ABSTRACT:

New generation private sector banks in India are growing with the market share of 20% in deposits and advances. The technological advancement in the banking operations of NGPSBs has enabled them to stand with the global competitors successfully. Both fund based and non fund based operations of NGPSBs has witnessed a significant increase in the domestic as well as overseas operations. A well developed and efficient credit risk management practices are followed by the NGPSBs to monitor and control the credit risk. With the increase in credit exposure, their magnitude of risk weighted assets has also expanded in the recent past. This study aims to portray the relationship between the credit exposure and the risk weighted assets of the seven new generation private sector banks viz., Axis Bank, Development Credit Bank, HDFC Bank, ICICI Bank, Indusind Bank, Kotak Mahindra Bank and Yes Bank. This study is based on the secondary data collected from the published sources during 2008 to 2018.

KEYWORDS: Credit Exposure, Risk weighted assets, Fund based and Non fund based credit exposures.

1. INTRODUCTION

New generation private sector banks are the major role players in the economic development of the nation. Technology adoption and smart way of servicing the customer have helped them to have a strong customer base. The seven New Generation Private Sector Banks (NGPSBs) are the front runners in the Indian banking industry. As compared to the public sector banks, NGPSBs are leading in many aspects of banking operations, especially with regard to credit risk and NPA management. Private sector banks’ GNPA ratio stood at a much lower level of 4.7 percent in 2018 as against 4.1 percent during the financial year 2017 while the share of public sector banks stood at Rs 8.95 trillion, or at 14.6 percent out of the total NPAs. Managing the credit risk is an essential part of the banking business. NGPSBs are efficiently managing their credit risk with the prompt recovery measures. Bank for International Settlements has stated credit risk in its principles for the management of credit risk as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The management of credit risk starts from the appropriate credit flow. The goal of credit risk management is to maximise a bank’s risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Credit exposure is the total amount of credit made available to a borrower by a
lender and it measures the potential magnitude of loss if a default occurs. The Reserve Bank of India made it mandatory that all banks are requested to fix the limits for their exposure for credit and investment. Credit Exposure to industry type and sector type, to single borrower and group borrower limit, to leasing, to hire purchase and factoring services, to wholly owned subsidiaries abroad and overseas step down subsidiaries of Indian corporate, to the capital market for each bank. Further, banks in India are allowed to extend their credit facilities (fund based and non fund based) to people outside the country. But, the fund based and non fund based limits are to be within the set exposure limit of the bank. To manage the loss on account of default, banks have to classify the riskiness of the assets. Risk Weighted Assets, shortly called as RWA, are the assets of the bank which carries certain percentage of risk associated with the probable default on the agreed terms by the borrower. As per Basel I and Basel II norms, all banks are required to maintain 8% capital of their RWA but in India, rbi mandated banks to maintain it at 9% from the beginning (2003).

There are different approaches to identify and classify the risk level of assets. As per Basel II, two different credit risk measurement techniques are followed by banks for calculating credit risk. They are:

1) Standardised Approach,
2) Internal Ratings-Based Approach.

1) Standardised Approach is the only approach many banks in the world are following for calculating credit risk capital requirement. Under this approach, risks are calculated on the basis of ratings provided external Credit Rating Agencies (CRA) like ICRA, CRISIL and S&P, etc. Each asset of the bank carries a certain percentage of risk weight. Based on the risk weights, risk weighted assets will be calculated.

2) Internal Ratings-Based Approach (IRB) are broadly classified into two types viz., Foundation IRB approach and Advanced IRB approach. Under this approach to calculate the credit risk, four main risk parameters are followed, viz., Probability of Default (PD), Exposure at Default (EAD), Loss Given Default (LGD) and Maturity. Under Foundation IRB approach, banks’ are calculating their own PD, whereas the other parameters are given by the banks supervisor for calculating the credit risk. Under Advanced IRB approach, banks use their own PD, EAD LGD and other parameters for calculating the credit risk and based on the risk weights, risk weighted assets are calculated.

2. REVIEW OF LITERATURE

Swaranjeet Arora (2013) in his research study entitled ‘Credit Risk Analysis in Indian Commercial Banks – An Empirical Investigation’ has compared the credit risk management practices in public and private sector banks. The author has undertaken a survey with regard to credit risk process in SBI group, nationalised banks, old and new generation private sector banks in Indore division with a sample size of 200 which consists of 50 respondents in each bank group. The author has compared the credit risk processing in public and private sector banks by considering the creditworthiness analysis and collateral requirements as the important factors for analysing the credit risk. He concluded that the credit risk management practices in public and private sector banks significantly differed and the process of credit risk management of old and new generation private sector banks is better than the SBI and nationalised banks.

Asha Singh (2013) in her descriptive study entitled ‘Credit Risk Management in Indian Commercial Banks’ has provided the detailed information on the credit risk framework followed by Indian commercial banks. The author has portrayed the theoretical aspects of credit risk management framework by RBI and Credit risk management policies in commercial banks and highlighted the requirements of effective credit risk management in banks.

Tigor Sitorus (2015), in his study entitled ‘The Study on Risk Weighted Assets on the Effects of Loan Exposure Valuation towards Credit Default’ studied about the relationship between loan exposure and risk weighted assets towards credit default. The author has tested the mediation effect of
risk weighted assets on the effects of loan exposure valuation towards the credit default at the local banks listed in Indonesian Stock Exchange for the period 2008 to 2012 by using structural equation model (SEM). He explained the results that the credit exposure did not significantly affect the credit default but it directly affected the risk weighted assets.

Dr. Pralhadrathod and Vidyashree (2015), in their descriptive study entitled ‘Credit Risk Management – A study on Public sector, Private sector and Foreign banks in India’ has provided the theoretical aspects of credit risk management practices of public, private and foreign banks and RBI’s framework on credit risk management. From the descriptive analysis the authors analysed the position of NPA, NPA recovery on Public sector, private sector and foreign banks.

3. OBJECTIVES OF THE STUDY

This study is mainly focused on analysing the relationship between the credit exposure and risk weighted assets to determine whether the increased credit exposure is the crucial factor for the increase of risk weighted assets. In this backdrop the following objectives are framed for this study:

1. To study credit exposure and its trend in New generation private sector banks.
2. To analyse the position of Risk weighted assets of New generation private sector banks.
3. To find out the relationship between Credit Exposure and Risk weighted assets of NGPSBs.

4. METHODOLOGY

This research study is solely based on the secondary data. Annual credit exposure and the risk weighted assets of seven new generation private sector banks were collected from the annual reports published by respective banks and publications of Reserve Bank of India. The study period is 11 years from 2008 to 2018. Descriptive statistics, Trend analysis and Correlation analysis were the statistical tools used by the authors to analyse the data to draw meaningful inferences.

5. HYPOTHESIS OF THE STUDY

The null hypothesis $H_0$ be = There is no significant relationship between Credit Exposure and Risk weighted assets of New generation private sector banks.

The Alternate hypothesis $H_1$ be = There is a significant positive/negative relationship between Credit exposure and Risk weighted assets of New generation private sector banks.

6. DATA ANALYSIS

6.1 Fund based and non fund based exposure of new generation private sector banks in Domestic and Overseas environment

The average fund based and non fund based credit exposure of seven new generation private sector banks in India viz., Axis bank, Development credit bank, HDFC bank, ICICI bank, IndusInd bank, Kotak Mahindra bank and Yes bank for the period 2010 to 2018 is presented in Table 6.1 and Chart 6.1.
Source: Chart prepared by the authors based on data collected from the Annual reports of respective banks.

Interpretation

From Table 6.1 and Chart 6.1, it is clear that, fund based exposure is quite higher in all banks and the average fund and non fund based credit exposure of ICICI Bank, HDFC Bank and Axis Bank is greater than other four NGPSBs viz., IndusInd bank, Kotak Mahindra bank, Yes bank and Development credit bank during the study period 2010 to 2018.

<table>
<thead>
<tr>
<th>Bank</th>
<th>Axis</th>
<th>DCB</th>
<th>HDFC</th>
<th>ICICI</th>
<th>Indus</th>
<th>Kotak</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>FB NFB</td>
<td>FB NFB</td>
<td>FB NFB</td>
<td>FB NFB</td>
<td>FB NFB</td>
<td>FB NFB</td>
<td>FB NFB</td>
</tr>
<tr>
<td>2010</td>
<td>341007</td>
<td>341007</td>
<td>213573</td>
<td>213573</td>
<td>335600</td>
<td>210970</td>
<td>335600</td>
</tr>
<tr>
<td>2011</td>
<td>2514719</td>
<td>2514719</td>
<td>1747571</td>
<td>1747571</td>
<td>1747571</td>
<td>1747571</td>
<td>1747571</td>
</tr>
<tr>
<td>2012</td>
<td>1311290</td>
<td>1311290</td>
<td>120982</td>
<td>120982</td>
<td>120982</td>
<td>120982</td>
<td>120982</td>
</tr>
<tr>
<td>2013</td>
<td>2863865</td>
<td>2863865</td>
<td>2863865</td>
<td>2863865</td>
<td>2863865</td>
<td>2863865</td>
<td>2863865</td>
</tr>
<tr>
<td>2014</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
</tr>
<tr>
<td>2015</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
</tr>
<tr>
<td>2016</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
</tr>
<tr>
<td>2017</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
</tr>
<tr>
<td>2018</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
<td>1311290</td>
</tr>
<tr>
<td>Average</td>
<td>3755140</td>
<td>3755140</td>
<td>3755140</td>
<td>3755140</td>
<td>3755140</td>
<td>3755140</td>
<td>3755140</td>
</tr>
</tbody>
</table>

Source: Compiled from the Annual Reports of New Generation Private Sector Banks.
Value: Rupees in Millions
Note: FB – Fund Based Credit Exposure
NFB - Non Fund Based Credit Exposure

6.2 Bank-wise market share of credit exposure of NGPSBs

Chart 6.2 exhibits the bank wise market share of credit exposure of NGPSBs in domestic and overseas operations.
Chart 6.2
Bank wise share on average credit exposure in Domestic and Overseas Environment

Source: Chart prepared by the authors based on data collected from the Annual Reports of respective banks.

From Chart 6.2, it is clear that the credit exposure of NGPSBs in domestic operations is higher than their overseas exposure. Among the seven NGPSBs, ICICI Bank, Axis Bank and HDFC Bank are leading in credit exposure both in the domestic and overseas environments. ICICI bank and Axis Bank hold the larger credit exposure in domestic and overseas environment together.

6.3 Credit exposure Trend Line of Seven New Generation Private Sector Banks

Annual trend of fund and non fund based credit exposure during 2009 to 2018 in seven new generation private sector banks viz., Axis Bank, DCB Bank, HDFC Bank, ICICI Bank, IndusInd Bank, Kotak Mahindra Bank and Yes Bank are presented in the Charts 6.3a, 6.3b, 6.3c, 6.3d, 6.3e, 6.3f and 6.3g respectively.

Chart 6.3 a

Source: Chart prepared by the authors based on data collected from the Annual Reports of respective banks.

Interpretation

Chart 6.3a conveys that the FB exposure trend line of Axis Bank drastically declined during the years 2009, 2011 and 2017. In the year 2010 and 2012 there was a gradual increase in the FB exposure. NFB exposure trend line continuously declined from the year 2009 to 2013 and thereafter there was a
mixed trend. To be precise, Axis Bank experienced a downward trend in majority of the years in FB and NFB exposures.

**Chart 6.3 b**

Source: Chart prepared by the authors based on data collected from the Annual Reports of respective banks.

**Interpretation**

From chart 6.3b, one can infer that the trend line of DCB Bank shows initially there was a decline in its fund based exposure during 2009 and 2010, thereafter consistently increased from the year 2010 to 2012. During 2013 to 2018, there was no much difference. Trend line shows NFB exposure was on the steep downward trend during 2009 to 2011, thereafter it increased like anything and reached 0.6 scale in the year 2014, again there was dip in the year 2015, thereafter it was on the upward trend. The DCB had a major fluctuations in its NFB curve from 2009 to 2015.

**Chart 6.3 c**

Source: Chart prepared by the authors based on data collected from the Annual Reports of respective banks.

**Interpretation**

From chart 6.3c, it is inferred that a FB credit exposure of HDFC Bank was on the upward trend from 2009 to 2011, thereafter the line was continuously on the decline except during 2015. The trend
line of NFB exposure of HDFC Bank was on an upward trend from 2009 to 2010, thereafter, the line started decline, again in the year 2014 it had increased and touched the 0.5 scale in the year 2015 and from 2016 onwards it was on the downward trend.

**Source:** Chart prepared by the authors based on data collected from the Annual Reports of respective banks.

**Interpretation**

From chart 6.3d, it is clear that the FB exposure trend line of the ICICI Bank shows the upward trend from 2010 to 2013, thereafter the line drastically came down during 2014 and slowly it started to move on the upward trend till 2018 (except during 2016). NFB exposure trend line of the ICICI Bank sharply declined from 2009 to 2013 except during 2010 and 2011, thereafter it gradually increased.

**Source:** Chart prepared by the authors based on data collected from the Annual Reports of respective banks.
Interpretation

Chart 6.3e reveals that IndusInd Bank’s FB exposure trend line had an upward movement from 2009 to 2011, thereafter continuously it was on the downward movement in one year and upward movement in the next year. The NFB exposure trend line of the Bank gradually increased from 2009 to 2017.

Source: Chart prepared by the authors based on data collected from the Annual Reports of respective banks.

Interpretation

Chart 6.3f reveals that the Kotak Mahindra Bank had a downward movement in both FB credit and NFB credit exposure from 2011 to 2014, thereafter there was an upward movement till 2016. During the year 2014 to 2016 and 2017 both the exposures were on the increasing trend.

Source: Chart prepared by the authors based on data collected from the Annual Reports of respective banks.

Interpretation

From chart 6.3g it is clear that both FB and NFB credit exposure trend lines were moving in the upward directions during 2009 and 2010, and the trend was reversed during 2011 and 2012 and thereafter both the lines exhibit a fluctuating trend.
7. Risk Weighted Assets in New Generation Private Sector Banks

Risk Weighted Assets (RWAs) are classified into three categories viz., below 100% RWAs, 100% RWAs and above 100% RWAs.

**Below 100% RWAs category**

Table 7.1 exhibits the average percentage of RWAs in below 100% category of NGPSBs during the period under study.

<table>
<thead>
<tr>
<th>RWAs / Bank Name</th>
<th>Axis</th>
<th>DCB</th>
<th>HDFC</th>
<th>ICICI</th>
<th>INDUS</th>
<th>KOTAK</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of RWAs in below 100% category (out of total RWAs)</td>
<td>61</td>
<td>57</td>
<td>41</td>
<td>40</td>
<td>69</td>
<td>46</td>
<td>56</td>
</tr>
</tbody>
</table>

**Source:** Compiled by the authors from the Annual Reports of respective banks

During the study period from 2008 to 2018, below 100% RWAs are higher in IndusInd bank, Axis Bank, DCB Bank and Yes Bank compared to other two categories of RWAs. These banks maintain more than fifty percent of RWAs in this category. It means out of the total RWAs, most of their RWAs are in below 100% RWAs category which is less riskier for banks.

**100% RWAs category**

Table 7.2 exhibits the average percentage of RWAs in 100% category of NGPSBs during the period under study.

<table>
<thead>
<tr>
<th>RWAs / Bank Name</th>
<th>Axis</th>
<th>DCB</th>
<th>HDFC</th>
<th>ICICI</th>
<th>INDUS</th>
<th>KOTAK</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of RWAs in 100% category (out of total RWAs)</td>
<td>28</td>
<td>37</td>
<td>30</td>
<td>50</td>
<td>23</td>
<td>34</td>
<td>37</td>
</tr>
</tbody>
</table>

**Source:** Compiled by the authors from the Annual Reports of respective banks

During the study period from 2008 to 2018, 100% RWAs are high in ICICI bank as compared to other two categories of RWAs. This is the only bank which maintains 50% of their RWAs in the 100% RWAs category. It means its RWAs in this category are equal to the credit portion.

**Above 100% RWAs category**

Table 7.3 exhibits the average percentage of RWAs in above 100% category of NGPSBs during the period under study.

<table>
<thead>
<tr>
<th>RWAs / Bank Name</th>
<th>Axis</th>
<th>DCB</th>
<th>HDFC</th>
<th>ICICI</th>
<th>INDUS</th>
<th>KOTAK</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of RWAs in above 100% category</td>
<td>11</td>
<td>5</td>
<td>29</td>
<td>10</td>
<td>8</td>
<td>20</td>
<td>8</td>
</tr>
</tbody>
</table>

**Source:** Compiled by the authors from the Annual Reports of respective banks

During the study period from 2008 to 2018, above 100% RWAs are very low in DCB bank and it is followed by IndusInd Bank, Yes Bank and ICICI Bank. Out of the total RWAs, only 10% are in above
100% RWAs category and remaining 90% are in either 100% RWAs or below 100% category. Generally, higher share in this category is not good for a bank. Because they are taking the risk above 100% of their assets. The share of HDFC Bank and Kotak Mahindra Bank in this category is high as compared to other banks.

The RWAs of NGPSBs is exhibited in Chart 7.1 which is self-explanatory.

![Chart 7.1](chart.jpg)

**Source:** Chart prepared by the authors based on the data collected from the annual reports from 2008 to 2018

8. CORRELATION ANALYSIS

The Correlation between Credit Exposure and Risk Weighted Assets of New Generation Private Sector Banks is shown in Table 8.1

![Table 8.1](table.png)

**Source:** MS Excel Data analysis output, created by the authors

** represents the 1% level of Significance (2 tailed)

**Interpretation**

The Pearson correlation coefficient value in the correlation table infers that, the linear positive relationship exists between the credit exposure and risk weighted assets in the NGPSBs. Hence, The null
hypothesis that there is no significant relationship between Credit Exposure and Risk weighted assets of New generation private sector banks is rejected.

**Axis Bank**

From the results of correlation analysis, the volume of credit exposure is positively correlated with the risk weighted assets in Axis bank. Pearson correlation value of 0.997 in the below 100% risk weighted assets indicates the strong positive relationship and whenever the level of credit exposure increases the assets under below 100% risk increases significantly. Similarly, the Pearson correlation coefficient value of 0.883 and 0.992 in the 100% RWAs and above 100% RWAs indicates the strong linear relationship between the credit exposure and RWAs.

In Axis bank, the correlation result reveals that, the level of credit exposure is highly correlated with below 100% RWA and the relationship is a little lower in the 100% RWA category. The relationship is ranked based on the correlation value as evidenced from Table 8.2

<table>
<thead>
<tr>
<th>RWA category</th>
<th>Rank</th>
<th>Correlation (%)</th>
<th>Relationship status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100% RWA</td>
<td>1</td>
<td>99.7</td>
<td>Strong Positive Relationship</td>
</tr>
<tr>
<td>100% RWA</td>
<td>3</td>
<td>88.3</td>
<td>Positive relationship</td>
</tr>
<tr>
<td>Above 100% RWA</td>
<td>2</td>
<td>99.2</td>
<td>High positive Relationship</td>
</tr>
</tbody>
</table>

**DCB Bank**

From the results of correlation analysis through Table 8.3, the volume of credit exposure is positively correlated with the risk weighted assets in DCB bank. Pearson correlation value of 0.998 in the below 100% risk weighted assets indicates the strong positive relationship and whenever the level of credit exposure increases, the assets under below 100% risk increases significantly. Similarly, the Pearson correlation coefficient value of 0.971 and 0.930 in the 100% RWA and above 100% RWA indicates the strong linear relationship between the credit exposure and RWA.

In DCB bank, the correlation result reveals that, the level of credit exposure is highly correlated with below 100% RWA and 100% RWA, the relationship is very little lower in the above 100% RWA category.

<table>
<thead>
<tr>
<th>RWA category</th>
<th>Rank</th>
<th>Correlation (%)</th>
<th>Relationship status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100% RWA</td>
<td>1</td>
<td>99.8</td>
<td>High Positive Relationship</td>
</tr>
<tr>
<td>100% RWA</td>
<td>2</td>
<td>97.1</td>
<td>Strong Positive relationship</td>
</tr>
<tr>
<td>Above 100% RWA</td>
<td>3</td>
<td>93.0</td>
<td>Positive Relationship</td>
</tr>
</tbody>
</table>

**HDFC Bank**

From the results of correlation analysis through Table 8.4, the volume of credit exposure is positively correlated with the risk weighted assets in HDFC bank. Pearson correlation value of 0.964 in the below 100% risk weighted assets indicates the positive relationship and whenever the level of credit exposure increases the assets under below 100% risk increases significantly. Similarly, the Pearson correlation coefficient value of 0.842 and 0.941 in the 100% RWA and above 100% RWA indicates the good linear relationship between the credit exposure and RWA.
In HDFC bank, the correlation results show that the level of credit exposure is highly correlated with below 100% RWA and the relationship is a little lower in the above 100% RWA category. The relationship is ranked based on the correlation value is given in Table 8.4

<table>
<thead>
<tr>
<th>RWA category</th>
<th>Rank</th>
<th>Correlation (%)</th>
<th>Relationship status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100% RWA</td>
<td>1</td>
<td>96.4</td>
<td>Strong Positive Relationship</td>
</tr>
<tr>
<td>100% RWA</td>
<td>3</td>
<td>84.2</td>
<td>Positive relationship</td>
</tr>
<tr>
<td>Above 100% RWA</td>
<td>2</td>
<td>94.1</td>
<td>Strong Positive Relationship</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors

ICICI Bank

From the results of correlation analysis through Table 8.5, the volume of credit exposure is positively correlated with the risk weighted assets in ICICI bank. Pearson correlation value of 0.999 in the below 100% risk weighted assets indicates the very strong positive relationship and whenever the level of credit exposure increases the assets under below 100% risk increases significantly. Similarly, the Pearson correlation coefficient value of 0.937 and 0.975 in the 100% RWA and above 100% RWA indicates the good linear relationship between the credit exposure and RWA.

In ICICI bank, the correlation results indicate that the level of credit exposure is highly correlated with below 100% RWA, 100% RWAs and the relationship is positive in the above 100% RWA category. The relationship is ranked based on the correlation value is given in Table 8.5

<table>
<thead>
<tr>
<th>RWA category</th>
<th>Rank</th>
<th>Correlation (%)</th>
<th>Relationship status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100% RWA</td>
<td>1</td>
<td>99.9</td>
<td>High Positive Relationship</td>
</tr>
<tr>
<td>100% RWA</td>
<td>3</td>
<td>93.7</td>
<td>Strong Positive relationship</td>
</tr>
<tr>
<td>Above 100% RWA</td>
<td>2</td>
<td>97.5</td>
<td>High Positive Relationship</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors

IndusInd Bank

From the results of correlation analysis, the volume of credit exposure is positively correlated with the risk weighted assets in Indusind bank. Pearson correlation value of 0.999 in the below 100% risk weighted assets indicates the very strong positive relationship and whenever the level of credit exposure increases the assets under below 100% risk increases significantly. Similarly, the Pearson correlation coefficient value of 0.981 and 0.991 in the 100% RWA and above 100% RWA indicates the strong relationship between the credit exposure and RWA.

In Indusind bank, the correlation result reveals that, the level of credit exposure is highly correlated with below 100% RWA, 100% RWAs and the relationship is positive in the above 100% RWA category. The relationship is ranked based on the correlation value is given in the Table 8.6.
Table 8.6
Correlation Results of RWAs of IndusInd Bank

<table>
<thead>
<tr>
<th>RWA category</th>
<th>Rank</th>
<th>Correlation (%)</th>
<th>Relationship status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100% RWA</td>
<td>1</td>
<td>99.9</td>
<td>High Positive Relationship</td>
</tr>
<tr>
<td>100% RWA</td>
<td>3</td>
<td>98.1</td>
<td>High Positive relationship</td>
</tr>
<tr>
<td>Above 100% RWA</td>
<td>2</td>
<td>99.1</td>
<td>High Positive Relationship</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors

Kotak Mahindra Bank

From the results of correlation analysis, the volume of credit exposure is positively correlated with the risk weighted assets in the Kotak Mahindra bank. Pearson correlation value of 0.998 in the below 100% risk weighted assets indicates the very strong positive relationship and whenever the level of credit exposure increases the assets under below 100% RWA increases significantly. Similarly, the Pearson correlation coefficient value of 0.996 and 0.992 in the 100% RWA and above 100% RWA indicates the strong relationship between the credit exposure and RWA.

In the Kotak Mahindra bank, the correlation result reveals that the level of credit exposure is highly correlated with all the categories of RWAs. The relationship is ranked based on the correlation value is given in Table 8.7.

Table 8.7
Correlation Results of RWAs of Kotak Mahindra Bank

<table>
<thead>
<tr>
<th>RWA category</th>
<th>Rank</th>
<th>Correlation (%)</th>
<th>Relationship status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100% RWA</td>
<td>1</td>
<td>99.8</td>
<td>High Positive Relationship</td>
</tr>
<tr>
<td>100% RWA</td>
<td>2</td>
<td>99.6</td>
<td>High Positive relationship</td>
</tr>
<tr>
<td>Above 100% RWA</td>
<td>3</td>
<td>99.2</td>
<td>High Positive Relationship</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors

Yes Bank

From the results of correlation analysis, the volume of credit exposure is positively correlated with the risk weighted assets in Yes bank. Pearson correlation value of 0.994 in the below 100% risk weighted assets indicates the very strong positive relationship and whenever the level of credit exposure increases the assets under below 100% risk increases significantly. Similarly, the Pearson correlation coefficient value of 0.992 and 0.962 in the 100% RWA and above 100% RWA indicates the good linear relationship between the credit exposure and RWA.

In Yes bank, the correlation result reveals that the level of credit exposure is highly correlated with below 100% RWA, 100% RWAs and the relationship is positive in the above 100% RWA categories. The relationship is ranked based on the correlation value is given in Table 8.8.

Table 8.8
Correlation Results of RWAs of Yes Bank

<table>
<thead>
<tr>
<th>RWA category</th>
<th>Rank</th>
<th>Correlation (%)</th>
<th>Relationship status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 100% RWA</td>
<td>1</td>
<td>99.4</td>
<td>High Positive Relationship</td>
</tr>
<tr>
<td>100% RWA</td>
<td>2</td>
<td>99.2</td>
<td>High Positive relationship</td>
</tr>
<tr>
<td>Above 100% RWA</td>
<td>3</td>
<td>96.2</td>
<td>Strong Positive Relationship</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors
9. CONCLUSION:

Credit Risk Exposure is the very crucial factor for increasing RWAs of the bank. These two components are the deciding factors for profit and sustainability of the bank. Most of the NGPSBs RWAs are within the 100% or below 100% RWAs category only and by this way NGPSBs are managing their credit risk. During the study period, it is clear that whenever the credit risk exposures increase, the risk weighted assets are also getting increased in all NGPSBs. There is a positive correlation between credit exposure and RWAs. So the credit exposure is a crucial factor for the increase in RWAs.

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