

AN ANALYSIS OF BANK CONCENTRATION IN THE POST SECOND-GENERATION BANKING SECTOR REFORM PERIOD

Shivam Dhawan*

Abstract

The present research has made use of Concentration Ratio (CR₅) to examine the degree of concentration of the nationalized banks during the post second-generation banking sector reform period (1999-2018). The study has identified Punjab National Bank, Bank of India, Bank of Baroda, Canara Bank and Union Bank of India as the top five nationalised banks which have accounted for approximately 47% share amongst the twenty nationalised banks in terms of total advances granted on an average during 1999 to 2018. The results further revealed that the Concentration Ratio has remained more or less stable during the same time period and it averaged out to be less than 50%, thereby reflecting low level of concentration and the presence of competitive banking structure as far as nationalised banks are concerned in India.

Keywords:

Competitive Banking Structure;
Concentration Ratio (CR₅);
Nationalised Banks;
Second-Generation Banking Sector Reform Period

*** Ph.D. Research Scholar (UGC-JRF), Department of Economics, Panjab University, Chandigarh**

1. Introduction

The financial sector at the global level has transformed over the years due to reforms in the regulatory policies as well as upgradation in technology. The Indian banking sector has also gone through pivotal structural changes, when banking sector reforms were introduced on the recommendations of Narsimham Committee in the year 1991. Commercial banks of India operated under extremely regulated framework before the reforms, which led to low profits and inefficient banking system (Subbarao, 2013). The main goals of banking sector reforms were to create a competitive environment by allowing entry of private players in the banking sector, deregulation in the structure of interest rates, reduction of the required reserves so as to ensure lucidity, efficiency and transparency in the Indian banking system. Narsimham Committee recommended the second generation banking sector reforms in the year 1998, which initiated the consolidation of Indian banks through mergers and amalgamations. The committee was of the view that bank consolidation driven by economies of scale results in efficient allocation of resources and reduces costs. However, consolidation of banks also leads to concentrated banking structure due to the decrease in number of banks as a result of mergers and acquisitions. Absolute measures of market concentration such as concentration ratios and HHI and relative measures of market concentration such as Gini coefficient are generally employed by the researchers to elucidate competitive performance of the banks during a given time period. Sharma and Bal (2010) in their research work revealed that market concentration dropped since 1998-89, which resulted into increased competition among banks in India. Concentration also diminished with the closure of operating banks. A similar study by Jayant, Devendra and Sharma (2015) explored the market structure and competitiveness of 100 commercial banks operating in the Indian banking sector using total assets and concentration ratios for the period from 2000 to 2013. The researchers measured the concentration of banks by applying Herfindahl-Hirschman Index, Industrial Concentration Index, and Gini coefficient, etc. The number of banks also varied over time due to mergers, setting up of new and closure of old banks. The findings manifested a decrement in the concentration and increment in the extent of competition amongst banks during the period 2000 to 2013. The values of Gini coefficient further validated that inequality among Indian commercial banks declined during the given period. In this backdrop, the present study draws inspiration from the decision taken by the Government of India in the year 2017 to consolidate public sector banks to improve efficiency of the financial system as

evident by merging State Bank of India's five associates and Bhartiya Mahila Bank into State Bank of India. Since bank consolidation increases concentration in the banking sector (Dhawan and Niharika, 2018), therefore the present study aims to assess the degree of concentration of nationalized banks during the post second generation banking sector reform period (from 1999-2018).

2. Specific Objectives of the Study

The present research attempts to assess the degree of concentration of nationalized banks during the post second-generation banking sector reform period (from 1999-2018). Further, the study also envisage to identify the top five nationalised bank having the highest average share in terms of total advances granted by them and to assess the temporal increment/decrement of bank concentration during the twenty year time period (1999-2018).

3. Data and Methodology

In the present study, the bank concentration is assessed in terms of total advances granted by all the nationalised banks in India and 'Concentration Ratio 5' denoted by CR_5 is used as a measure to examine the degree of concentration of 20 nationalised banks in India during the post second-generation banking sector reform period (from 1999-2018). In the context of the present study, the Concentration Ratio 5 (CR_5) takes into account the market shares (in terms of total advances granted) of largest five nationalised banks and is calculated in the following manner:

$$CR_5 = \sum_{i=1}^5 S_i$$

Where,

CR_5 = Concentration Ratio 5

S_i = refers to market share of the i th nationalised bank

Thus, the Concentration Ratio 5 (CR_5) is defined as the sum of the market shares of each of the top 5 banks in the market (Gajurel and Pradhan, 2012). The value of the ratio ranges from 0% to 100%. As a thumb rule, a Concentration Ratio between 0% and 50% is indicative of competitive

banking structure, whereas the value above 50% and 70% denotes oligopolistic structure and the value above 70% indicates high degree of concentration in the banking sector.

In the present study, the market shares (in terms of total advances granted) of each of the 20 nationalised banks is calculated and the top five nationalised bank having the highest average share is identified so as to calculate the Concentration Ratio 5 (CR₅) for each year for the time period from 1999 to 2018. The data pertaining to the total advances granted by each of the 20 nationalised banks for the aforementioned time period has been procured from the Reserve Bank of India publications.

4. Results and Discussion

Table 1: Average shares (%) of Banks in terms of Total Advances Granted (1999-2018)

Name of the Nationalised Bank	Average shares (%) of Banks in terms of Total Advances Granted (1999-2018)
Punjab National Bank	10.49
Bank of India	10.17
Bank of Baroda	9.94
Canara Bank	9.69
Union Bank of India	6.48
Central Bank of India	5.57
Syndicate Bank	5.03
IDBI Ltd.	4.75
Indian Overseas Bank	4.72
Oriental Bank of Commerce	4.25
UCO Bank	3.95
Allahabad Bank	3.89
Corporation Bank	3.47
Indian Bank	3.43
Andhra Bank	3.08
United Bank of India	2.52
Bank of Maharashtra	2.41
Vijaya Bank	2.33
Dena Bank	2.20
Punjab and Sind Bank	1.65

Source: Computed from data procured from RBI publications

Graph 1: Top Five Nationalised Banks having the Highest Average Share in terms of Total Advances Granted

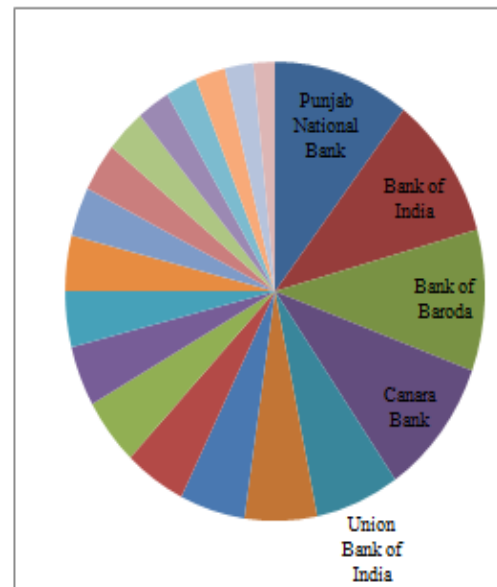
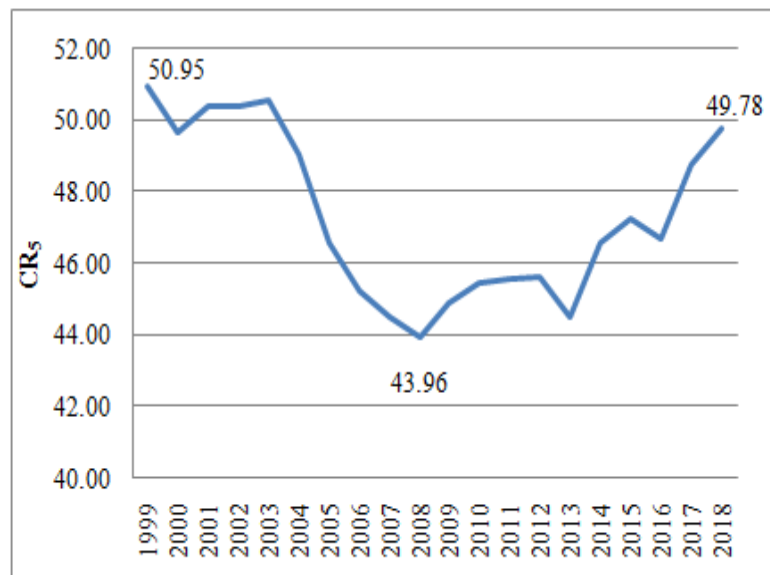


Table 1 shows the average shares of each of the nationalised banks in terms of total advances granted for a 20 year time period. It is evident that Punjab National Bank (10.49%) has recorded the highest average market share in terms of total advances granted amongst all the nationalised banks in India followed by Bank of India (10.17%). Similarly, Bank of Baroda, Canara Bank and Union Bank of India recorded the third, fourth and fifth highest average market share of (9.94%, 9.69% and 6.48%, respectively) during the time period from 1999 to 2018. Further, as shown in the table, Punjab and Sind Bank recorded the lowest average market share (1.65%) amongst the nationalised banks followed by Dena (2.20%) and Vijaya Bank (2.33%). The top five nationalised banks having the highest average shares in terms of total advances granted are also depicted in the graph 1. Further, a point worth mentioning here is that these top five nationalised banks accounted for approximately 47% share amongst the twenty nationalised banks in terms of total advances granted on an average during 1999 to 2018.

**Table 2: Concentration Ratio (CR₅) Values
for Indian Nationalised Banks**

Years	CR5
1999	50.95
2000	49.65
2001	50.36
2002	50.39
2003	50.54
2004	49.03
2005	46.57
2006	45.26
2007	44.50
2008	43.96
2009	44.93
2010	45.45
2011	45.57
2012	45.61
2013	44.50
2014	46.58
2015	47.25
2016	46.68
2017	48.74
2018	49.78
Average	47.31



Graph 2 depicts the Concentration Ratio (CR₅) from 1999 to 2018

Source: Computed from data procured from RBI publications

Table 2 shows that the Concentration Ratio (CR_5), which is an indicator of degree of market concentration has remained more or less stable and have hovered around 50% between the time period spanning from 1999 to 2018. Further, the temporal analysis as depicted in graph 2 points out that the value of the concentration ratio which was 50.95% in the year 1999 considerably decreased to 43.96% in the year 2008, which is the year of 'Great Recession'. The reason behind the reduced concentration ratio is probably

due to the lower advances offered by the banks owing to falling demand for loans during the recessionary period. However, as the global economies started recovering from this downturn, the concentration ratios also started to increase, that too particularly after the Government of India's decision to consolidate public sector banks by merging State Bank of India's five associates and Bhartiya Mahila Bank into State Bank of India in the year 2017. Through a twenty year time period (1999 to 2018) the Concentration Ratio (CR_5)

averaged out to be 47.31%, thereby indicating low level of concentration and the presence of competitive banking structure as far as nationalised banks are concerned in India.

5. Conclusion

The present research has made use of Concentration Ratio (CR_5) to examine the degree of concentration of nationalized banks during the post second-generation banking sector reform period (1999-2018). The results pointed out that Punjab National Bank, Bank of India, Bank of Baroda, Canara Bank and Union Bank of India are the top five nationalised bank having the highest average share in terms of total advances granted by them during the aforementioned study period. In fact, Punjab National Bank has the dominant position amongst the nationalised banks as far as the average market share in terms of total advances is concerned. The results further revealed that the Concentration Ratio has remained more or less stable during the same time period and it averaged out to be less than 50%, thereby reflecting the presence of competitive banking structure as far as nationalised banks are concerned in India.

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