# A Study on Impact of Mergers on Financial Performance and Share Prices of Selected Banking Companies

Amble Radhakrishna Gaonkar Satish Rane Namrata Bhandari S.V. Sukthankar

M.Com II Student
Assistant Professor of Commerce
Assistant Professor of Commerce
Associate Professor of Commerce
Post Graduate Department of Commerce
Government College of Arts, Science & Commerce, Khandola, Marcela Goa.

## **ABSTRACT**

Due to globalization, liberalization and technological innovation the firms in the world are facing enormous competition. To effectively face the competition firms are using an assortment of strategies to compete in the market. Strategy may include joint ventures, strategic alliance, mergers, acquisitions etc. The present study focuses on impact of merger on financial performance and share prices of selected banking companies. Banks are one of the important financial sectors which help the economy to grow. The business transactions of all the sectors are dependent on the banking sector. The study focuses on merger of selected banks from the period 2007 to 2010. The mergers of the banks taken for study are Centurion bank of Punjab with HDFC bank, Bank of Rajasthan with ICICI bank, United Western bank with IDBI bank, and Bharat Overseas bank with Indian Overseas bank. The statistics has been collected from BSE, NSE and money control websites. SPSS software is used to evaluate the financial performance of selected banks during pre & post-merger period with the help of paired sample t-test and E-views software was used to analyze to study the impact of merger on the share prices of each of the bank using GARCH regression model. The study concludes that there is no significant impact of merger on share prices during pre and post-merger period. On the day of merger shows negative impact on share prices. Ratios such as return on assets, interest expenses shows positive impact on financial performance of banking companies on the other hand net profit, retention ratio, and net interest margin shows negative impact.

Key words: banking, financial, merger and performance.

## 1. INTRODUCTION

India is appears as one of the top countries with respect to merger deals. Indian firms have been energetically mixed up in mergers. Due to globalization, liberalization and changes in the technology the firms in the world are facing huge competition. To effectively face the competition firms are using various strategies to compete in the market. Strategy may include joint ventures, strategic alliance, mergers, acquisitions etc. Mergers are most popular and common strategy used by many firms around the globe. In mergers the ownership entirely changes of the firms which are merging.

Mergers occur when two companies combine their forces together. Merger may happen between the companies which are of same size which identifies advantages of each other in terms of increasing sales, efficiencies and capabilities. The word merger is like friendly and mutually agreed. In mergers two companies equally participate in the new company. Merger is a corporate strategy use to reduce competition and increase market share by similar or different firm.

Banking is backbone of economy in the world. It is one of the essential financial sectors which help the economy as a whole. As the trade, transactions, all the sectors are totally depending on the banking sector. The development of the nation is based on the growth of banking industry. The banks which were not performing satisfactory or the banks which wanted to expand their business started merging and acquiring other banks.

### Mergers that took place during the period 2007 to 2010 were as follows:

# Centurion Bank of Punjab with HDFC Bank

The Housing Development Finance Corporation Limited (HDFC) was the first to receive an 'in principle' approval from RBI to set up a Bank in the private sector. HDFC Bank is one of India's leading banks providing a widespread variety of financial products and services to its millions of customers across various cities of India using numerous distribution channels. HDFC has various

products such as ATMs, phone banking net banking, mobile banking, wholesale banking etc. In the year 2008 Centurion Bank of Punjab merged with HDFC Bank. It has been considered as major merger in Indian banking sector. The merger took place so that it increases its presence as well to have greater capital than any other banks. HDFC has 754 branches and had got permission for more than 250 branches from RBI. Combine entity have around 1500 branches in the nation. The merger help the HDFC to become second leading private sector bank in India.

#### Bank of Rajasthan with ICICI bank

After merger of Bank of Rajasthan with ICICI bank it has become largest private sector banks in India economy which offers large numbers of banking products and financial services to corporate as well retail customers by using a variety of delivery channels. On 18th May 2010 Bank of Rajasthan merged with ICICI Bank, as the Bank of Rajasthan was suffering from financial crisis it merged with one of the largest private sector lender i.e. ICICI Bank. ICICI has 99000 crores market capitalization and it is around 25 times as large as Rajasthan. The merger would help the ICICI Bank to cover the Northern India as Bank of Rajasthan has its greater presence.

#### United Western bank with IDBI bank

Industrial Development Bank of India (IDBI) is a full service universal bank which provides a wide range of financial products and services including deposits, loans, payment services and investment solutions. It aims at consistently delivering relevant financial solutions and excellent customer service. On  $27^{th}$  September 2007 United Western bank merged with IDBI bank. RBI gave in written to United Western bank to merge with IDBI Bank as it was suffering the losses. IDBI Bank was adequately capitalized bank. The merger with United Western Bank was useful for IDBI Bank as it has increased the assets of the banks.

### Bharat Overseas Bank with Indian Overseas Bank

Indian Overseas Bank (IOB) is a public sector Bank which has 3,400 domestic branches, including 1,150 branches in Tamil Nadu, 3 extension counters, and 8 branches and offices overseas. In the year 2007 Bharat Overseas Bank merged with Indian Overseas Bank. Bharat Overseas Bank was owned by 7 banks i.e. Indian Overseas Bank, Bank of Rajasthan, Vysya Bank, Federal Bank, Karurvysya Bank, South India Bank & Karnataka Bank. After the merger Indian Overseas became 100% owner of Bharat Overseas bank.

### 2. LITERATURE REVIEW

For the purpose of knowing the research work that is undertaken on the topic in the past was conducted.

Kantamaneni Hema Divya. et al., (2018) aims to compare pre and post-merger performance of merged bank with the help of financial parameters like net profit, quick ratio, current ratio, debt to equity ratio. The research sample is taken of merger of ING VYSYA bank with Kotak Mahindra bank. The study period taken is from financial year 2011-12 to 2015-16. The main aim of the study was to analyze and evaluate the performance of Kotak Mahindra bank in terms of selected ratios. They concluded that merger was useful strategy of Kotak Mahindra bank.

Giridhari Mohanta (2018) attempted to study the financial performance for pre and post-merger period. The sample taken for study was ICICI bank and bank of Rajasthan. Period of study was of 12years in which pre-merger period was 5years and 7years post-merger. The T-test, financial ratios, standard deviation were used in study. In this study it was concluded that the post-merger performance is better than the pre-merger performance.

Mital Menapara, et al., (2018) examines the financial performance of selected companies during pre and post-merger. The sample size consist of all types of the companies from different nature of industries. Companies are selected based upon growth aspect of companies from Indian industry. The study period was10 years i.e. 5 years before and 5 years after merger. Ratio analysis and T-test analysis were used for the study. They concluded that it was possible for merged firms to turn around successfully.

K Pranathi, et al., (2016) aims to compare financial performance of pre and post-merger of Vodafone and Hutch and examine the opportunities of pre and post-merger of Vodafone mobile industry. To achieve those objectives they extracted information from various literature reviews. They conduced that there was positive impact of merger on Vodafone. It increases the presence of big Global player in India.

Abhinav Srivastava (2016) aims to evaluate the impact of acquisition on financial health and profitability of the company. The study period covers from year 2011-2015. The data collected from CMIE prowess. The main objectives of the study is to find out impact on shareholders by analyzing whether, it was right step of acquiring Ranbaxy. The study concluded that the company has stimulated in right direction by acquiring the Ranbaxy.

Ketan Kamra, et al., (2016) makes attempts to compare pre and post-acquisition financial performance based on performance ratio of the acquiring firms. The research sample taken was of pharmaceutical companies i.e. Daichi Sankyo Company limited and Abbott laboratories. The study period was taken as 3years pre and 3years post-acquisition. The tools used for study was paired two sample t-test. The outcomes depict effect on operating performance for both the companies was not significant from statistical point of view.

### 3. STATEMENT OF THE PROBLEM & SIGNIFICANCE OF THE STUDY

Extensive review of literature was conducted by referring various articles published in research journals, books & other articles were reference which revealed the following.

- i. Most of the articles referred related to single merger of banks & other companies.
- ii. Most of the articles have studied either share prices or financial performance.
- iii. No article has studied financial performance & share prices together.

By keeping all the above factors I have selected & titled topic as "A study on impact of mergers on financial performance and share prices of selected banking companies"

The study will be useful to know the impact of merger & financial performance and share prices for banking company to enable them to take appropriate decisions. The study will also help the investors to know whether the mergers are profitable. The study will also be helpful to a academicians & research to improve their knowledge.

### 4. OBJECTIVES OF THE STUDY

The objectives of the study are as follow:-

i.To study the financial performance of selected Banks during pre-merger and post-merger period.

ii.To study the impact of merger on share prices of selected Banks during pre-merger and post-merger period.

# 5. HYPOTHESIS OF THE STUDY

H0: There is no significant impact of merger on financial performance of selected Banking companies.

H0: Returns has a unit root

H0: Data is homoscedastic

H0: There is no significant pre, post & day impact of merger on share prices of selected banks.

#### 6. RESEARCH METHODOLOGY

For the purpose of study I have selected all four mergers of listed Banks taken place during 2007-10 which are shown below:

### 6.1 Sample Size:

Table No: 1 List of banks selected for the study

Sr.No	Acquirer company	Target Company	Year
1	HDFC bank	Centurion bank of Punjab	2008
2	ICICI bank	Bank of Rajasthan	2010
3	IDBI bank	United Western bank	2007
4	Indian overseas bank	Bharat Overseas bank	2007

**6.2 Source:** Compiled using secondary data

For the purpose of analyzing financial performance of selected mergers 5years pre and 5 years post-merger period is considered. The variables to analysis the financial performance used are net profit, operating profit, return on investment, current ratio, quick ratio, inventory turnover ratio, assets turnover ratio, interest coverage ratio, debt equity ratio, proprietary ratio, dividend pay-out ratio.

### IJEMR - September 2019 - Vol 9 Issue 09 - Online - ISSN 2249-2585 Print - ISSN 2249-8672

For analyzing impact on share prices on selected banking 100 days pre and 100 days post-period is considered. To study the impact on share prices the dependent variable is stock returns & independent variables are the day impact, pre impact & post impact.

To study the impact on the share prices of selected banking companies ADF test is done to check the stationary of the data and to verify whether the data is homoscedastic or not, heteroskedasticity test was done. The data was analyzed by using E-views software & GARCH regression model is used. To analyze the financial performance during pre & post-merger period of the banks SPSS tool has been used by paired t-test.

The study is based on secondary data.

## 6.3 Data collection: Primary data

Unstructured personal interview: The data for getting exactly both the history &contemporary scenario in working of banks, mergers, acquisitions & it's working were collected by interviewing bank officials, financial consultants, charter accountant & academicians.

### 6.4 Data collection: secondary data:

Library source: Secondary data in the form of historical data was collected from banks, govt. institutions. For understanding the theoretical aspects published source in various library were used as follows:

- 1. Goa University library Talegaon
- 2. Krishnadasshana Goa State central library Panjim
- 3. Govt. college Khandola library

### 6.5 Data collection: Other sources

Various websites related to the topic where used to collect the information as under:

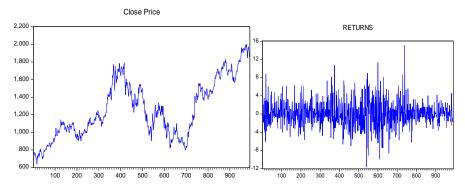
NSE.India.com, BSE.India.com, Moneycontrol.com.

#### 7. DATA ANALYSIS AND INTERPRETATION

# Impact of Merger on Share Prices of Selected of Banks

### A. Housing Development Finance Corporation Limited (HDFC)

**Graph No: 1** Graphical representation of closing price & stock returns of HDFC bank during pre and Post merger period.



Source: Compiled using E-view software

The above left hand side graph shares the closing prices & right hand side graph shows stock returns of HDFC bank during pre & post-merger period.

### Augmented Dickey-Fuller test (ADF) for checking the stationarity of Data

H0: RETURNS has a unit root (Data is non-stationary)

H1: Returns don't have unit root (Data is stationary)

Table No: 2 Result of unit root test

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	-29.35520	0.0000

Source: Compiled using E-view software

## IJEMR - September 2019 - Vol 9 Issue 09 - Online - ISSN 2249-2585 Print - ISSN 2249-8672

The ADF value is 0.000 which is less than 0.05 at 5% level of significance. Hence we reject the null hypothesis which indicates that the data don't have unit root hence the data is stationary.

# **Heteroskedasticity Test: ARCH**

Ho: Data is homoscedastic H1: Data is heteroscedastic

Table No: 3Result of Heteroskedasticity Test ARCH

	0.066061	D 1 D/1 00E)	0.0=00
F-statistic	0.866361	Prob. F(1,987)	0.3522
Obs*R-squared	0.867355	Prob. Chi-Square(1)	0.3517

Source: compiled using E-view software

P value is more than 0.05 at 5% level of significance i.e. 0.3517 hence we fail to reject the null hypothesis which means the data is homoscedastic.

# To study the impact of merger on the share prices of HDFC bank on day, pre and post-merger period.

Table No: 4 Result of GARCH regression model

Variable	Coefficient	$\mathbb{R}^2$	Probability (P)
Day effect	-7.558384	0.004512	0.0000
Pre effect	-0.932702	0.004512	0.2307
Post effect	3.790034	0.004512	0.1912

**Source:** compiled using E-view software

R² is 0.004512 which means 0.4512% of variation in stock returns is due to the merger of Centurion Bank of Punjab with HDFC bank. P value for day effect is 0.0000 which is less than 0.05 at 5% level of significance hence we reject the null hypothesis which means that there is significant impact of merger on share prices of HDFC bank on the day of merger. Coefficient value for day effect is negative i.e. -7.558 which shows that there is a negative impact on stock return on day of merger.

At 5% level of significance P value for pre effect & post effect of merger is 0.2307 & 0.1912 respectively. Which is more than 0.05 hence we fail to reject the null hypothesis which indicates that there is no significant pre & post impact of merger on the share prices of HDFC bank.

# HDFC bank financial performance analysis using paired sample T-test during pre & post-merger period

Table No: 5 Result of paired sample T-test

Variables	Pre	Post	Significance
Net profit	15.776	18.73	0.148
Operating profit	12.682	2.128	0.018
Return on assets	1.222	1.53	0.02
Return on equity	16.324	16.898	0.757
Net interest margin	4.826	4.062	0.211
Interest income	7.868	8.21	0.456
Interest expense	3.034	4.142	0.006
EV per net sale	13.57	13.836	0.687
Retention ratio	80.194	80.682	0.226
Earning yield	0.04	0.042	0.778

**Source**: compiled using SPSS

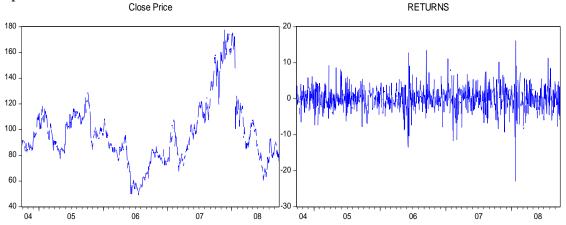
At 10% level of significance certain financial ratios like operating profit, return on asset, interest expenses i.e. 0.018, 0.02, and 0.006 has significance value less than 0.1. Hence we reject the null hypothesis which indicates that there is significant impact of HDFC bank merger on the above ratios.

Post-merger mean values for return on assets, interest expenses i.e. 1.53, 4.142 is more than premerger mean values i.e. 1.222 & 3.034 which indicates that there is positive impact of merger on these ratios. There is negative impact of merger during post-merger on operating profit i.e. 2.128 which is less than pre-merger i.e. 12.682 which shows decrease in the profitability of HDFC bank after merger. Significance value of net profit, return on equity, net interest margin, interest income, EV per net sale, retention ratio, earning yield i.e. 0.148, 0.757, 0.211, 0.456, 0.687,

0.226, 0.778 which are more than 0.1 at 10% level of significance hence we fail to reject the null hypothesis which indicates that there is no significant impact of merger on the above ratios of HDFC bank.

# **B.Industrial Development Bank of India (IDBI)**

**Graph No: 2** Graphical representation of closing price & stock returns of IDBI during pre and Post merger period.



Source: Compiled using E-view software

The above left hand side graph shares the closing prices & right hand side graph shows stock returns of IDBI during pre & post-merger period.

## Augmented Dickey-Fuller test (ADF) for checking the stationarity of data

H0: RETURNS has a unit root (Data is non-stationary)

H1: Returns don't have unit root (Data is stationary)

Table No: 6 Result of unit root test

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	-28.35440	0.0000

Source: Compiled using E-view software

The ADF value is 0.000 which is less than 0.05 at 5% level of significance. Hence we reject the null hypothesis which indicates that the data don't have unit root hence the data is stationary.

# **Heteroskedasticity Test: ARCH**

Ho: Data is homoscedastic H1: Data is heteroscedastic

Table No: Result of Heteroskedasticity Test ARCH

F-statistic	9.31	Prob. F(1,998)	0.9923
Obs*R-squared	9.32	Prob. Chi-Square(1)	0.9923

**Source:** compiled using E-view software

P value is more than 0.05 at 5% level of significance i.e. 0.9923 hence we fail to reject the null hypothesis which means the data is homoscedastic.

To study the impact on the share prices of IDBI bank on merger day, pre and post-merger period.

Table No: 7 Result of GARCH regression model

Variable	Coefficient	R <sup>2</sup>	Probability (P)
Day effect	16.49250	0.010985	0.6740
Pre effect	1.202875	0.010985	0.0676
Post effect	0.339069	0.010985	0.4423

**Source:** compiled using E-view software

R<sup>2</sup> is 0.010985 which means 1.0985% of variation in stock returns is due to the merger of IDBI.

P value for day, pre & post-merger is 0.6740, 0.0676 & 0.4423 which is more than 0.05 at 5% level of significance hence we fail to reject the null hypothesis which means that there is no impact of merger on share prices of IDBI on the day, pre & post-merger period.

# IDBI bank financial performance analysis using paired sample T-test during pre & post-merger period

Table No: 8 Result of paired sample T-test

Variables	Pre	Post	Significance
Net profit	7.988	7.242	0.43
Operating profit	4.266	-0.216	0.109
Return on assets	0.562	0.55	0.874
Return on equity	8.182	11.152	0.087
Net interest margin	1.376	1.678	0.208
Interest income	7.572	7.636	0.967
Interest expense	6.19	5.948	0.86
EV per net sale	13.018	11.742	0.62
Retention ratio	80.436	77.27	0.011
Earning yield	0.09	0.158	0.041

Source: Compiled using SPSS

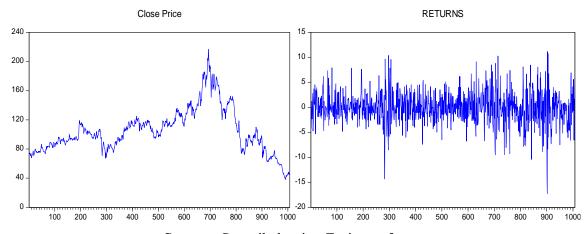
At 10% level of significance financial ratios such as return on equity 0.087, retention ratio 0.011 and earning yield ratio 0.041 has a significance value less than 0.1. Hence we reject the null hypothesis which indicates that there is significant impact of merger on the above mention ratios of IDBI bank.

Post-merger mean values for return on equity 11.152, earning yield 0.158 is more than premerger i.e. 8.182 & 0.09 which indicates that there is a significant positive impact of merger on the above ratio which also suggest that most part of net profit is distributed among the owners in the form of dividend as result of which there is a negative impact of merger on retention ratio as their post-merger mean value i.e. 77.27 which is less than pre-merger i.e. 80.436 respectively.

Significance value from ratios such as net profit 0.43, operating profit 0.109, and return on assets 0.874, net interest margin 0.208, interest income 0.967, and interest expenses 0.86, EV per net sale 0.62 has more than 0.1 at 10% level of significance hence we fail to reject the null hypothesis which shows that there is no significant impact of merger on the above mention ratios.

### C. Indian Overseas Bank

**Graph No:3** Graphical representation of closing price & stock returns of Indian Overseas Bank during pre and Post merger period.



Source: Compiled using E-view software

The above left hand side graph shares the closing prices & right hand side graph shows stock returns of Indian Overseas Bank during pre & post-merger period.

## Augmented Dickey-Fuller test (ADF) for checking the stationarity of Data

H0: RETURNS has a unit root (Data is non-stationary)

H1: Returns don't have unit root (Data is stationary)

**Table No: 9** Result of unit root test

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	-28.69998	0.0000

**Source:** Compiled using E-view software

The ADF value is 0.000 which is less than 0.05 at 5% level of significance. Hence we reject the null hypothesis which indicates that the data don't have unit root hence the data is stationary.

### **Heteroskedasticity Test: ARCH**

Ho: Data is homoscedastic H1: Data is heteroscedastic

Table No: 10 Result of Heteroskedasticity Test ARCH

F-statistic	2.447723	Prob. F(1,1003)	0.1180
Obs*R-squared 2.446633		Prob. Chi-Square(1)	0.1178

**Source:** compiled using E-view software

P value is more than 0.05 at 5% level of significance i.e. 0.1178 hence we fail to reject the null hypothesis which means the data is homoscedastic.

# To study the impact on the share prices of Indian overseas bank on merger day, pre and post-merger period.

**Table No: 11** Result of GARCH regression model

Variable	Coefficient	$R^2$	Probability (P)
Day effect	-5.758584	0.008920	0.5390
Pre effect	-0.190267	0.008920	0.3584
Post effect	-0.378688	0.008920	0.0957

**Source:** compiled using E-view software

R<sup>2</sup> is 0.008920 which means 0.892% of variation in stock returns is due to the merger of Indian overseas bank.

P value for day, pre & post-merger is 0.5390, 0.3584 & 0.0957 which is more than 0.05 at 5% level of significance hence we fail to reject the null hypothesis which means that there is no impact of merger on share prices of Indian overseas bank on the day pre & post-merger period.

# Indian overseas bank financial performance analysis using paired sample T-test during pre & post-merger period

Table No: 12 Result of paired sample T-test

Variables	Pre	Post	Significance
Net profit	14.174	7.204	0.028
Operating profit	15.602	0.016	0.015
Return on assets	1.214	0.582	0.019
Return on equity	26.07	9.00	0.016
Net interest margin	4.282	2.644	0.00
Interest income	8.64	8.158	0.202
Interest expense	4.354	5.51	0.007
EV per net sale	10.234	11.08	0.16
Retention ratio	79.336	70.24	0.049
Earning yield	0.164	0.204	0.645

Source: Compiled using SPSS

At 10% level of significance ratios like net profit 0.028, operating profit 0.015, return on assets 0.019, return on equity 0.016, net interest margin 0.00, interest expense 0.007, and retention ratio 0.049 has significance value less than 0.1. Hence we reject the null hypothesis which indicates that there is significant impact of merger on Indian overseas on the above ratios.

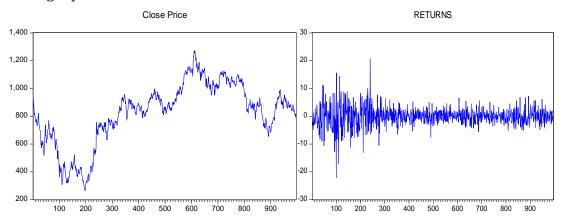
Post-merger mean value for interest expenses 5.51 is more than pre-merger i.e.4.354 which indicates that there is positive impact as its total deposits has increased which has result into the increase in interest expenses.

There is negative impact on post-merger ratios such as net profit, operating profit, return on assets, return on equity, net interest margin, income interest, retention ratio i.e. 7.204, 0.016, 0.582, 9.00, 2.644, 8.158, 70.24 which are less than pre-merger mean values i.e. 14.174, 15.602, 1.214, 26.07, 4.282, 8.64, 79.336 respectively.

Significance value of ratios such as interest income 0.202, EV per net sale 0.16, earning yield 0.645 is more than 0.1 at 10% level of significance. Hence we fail to reject the null hypothesis which indicates that there is no significant impact of merger on Indian overseas bank from above stated ratios.

### D. Industrial Credit and Investment Corporation of India (ICICI)

**Graph No: 4** Graphical representation of closing price & stock returns of ICICI bank during pre and Post merger period.



Source: Compiled using E-view software

The above left hand side graph shares the closing prices & right hand side graph shows stock returns of ICICI bank during pre & post-merger period.

### Augmented Dickey-Fuller test (ADF) for checking the stationarity of Data

H0: RETURNS has a unit root (Data is non-stationary)

H1: Returns don't have unit root (Data is stationary)

Table No: 12 Result of unit root test

	t-Statistic	Prob.
Augmented Dickey-Fuller test statistic	-28.65977	0.0000

**Source:** Compiled using E-view software

The ADF value is 0.000 which is less than 0.05 at 5% level of significance. Hence we reject the null hypothesis which indicates that the data don't have unit root hence the data is stationary.

### **Heteroskedasticity Test: ARCH**

Ho: Data is homoscedastic

H1: Data is heteroscedastic

 Table No: 13 Result of Heteroskedasticity Test ARCH

F-statistic	0.505095	Prob. F(1,992)	0.4774
Obs*R-squared	0.505855	Prob. Chi-Square(1)	0.4769

**Source:** Compiled using E-view software

P value is more than 0.05 at 5% level of significance i.e. 0.1178 hence we fail to reject the null hypothesis which means the data is homoscedastic.

To study the impact on the share prices of ICICI bank on merger day, premerger effect and post-merger effect.

Table No: 14 Result of GARCH regression model

Variable	Coefficient	$\mathbb{R}^2$	Probability (P)
Day effect	5.088437	0.007559	0.1539
Pre effect	-0.043293	0.007559	0.4256
Post effect	-0.104377	0.007559	0.0526

Source: compiled using E-view software

R<sup>2</sup> is 0.007559 which means 0.7559% of variation in stock returns is due to the merger of Indian overseas bank.

At 5% level of significance P value for day, pre & post-merger is 0.1539, 0.4256 & 0.0526 respectively which is more than 0.05 hence we fail to reject the null hypothesis which indicates that there is no significant day, pre & post impact of merger on the share prices of ICICI bank.

# ICICI bank financial performance analysis using paired sample T-test during pre & post-merger period.

**Table No: 15** Result of paired sample T-test

Variables	Pre	Post	Significance
Net profit	9.736	22.318	0.001
Operating profit	-1.974	-51.766	0.041
Return on assets	0.79	1.354	0.003
Return on equity	9.344	13.266	0.049
Net interest margin	3.514	2.396	0.001
Interest income	8.148	6.364	0.007
Interest expense	4.744	3.964	0.021
EV per net sale	11.004	14.088	0.008
Retention ratio	67.334	75.376	0.005
Earning yield	0.052	0.07	0.167

**Source:** compiled using SPSS

At 10% level of significance ratios like net profit ratio, operating profit ratio, return on asset ratio, return on equity ratio, net interest margin ratio, interest income ratio, interest expense ratio, EV per net sale ratio and retention ratio has significance value i.e. 0.001, 0.041, 0.003, 0.049, 0.001, 0.007, 0.021, 0.008 and 0.005 respectively which is less than 0.10 hence we reject the null hypothesis indicates that there is significant impact of merger on the above mention ratios of ICICI bank during the post-merger period.

Post-merger mean value of ratios such as net profit ratio 22.318, return on assets 1.354, return on equity 13.266, EV per net sale ratio 14.088 and retention ratio 75.376 which is increased as compared with pre-merger i.e. 0.79, 9.344, 11.004, 67.334 which indicates that there is positive impact of merger. On the above mention ratio which also state that increase in the profitability position of ICICI bank due to the merger as a result of which there has been increase in ratios like return on assets, return on equity, EV per net sales & retention ratio.

There is negative impact during post-merger on certain ratios like operating profit ratio -51.766, net interest margin 2.396, interest income 6.364, and interest expenses 3.964 which is less than pre-merger mean value i.e. -1.974, 3.514, 8.148, 4.744 respectively which shows decrease in credit deposits ratio of bank during post-merger period.

### 8. FINDINGS

There is significant negative impact of merger on day whereas pre and post-merger there is no significant impact of merger on HDFC bank. There is a positive impact return on assets & interest expenses where as it shows negative impact on operating profits of the bank.

There is no significant impact of day, pre & post-merger on IDBI bank. Earning yield ratio shows positive after the merger but retention ratio shows negative impact.

There is no significant impact of day, pre & post-merger on Indian overseas bank. There is significant negative impact on operating profit, return on assets, return on equity, net interest margin, retention ratio but interest expense shows positive impact.

There is no significant impact of day, pre & post-merger on ICICI bank. Financial ratios like net profit return on assets return on equity, retention ratio shows positive impact but operating profit,

### IJEMR - September 2019 - Vol 9 Issue 09 - Online - ISSN 2249-2585 Print - ISSN 2249-8672

net interest margin, interest income & interest expense shows negative impact on company's financial performance.

#### 9. CONCLUSION

The study concludes that there is no significant impact of merger on share prices during pre and post-merger period. The day impacts for banking companies are negative. Ratios such as return on assets, interest expenses shows positive impact on financial performance of banking companies on the other hand net profit, retention ratio, and net interest margin shows negative impact.

### 10. LIMITATIONS OF THE STUDY

The research is based on secondary data which has been collected from various websites. So the reliability and findings are contingent upon the data published in various reports. The sample size of the study is also small i.e. it focuses only the selected 4 banking companies. The limitations of statistical tools used cannot be ruled out.

#### 11. REFERENCES

- Abhinav Srivastava (2016) Opportunities and Threats of Mega Merger: A Case Study of Sun Pharmaceuticals and Ranbaxy Laboratories, International Journal of Commerce and Management Research, Volume 2; Issue 8; August 2016, ISSN: 2455-1627.
- Devarajappa S. (2012) Mergers In Indian Banks: A Study on Mergers of HDFC Bank Ltd And Centurion Bank of Punjab Ltd., International Journal of Marketing, Financial Services & Management Research Vol.1 Issue 9, September 2012, ISSN 2277 3622.
- Dr. D. Seethanaik (2015) Merger and Acquisitions in Telecom Industry, International Journal of Research in Finance and Marketing Volume 5, Issue 9 (September, 2015) ISSN 2231-5985.
- Dr. S. Nirmala, Et Al., (2015) Financial Impact of Cross Border Merger And Acquisition On It Companies: With Special Reference To Infosys, International Journal Of Informative & Futuristic Research, Volume 2 Issue 6 February 2015, ISSN: 2347-1697.
- Dr. Yusuf Ali Khalaf Al-Hroot (2016) The Impact of Mergers On Financial Performance Of The Jordanian Industrial Sector, International Journal Of Management & Business Studies IJMBS Vol. 6, Issue 1, Jan March 2016 ISSN: 2230-9519.
- Giridhari Mohanta (2018) Pre and Post-Merger Financial Performance Analysis of ICICI Bank: With Reference To Bank of Rajasthan VSRD International Journal of Business and Management Research, Vol. Viii Issue V May 2018.
- https://www.hdfcbank.com/
- https://www.icicibank.com/
- https://www.nseindia.com/
- https://www.bseindia.com/
- https://www.iob.in/
- https://www.moneycontrol.com/
- https://m.idbibank.com/smart-index.asp