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**An Analysis of Credit Rating in Service  
Sector- Research on Indian Banking System**

CASS


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**Credit Rating Agency** plays a vital role in the current financial markets towards fund mobilization and product promotion. They provide information to investors in simplified and easily readable form. As per RBI mandate the banks had to get the debt instruments rated prior to floating them in the market and it selected a few credit rating agencies in this regard. Thus with the growth in business and regulatory mandate, the credit rating agencies became popular in the current scenario. The regulatory norms which demand the banks have to be rated has been in the interest of the investors to substantiate whether they can fulfill their role in the financial system with a sound and healthy business model.

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**Research Objective -**

- To analyze the impact of rating on Financial performance of banks.

**Sample for Research -**

- (i) Bank of Baroda
- (ii) Bank of India
- (iii) Canara Bank
- (iv) Punjab National Bank

**1. INTRODUCTION**

Credit Rating Agency has become ubiquitous everywhere in the current scenario starting from rating of bonds, structured financial products, certificates of deposits, commercial papers, corporate, mutual funds, SMEs etc. Though they play a very important role in the financial markets yet they are grossly misunderstood and criticized for their role in the financial crisis of 2008. This brings to light the need for reform in their business models and methodology adopted which could perhaps take some more aspects of management and quality rather than just the financial ratios. Some critics opined that they should be completely done away with. While that may not be in the interest of all yet increased due diligence, less regulatory dependence on ratings and a user pay model are some of the solutions offered to bring some amount of discipline in this regard.

Indian credit rating industry mainly comprises of

- (i) CRISIL
- (ii) ICRA
- (iii) CARE
- (iv) ONICRA

**1.1 CREDIT ANALYSIS AND RESEARCH LIMITED (CARE)**

CREDIT ANALYSIS AND RESEARCH LIMITED (CARE) CARE started operating from April 1993 and over nearly two decades it has established itself as the second-largest credit rating agency in India. It has rated volume of debt around Rs.45, 901 billion (as on December 31, 2016). CARE Ratings has a dominant place in the Indian capital market reflecting strong investor confidence. CARE's primary business is to provide debt ratings and it has 21 years of experience. CARE ratings covers rating and grading services over a wide spectrum of debt instruments like

- (i) commercial papers,
- (ii) bonds,
- (iii) debentures,
- (iv) preference stocks,
- (v) structured debt instruments,
- (vi) bank loans etc and industries like banking, insurances, NBFCs, shipping, real estates, construction, manufacturing, energy service company (ESCO), renewable energy service company (RESCO), etc. It even rates small and medium sector enterprises (SMEs) and does grading of Initial Public Offer (IPO).

CARE periodically publishes industry research reports and also publishes risk scores report called CARE Industry Risk Metrics. CARE also provide customized research covering key areas such as

- (i) market sizing,
- (ii) demand estimation,
- (iii) demand supply gap analysis,
- (iv) cost benefit analysis,
- (v) product segmentation,
- (vi) business analysis.

The economics team produces economic research that includes

- (i) a daily debt market report,
- (ii) a monthly debt market review,
- (iii) budget analysis,
- (iv) other policy impact analysis
- (v) special commentaries on topical issues and
- (vi) studies and surveys on the Indian economy.

CARE also analyzes global economic developments.

CARE's has its registered office and head office, at 4th floor, Godrej Coliseum, Somaiya Hospital Road, Sion (East), Mumbai 22. CARE has regional offices at

- (i) Ahmedabad,
- (ii) Bangalore,
- (iii) Chennai,
- (iv) Hyderabad
- (v) Jaipur, Kolkata,
- (vi) New Delhi,

- (vii) Pune
- (viii) Jaipur
- (ix) Chandigarh and international operation in
- (x) Male in the Republic of Maldives.

## 2. LITERATURE REVIEW

Credit rating agencies aim to measure the creditworthiness of an entity (e.g. a corporation) through the credit analysis of the instruments or the entity (*Berblinger, 1996; Gonzales, 2004; Wappenschmidt, 2009*) and then represent their unbiased opinion based on the debt servicing capacity of the corporate (*Dilly &Mahlmann, 2010*).

It is also used as an informative index to look at the mechanism of corporate governance of the corporate to signal low investment risk and transparency (*Nordberg, 2011*). This can then be used by potential investors and banks as benchmarks for comparisons with their own analysis and internal ratings (*Erlenmaier, 2006*).Credit ratings are produced by professional rating agencies which are recognized by the regulators like the securities and exchange commission (SEC) in United States, Reserve Bank of India(RBI) and Security and Exchange Board of India (SEBI) in India and so on. In economic sense the credit rating agencies acts as a financial intermediaries between the lender and the borrowers which helps to reduce the information gap between the two (*Ramakrishan, &Thakor, 1984*).

Credit ratings encompass enormous scope from bonds, commercial papers, mutual funds, structured financial products to corporations to countries. Under regulatory norms credit ratings are compulsory for certain loans and credit of an undersigned amount (*Krahnem, 2001; RBI Working Papers*).These is called a shadow rating.

The credit rating agencies does professional ratings which can further be classified into solicited and unsolicited. Ratings published by them are single scale based (AAA, AA etc) upon analysis of multiple parameters like financial ratios, management quality, franchise value, competitiveness in different economic scenario (*Gonzales, 2004*). Initially rating models were built around only financial parameters which could be easily quantitatively analyzed like leverage, liquidity, interest coverage, profitability, firm size etc(*Altman, 1968; Brume, 1998; Ederington, 1985; Kaplan, 1979; Kamastra, 2001*).These models were based on through-the-cycle approach which ignored the short term changes in the business cycle. So a more dynamic model called the point-in-time was developed (*Amato, &Furne , 2004; Altman &Rijken, 2006*) based on Merton type model(*Merton, 1974*).

In the light of numerous false assessments of credit quality and sudden downfall of corporate firms Enron, Worldcom, AIG and Lehman Brothers (*Hill, 2004; Loffler, 2005; Guttler&Wahrenburg,*

2007; Gopalan, 2009) several loopholes have been exposed such as the improper methodology adopted by the rating agencies, the oligopolistic nature of the industry, the issuers payer model, strict regulatory mandates and conflict of interests.

### 3. SAMPLE STUDY

**3.1 Bank of Baroda (BOB)** is a premier nationalized bank which was incorporated in 1908. It is the largest nationalized public sector banks in India in terms of business, with Government of India holding 56.26% of its stake as on March 31<sup>st</sup>, 2018. It has a network of 4874 branches and 6254 ATMs as on March 31<sup>st</sup>, 2018. As on March 31<sup>st</sup>, 2018, the international business accounts for 33.3% of the bank's total business. BOI has got three domestic subsidiaries viz BOBCARDS Ltd., BOB Capital Markets Ltd. and Nainital Bank and eight other overseas subsidiaries. It has also got three domestic associates and two overseas associates. Its representative office overseas is in Thailand. It has got presence all across the globe like USA, UK, UAE, Australia, Singapore, Malaysia, China, Thailand, Mauritius, Hongkong, Zambia, Uganda etc.

Rating Factors	Comments on rating	Score
Track record of operations	Long track record of 105 years of operations, experienced management and well laid down strategic objectives.	Strong
Market position	Strong market position.	
Ownership	Majority ownership of Government of India. Governmental stake increased to 56.26% in FY18 from 55.41% in FY17.	Strong
Growth in business	Growth in business revived in FY18 crossing 9.5 lakh Crores. Growth in advances and deposits: 21.1 % and 20.1% in FY18 respectively.	Strong
Capitalization level	Bank has adequate capitalization. CAR as per Basel III is 12.28% as on 31 <sup>st</sup> March, 2018.	Strong
Asset quality	Slippages were reduced. However gross NPA ratio and Net NPA ratio slipped to 2.9% and 1.52% respectively in FY18.	Moderate
Liquidity profile	Liquidity position is comfortable. SLR at 24.52% of NDTL as against RBI norms of 23%. 85.02% of SLR investments in government securities as on 31 <sup>st</sup> March 2018.	Strong
Cost of resources	Bank has moderate low cost resources. CASA ratio has increased to 25.74% in FY18. CASA domestic ratio stood at 31.76%	Strong
Customer base	Extensive customer base.4874 branches and 6254 ATMs as on 31 <sup>st</sup> March 2018.	Strong

**3.2 Bank of India (BOI)** is a premier nationalized bank which was incorporated on September 07, 1906. It is the second largest nationalized banks in India in terms of business, with Government of India holding 66.7% of its stake as on March 31<sup>st</sup>, 2018. It has a network of 4646 branches and 4225 ATMs as on March 31<sup>st</sup>, 2018. As on March 31<sup>st</sup>, 2018, the international business accounts for 26.4% of the bank's total business. BOI has domestic subsidiary viz BOI Shareholding Ltd. in which it has 51% stake. It has recently incorporated two new domestic subsidiaries dealing in the mutual funds and portfolio management.

Rating Factors	Comments on rating	Score
Track record of operations	Long track record of 108 years of operations, experienced management and well laid down strategic objectives.	Strong
Market position	Strong market position. However due to strong competition credit and deposit market share had increased to 4.17% and 4.47% in FY18 from 3.83% and 4.26% in FY17 respectively.	Strong
Ownership	Majority ownership of Government of India. Governmental stake increased to 66.7% in FY18 from 64.1% in FY17.	Strong
Growth in business	Growth in business revived in FY18 crossing 8 lakh Crores. Growth in advances and deposits to 27.7% and 24.9% in FY18.	Strong
Capitalization level	Bank's capitalization can be under pressure. CAR as per Basel II is 10.76% and Basel III is 9.97% as on 31 <sup>st</sup> March, 2018. CET1 at 6.8% can be under pressure due to aggressive lending strategy	Caution
Asset quality	Asset quality deteriorated further. Gross NPA ratio and Net NPA ratio is at 3.25% and 2% respectively in FY14.	Moderate
Liquidity profile	Liquidity position is comfortable. SLR as per RBI limit. 87.5% of SLR investment is in government securities as on 31 <sup>st</sup> March 2014.	Strong
Cost of resources	Bank can further increase low cost resources. CASA ratio (domestic) has increased to 29.9% in FY14	Moderate
Customer base	Extensive customer base.4646 branches and 4225 ATMs as on 31 <sup>st</sup> March 2014.	Strong

**3.3 Canara Bank (CB)** was incorporated under the Indian Companies Act, 1882 (Act VI of 1882) in 1906 as Canara Bank Hindu Permanent Fund by late Shri AmmembalSubba Rao Pai. It became Canara Bank Ltd. in 1910 and Canara Bank in 1969 after nationalization. It is India's fifth largest nationalized bank in terms of business and in terms of number of branches.

Rating Factors	Comments on rating	Score
Track record of operations	Long track record of 108 years of operations, experienced management and well laid down strategic objectives.	Strong
Market position	Strong market position.	Strong
Ownership	Majority ownership of Government of India. Governmental stake increased to 69% in FY18 from 67.72% in FY17.	Strong
Growth in business	Growth in business revived in FY18 crossing 8 lakh Crores. Growth in advances and deposits: 24.3% and 18.2% in FY18 respectively.	Strong
Capitalization level	Bank has adequate capitalization. CAR as per Basel III is 10.63% as on 31 <sup>st</sup> March, 2018.	Strong
Asset quality	Asset quality improved. Gross NPA ratio and Net NPA ratio is at 2.44% and 1.98% respectively in FY18.	Moderate
Liquidity profile	Liquidity position is comfortable. SLR as per RBI norms. 85% of SLR investments in government securities as on 31 <sup>st</sup> March 2018.	Strong
Cost of resources	Bank has moderate low cost resources. CASA ratio has increased to 25.9% in FY18	Moderate
Customer base	Extensive customer base. 4755 branches and 6312 ATMs as on 31 <sup>st</sup> March 2018.	Strong

**3.4 Punjab National Bank (PNB)** was incorporated under the Indian Companies Act, 1882 (Act VI of 1882) in 1894 as Punjab National Bank Limited and commenced its operations on April 12, 1895 from Lahore. It is India's third largest nationalized bank in terms of business. In January 1940, PNB made its first acquisition of Bhagwandas Bank Limited. Post nationalization, PNB has grown substantially from a bank with 619 branches to 5800 branches and 6300 ATMs with 680 ATMs having biometric functionality by March 31<sup>st</sup>, 2018 catering to a customer base of 7.2 crore throughout the country. It has four domestic subsidiaries viz PNB Gilts Ltd, PNB Housing Finance Ltd, PNB Investment Services Ltd and PNB Insurance Broking Pvt. Ltd. It is also into four domestic joint ventures viz Principal PNB Asset Management Company Pvt. Ltd, Principal Trustee Company Pvt. Ltd, Assets Care & Reconstruction Enterprise Ltd and PNB Metlife India Insurance Company Ltd. It has got international branches in Hongkong, Kabul and Dubai. It has also got six domestic associates and rural regional banks where it has more than 30% stake.

Rating Factors	Comments on rating	Score
Track record of operations	Long track record of 120 years of operations, experienced management and well laid down strategic objectives.	Strong
Market position	Strong market position. However due to strong competition credit and deposit market share had dropped to 4.98% and 4.98% in FY18 from 5.11% and 5.18% in FY17 respectively.	Strong
Ownership	Majority ownership of Government of India. Governmental stake increased to 58.87% in FY18 from 57.87% in FY17.	Strong
Growth in business	Growth in business revived in FY18 crossing 8 lakh Crores. Growth in advances and deposits to 13.1% and 15.3% in FY17.	Strong
Capitalization level	Bank has adequate capitalization. CAR as per Basel II is 12.29% and Basel III is 11.52% as on 31 <sup>st</sup> March, 2018.	Strong
Asset quality	Asset quality deteriorated further. Gross NPA ratio and Net NPA ratio is at 5.25% and 2.85% respectively in FY18.	Weak
Liquidity profile	Liquidity position is comfortable. SLR is at 27.23% as on 31 <sup>st</sup> March 2018.	Strong
Cost of resources	Bank has adequate low cost resources. CASA ratio has increased to 41.3% in FY18	Strong
Customer base	Extensive customer base. 6200 branches and 6940 ATMs as on 31 <sup>st</sup> March 2018.	Strong

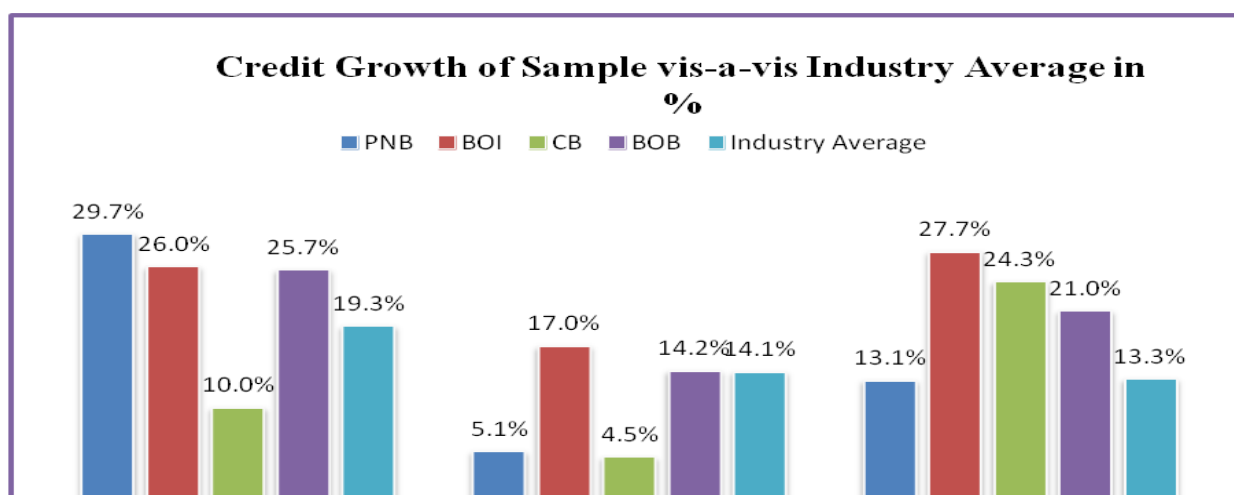


## 4. ANALYSIS

### 4.1 Credit Growth Analysis of the Sample

#### 4.1.1 Credit Growth of the Sample -

Trend in Credit Growth of the Sample vis-à-vis Industry Average (FY16-FY18)



Sources: careratings.com, pnb.com, bankofindia.co.in, canarabank.com, bankofbaroda.com.

Conservative lending approach by PNB has lowered its credit growth below industry average. BOI has been consistently able to maintain credit growth above industry average. CB has been able to revive its credit growth above industry in FY18 due to its aggressive lending approach to retail, MSME and agricultural sector. BOB has always maintained a balanced lending approach keeping in tune with the industry average and economic growth.

#### *Variations in the sample:*

The sample has shown a greater decrease in loans towards the large industrial sector than the banking industry average of 12% in FY18.

1. PNB has shown only 9% increase towards infrastructural advances while CB has shown 27% increase: the banking industry average advances to infrastructure stood at 15% in FY18.
2. While the average banking sector advances growth to chemical and chemical product industry was seen at 5.3% in FY18, the sample has shown an average robust growth of 35%.
3. The sample has shown a robust growth in advances to retail sector at 45% on an average while the industry average was seen at 15.5% in FY18.

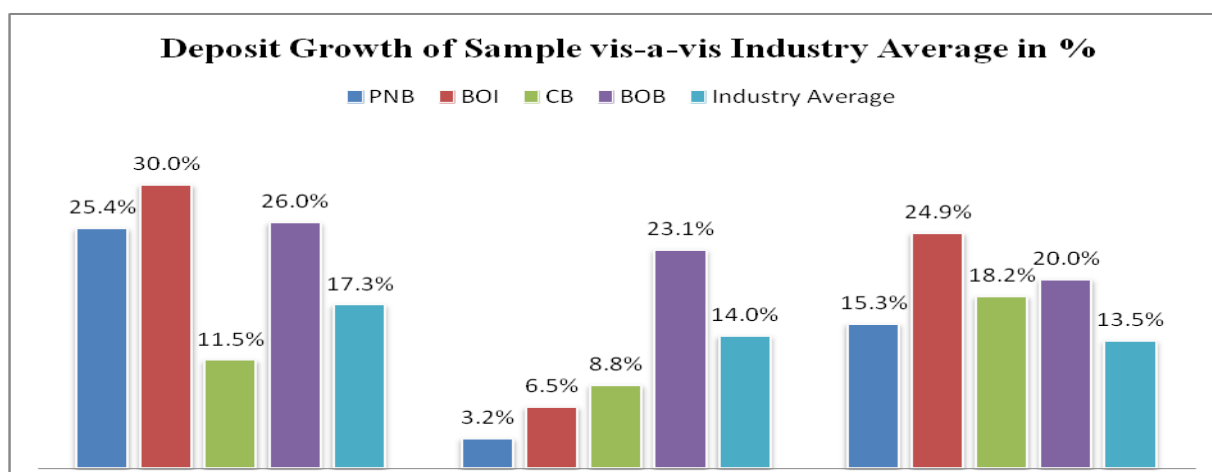
*Areas of concern:*

1. Stress could arise from SME sector as according to India Ratings & Research's SME Credit Report 2018-19 atleast one in four SMEs may not be able to service its debt going forward and the sample has shown an average credit growth of 30% to this sector.

## 4.2 Deposit Growth Analysis of the Sample

### 4.2.2 Deposit Growth of the Sample -

Trend in Deposit Growth of the Sample vis-à-vis Industry Average (FY16-FY18)



Sources: careratings.com, pnb.com, bankofindia.co.in, canarabank.com, bankofbaroda.com.

PNB's conservative lending approach led to lower mobilization of its deposit base. BOI has the highest deposit base among its peers due to strong FCNR (B) deposits. BOB's deposits grew on account of attractive retail schemes and 33.3% overseas deposits. CB's deposit grew mostly on account of domestic business.

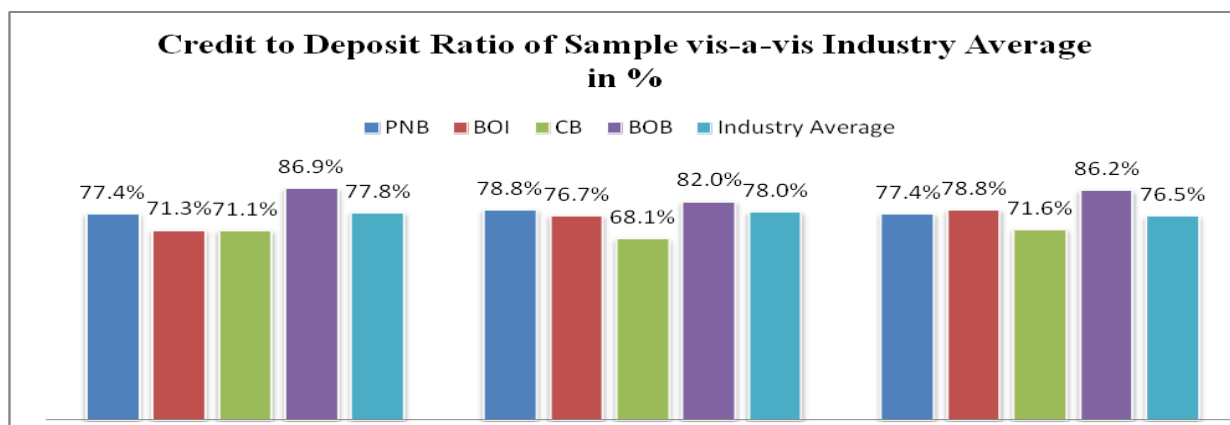
### *Variations in Deposit Composition in FY18*

1. The sample witnessed a shift in deposit base from bulk corporate deposits to granular retail deposits.

Growth of FCNR (B) deposits during September to November 2018 led to cost advantages for the banks as cost of FCNR (B) is 8.25% to 8.5% as against cost of term deposits at 9%. Again FCNR (B) deposit attracts no CRR and SLR requirements and no Priority Sector Lending (PSL) mandatory norms

### 4.3 Credit to Deposit Ratio Analysis -

Trend in Credit/Deposit Ratio of the Sample vis-à-vis Industry Average (FY16-FY18)

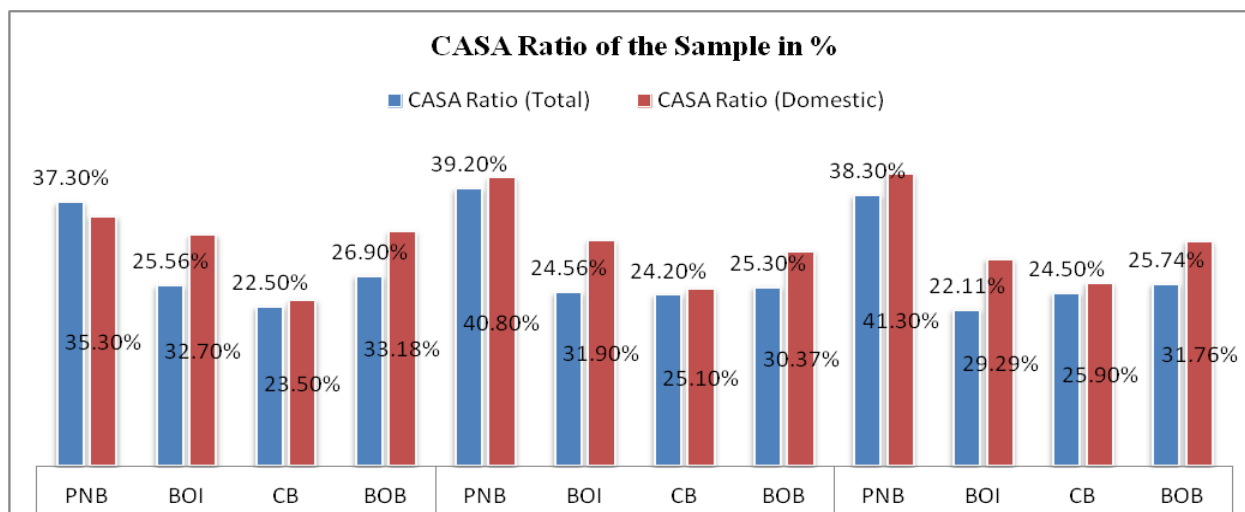


Sources: careratings.com, pnb.com, bankofindia.co.in, canarabank.com, bankofbaroda.com.

BOB has been able to maintain Credit to Deposit ratio higher its peers and above the banking industry averages in the last three years. PNB has almost maintained a status quo in line with industry average. CB’s credit to deposit ratio has been lower than the industry average in the past three years. BOI improved its credit to deposit ratio in FY18 on account of its aggressive business model.

### 4.4 CASA Deposits of the Sample -

Trend in CASA Ratio of the Sample (FY16-FY18)

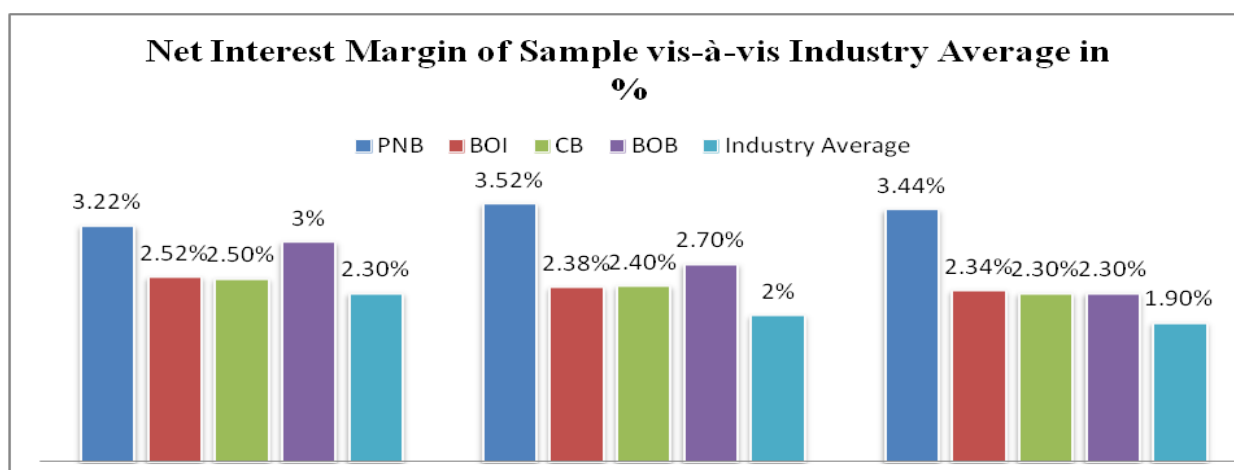


Sources: careratings.com, pnb.com, bankofindia.co.in, canarabank.com, bankofbaroda.com.

PNB has always been able to maintain CASA ratio higher than its peers for three years solely on account of increasing domestic deposits. CASA ratio of BOI and BOB has decreased on account of lower mobilization of international deposits explained statistically by a correlation coefficient of 0.57 between CASA ratio and overseas deposits.

#### 4.5 Net Interest Margin Analysis -

Trend in Net Interest Margin of the Sample vis-à-vis Industry Average (FY16-FY18)

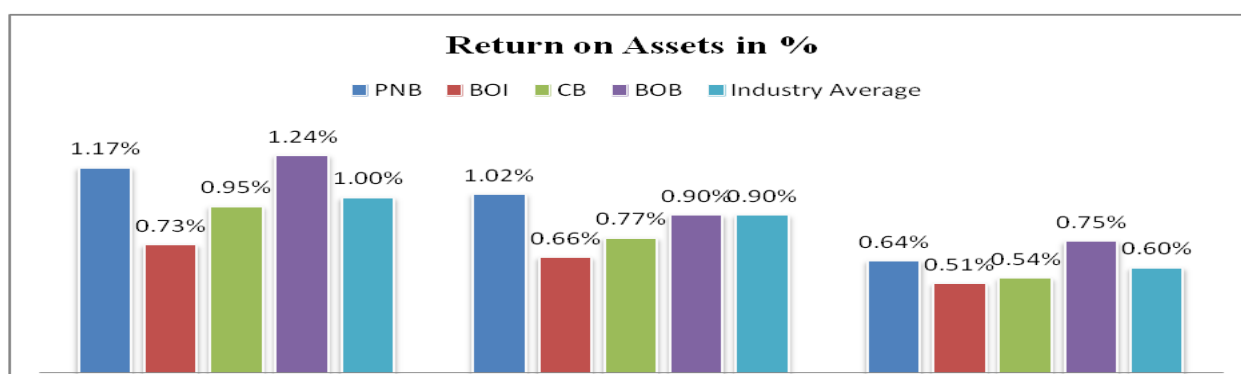


Sources: careratings.com, pnb.com, bankofindia.co.in, canarabank.com, bankofbaroda.com.

Higher NIM of the sample over the industry average has been contributed by their strong customer base. PNB has been the largest Nationalised Bank in terms of its business until FY18 when BOB surpassed it. On a y-o-y basis the sample witnessed around 8-10 bps drop in NIM due to growing NPAs. BOB witnessed a 40 bps drop on account of its subdued international business.

#### 4.6 Return on Assets (ROTA) Analysis -

Trend in Return on Assets of the Sample vis-à-vis Industry Average (FY16-FY18)



Sources: careratings.com, pnb.com, bankofindia.co.in, canarabank.com, bankofbaroda.com.

The Return on Asset (ROTA) has been impacted due to slowing down of economy and policy paralysis. Huge amount of NPAs in the banks book have forced banks for creating higher provisions thus pulling down their profitability.

PNB's ROTA witnessed a maximum drop of 38 bps in FY18 on a y-o-y basis within the sample on account of its higher slippages and provisions. BOB's ROTA has been higher than industry average due to its control on the slippages.

## 5. COMPARATIVE ANALYSIS OF THE SAMPLE

### 5.1 Brief Snapshot of Comparison of the sample vis-à-vis the industry in FY18

(All in percentage %)

Parameters	PNB	BOI	CB	BOB	Industry Average	Best Score (1/4)
Credit Growth	13.2	27.7	24.3	21	13.3	BOI
Deposit Growth	15.28	24.9	18.2	20	13.5	BOI
Credit/Deposit ratio	77.37	78.8	71.56	86.15	76.5	BOB
CASA Ratio	41	29.5	26	31	30 (RBI target)	PNB
NIM	3.44	2.34	2.3	2.3	2.8	PNB
ROTA	0.64	0.51	0.77	0.75	0.6(PSB)	CB

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