individual & corporate and pay interest to them. These Deposits can be classified as Demand & Term Deposits. It also includes Interest on borrowings from RBI & other inter-bank borrowings.

Exhibit – 5: Interest Expenses

Millions	Allahabad Bank	Change (%)	Indian Bank	Change (%)
2014	1,34,346		1,08,875	
2015	1,35,373	0.77%	1,13,898	4.61%
2016	1,29,851	-4.08%	1,17,954	3.56%
2017	1,23,729	-4.71%	1,08,915	-7.66%
2018	1,16,267	-6.03%	1,08,513	-0.37%
2019	1,13,543	-2.34%	1,21,668	12.12%
Mean	1,25,518	-3.28%	1,13,304	2.45%
SD	9,230		5,545	
CV	0.074		0.049	
CAGR (%)	-3.31		2.25	

Allahabad Bank reported the highest mean value in terms of Interest Income. But, the average growth, Y-O-Y growth as well as CAGR of Indian Bank have been more in comparison to Allahabad Bank.

Hypothesis:

H_0: $\mu_1=\mu_2$ (Interest Expenses of the Banks doesn't differ over years)

H_1: $\mu_1\neq\mu_2$ (Interest Expenses of the Banks differ over years)

Exhibit – 6: Interest Expenses: Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	753109.3	125518.22	85201409.9
Indian	6	679821.1	113303.52	30752475.8

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	447596688	1	447596688	7.7203	0.0195	4.9646
Within Groups	579769428.4	10	57976943			
Total	1027366117	11				

Above analysis shows that the F value (7.7203) is more than the table value (4.9646) so null hypothesis is rejected. Therefore it is concluded that Interest Expenses of the Banks differ over years

Net Interest Margin: It is the spread between Interest Income & Interest Expenses of a Bank.

Exhibit – 7: Net Interest Margin

Millions	Allahabad Bank	Change (%)	Indian Bank	Change (%)
2014	53,410		43,620	
2015	62,117	16.30%	44,636	2.33%
2016	59,297	-4.54%	44,489	-0.33%
2017	53,214	-10.26%	51,478	15.71%
2018	47,717	-10.33%	62,640	21.68%
2019	55,615	16.55%	70,153	11.99%
Mean	55,229	1.54%	52,836	10.28%
SD	5,059		11,133	
CV	0.092		0.211	
CAGR (%)	0.81		9.97	

Allahabad Bank reported the highest mean value in terms of Net Interest Margin. But, the average growth, Y-O-Y growth as well as CAGR of Indian Bank have been more in comparison to Allahabad Bank.

Hypothesis:

H_0: $\mu_1=\mu_2$ (Net Interest Margin of the Banks doesn't differ over years)

H_1: $\mu_1\neq\mu_2$ (Net Interest Margin of the Banks differ over years)

Exhibit – 8: Net Interest Margin: Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	331371	55228.5	25588683
Indian	6	317015.2	52835.87	1.24E+08

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	17174083	1	17174083	0.2297	0.64205	4.9646
Within Groups	747654470	10	74765447			
Total	764828552	11				

Above analysis shows that the F value (0.2297) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that Net Interest Margin of the Banks doesn't differ over years.

Operating Profit: It is the difference between Net Interest Margin & Operating Expenses (Payments to employees, Rent, taxes & lighting, Printing & stationery, Depreciation, Auditors' fees, Legal Charges, Repairs & maintenance, Insurance premium etc)

Exhibit – 9: Operating Profit

Millions	Allahabad Bank	Change (%)	Indian Bank	Change (%)
2014	40,313		29,021	
2015	44,793	11.11%	30,104	3.73%
2016	41,583	-7.17%	30,357	0.84%
2017	38,982	-6.26%	40,067	31.99%
2018	35,654	-8.54%	50,073	24.97%
2019	28,290	-20.65%	48,784	-2.57%
Mean	38,269	-6.30%	38,068	11.79%
SD	5,738		9,672	
CV	0.150		0.254	
CAGR (%)	-6.84		10.95	

Allahabad Bank reported the highest mean value in terms of Operating Profit. The average growth; Y-O-Y growth as well as CAGR of Indian Bank have been more in comparison to Allahabad Bank as well as Positive.

Hypothesis:

H_0: $\mu_1=\mu_2$ (Operating Profit of the Banks doesn't differ over years)

H_1: $\mu_1 \neq \mu_2$ (Operating Profit of the Banks differ over years)

Exhibit – 10: Operating Profit: Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	229615	38269.16667	32927908.7
Indian	6	228405.7	38067.61667	93539059.7

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	121867	1	121867	0.0019	0.965848	4.9646
Within Groups	632334842.3	10	63233484			
Total	632456709.5	11				

Above analysis shows that the F value (0.0019) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that Operating Profit of the Banks doesn't differ over years.

Net Profit: It is obtained after deducting Non Operating Expenses, Provision for Income Tax etc from Operating Profit.

Exhibit – 11: Net Profit

Millions	Allahabad Bank	Change (%)	Indian Bank	Change (%)
2014	11,808		11,596	
2015	6,311	-46.55%	10,135	-12.60%
2016	-7,235	-214.64%	7,145	-29.50%
2017	-2,897	-59.97%	14,129	97.74%
2018	-45,881	1483.96%	12,629	-10.62%
2019	-82,943	80.78%	3,209	-74.59%
Mean	-20,139	248.72%	9,807	-5.91%
SD	36,854		4,014	
CV	-1.830		0.409	
CAGR (%)	-247.68		-22.66	

Indian Bank reported the highest mean value in terms of Net Profit. Allahabad Bank had reported Net Loss since 2015-16 which have increased over the years & have the SD of 36,854 which indicates the deviation from Mean as well as Risk.

Hypothesis:

H_0: $\mu_1=\mu_2$ (Net Profit of the Banks doesn't differ over years)

H_1: $\mu_1 \neq \mu_2$ (Net Profit of the Banks differ over years).

Exhibit – 12: Net Profit: Anova

ANOVA: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	-120836.6	-20139.4333	1358193246
Indian	6	58843.4	9807.2333	16113664.1

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2690408533	1	2690408533	3.9153	0.076036	4.9646
Within Groups	6871534552	10	687153455			
Total	9561943085	11				

Above analysis shows that the F value (3.9153) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that Net Profit (Loss) of the Banks doesn't differ over years.

CASA: It is the ratio of deposits in current & saving accounts to total deposits. A higher CASA ratio indicates a lower cost of funds, as banks do not usually pay any interests on current account and the interest on saving accounts is usually very low 3-4%.

Exhibit – 13: Current Account & Savings Account Ratio (%)

Year	**Allahabad Bank**	**Indian Bank**
2014	31.34	27.15
2015	33.55	28.77
2016	35.90	31.27
2017	45.37	37.08
2018	46.07	36.95
2019	49.48	34.71
Mean	40.29	32.66
SD	7.60	4.23
CV	0.189	0.130
CAGR (%)	9.56	5.04

Above exhibit depicts that Allahabad Bank's CASA ratio is better in comparison to Indian Bank indicating that Demand Deposits in Allahabad Bank is more. This is clearly indicated in the Mean Value of Allahabad Bank as well as CAGR.

Hypothesis:

H_0: $\mu_1=\mu_2$ (CASA of the Banks doesn't differ over years)

H_1: $\mu_1\neq\mu_2$ (CASA of the Banks differ over years)

Exhibit – 14: Casa (%): Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	241.71	40.285	57.69459
Indian	6	195.93	32.655	17.91343

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	175	1	175	4.6199	0.057123	4.9646
Within Groups	378.040	10	38			
Total	552.691	11				

Above analysis shows that the F value (4.6199) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that CASA (%) of the Banks doesn't differ over years.

Credit/Deposit ratio: It is the ratio of Total Advances to Total Deposits. It states how much a bank lends out of the deposits it has mobilized. It helps in assessing Bank's Liquidity & Financial health. A low ratio indicates that a Bank has not been able to mobilize its deposits properly by providing Loans. A very high ratio indicates that a Bank may not have enough fund to meet up the unforeseen circumstances.

Exhibit – 15: Credit Deposit Ratio

Million	Allahabad Bank			Indian Bank		
Year	**Advances**	**Deposits**	**CD ratio**	**Advances**	**Deposits**	**CD ratio**
2014	1,380,076	1,908,349	72.32	1,222,125	1,622,552	75.32
2015	1,498,771	1,933,760	77.51	1,258,702	1,692,042	74.39
2016	1,523,721	2,006,244	75.95	1,290,554	1,782,589	72.40
2017	1,507,527	2,018,353	74.69	1,277,077	1,824,800	69.98
2018	1,520,607	2,135,954	71.19	1,565,689	2,082,618	75.18
2019	1,422,122	2,143,301	66.35	1,812,619	2,420,408	74.89
Mean	1,475,471	2,024,327	73	1,404,461	1,904,168	73.69
SD	59,803	98,622	4	235,066	297,904	2.11
CV	0.041	0.049	0.055	0.167	0.156	0.029
CAGR (%)	0.60	2.35	-1.71	8.20	8.33	-0.12

Above exhibit depicts that both the banks have same mean value wrt Credit Deposit Ratio. CAGR of Indian Bank have been more than Allahabad Bank indicating the growth in CD ratio during the period.

Hypothesis:

H_0: $\mu_1=\mu_2$ (Credit/Deposit ratio of the Banks doesn't differ over years)

H_1: $\mu_1\neq\mu_2$ (Credit/Deposit ratio of the Banks differ over years)

Exhibit – 16: Credit Deposit Ratio: Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	438.0061	73.0010	15.9579
Indian	6	442.1608	73.6935	4.4410

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1	1	1	0.1410	0.715101	4.9646
Within Groups	101.99484	10	10			
Total	103.43329	11				

Above analysis shows that the F value (0.1410) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that Credit/Deposit ratio of the Banks doesn't differ over years.

Return on Equity (%): It is the ratio of Equity Earnings to Equity Shareholders Fund. A High ROE leads to creation of shareholders wealth which in turn has an impact in both EPS & P/E ratio.

Exhibit – 17: Return on Equity (%)

Year	Allahabad Bank	Indian Bank
2014	10.34	8.77
2015	5.26	7.21
2016	-5.24	4.69
2017	-2.01	8.57
2018	-46.62	7.19
2019	-115.87	1.98

Mean	-25.69	6.40
SD	48.59	2.61
CV	-1.891	0.408
CAGR (%)	-262.15	-25.77

Above exhibit depicts that Indian Bank is in a better position than Allahabad Bank. Allahabad Bank have generated a Negative ROE indicating that the Bank have sustained losses which in turn have led to destruction of Shareholders wealth.

Hypothesis:
H_0: $\mu_1=\mu_2$ (ROE of the Banks doesn't differ over years)
H_1: $\mu_1\neq\mu_2$ (ROE of the Banks differ over years)

Exhibit – 18: Return On Equity (%): Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	-154.1420	-25.6903	2361.1391
Indian	6	38.4063	6.4011	6.8184

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	3090	1	3090	2.6095	0.1373	4.9646
Within Groups	11839.7879	10	1184			
Total	14929.3583	11				

Above analysis shows that the F value (2.6095) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that ROE of the Banks doesn't differ over years.

Return on Total Assets (%): It is the ratio between Net Profit and Average Total Assets. It plays a significant role in determining the quality of the Assets employed and return generated from such Assets.

Exhibit – 19: Return on Total Assets (%)

Year	Allahabad Bank	Indian Bank
2014	0.54	0.63
2015	0.29	0.54
2016	-0.30	0.37
2017	-0.12	0.66
2018	-1.80	0.52
2019	-3.39	0.14
Mean	-0.80	0.48
SD	1.51	0.20
CV	-1.890	0.413
CAGR (%)	-244.50	-26.55

Above exhibit depicts that Indian Bank is in a better position than Allahabad Bank wrt to ROTA. NPA as well as Net loss of Allahabad Bank have created a negative impact on its ROTA which have increased over the years. Moreover Volatility of such Return in the form of SD of Allahabad Bank is 7.55 times over Indian Bank.

Hypothesis:
H_0: $\mu_1=\mu_2$ (ROTA of the Banks doesn't differ over years)
H_1: $\mu_1\neq\mu_2$ (ROTA of the Banks differ over years)

Exhibit – 20: Return on Total Assets (%): Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	-4.78992	-0.79832	2.27706
Indian	6	2.86459	0.47743	0.03891

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	5	1	5	4.2165	0.067124	4.9646
Within Groups	11.57983	10	1			
Total	16.46246	11				

Above analysis shows that the F value (4.2165) is less than the table value (4.9646) so, null hypothesis is accepted. Therefore it is concluded that ROTA of the Banks doesn't differ over years.

Earnings Per Share: It is the ratio between Equity Earnings and no of shares and plays a significant role to determine the P/E as well as creation of shareholders wealth.

Exhibit – 21: EPS

Millions	Allahabad Bank	Change (%)	Indian Bank	Change (%)
2014	21.82		24.76	
2015	11.36	-47.95%	21.84	-11.81%
2016	-11.73	-203.25%	15.64	-28.36%
2017	-3.75	-68.01%	30.25	93.41%
2018	-54.19	1344.57%	27.29	-9.81%
2019	-40.33	-25.58%	7.91	-70.99%
Mean	-12.80	199.96%	21.28	-5.51%
SD	29.5		8.2	
CV	-2.3		0.387	
CAGR (%)	-213.07		-20.40	

Indian Bank reported the highest mean value in terms of EPS. Allahabad Bank reported a negative EPS due to Net Loss which in turn have lead to destruction of shareholders wealth as well as MPS & P/E ratio of the bank.

Hypothesis:

H_0: $\mu_1=\mu_2$ (EPS of the Banks doesn't differ over years)

H_1: $\mu_1\neq\mu_2$ (EPS of the Banks differ over years)

Exhibit – 22: EPS: Anova

Anova: Single Factor

Groups	*Count*	*Sum*	*Average*	*Variance*
Allahabad	6	-76.8267	-12.8044	867.3830
Indian	6	127.6941	21.2824	67.8904

Anova: Variation

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	3486	1	3486	7.4539	0.021187	4.9646
Within Groups	4676.367	10	468			
Total	8162.097	11				

Above analysis shows that the F value (7.4539) is more than the table value (4.9646) so null hypothesis is rejected. Therefore it is concluded that EPS of the Banks differs over years.

Segmental Reporting: It is done as per AS 17 & Ind AS 108 to analyze the performance of an entity on different types of products &services offered as well as its geographical operations. Organizations products & services or operate in geographical areas that are subject to differing rates of profitability, opportunities for growth, future prospects, and risks. So Segmental Reporting is considered significant to meet the needs of users of financial statements.

Business Segment: A business segment in context to a Bank means the different services & products it provides to different sects of the customers. It can be classified as Treasury Banking, Corporate/ Wholesale Banking, Retail Banking & Other Operations.

Exhibit – 21: Business Segment: Revenue: Allahabad Bank

Millions	Treasury	Corporate/ Wholesale Banking	Retail Banking	Other Operations	Total
2014	53,253	96,701	51,328	9,292	2,10,575
2015	54,308	1,03,297	55,777	5,533	2,18,915
2016	49,683	90,670	63,878	5,837	2,10,068
2017	61,193	67,680	67,916	9,001	2,05,789
2018	60,122	52,272	67,623	14,858	1,94,875
2019	51,692	54,349	66,380	17,274	1,89,695
Mean	55041.8	77494.8	62150.4	10299.3	204986.3
SD	4632.8	22255.1	6954.1	4790.7	10842.3
CV	0.084	0.287	0.112	0.465	0.053
CAGR (%)	-0.59	-10.88	5.28	13.20	-2.07

Above analysis shows that during FY 2018-19, maximum revenue has been generated by Retail Banking followed by Corporate & Treasury Banking. Though mean of Corporate Banking has been maximum but due to inconsistency its SD is high as well as COV.

Exhibit – 22: Business Segment: Profit: Allahabad Bank

Millions	Treasury	Corporate/ Wholesale Banking	Retail Banking	Other Operations	Total
2014	3,937	12,746	16,407	7,301	40,390
2015	8,795	16,823	16,678	2,676	44,971
2016	9,150	10,521	19,486	2,463	41,620
2017	19,534	-6,198	20,822	4,930	39,088
2018	17,942	-13,615	21,743	9,723	35,793
2019	3,855	-7,293	20,378	9,719	26,659
Mean	10535.3	2164.0	19252.3	6135.4	38087.0
SD	6767.0	12688.7	2223.3	3285.7	6356.6
CV	0.642	5.864	0.115	0.536	0.167
CAGR (%)	-0.42	-189.43	4.43	5.89	-7.97

Above analysis shows that during FY 2018-19, maximum PBT has been generated by Retail Banking followed by Other Operations.

Mean of Corporate Banking has been maximum, SD minimum as a result of which COV has been the minimum.

Exhibit – 23: Business Segment: Revenue: Indian Bank

Millions	Treasury	Corporate/ Wholesale Banking	Retail Banking	Other Operations	Total
2014	42,001	68,437	54,379	1,457	1,66,275
2015	39,708	71,617	59,667	1,263	1,72,256
2016	45,918	71,224	61,322	1,868	1,80,332
2017	55,621	66,792	58,831	1,372	1,82,616
2018	61,243	67,826	64,380	1,870	1,95,319
2019	54,394	73,346	80,876	2,119	2,10,735
Mean	49814.2	69873.8	63242.7	1658.1	184588.7
SD	8528.3	2556.3	9238.1	340.5	16175.8
CV	0.171	0.037	0.146	0.205	0.088
CAGR (%)	5.31	1.40	8.26	7.77	4.85

Above analysis shows that during FY 2018-19, maximum revenue has been generated by Retail Banking followed by Corporate & Treasury Banking. Mean of Corporate Banking has been maximum, SD minimum as a result of which COV has been the minimum.

Exhibit – 24: Business Segment: Profit: Indian Bank

Millions	Treasury	Corporate/ Wholesale Banking	Retail Banking	Other Operations	Total
2014	8,475	10,996	8,148	1,402	29,021
2015	6,715	12,384	9,869	1,137	30,104
2016	9,781	10,308	8,444	1,824	30,357
2017	19,059	10,837	9,274	837	40,007
2018	23,458	13,099	12,159	1,357	50,073
2019	15,523	15,522	16,274	1,465	48,784
Mean	13835.1	12190.9	10694.6	1337.1	38057.6
SD	6612.0	1937.3	3082.9	331.0	9669.1
CV	0.478	0.159	0.288	0.248	0.254
CAGR (%)	12.87	7.14	14.84	0.89	10.95

Above analysis shows that during FY 2018-19, maximum PBT has been generated by Retail Banking followed by Treasury & Corporate Banking. Though mean of Corporate Banking has been maximum but due to inconsistency its SD is high as well as COV.

Geographical Segment: It is a distinguishable component of an enterprise that is engaged in providing services in different economic environment which are subject to different risks & returns.

Exhibit – 25: Geographical Segment: Revenue

	ALLAHABAD BANK				INDIAN BANK			
Millions	**Domestic**	**Change**	**International**	**Change**	**Domestic**	**Change**	**International**	**Change**
2014	2,08,488		2,087		1,62,932		3,343	
2015	2,16,514	3.85%	2,401	15.07%	1,69,079	3.77%	3,177	-4.96%
2016	2,07,354	-4.23%	2,715	13.04%	1,77,476	4.97%	2,857	-10.09%
2017	2,02,610	-2.29%	3,180	17.13%	1,79,823	1.32%	2,794	-2.21%
2018	1,91,290	-5.59%	3,585	12.75%	1,92,276	6.93%	3,043	8.93%

2019	1,86,944	-2.27%	2,751	-23.26%	2,06,463	7.38%	4,272	40.39%
Mean	202199.9		2786.4		181341.3		3247.4	
SD	11161.9		536.0		15856.9		541.2	
CV	0.055		0.192		0.087		0.167	
CAGR (%)	-2.16		5.68		4.85		5.03	

Above exhibit reveals, that both the Banks have generated the maximum income from their Domestic Operations. But for Allahabad Bank the revenue have fallen over the years.

Exhibit – 26: Geographical Segment: Assets

	ALLAHABAD BANK				INDIAN BANK			
Millions	**Domestic**	**Change**	**International**	**Change**	**Domestic**	**Change**	**International**	**Change**
2014	21,15,637		93,882		17,83,069		91,813	
2015	21,53,272	1.78%	1,23,525	31.57%	18,48,214	3.65%	82,143	-10.53%
2016	22,19,403	3.07%	1,45,199	17.55%	19,48,694	5.44%	90,717	10.44%
2017	22,50,121	1.38%	1,29,505	-10.81%	21,14,375	8.50%	70,705	-22.06%
2018	24,05,927	6.92%	1,31,250	1.35%	24,38,636	15.34%	91,178	28.96%
2019	24,58,764	2.20%	37,002	-71.81%	26,97,875	10.63%	1,06,008	16.26%
Mean	2267187.4		110060.6		2138477.1		88760.6	
SD	137454.7		39603.8		360606.9		11715.7	
CV	0.061		0.360		0.169		0.132	
CAGR (%)	3.05		-16.99		8.64		2.92	

Above exhibit reveals, that both the Banks hold their maximum Assets in India.

NPA: A NPA is a loan asset, which has ceased to generate any income for a bank whether in the form of interest or principal repayment. As per the prudential norms suggested by RBI a bank cannot book interest on an NPA on accrual basis & such interests can be booked when it has been actually received.

Gross NPA: It is the amount outstanding in borrower's account, in books of bank other than interest which has been recorded & not debited to the borrower account.

NET NPA: It is the amount of Gross NPA **Less: (**1) interest debited to borrower but not recovered & not recognized as income and kept in interest suspense (2) amount of provisions held in respect of NPA & (3) amount of claim received and not appropriated.

Exhibit – 27: NPA: Allahabad Bank

Millions	**Gross NPAs**						**Net NPAs**		
Year	**Opening**	**Addition**	**Reduction**	**Written-off**	**Closing**	**Change**	**Opening**	**Closing**	**Change**
2014	51,370	60,212	30,902	0	80,680		41,268	57,218	
2015	80,680	50,213	29,923	17,391	83,580	**3.59%**	57,218	59,789	**4.49%**
2016	83,580	129,248	22,430	36,553	153,846	**84.07%**	59,789	102,925	**72.15%**
2017	153,846	114,170	36,717	24,421	206,878	**34.47%**	102,925	134,335	**30.52%**
2018	206,878	129,033	33,791	36,492	265,628	**28.40%**	134,335	122,291	**-8.97%**
2019	265,628	107,263	43,013	42,830	287,048	**8.06%**	122,291	74,193	**-39.33%**

Above exhibit shows, that Allahabad Bank's Gross NPA have increased over the years while during FY 2018-19 there have been a fall of Net NPA by 39.33% due to writing off of unrecovered interest & amount held as NPA provisions.

Exhibit – 28: NPA: Indian Bank

Millions	Gross NPAs						Net NPAs		
Year	**Opening**	**Addition**	**Reduction**	**Written-off**	**Closing**	**Change**	**Opening**	**Closing**	**Change**
2014	35,655	28,323	18,356	0	45,622		23,843	27,637	
2015	45,622	33,389	16,809	5,497	56,704	**24.29%**	27,637	31,470	**13.87%**
2016	56,704	57,038	16,208	9,264	88,270	**55.67%**	31,470	54,194	**72.21%**
2017	88,270	33,307	10,671	12,254	98,651	**11.76%**	54,194	56,066	**3.45%**
2018	98,651	50,412	12,746	16,416	119,901	**21.54%**	56,066	59,596	**6.30%**
2019	119,901	64,450	22,078	28,738	133,535	**11.37%**	59,596	67,931	**13.99%**

Above exhibit shows, that Indian Bank's both Gross NPA & Net NPA have increased over the years. During FY 2018-19 the increase in Gross NPA has fallen from 21.54% to 11.37% while it's Net NPA have increased from 6.3% to 13.99%.

Asset Liability Management (ALM)

Commercial Banks play an important role in mobilization of deposits and disbursement of credit to various sectors of the economy. ALM concept has been introduced by RBI based on the emphasis made by the Basel Committee on Banking Supervision.

ALM is a technique available to the bankers to manage the bank's assets and liabilities in order to maintain both liquidity and spread as the basis of their respective maturity period. It is a selective approach of classifying the assets and liabilities of a bank into different maturity time segments and matching them with respective segments, in such a way as to strike the balance between the liquidity and profitability. ALM implementation makes the banker more alert in managing the assets and liabilities by considering their respective maturity profiles and to take necessary initiatives to speed up the recovery process.

Exhibit – 29: GAP Analysis: Allahabad Bank

Millions	1-14 days	15-28 days	29 days-3 months	3 months-6 months	6 months-1Yr	1Yr-3Yrs	3Yrs-5Yrs	Over 5Yrs	TOTAL
2014	-103,861	-36,893	-210,716	-125,257	-274,350	-20,002	163,924	612,124	4,970
2015	-58,019	-45,065	-126,996	-145,482	-272,664	40,643	107,007	461,390	-39,186
2016	-59,203	-18,624	-121,503	-149,530	-312,664	66,980	22,983	542,265	-29,297
2017	-30,427	-44,340	-2,327	-105,832	-203,547	-172,183	-46,474	534,108	-71,022
2018	67,556	-15,836	-130,237	-61,122	-260,025	-128,533	-88,083	494,466	-121,815
2019	7,935	41,680	130,260	42,173	11,700	-218,991	-105,018	37,987	-52,273
Mean	-29,336	-19,846	-76,920	-90,842	-218,592	-72,014	9,056	447,057	-51,437
SD	60,078	32,648	121,431	72,685	118,203	117,938	108,908	206,727	42,800
CV	-2.048	-1.645	-1.579	-0.800	-0.541	-1.638	12.025	0.462	-0.832
CAGR (%)	-159.79	-202.47	-190.83	-180.44	-153.21	61.39	-191.48	-42.65	-260.10

Above exhibit shows, poor ALM by Allahabad Bank which have generated a Negative Gap. Since 2014, the Bank have generated a Negative Gap indicating poor ALM which have increased over the years. Poor ALM have created a negative impact on Allahabad's Bank's profitability, liquidity & have also increased the NPA.

Exhibit – 30: GAP Analysis: Indian Bank

Millions	1-14 days	15-28 days	29 days-3 months	3 months-6 months	6 months-1Yr	1Yr-3Yrs	3Yrs-5Yrs	Over 5Yrs	TOTAL
2014	63,075	10,206	21,664	-39,624	9,432	-333,598	151,507	141,404	24,067
2015	34,888	23,914	42,453	-84,328	-32,059	-339,688	141,350	222,871	9,400
2016	123,496	45,026	40,218	-57,536	29,612	-492,025	110,092	214,767	13,649
2017	103,149	31,864	-187	-32,712	19,356	-488,785	103,769	261,713	-1,833
2018	10,208	3,698	-30,952	-21,148	-71,660	-18,482	49,428	99,906	20,997
2019	16,649	-10,900	-51,872	-13,244	-82,348	-40,715	102,060	-6,408	-86,778
Mean	58,577	17,301	3,554	-41,432	-21,278	-285,549	109,701	155,709	-3,416
SD	46,648	20,274	38,632	26,018	48,100	209,974	35,989	98,829	41,853
CV	0.796	1.172	10.870	-0.628	-2.261	-0.735	0.328	0.635	-12.251
CAGR (%)	-23.39	-201.32	-219.08	-19.68	-254.24	-34.34	-7.60	-153.86	-229.24

Above exhibit depicts that Indian Bank has been in a better position in comparison to Allahabad Bank in terms of ALM. Except for FY 2017 & 2019, Indian Bank has been able to maintain a Positive Gap indicating timely recovery of Loans given.

A merger is a combination of two or more companies to form a single entity. A merger is more over similar like an acquisition or takeover but the only difference is that in merger existing shareholders of both companies involved they retain a shared interest in the new corporation while in acquisition one company acquire of a bulk of acquired company's stock by willingness or unwillingness of another company.
The Swap Ratio was determined at 115 Shares in Indian Bank for every 1,000 shares held in Allahabad Bank.

Exhibit – 31: No. of Shares: Pre & Post Merger

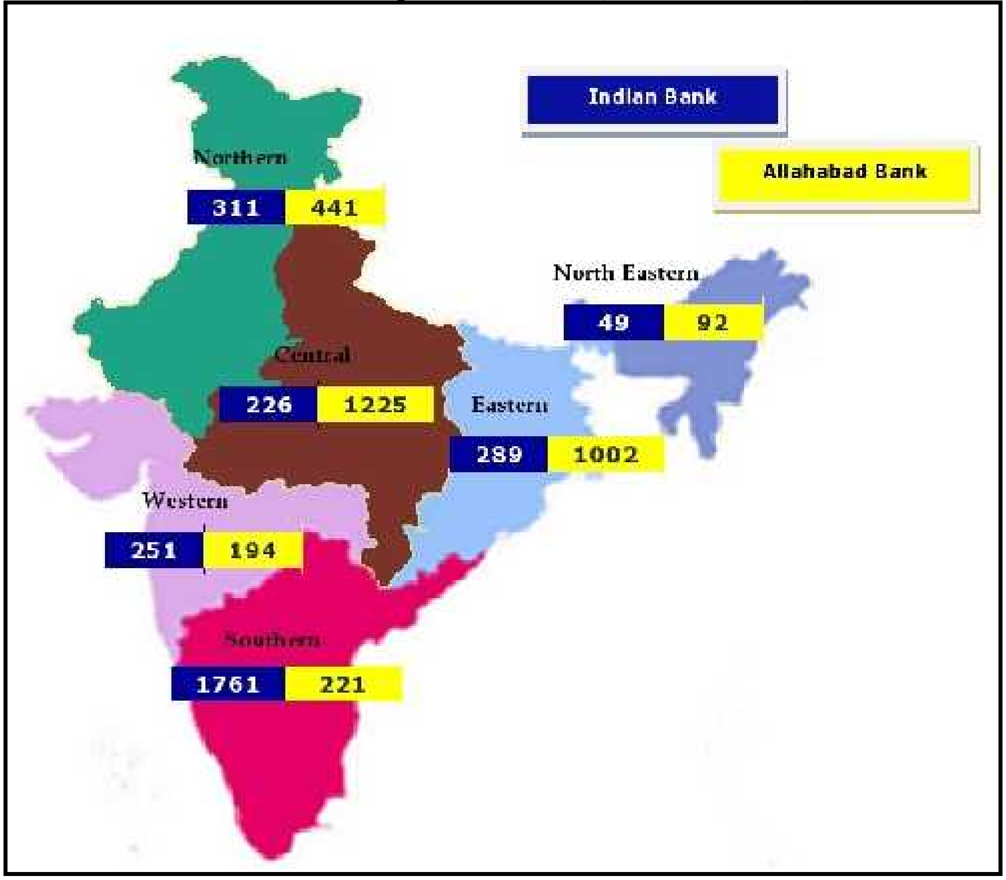
Millions	Allahabad Bank	Indian Bank
2014	544.61	480.29
2015	571.38	480.29
2016	613.80	480.29
2017	743.69	480.29
2018	844.04	480.29
2019	2,096.84	480.29
Extra Shares Allotted		241.14
Total Shares Post Merger : Indian Bank		**721.43**

Above exhibit shows, that Allahabad Bank went for a FPO during 2018-19 increasing its Subscribed Capital (no of Shares) from 844.04 million to 2,096.84 million. The Scheme of Amalgamation envisaged an exchange ratio of 115 Shares in the merged entity for every 1,000 Shares held in Allahabad Bank as a result of which the no of shares by 50.21% and became 721.43 million.

Merger of Allahabad Bank with Indian Bank: Will It Pay Off?

The merger story of both Allahabad Bank & Indian Bank began in September 2019 when, Finance Minister Nirmala Sitharaman announced the merger with the aim to form India's seventh-largest Public Sector Bank. Both the Banks started their operations as Indian Bank since 1st April 2020. The scheme of amalgamation envisaged an exchange ratio of 115 Indian Bank shares for every 1,000 shares held in Allahabad Bank. After the transmission of shares took place Shareholders Wealth dropped by 25.25%. Post merger, the total issued share capital of Indian Bank increased to Rs 7,214.27 million. The consolidation will help Indian Bank to gain strategic advantage in the Indian Banking sector due to strong presence of Allhabad Bank in the Eastern & Northern part of India. Post merger, the combined entity will operate with its increased distribution network of around 6,104 branches, total business of Rs 8,07,859 crore & 42,814 employees.

Exhibit – 32: Regional Presence (No .of Branches)



Projections: The analysts felt that Indian Bank with its product range, risk management and marketing expertise, would contribute to the smooth running of the combined entity. It was opined that the HDFC Bank with its service and expertise skills in marketing, manpower, technology, would be able to boost up the revenue of the combined entity. As per, K Ramachandran, Executive Director Allahabad Bank, "It is good in the sense that the merger will bring in a lot of more synergies because two big banks are getting merged. The two banks are roughly of equal size. The core banking platform is same for both the banks. We are predominantly present in the north and east, and they are present in the south."

The merger will position the combined entity to significantly exploit opportunities in a market globally recognized as one of the fastest growing. The merger took place with the aim to make the combined entity the 7th largest PSB in India.

Exhibit – 33: Growth Projections: Indian Bank

Millions	2014	2015	2016	2017	2018	2019	2020 E	2021 E	2022 E
Interest income	152,494	158,534	162,443	160,392	171,153	191,821	216,757	247,103	284,169
Growth (%)		3.96%	2.47%	-1.26%	6.71%	12.08%	13.00%	14.00%	15.00%
Interest expense	108,875	113,898	117,954	108,915	108,513	121,668	136,268	152,620	171,087
Growth (%)		4.61%	3.56%	-7.66%	-0.37%	12.12%	12.00%	12.00%	12.10%
Net Interest Income	43,620	44,636	44,489	51,478	62,640	70,153	80,490	94,483	113,082
Growth (%)		2.33%	-0.33%	15.71%	21.68%	11.99%	14.73%	17.39%	19.68%
Other income	13,780	13,722	17,889	22,224	24,166	18,914	21,941	25,451	29,651
Growth (%)		-0.42%	30.37%	24.23%	8.74%	-21.73%	16.00%	16.00%	16.50%
Total Income	57,400	58,358	62,378	73,702	86,806	89,067	102,430	119,935	142,732

Growth (%)		1.67%	6.89%	18.15%	17.78%	2.60%	15.00%	17.09%	19.01%
Operating Expenses	28,379	28,254	32,021	33,635	36,733	40,283	44,312	50,072	56,581
Growth (%)		-0.44%	13.33%	5.04%	9.21%	9.66%	10.00%	13.00%	13.00%
Operating Profit	29,021	30,104	30,357	40,067	50,073	48,784	58,119	69,863	86,151
Growth (%)		3.73%	0.84%	31.99%	24.97%	-2.57%	19.13%	20.21%	23.32%
Provisions	17,424	19,970	23,212	25,938	37,444	45,575	52,530	58,000	64,000
Growth (%)		14.61%	16.24%	11.74%	44.36%	21.71%	15.26%	10.41%	10.34%
Net Profit	11,596	10,135	7,145	14,129	12,629	3,209	5,589	11,863	22,151
Growth (%)		-12.60%	-29.50%	97.74%	-10.62%	-74.59%	74.14%	112.26%	86.73%

Above exhibit shows, that Indian Bank’s Interest Income is expected to increase by 1% each year since 2020. The increase in Interest Income as well as Other Income will be able to create a positive impact in both Operating Profit as well as Net Profit.

Exhibit – 34: Growth Projections: Merged Entity

Millions	2019	2020 E	2021 E	2022 E
Interest income	360,978	397,784	443,242	499,588
Growth (%)		10.20%	11.43%	12.71%
Interest expense	235,210	244,001	255,841	269,951
Growth (%)		3.74%	4.85%	5.51%
Net Interest Income	125,768	153,783	187,401	229,638
Growth (%)		22.27%	21.86%	22.54%
Other income	39,451	43,505	48,093	53,425
Growth (%)		10.27%	10.55%	11.09%
Total Income	165,219	197,287	235,494	283,062
Growth (%)		19.41%	19.37%	20.20%
Operating Expenses	88,145	96,303	106,000	112,501
Growth (%)		9.26%	10.07%	6.13%
Operating Profit	77,075	100,984	129,494	170,561
Growth (%)		31.02%	28.23%	31.71%
Provisions	156,808	170,437	182,982	196,480
Growth (%)		8.69%	7.36%	7.38%
Net Profit	-79,733	-69,453	-53,487	-25,919
Growth (%)		-12.89%	-22.99%	-51.54%

Allahabad Bank had reported a Net Loss amounting to Rs -45,881 million during FY 2017-18 which increased to Rs -82,943 million during FY 2018-19. Since, Allahabad Bank is a Loss making bank hence; it will have an impact in the performance of the merged entity in the post consolidation stage. But with the infusion of Capital from Government amounting to Rs 25,0000 Crores & proper planning the merged entity will be able to reduce its losses and become a profitable bank.

Conclusion

M & A have been one of widely used strategy used by the companies to strengthen their base, increase their profitability as well as market share. Indian Banking System is the backbone of Indian financial system & have played a pivotal role in the economic development of the country. Banks accept Deposits from customers and channelize them among the priority sectors which in turn help in development & growth of Indian Economy. Over last two decades many banks have been facing the problem of low profitability and high NPA.Foreseeing the future opportunity in the Indian Banking sector and with the aim of becoming the 7th Largest Public Sector Bank, the ministry of Finance consolidated Allahabad Bank & Indian Bank into one entity (Indian Bank).

The synergies of the Marger are as follows

1. The Merger of the two Banks will help Indian Bank to strengthen its position in the India Banking sector
2. The merger will provide Indian Bank with greater access to the Northern & Eastern part of India, thereby strengthening its presence in those regions
3. Government of India will provide Rs 2,500 crore capital to the merged entity
4. The merged entity have the leverage of the combined strengths of both Allahabad Bank with 155 years and Indian Bank with 113 years of experience for improving the quality of its portfolio, relative standing in the financial sector and its overall performance
5. Operational efficiency gains to reduce cost of lending
6. Enhanced risk appetite

The study reveals that: Indian Bank is in a better position in comparison to Allahabad Bank in terms of Revenue, Net Interest Margin, Operating Profit, Net Profit, ROE, ROTA, Segmental Performance as well as NPA Management & ALM.

The merged entity had a leverage of the combined strengths of both Indian & Allahabad Bank. But, the global crisis in the form of COVID 19 will have an impact in the business of Indian Bank. Hence it is to be seen, how well Indian Bank copes up with the increased competition and successfully achieve its targets in future. Thus, the question still remains whether this merger would succeed and realize its projected synergies.

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