

# Pre & Post- Acquisition Effects on Financial Performance of a Bank: Case of IDBI Bank Ltd.

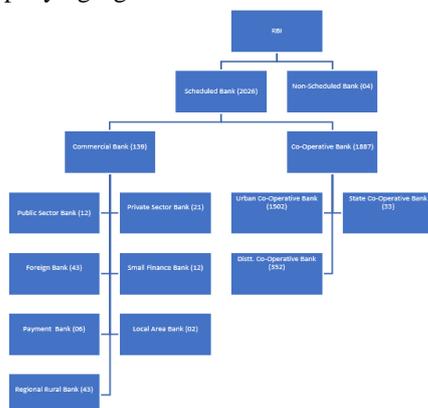
Reena Rani Bansal, N.P.Singh  
MVN University

**Abstract:** This paper compares the pre and post acquisition effects on financial performance of an acquired bank i.e. IDBI bank ltd. for a period of 10 years from 2015 to 2024. This evaluation has been done by using CAMELS Analysis, the latest model of financial analysis and by using DuPont analysis having 3-steps and 5-steps model. The knowledge of financial performance helps in predicting, comparing and evaluating the earning ability of the bank. The data is collected from various secondary sources such as annual reports of the bank, business reports, magazines and financial websites such as money control and yahoo finance. The findings of the study show that There is a good impact of acquisition on the capital adequacy, Assets Quality, earnings of the bank were also increased and Net NPA is also decreased. Overall this study shows positive effects of acquisition on the financial performance of IDBI Bank.

**Keywords:** Acquisition, Capital Adequacy, Asset quality, Management capability, Earnings, Liquidity, Sensitivity to market risk, DuPont Analysis.

## 1.0 INTRODUCTION

The Indian banking industry is an essential component of the economic development of the country. Over the past 20 years, there have been several improvements to the Indian banking sector. The two primary division of the Indian banking industry are scheduled banks and non - scheduled banks. The further classification of scheduled and non- scheduled banks is depicted in the accompanying figure.



Source: (Bansal and Singh, 2024)

Fig 1: Structure of banks in India

### 1.1.0 Acquisition

An acquisition is an activity where a firm takes a controlling ownership interest in another firm, a legal subsidiary of another firm or selected assets of another firm. This may involve the purchase of another firm's assets or stock (Singh and Das, 2018). The acquisition is one of the important tools to achieve the growth. Further, the merger and acquisition also serve the purpose of expansion, reducing the level of competition and creation of a large entity. This study is carried out with the objective to know the Pre & post acquisition comparative position of long term profitability with respect to selected Indian Bank i.e. IDBI.

#### 1.1.1 Definitions of Acquisition

Acquisition makes sizeable contribution to the banking sector in India and defined by different research experts in their own way. Few definitions are listed in the following:

**Definition 1:** Acquisition is the combination of two or more companies generally by offering the stockholders of one company securities in the acquiring company in exchange for the surrender of their stock (Godbole, 2013).

**Definition 2:** Acquisition is a situation whereby one company purchases most or all of another company's shares in order to take control (Sethi and Sahoo, 2021).

**Definition 3:** An acquisition is the act of taking over the controlling interest in the share capital of a smaller entity from a bigger entity (Sinha and Kaushik, 2010).

**Definition 4:** Acquisition refers to the process of purchasing a rival business and integrating it into the parent organization. This is

accomplished by paying the acquired firm, the value of its capital and depending upon the circumstances, a premium over the capital amount (Sengar et al., 2021).

Definition 5: An acquisition is a financial transaction that occurs when one business acquires the majority or all of its target's shares (Othman et al., 2024).

## 1.2 The Journey of IDBI

This section presents phases of IDBI which was set up in 1964 as DFI. Later on it was transformed as commercial public sector bank followed by private sector bank. During this journey IDBI had passed through many phases. A brief of these phases were analysed & present in the following subsections.

### 1.2.1 Industrial Development Bank of India (IDBI)

Industrial Development Bank of India (IDBI) was created under Industrial Development bank of India Act, 1964 as a Development Financial Institution (DFI). It was regarded as a Public Financial

Institution in terms of the provisions of Section 4A of the Companies Act, 1956. It functioned as a DFI for 40 years until 2004 when it was transformed into a bank ([www.idbi.in](http://www.idbi.in)) & ([www.goodreturns.in](http://www.goodreturns.in)).

#### 1.2.1.1 Phase I (IDBI Ltd.)

In response to the felt need and on commercial prudence, it was decided to transform IDBI into a Bank. For the purpose, Industrial Development Bank (Transfer of Undertaking and Repeal) Act, 2003 [Repeal Act] was passed repealing the Industrial Development Bank of India Act, 1964. On September 15, 2004, a new corporation called Industrial Development Bank of India Limited (IDBI Ltd.) was created as a government company under the Companies Act, 1956, in accordance with the requirements of the Repeal Act ([www.idbi.in](http://www.idbi.in)). In terms of the provisions of the Repeal Act, a new company under the name of Industrial Development Bank of India Limited (IDBI Ltd.) was incorporated as a Govt. Company under the Companies Act, 1956 on September 15, 2004 ([www.idbi.in](http://www.idbi.in)) & (Patil, 2012).

Table 1: Key information of IDBI Bank

|  |                       |
|--|-----------------------|
| Incorporation Date                         | 15/09/2004            |
| Corporate Identification Number(CIN)       | L65190MH2004GOI148838 |
| Registration Number                        | 148838                |
| Registered Office                          | Maharashtra, India    |
| Listed on                                  | BSE, NSE              |
| BSE Code                                   | 500116                |
| NSE Code                                   | IDBI                  |
| ISIN                                       | INE008A01015          |
| Source: Official website of IDBI bank ltd. |                       |

#### 1.2.1.2 Phase II (Merger of United Western bank with IDBI Ltd.)

The United Western bank Ltd. (UWB), a Satara based private sector bank was placed under moratorium by RBI. RBI and Govt. of India amalgamated UWB with IDBI Ltd. in terms of the provisions of Section 45 of the Banking Regulation Act, 1949. The merger came into effect on October 03, 2006 ([www.idbi.in](http://www.idbi.in)) and (Chatterjee, 2006)

#### 1.2.1.3 Phase III (Change of name of IDBI Ltd. to IDBI Bank Ltd.)

With effect from May 7, 2008, the Bank's name was changed to IDBI Bank Limited in order to more

accurately reflect its expanded business operations. Fresh Certificate of Incorporation is issued by Registrar of Companies, Maharashtra ([www.idbi.in](http://www.idbi.in)) and ([www.moneycontrol.com](http://www.moneycontrol.com)).

#### 1.2.1.4 Phase IV (Merger of IDBI Home Finance Ltd. and IDBI Gilts with IDBI Bank Ltd.)

Two wholly owned subsidiaries IDBI Home Finance Ltd. and IDBI Gilts Ltd. were amalgamated with IDBI Bank Ltd. It was done under Section 391-394 of the Companies Act, 1956 vide Government of India, Ministry of Corporate Affairs order dated April 08, 2011 ([www.idbi.in](http://www.idbi.in)).

#### 1.2.1.5 Phase V (Re-categorization of IDBI Bank Ltd. as a Private Sector Bank)

LIC of India acquire 51% controlling stake in IDBI Bank on January 21, 2019 making it the majority shareholder and promoter (with management control) of the Bank. On January 21, 2019, Life Insurance Corporation of India acquired 51% of IDBI Bank Limited's total paid-up equity share capital the bank has been reclassified by the RBI as a "Private Sector Bank" for regulatory reasons. (www.idbi.in).

## 2.0 IDBI BANK LTD. AND LIC – ACQUISITION

This section represents the various aspects of acquisition of IDBI Bank Ltd. and LIC. It includes consultation of various legal authorities, pre and post acquisition shareholding pattern, and structure of board of directors of IDBI Bank Ltd. The deal between IDBI Bank Ltd. and LIC is also mentioned below.

### 2.1 Consultation of Various Legal Institutions on IDBI Bank Ltd. and LIC – Acquisition

In this section the role of Competition Commission of India (CCI), Securities and Exchange Board of India (SEBI), Finance Ministry, High Court and Shareholders on the acquisition of IDBI Bank Ltd. by LIC are presented in the following sub sections.

#### 2.1.1 Competition Commission of India (CCI) on IDBI Bank Ltd. & LIC Acquisition

Competition Commission of India (CCI) Act's Sections 5 and 6 address merger and acquisition regulations in India. Following the resolutions authorized by the LIC Board of Directors on July 16, 2018, and September 4, 2018, LIC ("Acquirer") filed a notification with CCI under Section 6(2) of the Competition Act, 2002, on October 15, 2018. On November 22, 2018, the CCI authorized Life Insurance Corporation of India's (LIC), purchase of a 51% stake and managerial control rights in IDBI Bank Limited (Jaiswar, 2019).

#### 2.1.2 SEBI on IDBI Bank Ltd. & LIC Acquisition

The Acquirer (LIC) and its directors, in compliance with the provisions of Regulation 22(2A) of the SEBI, SAST (Substantial Acquisition of Shares and Takeovers) Regulations approach SEBI to acquire stake in IDBI Bank Ltd. Consequently, on December 28, 2018 LIC had acquired 2,38,76,17,322 Equity Shares at a price of Rs 60.73 per share (inclusive of premium of Rs 50.73 per

share) aggregating to Rs 145000 million forming part of the Preferential Issue, for which shareholder's approval was obtained through Postal Ballot on November 7, 2018, by way of allotment of Equity Shares. Such Equity Shares were kept in a separate demat escrow account in compliance with Regulation 22 (2A) of SEBI (SAST) Regulations (www.sebi.gov.in), (Vashisht, 2018).

#### 2.1.3 Ministry of Finance on IDBI Bank Ltd. & LIC Acquisition

In 2016, the Finance Minister, in his Budget Speech announced that the Government will continue to pursue the IDBI Bank's reform process. It would also take into consideration the possibility of lowering its holding below 50% ( ). In light of this revelation, LIC requested authorization from the Insurance Regulatory and Development Authority of India (IRDAI) to acquire a majority share in IDBI Bank Ltd. By approval from IRDAI, LIC indicated interest in purchasing a 51% controlling position in IDBI Bank. Following its Board's review of this offer, the bank then requested the Government's decision about the Government's share dropping below 51% as a consequence of the planned purchase (Tripathy, 2018). Consequently, by approval of IRDAI, LIC requesting Ministry of Finance, GOI to reduce its shares holding by 51%.

#### 2.1.4 High Court and Supreme Court on IDBI Bank Ltd. & LIC Acquisition

The Allahabad High Court held that the Government of India (GOI) and LIC cannot be considered to be 'persons acting in concert' in this matter, and the price being offered by LIC is correct. The All India IDBI Officers Association (AIIOA) had challenged the LIC's move to acquire 51% stake in IDBI Bank in the Delhi high court. But Supreme Court said that IRDAI has the powers to give relaxations in specific cases if they are justified (Punj, 2019).

#### 2.1.5 IRDAI on IDBI Bank Ltd. and LIC Acquisition

The government is keen on selling a 43% stake in IDBI Bank Ltd. to LIC. It will be an acquisition under the provisions of the LIC Act. However, the Insurance Act currently bars an insurer from acquiring more than 15 % stake in any company. The IRDAI has the authority to grant an exemption,

which would be crucial in this case. According to the report, the insurer could sell out around Rs 10,500 crore for the acquisition. This could increase LIC's total stake in the IDBI Bank Ltd. from the current 8% to 51% (Moneycontrol.com), (Saha, 2018).

2.2 Shareholding pattern of IDBI Bank Ltd.

Shareholding pattern of IDBI Bank Ltd. for the pre acquisition period as well as for the post acquisition period is given in Table 2.

Table 2: Shareholding pattern of IDBI Bank

| Shareholding Pattern (%)                         | 2024                    | 2023  | 2022  | 2021  | 2020  | 2019                   | 2018  | 2017  | 2016  | 2015  |
|--|-------------------------|-------|-------|-------|-------|------------------------|-------|-------|-------|-------|
|  | Post Acquisition Period |       |       |       |       | Pre Acquisition Period |       |       |       |       |
| <b>(A) Promoter and promoter group</b>           |                         |       |       |       |       |                        |       |       |       |       |
| a) Individual/ HUF                               | 0.00                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00                   | 0.00  | 0.00  | 0.00  | 0.00  |
| <b>b). Government</b>                            |                         |       |       |       |       |                        |       |       |       |       |
| i). Present of India                             | 45.48                   | 45.48 | 45.48 | 45.48 | 47.11 | 46.46                  | 80.96 | 73.98 | 73.98 | 80.16 |
| <b>c). Financial Instaurations/ Banks</b>        |                         |       |       |       |       |                        |       |       |       |       |
| LIC  | 49.23                   | 49.23 | 49.23 | 49.23 | 51.00 | 51.00                  | 0.00  | 0.00  | 0.00  | 0.00  |
| d). Any Other                                    | 0.00                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00                   | 0.00  | 0.00  | 0.00  | 0.00  |
| Total (A)  | 94.71                   | 94.71 | 94.71 | 94.71 | 98.11 | 97.46                  | 80.96 | 73.98 | 73.98 | 80.16 |
| <b>(B) Public</b>                                |                         |       |       |       |       |                        |       |       |       |       |
| i). Mutual Funds                                 | 0.01                    | 0.01  | 0.01  | 0.04  | 0.02  | 0.07                   | 0.39  | 0.09  | 0.01  | 0.04  |
| ii). Foreign Portfolio                           | 0.45                    | 0.22  | 0.03  | 0.09  | 0.02  | 0.10                   | 1.71  | 2.53  | 2.59  | 2.58  |
| iii).Financial Institutions/ Banks               | 0.02                    | 0.01  | 0.24  | 1.40  | 0.03  | 0.04                   | 0.50  | 0.73  | 0.88  | 0.92  |
| iv). Insurance Company (LIC and other co.)       | 0.13                    | 0.14  | 0.12  | 0.12  | 0.12  | 0.17                   | 11.26 | 14.58 | 15.13 | 8.08  |
| v). Resident Individuals share capital > 2 lakhs | 2.02                    | 2.06  | 2.05  | 2.16  | 1.14  | 1.37                   | 2.99  | 5.10  | 5.14  | 5.18  |
| vi).Resident Individuals share capital < 2 lakhs | 1.85                    | 2.02  | 1.66  | 0.76  | 0.23  | 0.22                   | 0.81  | 1.07  | 0.87  | 1.41  |
| vii). Clearing members                           | 0.00                    | 0.00  | 0.04  | 0.16  | 0.02  | 0.11                   | 0.16  | 0.17  | 0.10  | 0.05  |
| viii). IEPF                                      | 0.08                    | 0.08  | 0.06  | 0.05  | 0.04  | 0.03                   | 0.07  | 0.00  | 0.00  | 0.00  |
| ix). HUF   | 0.15                    | 0.15  | 0.14  | 0.13  | 0.05  | 0.05                   | 0.10  | 0.17  | 0.16  | 0.16  |
| x). Body Corporation                             | 0.44                    | 0.44  | 0.00  | 0.22  | 0.00  | 0.00                   | 0.00  | 0.00  | 0.00  | 1.12  |
| xi). NRIs  | 0.12                    | 0.00  | 0.00  | 0.00  | 0.00  | 0.00                   | 0.00  | 0.00  | 0.00  | 0.00  |
| Total (B)  | 5.29                    | 5.29  | 5.29  | 5.29  | 1.89  | 2.54                   | 19.04 | 26.02 | 26.02 | 19.84 |
| Total (A+B)                                      | 100                     | 100   | 100   | 100   | 100   | 100                    | 100   | 100   | 100   | 100   |
| Source: Annual reports of IDBI Bank              |                         |       |       |       |       |                        |       |       |       |       |

Data in Table 2 represents the past and present shareholding pattern of IDBI Bank Ltd. This table shows that share of public in the total shareholding is reduced was decreased in 2018 from 26.02% to 19.04%. It seems that public lost the confidence in the bank due to excessive losses and Npa. After the acquisition of IDBI Bank Ltd. by LIC, share of Public in the total shareholding is increased in 2021 from 1.89% to 5.29%. Which means after acquisition, public confidence in IDBI Bank is also rebuild.

2.3 Board of Directors of IDBI Bank Ltd.

This section represents the board structure of IDBI Bank Ltd. for the period of pre Acquisition and as well as post Acquisition. Table 3a represents the list of board members of pre Acquisition period and table 6b represents the list of board members of post Acquisition period.

Table 3a: List of Board of Directors before Acquisition

| Sr. No. | 2019            | 2018           | 2017           | 2016          | 2015          | Designation  |
|---------|-----------------|----------------|----------------|---------------|---------------|--------------|
| 1       | M. R. Kumar     | --             | --             | --            | --            | Chairman     |
| 2       | Rakesh Sharma   | M. K. Jain     | M. K. Jain     | Kishor Kharat | Kishor Kharat | M.D. & C.E.O |
| 3       | P. K. Nair      | P. K. Nair     | P. K. Nair     | B. K. Batra   | B. K. Batra   | Deputy M.D.  |
| 4       | G.M.Yadwadkar   | G M. Yadwadkar | G M. Yadwadkar | G.M.Yadwadkar | G.M.Yadwadkar | Deputy M.D.  |
| 5       | Pankaj Jain     | Pankaj Jain    | Pankaj Jain    | Pankaj Jain   | Pankaj Jain   | Govt.Nominee |
| 6       | SudhirShyam     | Praveen Garg   | Praveen Garg   | Snehlata      | Snehlata      | Govt.Nominee |
| 7       | N.Jambunathan   | S. RAVi        | S. RAVi        | S. RAVi       | S. RAVi       | I.D          |
| 8       | B. B. Joshi     | Ninad Karpe    | Ninad Karpe    | Ninad Karpe   | Ninad Karpe   | I.D          |
| 9       | G. P. Joshi     | G. P. Joshi    | G. P. Joshi    | G. P. Joshi   | G. P. Joshi   | I.D          |
| 10      | Ashima Goyal    | Ashima Goyal   | Ashima Goyal   | Pankaj Vats   | Pankaj Vats   | I.D          |
| 11      | Samaresh Parida | --             | --             | --            | --            | LIC Nominee  |
| 13      | S. G. Kallapur  | --             | --             | --            | --            | LIC Nominee  |
| 14      | R. Kandalwal    | --             | --             | --            | --            | LIC Nominee  |

Source: Compiled by Author(s) from Annual Reports.  
M.D: Managing Director, C.E.O: Chief Executive Officer, I.D: Independent Director

Table 3b: List of Board of Directors after Acquisition

| Sr. No. | 2024           | 2023            | 2022            | 2021            | 2020           | Designation   |
|---------|----------------|-----------------|-----------------|-----------------|----------------|---------------|
| 1.      | T. Manoharan   | T. Manoharan    | T. Manoharam    | M. R. Kumar     | M. R. Kumar    | Chairman      |
| 2.      | Rakesh Sharma  | Rakesh Sharma   | Rakesh Sharma   | Rakesh Sharma   | Rakesh Sharma  | M.D. & CEO    |
| 3.      | Jayakumar S.   | Samuel Joseph   | Samuel Joseph   | Samuel Joseph   | Samuel J.      | Deputy M.D.   |
| 4.      | Manoj Sahay    | Manoj Sahay     | Meera Swarup    | Meera Swarup    | Meera          | Govt. Nominee |
| 5.      | S. K. Singh    | S. K. Singh     | Anshuman        | Anshuman        | Sudhir         | Govt. Nominee |
| 6.      | M. K. Gupta    | M. K. Gupta     | M. K. Gupta     | R. Khandelwal   | R. Khandelwal  | LIC Nominee   |
| 7.      | Raj Kumar      | Raj Kumar       | S. K. Khatankar | S. K. Khatankar | S.K.Katankar   | LIC Nominee   |
| 8.      | Ajay P sawhney | S. K. Khatankar | G. P. Joshi     | G. P. Joshi     | G. P. Joshi    | LIC Nominee   |
| 9.      | S. G. Kallapur | S. G. Kallapur  | S. G. Kallapur  | S. G. Kallapur  | S. G. Kallapur | LIC Nominee   |
| 10.     | B. B. Joshi    | B. B. Joshi     | B. B. Joshi     | B. B. Joshi     | B. B. Joshi    | I.D           |
| 11.     | S. Parida      | S. Parida       | S. Parida       | S. Parida       | S. Parida      | I.D           |
| 12.     | N.Jambunathan  | N. Jambunathan  | N. Jambunathan  | N. Jambunathan  | N.Jambunathan  | I.D           |
| 13.     | Deepak singhal | Deepak singhal  | Deepak singhal  | Deepak singhal  | Deepak singhal | I.D           |
| 14.     | P.V. Bharthi   | P.V. Bharthi    | P.V. Bharthi    | P.V. Bharthi    | Ashima Goyal   | I.D           |

Source: Compiled by Author(s) from Annual Reports.  
M.D: Managing Director, C.E.O: Chief Executive Officer, I.D: Independent Director

## 2.4 IDBI Bank Ltd. - LIC Deal

This section represents the details of deal between IDBI Bank Ltd. and LIC. It also describes that IDBI Bank suffers huge losses and Govt. allowed LIC to rescue the bank by acquisition.

2.4.1 IDBI bank in losses and LIC to the rescue

The RBI labelled IDBI as a "WEAK BANK" and placed the bank under the Prompt Corrective Action (PCA) framework, which included lending restrictions. Only safe retail lending will be permitted unless and until the bank demonstrates advancement in asset quality or shows indications of performance improvement.

Owing to this (RBI) re-classified IDBI bank as a Private Sector Bank for regulatory purposes with effect from January 21, 2019, vide a Press Release dated March 14, 2019. This came out as an ideal solution to deal with the twin problem of divestments and fiscal deficit and at the same time exiting some loss-making PSU (TOI, Jan 2019). Following table represents the gross and net NPA and losses of IDBI Bank before LIC invested in IDBI Bank.

Table 4a: Financial Data of IDBI Bank Ltd. before Acquisition

|                                     | 2015      | 2016      | 2017      | 2018       | 2019       |
|-------------------------------------|-----------|-----------|-----------|------------|------------|
| Gross NPA                           | 12684.97  | 24875.07  | 44752.59  | 55588.25   | 50027.94   |
| Net NPA                             | 5992.52   | 14643.39  | 25205.80  | 28665.14   | 14837.44   |
| P&L Balance                         | (1506.61) | (2752.61) | (7985.42) | (16730.31) | (32280.30) |
| Basic EPS                           | (5.45)    | (21.77)   | (25.05)   | (34.45)    | (30.48)    |
| Source: Annual reports of IDBI Bank |           |           |           |            |            |

Table 4b: Balance Sheet of IDBI Bank Ltd. Before Acquisition

| Particulars (in rs Cr.)             | 2015      | 2016      | 2017      | 2018      | 2019      |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|
| <b>Equity and Liabilities</b>       |           |           |           |           |           |
| Share capital                       | 1603.96   | 2058.82   | 2058.82   | 3083.86   | 7736.29   |
| Revaluation Reserve                 | 1662.85   | 5607.83   | 5417.75   | 5053.88   | 6727.69   |
| Reserves & surplus                  | 21050.11  | 20055.15  | 15087.09  | 13071.98  | 23147.71  |
| Total Reserves & surplus            | 22712.96  | 25662.97  | 20504.83  | 18125.87  | 29875.40  |
| Total shareholder fund              | 24317.10  | 27721.79  | 22563.65  | 21209.73  | 37611.70  |
| Deposits                            | 259835.97 | 265719.83 | 268538.10 | 247931.61 | 227371.72 |
| Borrowings                          | 61832.98  | 69573.94  | 56363.98  | 63185.53  | 45287.72  |
| Other liabilities and provisions    | 10044.51  | 11356.57  | 14302.18  | 17986.77  | 10013.35  |
| Total                               | 356030.57 | 374372.13 | 361767.90 | 350313.64 | 320284.49 |
| <b>Assets</b>                       |           |           |           |           |           |
| Cash balance with RBI               | 13035.77  | 13822.91  | 133346.92 | 13163.69  | 12730.47  |
| Bank money at call                  | 1489.99   | 2757.63   | 19337.16  | 20522.40  | 8503.23   |
| Investment                          | 120963.21 | 98999.43  | 92934.41  | 91606.06  | 93072.63  |
| Advances                            | 208376.87 | 215893.45 | 190825.93 | 171739.95 | 146790.44 |
| Fixed Assets                        | 3060.50   | 7447.32   | 7348.78   | 6770.98   | 8230.99   |
| Other Assets                        | 9104.24   | 35451.39  | 37974.70  | 46510.56  | 50956.74  |
| Total Assets                        | 356030.57 | 374372.13 | 361767.90 | 350313.64 | 320284.49 |
| Source: Annual reports of IDBI Bank |           |           |           |           |           |

There are fundamental differences between the business models of banking and insurance. The Government of India (GOI) is the only investor in both organizations, that is, LIC and IDBI Bank Ltd. Thus, it shows that LIC's acquisition of IDBI Bank was a feasible strategy for rescuing the bank. It was

establishing a bank assurance firm, giving LIC a prominent position in the banking sector (www.idbi.in). The purchase of a 51% controlling stake in IDBI Bank Ltd. was completed on January 21, 2019, making LIC the bank's largest stakeholder.

The bank received total capital of Rs. 21,624 crore from LIC (Press Release/1362).

LIC also finds enormous significance in this deal. With the help of IDBI bank's around 1.5 crore retail consumers, around 18,000 staff, and more than 1,800 outlets, LIC policies would be approved more. Moreover, IDBI Bank Ltd. will extend its cash management service to LIC in order to increase current account balances and lower funding costs.

On the other hand, LIC, with its 11 lakh agents and over 1 lakh staff, will demonstrate IDBI. Additionally, the agreement suggests enabling 900 IDBI branches to accept payments using NEFT, or National Electronic Funds Transfer, an immediate money transfer system run by the RBI (Jasrotia et al., 2022) and (Kakade, 2019).

2.4.2 Financial statements of IDBI Bank Ltd. after acquisition with LIC

Table 5a: Financial Data of IDBI Bank Ltd. after Acquisition

| (in rs Cr.)                         | 2020      | 2021     | 2022     | 2023     | 2024    |
|-------------------------------------|-----------|----------|----------|----------|---------|
| Gross NPA                           | 47272.37  | 36211.95 | 34114.83 | 10969.29 | 8916.84 |
| Net NPA                             | 5439.49   | 2519.38  | 1863.51  | 1494.74  | 643.83  |
| P&L Balance                         | -12887.33 | 1359.46  | 2439.27  | 3645.09  | 5634.09 |
| Basic EPS (rs.)                     | -14.48    | 1.30     | 2.27     | 3.39     | 5.24    |
| Source: Annual reports of IDBI Bank |           |          |          |          |         |

Table 5b: Balance Sheet of IDBI Bank Ltd. Before Acquisition

| Particulars (in rs Cr.)             | 2020      | 2021      | 2022      | 2023      | 2024      |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|
| <b>Equity &amp; Liabilities</b>     |           |           |           |           |           |
| Share capital                       | 10380.59  | 10752.40  | 10752.40  | 10752.40  | 10752.40  |
| Revaluation Reserve                 | 6503.37   | 6281.45   | 8467.76   | 8200.98   | 7933.45   |
| Reserves & surplus                  | 17140.41  | 19777.22  | 22441.82  | 26365.10  | 31196.01  |
| Total Reserves & surplus            | 23643.77  | 26058.67  | 30909.58  | 34566.08  | 39129.46  |
| Total shareholder fund              | 34024.37  | 36811.07  | 41661.98  | 45318.48  | 49881.87  |
| Deposits                            | 222424.13 | 230898.41 | 233134.42 | 255498.94 | 277657.22 |
| Borrowings                          | 36748.86  | 15908.05  | 14344.98  | 12637.75  | 17082.70  |
| Other liabilities and provisions    | 6745.02   | 14146.55  | 12277.98  | 17047.00  | 18568.68  |
| Total                               | 299942.37 | 297764.08 | 301419.36 | 330502.17 | 363190.47 |
| <b>Assets</b>                       |           |           |           |           |           |
| Cash balance with RBI               | 10538.83  | 13012.80  | 13593.37  | 16639.18  | 13990.96  |
| Bank money at call                  | 19891.57  | 22209.39  | 13117.22  | 12646.59  | 11941.93  |
| Investment                          | 81780.42  | 81022.56  | 82988.21  | 99689.74  | 114934.24 |
| Advances                            | 129841.79 | 128149.94 | 145771.84 | 162567.73 | 188620.61 |
| Fixed Assets                        | 8129.18   | 7827.42   | 9936.91   | 9756.87   | 9519.92   |
| Other Assets                        | 49760.58  | 45541.97  | 36011.82  | 29202.06  | 24182.81  |
| Total Assets                        | 299942.37 | 297764.08 | 301419.36 | 330502.17 | 363190.47 |
| Source: Annual reports of IDBI Bank |           |           |           |           |           |

Table 5a shows the gross and net NPA and profit/loss of the bank after the acquisition with LIC and table 5b shows the balance sheet of IDBI Bank ltd. from 2020 to 2024. In 2021 profits of the bank was increased and reached to the INR 5634.09 cr, in 2024.

2.5 SENSEX and IDBI Bank Ltd.

This section represents the pre and post acquisition data of share price of IDBI and SENSEX. Table 6a shows the pre- acquisition data as well as table 6b shows the post- acquisition data.

Table 6a: Pre Acquisition Data of IDBI Bank and SENSEX

| Month  | Open  |          | High  |          | Low   |          | Close |          |
|--------|-------|----------|-------|----------|-------|----------|-------|----------|
|        | IDBI  | SENSEX   | IDBI  | SENSEX   | IDBI  | SENSEX   | IDBI  | SENSEX   |
| Apr-15 | 74.50 | 27954.86 | 77.30 | 29094.61 | 66.30 | 26897.54 | 71.30 | 27011.31 |
| May-15 | 71.30 | 27204.63 | 71.75 | 28071.16 | 58.70 | 26423.99 | 60.70 | 27828.44 |
| Jun-15 | 60.70 | 27770.79 | 67.60 | 27968.75 | 58.40 | 26307.07 | 65.75 | 27780.83 |
| Jul-15 | 66.15 | 27823.65 | 72.00 | 28578.33 | 52.30 | 27416.39 | 60.90 | 28114.56 |
| Aug-15 | 60.10 | 28089.09 | 83.00 | 28417.59 | 52.95 | 25298.42 | 78.75 | 26283.09 |
| Sep-15 | 80.40 | 26127.04 | 89.80 | 26471.82 | 75.10 | 24833.54 | 85.65 | 26154.83 |
| Oct-15 | 85.75 | 26344.19 | 95.10 | 27618.14 | 80.30 | 26168.71 | 93.55 | 26656.83 |
| Nov-15 | 95.00 | 26641.69 | 95.70 | 26824.30 | 81.20 | 25451.42 | 88.85 | 26145.67 |
| Dec-15 | 91.00 | 26201.27 | 91.20 | 26256.42 | 53.95 | 24867.73 | 58.70 | 26117.54 |
| Jan-16 | 60.00 | 26101.50 | 64.80 | 26197.27 | 47.25 | 23839.76 | 58.55 | 24870.69 |
| Feb-16 | 60.00 | 24982.22 | 72.25 | 25002.32 | 58.30 | 22494.61 | 69.40 | 23002.00 |
| Mar-16 | 70.75 | 23153.32 | 74.00 | 25479.62 | 66.55 | 23133.18 | 69.35 | 25341.86 |
| Apr-16 | 69.00 | 25301.70 | 70.10 | 26100.54 | 63.05 | 24523.20 | 67.90 | 25606.62 |
| May-16 | 68.05 | 25565.44 | 72.75 | 26837.20 | 63.15 | 25057.93 | 69.80 | 26667.96 |
| Jun-16 | 70.30 | 26684.46 | 77.50 | 27105.41 | 69.50 | 25911.33 | 69.85 | 26999.72 |
| Jul-16 | 70.55 | 27064.33 | 77.90 | 28240.20 | 65.30 | 27034.14 | 72.90 | 28051.86 |
| Aug-16 | 72.70 | 28083.08 | 80.80 | 28532.25 | 66.45 | 27627.97 | 68.70 | 28452.17 |
| Sep-16 | 69.80 | 28459.09 | 77.90 | 29077.28 | 68.10 | 27716.78 | 73.55 | 27865.96 |
| Oct-16 | 74.00 | 27997.29 | 75.35 | 28477.65 | 62.75 | 27488.30 | 69.20 | 27930.21 |
| Nov-16 | 69.45 | 27966.18 | 72.50 | 28029.80 | 65.30 | 25717.93 | 69.40 | 26652.81 |
| Dec-16 | 69.50 | 26756.66 | 80.85 | 26803.76 | 68.10 | 25753.74 | 77.25 | 26626.46 |
| Jan-17 | 77.50 | 26711.15 | 86.40 | 27980.39 | 76.55 | 26447.06 | 79.55 | 27655.96 |
| Feb-17 | 80.00 | 27669.08 | 80.80 | 29065.31 | 73.30 | 27590.10 | 75.10 | 28743.32 |
| Mar-17 | 75.60 | 28849.04 | 78.80 | 29824.62 | 71.15 | 28716.21 | 78.10 | 29620.50 |
| Apr-17 | 78.10 | 29737.73 | 82.70 | 30184.22 | 58.80 | 29241.48 | 60.00 | 29918.40 |
| May-17 | 59.55 | 30021.49 | 61.50 | 31255.28 | 53.15 | 29804.12 | 53.50 | 31145.80 |
| Jun-17 | 53.85 | 31117.09 | 62.80 | 31522.87 | 53.25 | 30680.66 | 59.45 | 30921.61 |
| Jul-17 | 59.70 | 31156.04 | 60.75 | 32672.66 | 50.20 | 31017.11 | 55.10 | 32514.94 |
| Aug-17 | 55.30 | 32579.80 | 58.00 | 32686.48 | 52.00 | 31128.02 | 52.35 | 31730.49 |
| Sep-17 | 52.35 | 31769.34 | 73.00 | 32524.11 | 51.40 | 31081.83 | 62.65 | 31283.72 |
| Oct-17 | 62.60 | 31537.81 | 68.00 | 33340.17 | 57.50 | 31440.48 | 60.55 | 33213.13 |
| Nov-17 | 60.80 | 33344.23 | 61.90 | 33865.95 | 56.05 | 32683.59 | 59.85 | 33149.35 |
| Dec-17 | 61.30 | 33247.66 | 70.00 | 34137.97 | 58.45 | 32565.16 | 60.45 | 34056.83 |
| Jan-18 | 60.00 | 34059.99 | 83.70 | 36443.98 | 56.00 | 33703.37 | 74.55 | 35965.02 |
| Feb-18 | 74.30 | 36048.99 | 91.50 | 36256.83 | 61.10 | 33482.81 | 72.20 | 34184.04 |
| Mar-18 | 71.00 | 34141.22 | 74.85 | 34278.63 | 64.20 | 32483.84 | 66.15 | 32968.68 |
| Apr-18 | 66.15 | 33030.87 | 69.50 | 35213.30 | 59.65 | 32972.56 | 65.30 | 35160.36 |
| May-18 | 66.85 | 35328.91 | 66.85 | 35993.53 | 49.10 | 34302.89 | 54.90 | 35322.38 |
| Jun-18 | 57.95 | 35373.98 | 61.25 | 35877.41 | 47.00 | 34784.68 | 58.85 | 35423.48 |
| Jul-18 | 59.00 | 35545.22 | 64.95 | 37644.59 | 57.75 | 35106.57 | 62.70 | 37606.58 |
| Aug-18 | 63.25 | 37643.87 | 63.30 | 38989.65 | 47.50 | 37128.99 | 50.20 | 38645.07 |
| Sep-18 | 50.60 | 38915.91 | 60.90 | 38934.35 | 48.50 | 35985.63 | 59.20 | 36227.14 |
| Oct-18 | 59.35 | 36274.25 | 62.05 | 36616.64 | 59.00 | 33291.58 | 59.50 | 34442.05 |
| Nov-18 | 59.70 | 34650.63 | 62.35 | 36389.22 | 59.10 | 34303.38 | 61.25 | 36194.30 |
| Dec-18 | 61.45 | 36396.69 | 65.75 | 36554.99 | 52.90 | 34426.29 | 55.40 | 36068.33 |
| Jan-19 | 55.75 | 36161.80 | 55.95 | 36701.03 | 41.30 | 35375.51 | 42.85 | 36256.69 |

|   |        |        |        |        |
|---|--------|--------|--------|--------|
| Correlation                               | -0.543 | -0.517 | -0.539 | -0.564 |
| Source: moneycontrol.com and bseindia.com |        |        |        |        |

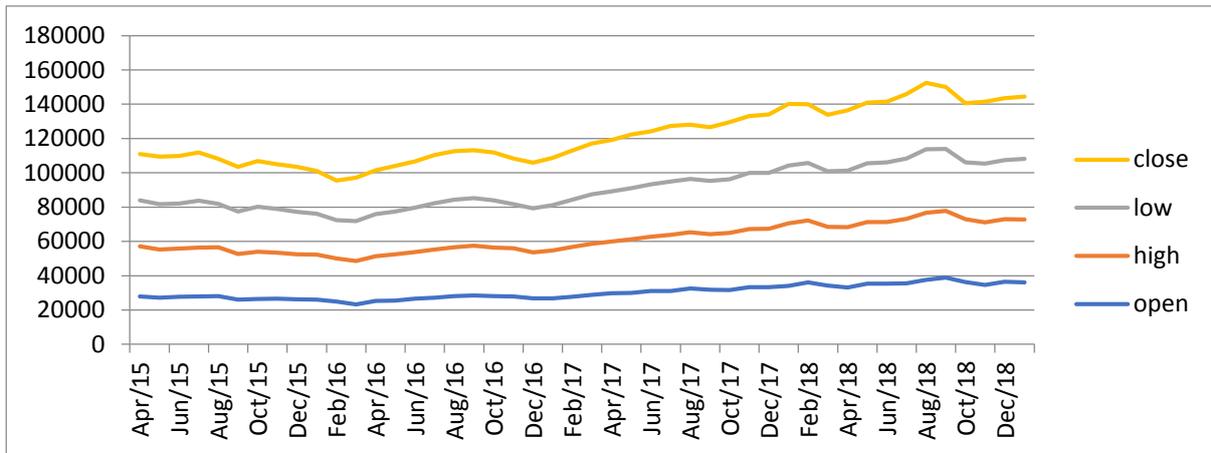


Fig 2a: Pre Acquisition share prices of IDBI Bank

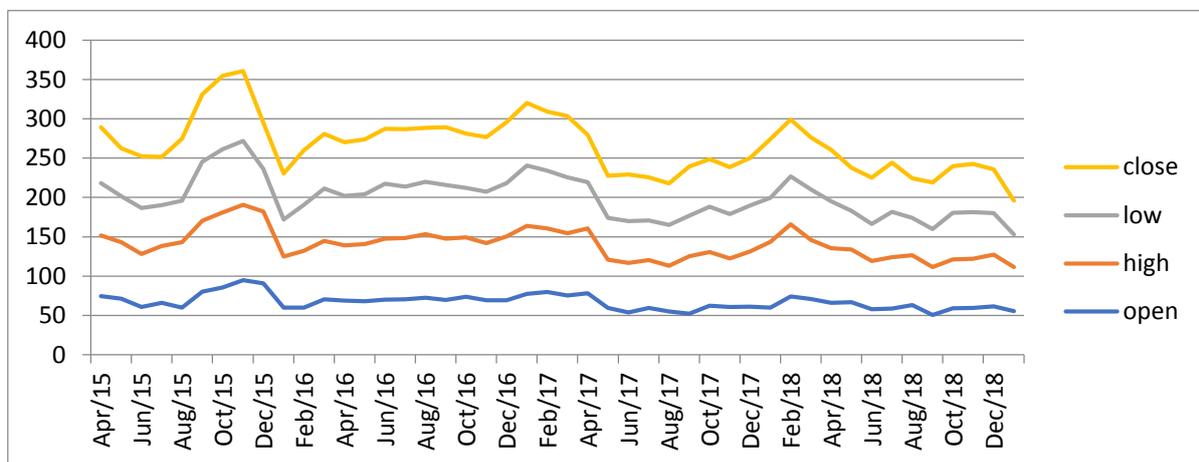


Fig 2b: Pre Acquisition share prices of SENSEX

Figure 2a and 2b are the graphical representation of table 6a, which indicated that the open and close values and high and low values of IDBI Bank’s share price and SENSEX for the pre acquisition

period i.e. 2015-2019. Table 6a also indicates the negative correlation between SENSEX and IDBI Bank Ltd. that means these two variables moves in opposite directions.

Table 6b: Post Acquisition Data of IDBI Bank and SENSEX

| Month  | Open  |          | High  |          | Low   |          | Close |          |
|--------|-------|----------|-------|----------|-------|----------|-------|----------|
|        | IDBI  | SENSEX   | IDBI  | SENSEX   | IDBI  | SENSEX   | IDBI  | SENSEX   |
| Feb-19 | 43.10 | 36311.74 | 48.15 | 37172.18 | 41.85 | 35287.16 | 46.65 | 35867.44 |
| Mar-19 | 46.85 | 36018.49 | 47.45 | 38748.54 | 39.10 | 35926.94 | 39.35 | 38672.91 |
| Apr-19 | 39.35 | 38858.88 | 40.65 | 39487.45 | 33.25 | 38460.25 | 37.60 | 39031.55 |
| May-19 | 37.60 | 39036.51 | 40.70 | 40124.96 | 33.55 | 36956.10 | 35.50 | 39714.20 |
| Jun-19 | 35.60 | 39806.86 | 37.85 | 40312.07 | 26.50 | 38870.96 | 27.80 | 39394.64 |
| Jul-19 | 27.55 | 39543.73 | 30.50 | 40032.41 | 23.65 | 37128.26 | 26.80 | 37481.12 |
| Aug-19 | 26.80 | 37387.18 | 37.75 | 37807.55 | 26.05 | 36102.35 | 31.75 | 37332.79 |
| Sep-19 | 31.75 | 37181.76 | 33.80 | 39441.12 | 28.80 | 35987.80 | 33.20 | 38667.33 |
| Oct-19 | 33.35 | 38813.48 | 41.00 | 40392.22 | 31.35 | 37415.83 | 37.75 | 40129.05 |
| Nov-19 | 38.00 | 40196.07 | 40.55 | 41163.79 | 33.05 | 40014.23 | 37.00 | 40793.81 |

|        |       |          |       |          |       |          |       |          |
|--------|-------|----------|-------|----------|-------|----------|-------|----------|
| Dec-19 | 36.90 | 41072.94 | 37.85 | 41809.96 | 33.60 | 40135.37 | 33.80 | 41253.74 |
| Jan-20 | 33.80 | 41349.36 | 39.90 | 42273.87 | 30.30 | 40476.55 | 30.60 | 40723.49 |
| Feb-20 | 30.70 | 40753.18 | 31.10 | 41709.30 | 17.25 | 38219.97 | 19.30 | 38297.29 |
| Mar-20 | 19.45 | 38910.95 | 22.90 | 39083.17 | 18.60 | 25638.90 | 21.45 | 29468.49 |
| Apr-20 | 21.45 | 29505.33 | 21.60 | 33887.25 | 19.20 | 27500.79 | 20.40 | 33717.62 |
| May-20 | 24.40 | 32748.14 | 44.10 | 32845.48 | 23.55 | 29968.45 | 44.10 | 32424.10 |
| Jun-20 | 45.90 | 32906.05 | 56.20 | 35706.55 | 36.50 | 32348.10 | 38.70 | 34915.80 |
| Jul-20 | 38.75 | 35009.59 | 45.20 | 38617.03 | 37.55 | 34927.20 | 39.25 | 37606.89 |
| Aug-20 | 39.00 | 37595.73 | 41.20 | 40010.17 | 32.60 | 36911.23 | 34.75 | 38628.29 |
| Sep-20 | 35.25 | 38754.00 | 40.80 | 39359.51 | 33.35 | 36495.98 | 36.45 | 38067.93 |
| Oct-20 | 36.90 | 38410.20 | 39.15 | 41048.05 | 35.60 | 38410.20 | 38.10 | 39614.07 |
| Nov-20 | 38.25 | 39880.38 | 43.90 | 44825.37 | 30.75 | 39334.92 | 31.10 | 44149.72 |
| Dec-20 | 31.60 | 44435.83 | 32.85 | 47896.97 | 26.35 | 44118.10 | 27.75 | 47751.33 |
| Jan-21 | 28.75 | 47785.28 | 33.30 | 50184.01 | 28.60 | 46160.46 | 31.55 | 46285.77 |
| Feb-21 | 32.00 | 46617.95 | 45.00 | 52516.76 | 31.25 | 46433.65 | 38.55 | 49099.99 |
| Mar-21 | 38.80 | 49747.71 | 39.50 | 51821.84 | 33.30 | 48236.35 | 35.25 | 49509.15 |
| Apr-21 | 34.75 | 49868.53 | 43.50 | 50375.77 | 34.70 | 47204.50 | 38.45 | 48782.36 |
| May-21 | 38.50 | 48356.01 | 41.05 | 52013.22 | 36.70 | 48028.07 | 37.90 | 51937.44 |
| Jun-21 | 38.00 | 52067.51 | 40.00 | 53126.73 | 37.25 | 51450.58 | 37.95 | 52482.71 |
| Jul-21 | 38.00 | 52638.50 | 39.40 | 53290.81 | 36.00 | 51802.73 | 38.50 | 52586.84 |
| Aug-21 | 38.30 | 52901.28 | 48.75 | 57625.26 | 36.60 | 52804.08 | 46.30 | 57552.39 |
| Sep-21 | 45.50 | 57763.53 | 65.25 | 60412.32 | 43.50 | 57263.90 | 51.05 | 59126.36 |
| Oct-21 | 51.50 | 58889.77 | 57.60 | 62245.43 | 43.90 | 58551.14 | 45.45 | 59306.93 |
| Nov-21 | 45.50 | 59577.48 | 55.00 | 61036.56 | 43.75 | 56382.93 | 46.40 | 57064.87 |
| Dec-21 | 46.45 | 57365.85 | 53.25 | 59203.37 | 45.00 | 55132.68 | 48.25 | 58253.82 |
| Jan-22 | 48.85 | 58310.09 | 52.20 | 61475.15 | 40.75 | 56409.63 | 44.00 | 58014.17 |
| Feb-22 | 44.00 | 58672.86 | 46.55 | 59618.51 | 40.50 | 54383.20 | 42.80 | 56247.28 |
| Mar-22 | 43.45 | 55629.30 | 50.20 | 58890.92 | 43.00 | 52260.82 | 45.30 | 58568.51 |
| Apr-22 | 45.00 | 58530.73 | 47.00 | 60845.10 | 32.30 | 56009.07 | 36.65 | 57060.87 |
| May-22 | 37.00 | 56429.45 | 38.30 | 57184.21 | 30.50 | 52632.48 | 30.80 | 55566.41 |
| Jun-22 | 30.90 | 55588.27 | 37.45 | 56432.65 | 30.50 | 50921.22 | 35.35 | 53018.94 |
| Jul-22 | 35.50 | 52863.34 | 46.60 | 57619.27 | 35.25 | 52094.25 | 43.95 | 57570.25 |
| Aug-22 | 43.75 | 57823.10 | 47.70 | 60411.20 | 39.80 | 57367.47 | 41.25 | 59537.07 |
| Sep-22 | 41.50 | 58710.53 | 47.50 | 60676.12 | 40.90 | 56147.23 | 43.90 | 57426.92 |
| Oct-22 | 44.15 | 57403.92 | 55.60 | 60786.70 | 43.15 | 56683.40 | 53.45 | 60746.59 |
| Nov-22 | 53.50 | 61065.58 | 61.00 | 63303.01 | 47.85 | 60425.47 | 54.35 | 63099.65 |
| Dec-22 | 54.50 | 63357.99 | 62.00 | 63583.07 | 49.50 | 59754.10 | 52.20 | 60840.74 |
| Jan-23 | 53.00 | 60871.24 | 53.75 | 61343.96 | 47.25 | 58699.20 | 48.30 | 59549.90 |
| Feb-23 | 48.35 | 60001.17 | 50.55 | 61682.25 | 42.90 | 58795.97 | 45.00 | 58962.12 |
| Mar-23 | 45.90 | 59136.48 | 55.60 | 60498.48 | 45.40 | 57084.91 | 54.65 | 58991.52 |
| Apr-23 | 54.65 | 59131.16 | 57.95 | 61209.46 | 52.55 | 58793.08 | 55.05 | 61112.44 |
| May-23 | 55.00 | 61301.61 | 57.00 | 63036.12 | 53.10 | 61002.17 | 55.35 | 62622.24 |
| Jun-23 | 55.50 | 62736.47 | 60.50 | 64768.58 | 55.45 | 62359.14 | 57.95 | 64718.56 |
| Jul-23 | 57.95 | 64836.16 | 66.85 | 67619.17 | 57.95 | 64836.16 | 59.80 | 66527.67 |
| Aug-23 | 59.90 | 66532.98 | 74.75 | 66658.12 | 59.25 | 64723.63 | 70.75 | 64831.41 |
| Sep-23 | 70.75 | 64855.51 | 72.50 | 67927.23 | 60.85 | 64818.37 | 61.85 | 65828.41 |
| Oct-23 | 62.10 | 65813.42 | 66.50 | 66592.16 | 59.50 | 63092.98 | 62.50 | 63874.93 |
| Nov-23 | 63.00 | 63829.87 | 71.35 | 67069.89 | 62.40 | 63550.46 | 67.40 | 66988.44 |
| Dec-23 | 67.45 | 67181.15 | 88.00 | 72484.34 | 66.45 | 67149.07 | 86.60 | 72240.26 |
| Jan-24 | 87.20 | 72218.39 | 98.70 | 73427.59 | 78.25 | 70001.6  | 86.45 | 71752.11 |

|             |       |          |       |          |       |          |       |          |
|-------------|-------|----------|-------|----------|-------|----------|-------|----------|
| Feb -24     | 87.00 | 71998.78 | 89.90 | 73413.93 | 75.50 | 70809.84 | 81.00 | 72500.3  |
| Mar -24     | 81.30 | 72606.31 | 91.00 | 74245.17 | 81.25 | 71674.42 | 89.35 | 73651.35 |
| Correlation | 0.796 |          | 0.788 |          | 0.844 |          | 0.817 |          |

Source: moneycontrol.com and bseindia.com

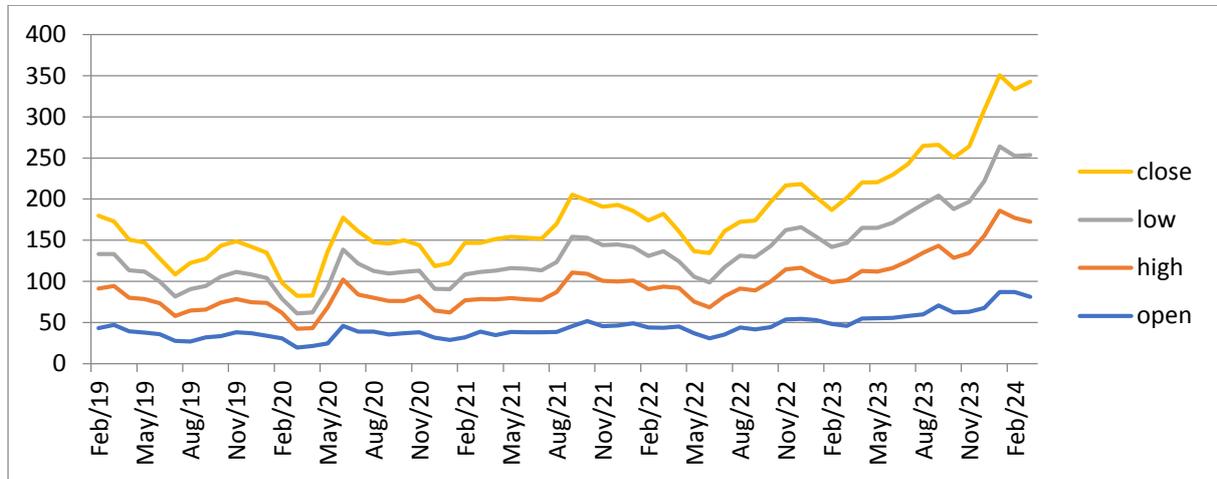


Fig 3a: Post Acquisition share prices of IDBI Bank

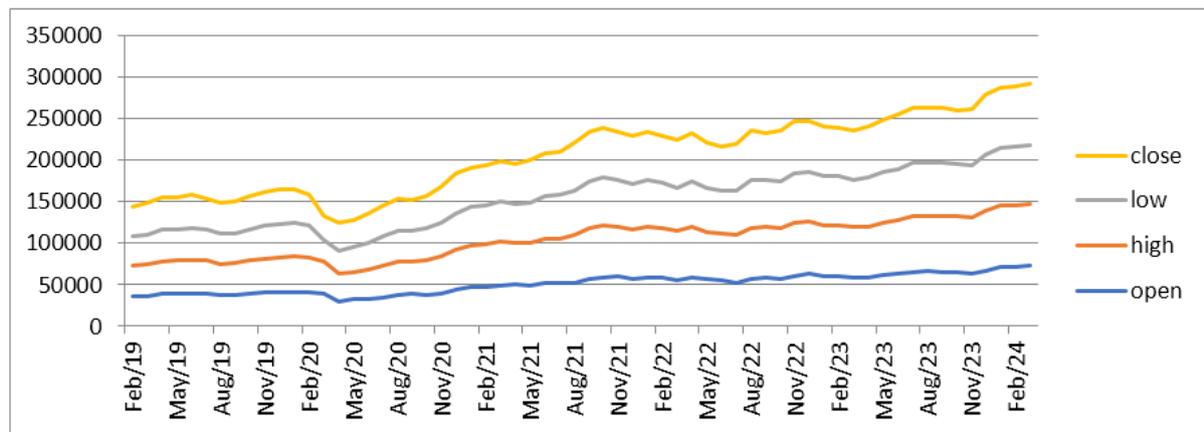


Fig 3b: Post Acquisition data of SENSEX

Figure 3a and 3b are the graphical representation of table 6b, which indicated that the open & close values and high & low values of IDBI Bank’s share price and SENSEX for the post acquisition period i.e. 2019 to 2024. Table 6b also indicates the high positive correlation between Sensex and IDBI Bank Ltd. Which means these two variables moves in the same direction.

### 3.0 REVIEW OF LITERATURE

This section represents the Review of literature of various studies on the basis of three aspects. The first aspect is about pre & post effects of acquisition of banks and second aspect is about application of CAMELS Model to measure financial performance of a bank and the last one is about application of

DuPont Model to analysis financial position of a bank.

#### 3.1 Analysis of pre and post- effects of acquisition of bank

In this section, the review of existing literature is done on the basis of pre and post- effects of acquisition of banks in India from 2010 to 2024.

Kumar and Suhas (2010) analysed the performance of the merged banks in relation to a control on financial ratios. Three models-market values of assets, book value of assets, and income, were used to deflate the cash flow in order to compare the operating performance of the acquiring banks before and after the merger. The outcome doesn't offer

proof for the theory that mergers boost business performance. Sinha and Kaushik (2010) had examined the effect of mergers and acquisitions on the selected financial institutions in India. There are two phases in the analysis. First, determine the organizations' financial status from 2000 to 2008 using the ratio analysis technique. Secondly, usage of the non parametric Wilcoxon signed rank test to compare the organizations' changes in efficiency between the pre- and post-merger periods. The findings of the study suggest that, over time, there is a substantial relationship between financial success and M&A deals in India, and that the acquiring companies were able to create value.

Jayaraman et al. (2014) had examined the impact and efficiency of Indian banks pursuant to merger and acquisition using data envelopment analysis. This study compares the efficiency of merged banks with non-merged banks to check the effect of merger. The findings of the study revealed that, the effect of merger and acquisition on the profitability and operational cost of merged banks, in general, is not significant during the period of study. Ghosh and Dutta (2015) have analysed 10 banks during a period from 2000 to 2010. Through a selection of HR and financial metrics, the research aims to quantify any changes in the banks' post-merger performance levels relative to their pre-merger performance levels. The results show that performance did not significantly alter over the post-merger era.

Patel (2018) had conducted a study on "Pre & Post-Merger Financial Performance: An Indian Perspective" to check the long-term Profitability of Indian banks. The study was done for 4 Indian banks to check the impact of Pre & post-merger on Asset quality, Management quality and earning quality of the banks. The finding of the study revealed that the asset quality of Bank of Baroda and Oriental bank of commerce was decreased, and there was an increase in the management quality and earning quality of State Bank of India and IDBI bank. Singh and Das (2018) examined the post-merger financial performance of merged banks. They used various financial ratios like, Net Profit margin, operating Profit margin, return on Capital Employed, Return on Equity, earnings per share, capital adequacy ratio, dividend per share etc. The results showed that post-merger and acquisition

processes heavily relied on strategies and policies in procedural, physical, and socio cultural contexts.

Mahajan and Jhawar (2019) had opinioned that Mergers and Acquisitions (M&A) is a useful tool for the growth and expansion in any industry and the Indian banking sector is no exception. The researcher concentrated on whether merger has led to a profitable situation or not. A comparison between pre and post-merger performance in terms of Net Profit Margin, Return On Assets, Operating profit Margin, Return On Equity, DER, Dividend Pay Out Ratio, EPS and Market Share Price, has been considered. The findings of the study revealed that Net Profit and Return on Assets have improved after merger but in other cases there is no such improvements were found. Tandon et al. (2019) focused on the State Bank of India (SBI) and its five associate banks and Bharatiya Mahila Bank which catapulted the SBI group to the top 50 banks of the world. The authors conclude that though as per the Earnings per Share (EPS) there is dilution and no competitive advantage obtained due to the merger, the other motives such as enhanced productivity, multi-dimensional banking, increased operational efficiency and customer delights will be advantageous to the evolved entity.

Sengar et al. (2021) considered two banks for the study; one was the acquirer bank, and another was the acquiree bank. The study was conducted before the merger for both the banks for four years. The conclusion drawn based on qualitative research that merger is flourishing as it results in happy stakeholders. Tanted and Baghchandani (2023) studied the pre and post- merger effects of ICICI bank and Erstwhile Bank of Rajasthan Limited. Financial performance of banks was analysed on the basis of financial ratios such as EPS, P-E Ratio, Current Ratio, ROI, ROA, ROE, Debt- equity ratio and paired T- test is used to analyse the impact of pre and post- merger. Maheshwa (2024) studied the six way horizontal merger/ acquisition between SBI with its six associate banks including Bharatiya Mahila Bank. The study was based on secondary data and evidenced that, SBI was not having significant improvement in the financial performance of the post merger period.

3.2 CAMELS Analysis and financial position of banks

In this section, the review of existing literature is done on the basis of CAMEL Analysis and Financial position of banks in India from 2010 to 2024.

Sangmi and Nazir (2010) analysed the performance of biggest nationalized bank (PNB) and biggest private sector bank (J&K Bank) using the CAMELS model for the period from 2001-2005. The analysis showed that both bank's position in terms of capital sufficiency; assets quality, managerial skill, and liquidity were solid and accurate. Prasad et al. (2011) evaluated the financial performance of the banking sector of all public sector banks and thirteen private sector banks in our country with the help of CAMELS model approach and the findings of the study have shown that Karur Vysya bank was the best performer followed by Andhra bank and Bank of Baroda. It was also found that Central Bank of India hold last position and SBI got 36th position. Misra (2013) used the CAMEL model to assess a national financial institution's overall performance and financial stability. The results indicated that the institution's features regarding the quality of its assets and the sufficiency of its capital could need to be enhanced.

Gupta (2014) used the CAMELS Model to analyse the performance of public sector banks during a five-year period, from 2009 to 2013, and found that Andhra Bank held the top spot, followed by Bank of Baroda, while United Bank of India was in last place. Kumar and Malhotra (2017) evaluated the performance & financial soundness of selected private sector banks in India for the period 2007-2017 CAMEL approach has been used. According to this research paper Axis Bank is ranked first by the CAMEL Model followed by ICICI Bank. Kotak Mahindra Bank scored the third position and IndusInd bank secured the last position amongst all the selected banks. Parikh (2018) studied the performance analysis of ICICI Bank, SBI, Bank of Baroda and HDFC Bank by using CAMELS Model. This study reveals the ICICI Bank was at top in terms of capital adequacy and SBI Bank held the top rank in terms of remaining parameters.

Reddy (2022) analysed the financial performance of public sector banks and private sector banks (State Bank of India, Punjab National Bank, ICICI Bank and AXIS Bank) by using CAMEL Model. This study showed that the Public Sector Banks are not

good as compare to Private Sector Banks. Kumar et al. (2022) analysed the financial performance of a few select private banks and analyse them using the CAMEL Model. Based on Model analysis, the rank order of the banks is ICICI Bank, HDFC Bank, Kotak Mahindra Bank, AXIS Bank, and YES Bank.

Soni and Devarakonda (2023) used the CAMEL Model and panel data analysis to look at the financial performance of a few international, public, and private sector banks. The study's most noteworthy conclusion is that Indian banks have outperformed international banks in terms of performance. Suresh and Pradhan (2023) examined the financial performance of selected Public sector undertaking banks and Private sector banks. The findings of the study show that PSUB has made a lot of progress but still are not performing up to the standard that PSB set.

Goud and Chodisetty (2024) had taken total assets of 5 Public banks and 5 private banks. The findings of the study show that Kotak Mahindra outperformed all other banks and came out on top, while PNB came in last. Othman et al. (2024) evaluated 12 public and 20 private banks for financial performance from 2019 to 2023, using composite ranking and independent sample t-tests. The results indicated that there is a significant difference between the performance of public and private banks in the CAMELS model, except for ratios involving liquid assets to total deposits and total assets. The study found that private banks dominated the banking industry and grew faster than public banks.

### 3.3 DuPont Analysis and financial position of banks

In this section, the review of existing literature is done on the basis of DuPont Analysis of banks in India from 2010 to 2024.

Ajmera (2012) analysed SBI Bank, Dena Bank and Corporation Banks through the DuPont Analysis. The findings of the study concluded that Net profit margin ratio is highest of SBI, Assets turnover is highest of Corporation banks and ROE is highest in SBI. Padake and Soni (2015) analysed the financial performance of various banks by using DuPont analysis. The findings of the study revealed that performance of the banks cannot be judged by some profit ratios alone.

Rooplata (2016) analysed 19 Nationalised banks through 3step DuPont Analysis. The findings of the study reveal that the performance Bank of Baroda is the bank with highest profit whereas Bank of India is the bank with highest ROE. But Canara Bank is the best performing bank among all if net profit, ROA, ROE and ROS is considered together. Sahoo (2020) has been studied selected private sector banks through DuPont model. Bank’s annual report has been taken for the data collection. The findings of the study revealed that in the year 2018-19, the performance of AXIS bank was best but in the year 2017-18 ICICI bank’s performance was best.

Kesireddy and Kumar (2022) studied the overall financial position of Bank of Baroda with the help pf DuPont Analysis. The findings of the study concluded that the parameters of ROE, ROI are showing comprehensive measures. The DuPont Analysis measures the wealth of investors and management’s effectiveness with the ROA index. Sanjeevinathan et al., (2023) studied financial performance of various private and public sector banks from 2018 to 2023 by using DuPont analysis. The findings of the study revealed that HDFC bank’s performance better in ROE, NIM, ATO and NPM. AXIS bank and ICICI bank among all banks better in leverage ratio.

4.0 RESEARCH METHODOLOGY

4.1 Context

The Reserve Bank of India gave its inceptors in developing and implementing new policies with the sole objective of protecting customer’s investment as well as making the banking sector more stable and sustainable. In spite of all efforts of RBI, banking sector in India often suffers from failure of some banks i.e. Unity small finance bank Ltd. (acquirer bank) and PMC (failed bank) (Singhal and Chauhan, 2021), LVB (failed bank) and DBS bank India ltd. (acquirer bank) (Bansal and Singh, 2024).

This study is based on financial statements of IDBI Bank, so it is based on secondary data collected from official website of IDBI Bank and other sources. This study analyses the IDBI Bank performance of pre Acquisition period (2015- 2019) and post Acquisition period (2020-2024).

4.2 Research Objectives

Two objectives of the present study are listed as under

Objective 1: To analyse the NPAs, Capital Adequacy, Risk Management, Earnings, Liquidity etc. by using CAMELS model on IDBI Bank Ltd.

Objective 2: To decompose the factors of ROE (Return on Equity) of IDBI Bank for the pre Acquisition period and post Acquisition period by using DuPont Analysis.

4.3 Data and its collection

This research paper is based on secondary data collection from different sources about financial ratios and parameters of the banks reference. This study is based on (2015- 2024) ten years data only. The secondary data is collected from the official website of IDBI Bank and also from other financial sites such as money control, yahoo finance etc.

4.4 Data Analysis and Interpretation

This paper is an attempt to analyse the financial performance of pre acquisition period i.e. 2015 to 2019 and post acquisition period i.e. 2020 -2024 using CAMELS Analysis/ Model and by using DuPont Analysis.

4.4.1 CAMELS Analysis

CAMELS model is a standardized financial rating system adopted by the Federal Financial Institution Examination Council (FFIEC, U.S.) on 13 November 1979 (Babu and Kumar, 2017). Camels model is basically ratio based model for evaluating the performance of banks. It is a management tool that measures capital adequacy, assets quality, management efficiency, earnings quality, liquidity and sensitivity to market risk of financial institutions (Mathiraj and Ramya, 2014).

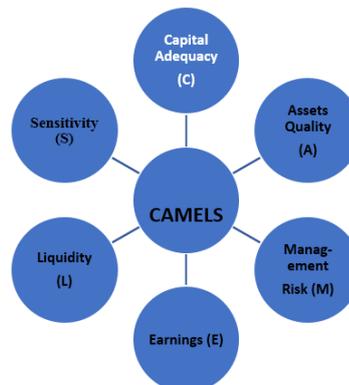


Fig.-2: Conceptual Framework of CAMELS

For the purpose of convenient presentation variables are abbreviated and the following table shows it.

Table 7: Financial Ratios with formula and their accepted Ideal value

| Abbreviations Used                                      | Name of the Ratios                  | Formula   | Source of data                                  | Ideal value  |
|---|-------------------------------------|---|---|--|
| Capital Adequacy (C)                                    |                                     |   |   |  |
| CAR (%)   | Capital Adequacy Ratio              | Tier I capital + tier II capital/ Risk weighted Assets              | Balance Sheet                                   | 9%<br>(www.rbi.org.in)   |
| LR (%)  | Leverage Ratio                      | Total Debt/ EBIT  | Balance Sheet                                   | More than 3%<br>(www.rbi.org.in)                                   |
| Assets Quality (A)                                      |                                     |   |   |  |
| GNR (%)   | Gross NPA Ratio                     | Gross NPA / Total Advances  | Balance Sheet                                   | Below 5%<br>(www.rbi.org.in)                                       |
| NNR (%)   | Net NPA Ratio                       | Net NPA / Total Advances  | Balance Sheet                                   | Below 1%<br>(www.rbi.org.in)                                       |
| Management Risk (M)                                     |                                     |   |   |  |
| ROA (%)   | Return on Assets                    | Net Profit / Total Assets   | Balance Sheet, statement of Profit & loss       | Greater than 5%<br>(www.rbi.org.in)                                |
| ROE (%)   | Return on Equity                    | Net Profit / Equity   | Balance Sheet, statement of Profit & loss       | Greater than 10%   |
| CI (%)  | Cost to Income                      | Operating Expenses/ Operating Income                                | statement of Profit & loss, Cash flow statement | Below 50%<br>(Kumar, 2020)   |
| Earnings (E)  |                                     |   |   |  |
| ROCE (%)  | Return on Capital Employed          | EBIT/ Capital Employed  | Balance Sheet, statement of Profit & loss       | Greater than 7.5 is considered good.                               |
| BEPS (rs)   | Basic Earnings Per Share (INR)      | Net Income – Preferred Dividends/ weighted Average of Common Shares | Balance Sheet, statement of Profit & loss       | Higher BEPS shows higher earnings. (Kumar, 2020)                   |
| Liquidity (L)   |                                     |   |   |  |
| LCR (%)   | Liquidity Coverage Ratio            | High quality liquid assets (HQLA)/ Total net cash outflow           | Balance Sheet, cash flow statement              | More than 100%<br>(www.rbi.org.in)                                 |
| CR  | Current Ratio                       | Current Assets/ Current Liabilities                                 | Balance Sheet                                   | 2:1 (Sudha and Rajendran, 2019)                                    |
| Sensitivity to Market Risk (S)                          |                                     |   |   |  |
| ITA (%)   | Interest Income to Total Assets     | Interest Income/ Total Assets                                       | Balance Sheet, statement of Profit & loss       | High ratio is a good indicator.<br>(Shanmugam and Ravirajan, 2021) |
| NITA (%)  | Non-Interest Income to Total Assets | Non-Interest Income/ Total Assets                                   | Balance Sheet, statement of Profit & loss       | Low ratio is a good indicator.<br>(Shanmugam and Ravirajan, 2021)  |
| Source: (Bansal and Singh, 2024), (Singh and Das, 2018) |                                     |   |   |  |

Table 7 represents the various parameters used in CAMEL Model with their formulas and 4.4.1.1 Capital Adequacy (C) abbreviations used in this study.

In CAMEL Analysis C stands for Capital Adequacy, so we firstly assess bank’s adequate capital maintaining ability, risk controlling ability etc. are taken into consideration provide rating to institution. The following ratios can be used to analyse bank’s Capital adequacy.

CRAR: It stands for Capital Risk Adequacy ratio. The ideal ratio is 9% for private commercial banks.

This ratio indicated that whether the bank has sufficient capital to bear unexpected losses in the future.

LR: It stands for Leverage Ratio. This ratio assesses the ability of a bank to meet its financial obligations. More than 3% should be considered as a good indicator. The computations are shown in table 8.

Table 8: Pre & Post Capital Adequacy Ratio of IDBI Bank

| Ratios/ years | 2015                   | 2016  | 2017  | 2018  | 2019  | Average | 2020                    | 2021  | 2022  | 2023  | 2024  | Average |
|---------------|------------------------|-------|-------|-------|-------|---------|-------------------------|-------|-------|-------|-------|---------|
|               | Pre Acquisition period |       |       |       |       |         | Post Acquisition period |       |       |       |       |         |
| CRAR (%)      | 11.86                  | 11.67 | 10.70 | 10.41 | 11.58 | 11.24   | 13.31                   | 15.59 | 19.06 | 20.44 | 22.26 | 17.10   |
| LR (%)        | 5.50                   | 5.81  | 4.89  | 4.33  | 4.69  | 5.04    | 5.02                    | 6.17  | 7.82  | 7.86  | 8.53  | 6.71    |

Source: annual reports, moneycontrol.com

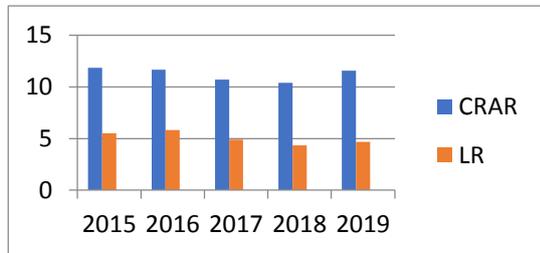


Fig 3a: Pre Acquisition Capital Adequacy

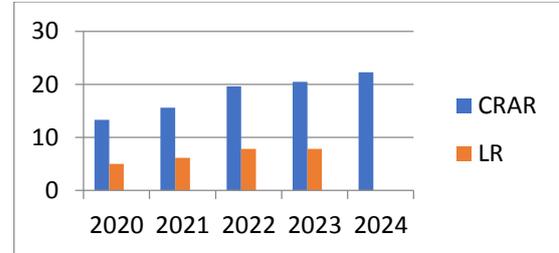


Fig. 3b: Post Acquisition Capital Adequacy

Figure 3a and 3b is the graphical representation of table 8. Table 8 indicates that, during the pre acquisition and post acquisition period, CRAR of IDBI Bank is more than the benchmark value level set by RBI i.e. (9%). The higher CRAR indicates the bank is able to protect value of investment of investors. Average CRAR of pre acquisition period is 11.24 and of post acquisition period is 17.10. LR of IDBI Bank is more than the benchmark value level set by RBI i.e. (more than 3%). Average LR of pre acquisition period is 5.04 and of post acquisition period is 6.71.

4.4.1.2 Assets Quality (A)

Table 9: Pre & Post Assets Quality Ratio of IDBI Bank

| Ratios/ years | 2015                   | 2016  | 2017  | 2018  | 2019  | Average | 2020                    | 2021  | 2022  | 2023 | 2024 | Average |
|---------------|------------------------|-------|-------|-------|-------|---------|-------------------------|-------|-------|------|------|---------|
|               | Pre Acquisition period |       |       |       |       |         | Post Acquisition period |       |       |      |      |         |
| GNR (%)       | 5.88                   | 10.98 | 21.25 | 27.95 | 27.47 | 18.70   | 27.53                   | 22.37 | 19.14 | 6.38 | 4.53 | 18.86   |
| NNR           | 2.88                   | 6.78  | 13.2  | 16.59 | 10.11 | 9.91    | 4.19                    | 1.97  | 1.27  | 0.92 | 0.34 | 2.08    |

In CAMEL Analysis A stands for Assets Quality, so we secondly assess bank’s assets quality that reflected the efficiency of investment policies and practice. Net NPA Ratio and Gross NPA Ratio are used to analyse the Assets Quality of the bank.

GNR: It stands for Gross NPA Ratio. It represents the relation between Gross NPA and Total Advances. For a commercial bank below 5% is considered as good.

NNR: It stands for Net NPA Ratio. It explains the relation between Net NPA and Total Advances. Net NPA is a better health indicator of the bank. For a commercial bank below 1% NNR is considered good. The computations are shown in table 9.

|  |  |  |   |  |  |  |  |  |  |  |  |  |
|--|--|--|---|--|--|--|--|--|--|--|--|--|
| (%)                                      |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Source: annual reports, moneycontrol.com |  |  |   |  |  |  |  |  |  |  |  |  |

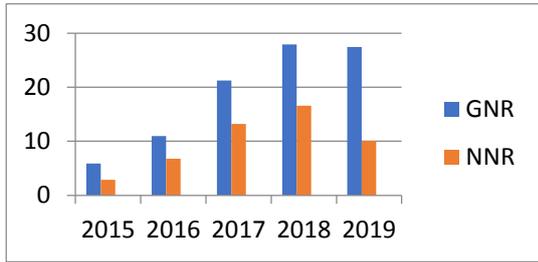


Fig 4a: Pre Acquisition Assets Quality

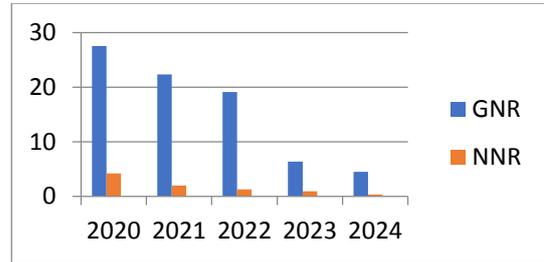


Fig. 4b: Post Acquisition Assets Quality

Figure 4a and 4b is the graphical representation of table 9. Table 9 indicates that, during pre acquisition period, GNR is excessively high than the benchmark value level set by RBI i.e. (below 5%). In 2018 GNR of IDBI Bank reached to the value of 27.95. Similarly, NNR also has the highest value of 16.59 in 2018, which is more than the benchmark value level set by RBI i.e. (less than 1%). The excessive GNR and NNR show the poor assets management of IDBI Bank. During the post acquisition period, GNR decreases and reached to the value of 4.53 in 2024 and NNR also decreases and reached to the value of 0.34 in 2024.

The third component of the CAMEL Analysis is the management quality component. It is the bank's ability to identify, monitor, quantify, and control risks associated with day-to-day operations. The management quality of the bank may be examined using the following ratios.

ROA: It stands for Return on Assets Ratio. It clarifies how net profit and total assets are related. A ROA of more than 5% is seen as favourable.

ROE: It stands for Return on Equity Ratio. It clarifies how net profit and total equity are related. A ROE of more than 10% is seen as favourable.

CI: It stands for Cost to Income Ratio. It basically does a cost-benefit analysis of a bank's operations. A CI of less than 50% is deemed satisfactory. The computations are presented in table 10.

4.4.1.3 Management Risk/ Quality (M)

Table 10: Pre & Post Management Quality Ratio of IDBI Bank

| Ratios/ years | 2015                   | 2016   | 2017  | 2018   | 2019   | Ave<br>average | 2020  | 2021                    | 2022  | 2023  | 2024  | Avera<br>age |  |
|---------------|------------------------|--------|-------|--------|--------|----------------|-------|-------------------------|-------|-------|-------|--------------|--|
|               | Pre Acquisition period |        |       |        |        |                |       | Post Acquisition period |       |       |       |              |  |
| ROA (%)       | 0.24                   | -0.97  | -1.42 | -2.35  | -4.71  | -1.84          | -4.29 | 0.45                    | 0.80  | 1.10  | 1.55  | -1.94        |  |
| ROE (%)       | 3.85                   | -16.57 | 30.08 | -50.99 | -48.94 | 28.55          | 46.82 | 4.45                    | 7.34  | 9.82  | 11.29 | -25.21       |  |
| CI (%)        | 27.61                  | 41.85  | 46.84 | 69.58  | 95.86  | 56.35          | 96.20 | 47.98                   | 49.65 | 48.74 | 40.49 | 56.62        |  |

Source: annual reports, moneycontrol.com

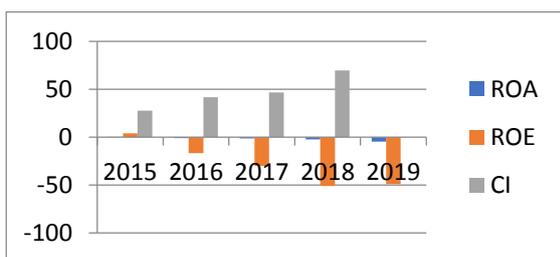


Fig 5a: Pre Acquisition Management Quality

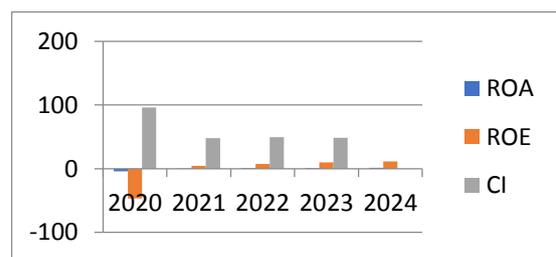


Fig. 5b: Post Acquisition Management Quality

Figure 5a and 5b is the graphical representation of table 10. Table 10 indicates that, during pre acquisition period, ROA and ROE were excessively low than the benchmark value level set by RBI. In 2019 ROA of IDBI Bank reached to the value of -4.71. Similarly, ROE also has the lowest value of -50.99 in 2018, which is less than the benchmark value level set by RBI i.e. (more than 10%). The negative ROA and ROE show the poor risk management of IDBI Bank. During the post acquisition period, ROE increases and reached to the value of 11.29 in 2024 and ROA also increases and reached to the value of 1.55 in 2024. During the pre acquisition period CI is in increasing trend. In 2019 CI of IDBI Bank is very high and reached to the value of 95.86 which is very high than the benchmark value level set by RBI i.e. (below 50%). During the post acquisition period CI is in

decreasing trend. In 2024 CI of IDBI Bank is low and reached to the value of 40.49 which is under the benchmark value level set by RBI i.e. (below 50%).

4.4.1.4 Earnings (E)

In CAMEL Analysis E stands for Earnings, so now we assess bank’s earnings, growth, stability, net worth level etc. It includes the following ratios:

ROCE: It stands for Return on Capital Employed. It indicates the relationship between EBIT and Capital Employed. ROCE greater than 7.5% is considering good.

BEPS: It stands for Basic Earnings per Share. It indicates the earnings of the bank per share. The computations are presented in table 11.

Table 11: Pre & Post Earning Ratio of IDBI Bank

| Ratios/<br>years | 2015                   | 2016   | 2017   | 2018   | 2019   | Average | 2020                    | 2021 | 2022 | 2023 | 2024 | Average |
|------------------|------------------------|--------|--------|--------|--------|---------|-------------------------|------|------|------|------|---------|
|                  | Pre Acquisition period |        |        |        |        |         | Post Acquisition period |      |      |      |      |         |
| ROCE (%)         | 1.65                   | 1.47   | 1.31   | 2.37   | 1.30   | 1.62    | 1.74                    | 2.50 | 2.59 | 2.78 | 2.79 | 2.40    |
| BEPS             | 5.45                   | -21.77 | -25.05 | -34.45 | -30.48 | -21.26  | 14.48                   | 1.30 | 2.27 | 3.39 | 5.24 | -0.46   |

Source: annual reports, moneycontrol.com

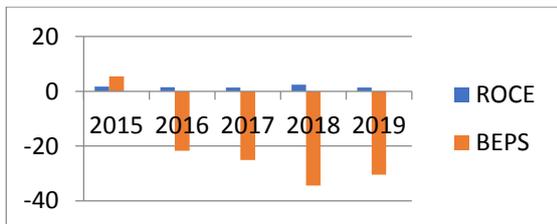


Fig 6a: Pre Acquisition Earnings

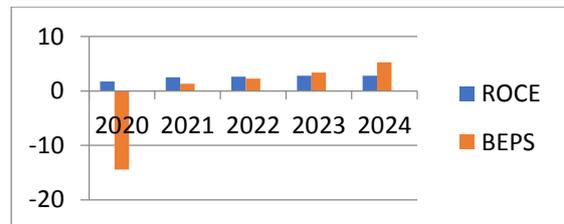


Fig. 6b: Post Acquisition Earnings

Figure 6a and 6b is the graphical representation of table 11. Table 11 indicates that, ROCE of IDBI Bank decreases during the pre acquisition period and reached to the value of 1.30 in 2019, which is less than the benchmark value level set by RBI i.e. (more than 7.5%). During the post acquisition period, ROCE is increases and reached to the value of 2.79 in 2024. During pre acquisition period, BEPS is excessively low and showed a negative balance. In 2018, BEPS of IDBI Bank reached to the value of -34.45. During the post acquisition period, BEPS of IDBI Bank is increases and reached to the value of 5.24 in 2024.

4.4.1.5 Liquidity (L)

In CAMEL Analysis L stands for Liquidity. It covers availability of converting short term assets into cash. The following ratios can be used to analyse bank’s Liquidity.

LCR: It stands for Liquidity Coverage Ratio. According to this ratio, banks have to maintain a sufficient level of liquid, high-quality assets to cover their cash withdrawals.

CR: It stands for Current Ratio. It explains the relation between Current Assets and Current

Liability. Standard current ratio is 2:1. The computations are shown in table 12.

Table 12: Pre & Post Liquidity Ratio of IDBI Bank

| Ratios/<br>years | 2015                   | 2016  | 2017   | 2018   | 2019   | Average | 2020                    | 2021   | 2022   | 2023   | 2024   | Average |
|------------------|------------------------|-------|--------|--------|--------|---------|-------------------------|--------|--------|--------|--------|---------|
|                  | Pre Acquisition period |       |        |        |        |         | Post Acquisition period |        |        |        |        |         |
| CR               | 6.18                   | 6.03  | 5.46   | 5.72   | 5.09   | 5.69    | 7.38                    | 3.22   | 2.93   | 1.71   | 1.68   | 3.81    |
| LCR (%)          | 76.74                  | 88.59 | 114.71 | 102.87 | 114.37 | 99.45   | 127.68                  | 155.59 | 141.70 | 135.66 | 119.84 | 140.15  |

Source: annual reports, moneycontrol.com

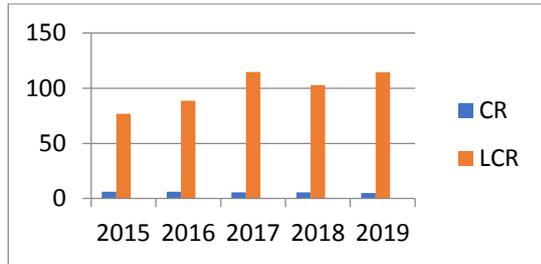


Fig 7a: Pre Acquisition Liquidity

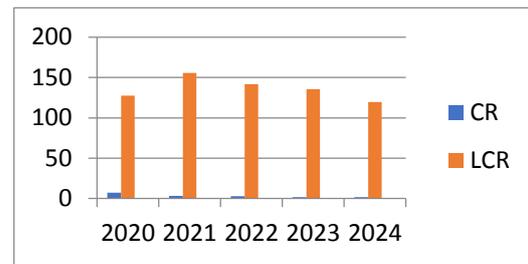


Fig. 7b: Post Acquisition Liquidity

Figure 7a and 7b is the graphical representation of table 12. Table 12 indicates that, CR of IDBI Bank is fluctuating during the study. During pre acquisition period, CR is more than the bench mark value set by RBI i.e. (2:1) but during post acquisition period, it decreases and reached to the value of 1.68 in 2024. Average LCR of IDBI Bank during pre acquisition is 99.4 which is less than benchmark value set by RBI i.e. (more than 100%) and during post acquisition period its average value is 140.15.

and regulate market risk is the primary criterion used to assess sensitivity. Market risk encompasses exposures associated with changes in interest rates, commodity prices or equity prices etc. The following ratios can be used to analyse bank's Sensitivity.

ITA: It stands for Interest Income to Total Assets Ratio. It shows bank's reliance on interest from bank lending as a source of funding. A high ratio is a good indicator.

NITA: It stands for Non- Interest Income to Total Assets Ratio. It shows bank's reliance on non-interest income as a source of funding. A low ratio is a good indicator. The computations are presented in table 13.

4.4.1.6 Sensitivity to Market Risk (S)

In CAMEL Analysis S stands for Sensitivity to Market Risk. The ability of management to track

Table 13: Pre & Post Capital Adequacy Ratio of IDBI Bank

| Ratios/<br>years | 2015                   | 2016 | 2017 | 2018 | 2019 | Average | 2020                    | 2021 | 2022 | 2023 | 2024 | Average |
|------------------|------------------------|------|------|------|------|---------|-------------------------|------|------|------|------|---------|
|                  | Pre Acquisition period |      |      |      |      |         | Post Acquisition period |      |      |      |      |         |
| ITA (%)          | 7.90                   | 7.49 | 7.68 | 6.57 | 6.89 | 7.30    | 6.94                    | 6.69 | 6.06 | 6.22 | 7.27 | 6.47    |
| NITA (%)         | 1.12                   | 0.90 | 1.09 | 2.00 | 1.03 | 1.22    | 1.49                    | 1.55 | 1.55 | 1.32 | 0.99 | 1.47    |

Source: annual reports, moneycontrol.com

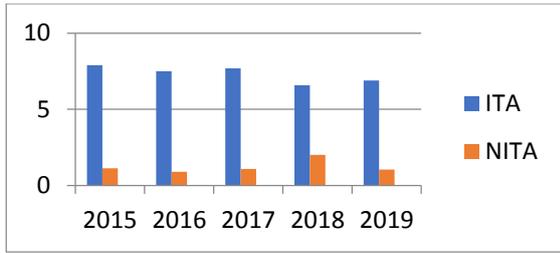


Fig 8a: Pre Acquisition Sensitivity

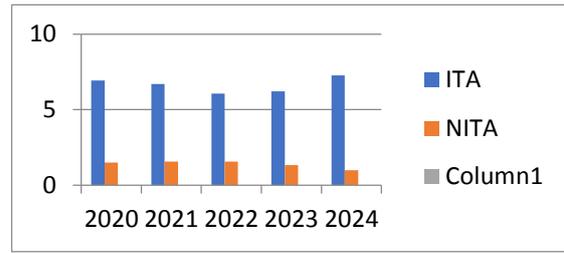


Fig. 8b: Post Acquisition Sensitivity

Figure 8a and 8b is the graphical representation of table 13. Table 13, indicates that ITA of IDBI Bank is fluctuating during the study. The average value of ITA during the pre acquisition period is 7.30 and during the post period is 6.47. NITA of IDBI Bank

is also fluctuating during the study. The average value of NITA during the pre acquisition period is 1.22 and during the post period is 1.47.

CAMALS Analysis at a Glimpse

Table 14: CAMELS Analysis of IDBI Bank

| Ratios/ years                            | 2015                   | 2016   | 2017   | 2018   | 2019   | 2020                    | 2021   | 2022   | 2023   | 2024   |
|--|------------------------|--------|--------|--------|--------|-------------------------|--------|--------|--------|--------|
|  | Pre Acquisition period |        |        |        |        | Post Acquisition period |        |        |        |        |
| Capital Adequacy (C )                    |                        |        |        |        |        |                         |        |        |        |        |
| CRAR (%)                                 | 11.86                  | 11.67  | 10.70  | 10.41  | 11.58  | 13.31                   | 15.59  | 19.06  | 20.44  | 22.26  |
| LR (%)                                   | 5.50                   | 5.81   | 4.89   | 4.33   | 4.69   | 5.02                    | 6.17   | 7.82   | 7.86   | 8.53   |
| Assets Quality (A)                       |                        |        |        |        |        |                         |        |        |        |        |
| Gross NPA (%)                            | 5.88                   | 10.98  | 21.25  | 27.95  | 27.47  | 27.53                   | 22.37  | 19.14  | 6.38   | 4.53   |
| Net NPA (%)                              | 2.88                   | 6.78   | 13.21  | 16.59  | 10.11  | 4.19                    | 1.97   | 1.27   | 0.92   | 0.34   |
| Management (M)                           |                        |        |        |        |        |                         |        |        |        |        |
| ROA (%)                                  | 0.24                   | -0.97  | -1.42  | -2.35  | -4.71  | -4.29                   | 0.45   | 0.80   | 1.10   | 1.55   |
| ROE (%)                                  | 3.85                   | -16.57 | -30.08 | -50.99 | -48.94 | -46.82                  | 4.45   | 7.34   | 9.82   | 11.29  |
| CI (%)                                   | 27.61                  | 41.85  | 46.84  | 69.58  | 95.86  | 96.20                   | 47.98  | 49.65  | 48.74  | 40.49  |
| Earnings (E )                            |                        |        |        |        |        |                         |        |        |        |        |
| ROCE (%)                                 | 1.65                   | 1.47   | 1.31   | 2.37   | 1.30   | 1.74                    | 2.50   | 2.59   | 2.78   | 2.79   |
| BEPS                                     | 5.45                   | -21.77 | -25.05 | -34.45 | -30.48 | -14.48                  | 1.30   | 2.27   | 3.39   | 5.24   |
| Liquidity (L)                            |                        |        |        |        |        |                         |        |        |        |        |
| CR                                       | 6.18                   | 6.03   | 5.46   | 5.72   | 5.09   | 7.38                    | 3.22   | 2.93   | 1.71   | 1.68   |
| LCR (%)                                  | 76.74                  | 88.59  | 114.71 | 102.87 | 114.37 | 127.68                  | 155.59 | 141.70 | 135.66 | 119.84 |
| Sensitivity (S)                          |                        |        |        |        |        |                         |        |        |        |        |
| ITA (%)                                  | 7.90                   | 7.49   | 7.68   | 6.57   | 6.89   | 6.94                    | 6.69   | 6.06   | 6.22   | 7.27   |
| NITA (%)                                 | 1.12                   | 0.90   | 1.09   | 2.00   | 1.03   | 1.49                    | 1.55   | 1.55   | 1.32   | 0.99   |
| Source: annual reports, moneycontrol.com |                        |        |        |        |        |                         |        |        |        |        |

#### 4.4.2 DuPont Analysis

DuPont analysis is a useful technique used to decompose the different drivers of return on equity (ROE) in order to analyze the contribution of each part. This model was originally devised in the 1920s by Donaldson Brown at DuPont Corporation, the chemical company. The decomposition of ROE allows investors to focus on the key metrics of financial performance individually to identify

strengths and weaknesses (Kesireddy and Kumar, 2022). There are two versions of DuPont analysis, one decomposing it into 3 steps and another decomposing it into 5 steps.

##### 4.4.2.1 3-Step DuPont Analysis Model

The 3-step DuPont analysis model states that if the net profit margin, asset turnover, and financial leverage of a company are multiplied, the output is the company's return on equity (ROE). In the 3-step

DuPont model, the return on equity (ROE) is broken into three ratio components (Rooplata, 2016).

1. Net Profit Margin Ratio measures how profitable a bank's revenue are after all expenses, including taxes and interest expenses have been deducted. Formula to calculate net profit margin ratio is

$$\text{Net Profit Margin} = \text{Net Income} \div \text{Revenue} \times 100$$

2. Assets Turnover measures management effectiveness and reveals how much revenue a bank earns for every rupee of its assets. Formula to calculate Assets Turnover is

$$\text{Asset Turnover} = \text{Revenue} \div \text{Total Assets}$$

3. Financial Leverage measures the equity multiplier of a bank. Formula to calculate Financial Leverage is

$$\text{Financial Leverage Ratio} = \text{Total Assets} \div \text{Shareholders' Equity}$$

Formula of 3 step DuPont Analysis

$$\text{ROE} = \text{Net Profit Margin} \times \text{Assets Turnover} \times \text{Financial Leverage Ratio}$$

Or

$$\text{ROE} = (\text{Net Income} / \text{Revenue}) \times (\text{Revenue} / \text{Total Assets}) \times (\text{Total Assets} / \text{Total Equity})$$

Table 15: 3-Step DuPont Analysis

| Ratios                                 | 2015                   | 2016  | 2017  | 2018  | 2019  | 2020                    | 2021  | 2022  | 2023  | 2024  |
|--|------------------------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|
|  | Pre Acquisition Period |       |       |       |       | Post Acquisition Period |       |       |       |       |
| Net profit margin (10%-20%)            | 2.7                    | -11.6 | -16.2 | -27.4 | -59.5 | -50.9                   | 5.5   | 10.6  | 14.6  | 18.7  |
| Assets turnover ratio (0.25-0.5)       | 0.09                   | 0.085 | 0.087 | 0.085 | 0.079 | 0.084                   | 0.082 | 0.076 | 0.075 | 0.082 |
| Financial leverage ratio (less than 5) | 15.72                  | 16.93 | 21.22 | 21.68 | 10.37 | 10.89                   | 9.75  | 9.08  | 8.90  | 7.28  |
| ROE (more than 10%)                    | 3.8                    | -16.6 | -30.1 | -50.9 | -48.9 | -46.7                   | 4.4   | 7.3   | 9.8   | 11.2  |

Table 15 shows the summary of 3 steps DuPont Analysis of IDBI Bank Ltd. During 2015-2019, pre acquisition period, Net Profit Margin was 2.7% in 2015 and decreased to -59.5% in 2019, which was less than the benchmark value i.e. 10% - 20%. This is not a good sign for the bank. Assets turnover ratio in 2015 was 0.09 and decreased to the lowest 0.079 in 2019. Financial leverage ratio was highest in 2018 with 21.68, which was more than the ideal value (less than 5). A high financial leverage indicates that a bank has borrowed heavily to acquire assets and, hence, has a higher probability of bankruptcy. During post acquisition period, Net Profit Margin was gradually increased to -50.9% in 2020 and increased to highest 18.7% in 2024. Assets turnover ratio fluctuated and reported 0.075 in 2023 and 0.082 in 2024. Financial leverage ratio gradually decreased to 7.28 in 2024. This analysis shows that ROE goes up during the post acquisition period because of net profit margin which is a positive sign for the bank.

#### 4.4.2.2 5-Step DuPont Analysis Model

The 5-step DuPont analysis model is the expended version of 3-step DuPont analysis model. In 5 step

model net profit is replaced by operating profit, tax burden and interest burden are also included.

The five components of the 5-step DuPont formula are as follows:

1. Operating Margin = Operating Income ÷ Revenue x 100
2. Asset Turnover = Revenue ÷ Average Total Assets
3. Financial Leverage Ratio = Average Total Assets ÷ Average Shareholders' Equity
4. Tax Burden = Net Income ÷ Pre-Tax and interest Income
5. Interest Burden = Pre-Tax and interest Income ÷ Operating Income

Formula of 5 step DuPont Analysis

$$\text{ROE} = \text{Operating Margin} \times \text{Assets Turnover} \times \text{Financial Leverage} \times \text{Tax Burden} \times \text{Interest Burden}$$

Or

$$\text{ROE} = (\text{Operating Income} / \text{Revenue}) \times (\text{Revenue} / \text{Total Assets}) \times (\text{Total Assets} / \text{Total Equity}) \times (\text{Net Income} / \text{Pre Tax Income}) \times (\text{Pre Tax and interest Income} / \text{Operating Income})$$

Table 16: 5-Step DuPont Analysis

| Ratios                   | 2015                   | 2016   | 2017   | 2018   | 2019   | 2020                    | 2021  | 2022  | 2023  | 2024  |
|--------------------------|------------------------|--------|--------|--------|--------|-------------------------|-------|-------|-------|-------|
|                          | Pre Acquisition Period |        |        |        |        | Post Acquisition Period |       |       |       |       |
| Operating profit margin  | 87                     | 89     | 87.5   | 76.6   | 86.9   | 82.3                    | 81.1  | 79.5  | 82.4  | 87.9  |
| Assets turnover ratio    | 0.09                   | 0.085  | 0.087  | 0.085  | 0.079  | 0.084                   | 0.082 | 0.076 | 0.075 | 0.082 |
| Financial leverage ratio | 15.72                  | 16.93  | 21.22  | 21.68  | 10.37  | 10.89                   | 9.75  | 9.08  | 8.9   | 7.28  |
| Tax Burden               | 0.031                  | -0.134 | -0.193 | -0.325 | -0.747 | -0.679                  | 0.073 | 0.146 | 0.203 | 0.258 |
| Interest Burden          | 0.99                   | 0.97   | 0.957  | 1.098  | 0.916  | 0.910                   | 0.928 | 0.908 | 0.868 | 0.826 |
| ROE                      | 3.8                    | -16.6  | -30.1  | -50.9  | -48.9  | -46.7                   | 4.4   | 7.3   | 9.8   | 11.2  |

Table 16 shows the summary of 5 steps DuPont Analysis of IDBI Bank Ltd. of pre acquisition period (2015-2019) and post acquisition period (2020-2024). During pre acquisition period, Operating Profit Margin was high with the value of 89% in 2016 and decreased to 86.9% in 2019. Assets turnover ratio in 2015 was 0.09 and decreased to the lowest 0.079 in 2019. Financial leverage ratio was highest in 2018 with 21.68, which was more than the ideal value (less than 5), which is not a good sign for a bank. A high financial leverage indicates that a bank has borrowed heavily to acquire assets and, hence, has a higher probability of bankruptcy. Tax Burden ratio more than 0.2 is better for a bank. Tax burden ratio was lowest with -0.747 in 2019.

During post acquisition period, Operating Profit Margin was gradually decreased to 79.5% in 2022 and increased to highest 87.9% in 2024. Assets turnover ratio fluctuated and reported 0.075 in 2023 and 0.082 in 2024. Financial leverage ratio gradually decreased to 7.28 in 2024. Tax Burden ratio was gradually increased to highest 0.258 in 2024. This analysis shows that ROE goes up during the post acquisition period because of favorable operating margin ratio, tax burden and interest burden ratio.

## 6. FINDINGS OF THE STUDY

i. CRAR is fluctuating but overall performance during the Pre Acquisition period is good. This ratio is in increasing trend in the Post Acquisition Period. In 2024 CRAR is high with

the value of 22.26 which is higher than the ideal level set by RBI i.e. 9%. The higher CAR ratio represents the investor protection ability of the bank from bankruptcy.

- ii. LR is in decreasing trend during the Pre Acquisition Period but during the Post Acquisition period this ratio is in increasing trend. In 2024 Leverage Ratio is high with the value of 8.53 which is higher than the ideal value i.e. less than 3%. The higher Leverage Ratio indicates the less ability of a bank to meet its financial obligations.
- iii. Both Gross NPA and Net NPA is very high with the value of 27.9 and 16.5 respectively during pre Acquisition period which shows poor assets management of bank during that period and continuously reducing during the post Acquisition period. In 2024 Net NPA Ratio is 0.34. It shows the effective assets management during post Acquisition period.
- iv. During the Pre Acquisition period both ROA and ROE are bad and also in minus figures. During the Post Acquisition period, these two ratios show an increasing trend and also become positive figure with the value of 1.55 and 11.29 respectively in 2024.
- v. Earning Ratio is fluctuating during the study. During the Pre acquisition period, earnings of the bank shows a negative balance with the value of -30.48 but during the post acquisition period it increases and becomes the positive with the value of 5.24.
- vi. Liquidity of IDBI Bank during pre Acquisition period is very high than its ideal value i.e. 2:1 which is not a good sign for a bank. But during

the post Acquisition period this ratio is low with the value of 1.71.

### CONCLUSION

Acquisition is a good tool to boost the economic and operational power, lift up the worldwide contacts, accomplish synergy by unite commercial activities, increased performance and lessen costs.

The one of the objective of the paper is to analyse the pre and post- acquisition financial performance of IDBI Bank with the help of CAMELS Model. This paper compares the pre and post acquisition position of long term profitability of IDBI Bank for the period from 2015 to 2024. It is found that Acquisition has positive effects on Gross NPA and Net NPA ratios. ROA ratio become positive as it shows negative balance from 2016 to 2020. It is also found that Acquisition has negative effects on earnings and interest income.

This paper also presents DuPont model for the decomposing the ROE of IDBI Bank ltd for the period 2015 - 2024. In its simplest form, we can say that if a bank wants to improve the ROE ratio the only choices has is to increase operating profits, become more efficient in using existing assets to generate sales, recapitalize to make better use of debt and/or better control the cost of deposit and lending money. It considers the operating and investing decisions. Finally, banks should seek for new sources of profitability in the retail banking and the asset management, by increase their market share. In order to minimize their losses from bad loans, they should control their operating expenses and expand their activities quite careful.

From 2015 to 2020, IDBI Bank write off bad loans worth Rs 45,693 crore and recovered just 8% of it after spending more than Rs 29.34 crore, an RTI query to Velankar reveals. The bank, which was re-categorised as a private sector lender in January 2019 after Life Insurance Corporation of India (LIC) raised its stake to 51%, refused to share information on loans of Rs 100 crore and above that were written off, the names of these borrowers or the money recovered from these big defaulters (Sapkale, 2020).

The deal between LIC and IDBI Bank Ltd. is essential for improving IDBI Bank Ltd.'s financial

situation. Many benefits would result from this deal, including more product offerings, lower distribution costs, and increased support for retail businesses (Jasrotia et al. 2022).

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