# PERFORMANCE EVALUATION OF INDIAN BANKING SECTOR AFTER THE GLOBAL CRISIS via CAMELS RATIOS

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## **ABSTRACT**

Following the catastrophe of November 2000 and February 2001, major structural changes took place in the financial sector especially with regard to Indian banks. Efforts have been made to review banking errors and financial regulation in the banking sector. Further to the function of the banking region in the ongoing transformation manner, the banking quarter's reaction has come to be a crucial problem to address in the light of the 2008 regulatory and financial crisis. despite the fact that there are numerous research assessing bank performance, the CAMELS score, which is one of the most crucial strategies for analyzing bank performance, has important parameters that replicate the results of bank overall performance. It carries. The Indian banking zone consists of a huge variety of industrial banks, home banks, cooperative banks, retail banks and international banks within its territory. The current study attempted to evaluate the financial performance of three major banks (HDFC, SBI and Punjab National Bank) using the CAMELS Rating Model. THE CAMELS simulation model is basically the most widely used method of measuring the performance of a banking unit in and out of India. THE CAMELS simulation model is basically the most widely used method of measuring the performance of a banking unit in and out of India. This model measures the performance of banks in all key areas such as financial efficiency, Asset Quality, Management Efficiency, Revenue Quality, Liquidity and Market Sensitivity. The study is based on the second data taken from the annual reports.

**KEYWORDS:** Camel Rating Model, Money Satisfaction, Product Quality, Management Efficiency, Discovery Quality, Liquidity, Sensitivity.

### RESEARCH OBJECTIVES

Purpose: The main purpose of this paper is an attempt to assess the performance of the Indian banking sector in the wake of the global crisis at the camel levels and to investigate the factors that affect the financial performance of selected Indian banks.

# **INTRODUCTION**

Financial markets are defined as a system that brings together economically active and resource-rich participants. In this structure, it is necessary for third parties to be called intermediate funds in order to reduce risk and provide effective transfers. In particular, the effects of financial advisors on the financial system are gradually understood after global trading. Despite being relatively small and high compared to developed countries, India's financial sector is in a state of development. On the other hand, the financial sector has exceeded the average size compared to emerging markets. Banks play an important role in the economic life of the nation. Although invisible banks are building new wealth, transactions such as lending and borrowing are actually faster.

Process of production, distribution, trade and utilization of resources. In this way, their success is inevitable in terms of partners in the economic development process. Given this importance, changes in the banking sector must first be considered in order to determine the cause of the financial sector instability.

### Problem

We have seen that the private banks do better compared to the state banks so I decided to find out why the private sector bank is doing so well. So I will do Camel analysis to see the performance of banks.



HDFC Bank was established in August 1994 on behalf of HDFC Bank Limited, with its registered office in Mumbai, India. The Bank became operational as a Commercial Bank in January 1995.

The Bank has three main business units, namely banks, wholesale banking and treasury. Part of the retail banks serve customers who sell through the branch network and other delivery channels. This section increases deposits for customers and creates loans and provides other services with the help of specialized product groups for such customers. The central banking sector provides loans, non-financial services and transactional services to companies, parastatals, government agencies, financial institutions and medium-sized businesses. The Treasury component is made up of the residual interest in the Bank's investment portfolio.



The State Bank of India (SBI) company Fortune 500, is the official body of Indian Multinational, Public Sector Banking and financial services based in Mumbai. The rich heritage and values of more than 200 years, confirm SBI as the most trusted Bank of India for generations.

SBI, the largest Indian Bank with 1/4 market share, serves more than 45 million customers through its large network of more than 22,000 branches, 62617 ATMs / ADWMs, 71,968 BC stores, with a focus unlimited establishment, and customer focus, from the Bank's core values - Service, Transparency, Ethics, Respect and Sustainability.

The bank has successfully split the business into its various subsidiaries namely SBI General Insurance, SBI Life Insurance, SBI Mutual Fund, SBI Card, etc. It has expanded its global presence and operates in all time zones with 229 offices in 31 foreign countries. The Bank operates in four categories of business, namely Treasury, Business Bank / Cash, Retail Bank and Other Business Banks. Part of the Treasury comprises an investment portfolio of trading and foreign exchange contracts and derivative contracts. The Corporate / Wholesale Banking component covers the lending activities of Corporate Accounts Group, Mid Corporate Accounts Group and Stressed Assets Management Group. The Retail Banking component consists of the branches of the National Banking Group, which primarily covers the activities of the private bank, which includes the lending activities of corporate clients with affiliated banking affiliates and branches of the National Banking Group.



Punjab National Bank (PNB), India's first Swadeshi Bank, became operational on April 12, 1895 from Lahore, with an approved capital of ₹ 2 lac and a working capital of ₹ 20,000. The Bank was established in the spirit of nationalism and became the first bank owned by the Indians with the Indian Capital. In the long history of the Bank, 9 banks are affiliated with PNB.

Punjab National Bank (abbreviated as PNB) is a India Public Sector Bank headquartered in Delhi, India, and is owned by the Ministry of Finance, the Government of India. The bank was established in May 1894 and is the second largest bank in the state of India, both in terms of its business documents and network. The bank has more than 180 million customers, 12,248 branches, and 13,000+ ATMs

### LITERATURE REVIEW

Advances in recent years indicate that everything can change quickly because of a few of today's trends. One of the most successful is the global catastrophe started prematurely but its effects appeared in mid-2007 and late 2008. It affected not only developed countries but also developing countries. (Mohan 2009) According to these studies, globalization has had a negative impact on "international trade and investment." these, "global stock markets have collapsed, huge financial institutions. institutions have collapsed or been purchased, 1532 Hasan Dincer et al. / Procedia Social and Behavioral Sciences 24 (2011) 1530–1545 and governments even in the richest countries have had to come up with rescue packages to produce their financial systems "(Shah 2010).

On the other hand, the financial data following this global crisis show that the financial performance of the banking sector has improved in line with the changing economic climate. The number of commercial banks has increased "from 194 to 203". This increase reflects the growing number of banks in the financial sector on a daily basis.

Okonjo highlights the obvious consequences of a global crisis such as inflation, unemployment and banking (2009). Overall, emerging markets including India are hampered by the global economic downturn under developed markets. The main reason for this according to India is a law made especially in the Indian banking sector after the 2001 crisis. Under the effects of those laws, the growth of the Indian banking sector began after the 2001 catastrophe mainly by consolidation and acquisition. Transaction. Therefore, the need for performance appraisal of the Indian banking sector arises during the pre-crisis and post-disaster crisis.

### RESEARCH METHODOLOGY

This study presented various analyzes of the CAMELS rating system developed for the Indian banking sector and was used to investigate the general banking conditions of private banks and to determine future banking success. As Sarker points out, the CAMELS approach is a form of financial analysis that is used to evaluate the performance and management of banks to ensure their sustainability and security (Sarker 2006). In this way, it will always be easier to measure the performance of banks in India, and thus drastic measures can be taken to increase efficiency. As mentioned above, it consists of six sections; financial adequacy, asset quality, management, payment, purchasing power and sensitivity to market risk.

Cash flow reflects the bank's cash flow. In the case of Capital adequacy ratio it is a measure that determines a bank's ability to account for time to meet other risk factors such as credit risk, market risk, performance risk, and so on. It is a measure of how much money is spent on supporting risky banking assets. Although this rate has a positive relationship with the financial stability of the bank, it is negatively related to potential failures.

Asset quality reflects the extent of asset danger and the extent of economic energy of the bank. in addition, it performs an essential function in assessing the contemporary country and destiny economic

electricity. as an instance, to degree the satisfactory of an asset, the full amount of the mortgage (loan / Asset) may be used. If the number of non-acting loans is high, the excellent of the belongings can be lower. consequently, it poses a chance to bank profit and destiny performance.

Management level does not depend solely on current financial performance. This section contains a number of different factors such as education level and management skills. Therefore, it is very difficult to measure compared to others. For example, total revenue as part of total costs and deposit interest costs as part of total costs can be used to predict management quality. Although both measures are negatively related to quality management, they are positively related to possible failures due to mismanagement of banks.

At this stage, the ability to lead banks is tested on two scales. The first measure is the residual interest as the total share of the asset. In terms of the second rate, it is a residual interest as part of Equity for shareholders. Both of these measures are positively related to the bank's financial performance and are negatively related to potential failures.

In this model, the amount of money banks are assessed using three steps. The first is the amount of liquid in total goods. This demonstrates the bank's ability to repay the loan. The second measure used to measure cash shortages is the total amount of liquid assets as part of the deposit amount. This rate reflects the bank's ability to pay an unexpected deposit. The level of liquid properties to

Short-term loans are the final amount used to determine what the loan will be. All three estimates are closely related to the bank's monetary value, but it can be either negative or positive related to performance or risk of failure.

In this model, there is an indirect relationship between the size of the bank and its sensitivity to market risk which is a risk of failure due to unfavorable market conditions. While one of them is growing, the other is getting smaller. As a result, if the bank has a large asset size in relation to the sector, it does not react to market risk and thus prevents failure.

### **RESULTS AND ANALYSIS**

We can assess the financial viability of selected banks primarily based on the CAMEL framework. These are the only indicators that determine which ones might be worth considering. The choice of symbols is primarily based on their analytical significance, the availability of compilation facts, calculations and their relevance to the observations. The following desk suggests selected checkmarks for all CAMEL abbreviations: -

Capital	Assets Quality	Managerial	Earning	Liquidity
Adequacy		Efficiency	Capabilities	
Capital Adequacy	Net NPA to Net Advance	Return on Equity(ROE)	Return on Assets	Cash Deposit Ratio
Ratio				_
Capital Adequacy	Secured Advance to total	Business Per Employee	Net Interest Margin	Credit Deposit Ratio
Ratio tier 1	Advance			
Capital Adequacy	Term loans to Total	Profit per Employee	Operating Profit to	Investment Deposit
Ratio tier 2	Advance		Total Assets	Ratio
		Return on Net Worth	Non-Interest Income	
			to total assets	

# DESCRIPTION AND DATA INTERPRETATION CAPITAL ADEQUACY

The capital adequacy ratio (car) is the quantity of cash available that is expressed as a percent of the credit score risk of a bank risk. The capital adequacy ratio, additionally called the capital-to-risk weighted assets ratio (CRAR), is used to defend buyers and promote the stableness and efficiency of monetary structures around the arena. As per the rules, Indian commercial banks are scheduled to hold a CAR of 9% as Indian public sector banks are required to hold a CAR of 12%. It measures two types of currency: tier-1 currency, which can draw losses unless the bank is required to stop trading, and tier-2 capital, which can incur losses in the event of a liquidity and thus provide minimal protection for investors.

Parameters		HDFC	SBI	PNB
Capital	Mean	14.82	12.60	14.91
Adequacy Ratio	RANK	2	3	1
Tier 1	Mean	13.25	10.360	10.99
Capital	RANK	1	3	2
Tier 2	Mean	1.57	2.24	2.69
Capital	RANK	3	2	1
Composite	Average	2	2.66	1.33
	Rank	2	3	1

From the given table we can infer that PNB bank has highest Capital Adequacy Ratio whereas SBI has lowest. PNB bank captures the better position in respect of Capital Adequacy.

# **ASSET QUALITY**

Asset quality measurement refers back to the risk evaluation associated with a selected asset, such as a bond or portfolio of shares. The efficiency level at which the investment manager manages and monitors credit score risk substantially affects the rate offered because asset quality is an critical determinant of a large financial and cost risk, analysts do their utmost to ensure that they produce the most accurate evaluation feasible. Indeed, their proclamations may want to have a profound effect at the state of the enterprise, bank, or portfolio for decades to return.

**Asset Quality of selected banks** 

Parar	neters	HDFC	SBI	PNB
Net NPA to	Mean	0.400	5.7303	11.240
Net Advance	RANK	1	2	3
Secured	Mean	74.49	81.38	85.270
Advance to total Advance	RANK	3	2	1
Term loans	Mean	71.17	57.940	30.970
to Total Advance	RANK	1	2	3
Composite	Average	1.66	2	2.33
	Rank	1	2	3

From the above table, it is witnessed that assets quality of HDFC bank is much better as compare to other bank. ICICI got second place in assets quality followed by PNB. Net NPA to Net Advance ratio (Minimum value gives lowest rank) infers that HDFC (0.40) is in the better condition whereas SBI & PNB is in bad condition. Where Secured Advance to total Advance represent that maximum value 85.270 obtained by the PNB.

### MANAGMENT EFFICIENCY

Management performance is another essential element of the CAMEL model that guarantees the survival and prosperity of the bank although the contradictory capabilities of the CAMEL model may be measured without troubles in the modern-day economic statements, the first section manage is a very ambiguous and impartial degree, however that is crucial for institutional success. The regional banking reforms enhance the desire to improve the efficiency of banks through appropriate measures aimed at lowering the value of operations and improving the profitability of banks.

Managerial Efficiency of selected banks

Param	eters	HDFC	SBI	PNB
Return on	Mean	17.87	-3.210	-29.540
Equity	RANK	1	2	3
<b>Business Per</b>	Mean	150.80	167.00	147.400
Employee	RANK	2	1	3
Profit per	Mean	2.00	-0.24	-1.700
Employee	RANK	1	2	3
Return on	Mean	18.49	14.11	13.64
Net Worth	RANK	1	2	3
Composite	Average	1.25	1.75	3
	Rank	1	2	3

Above table infer that managerial efficiency of HDFC bank is better with respect to other banks who got lowest rank.

### **EARNING QUALITY**

Earnings are an important element in figuring out the potential of banks to profit regularly. Basically, it determines the profitability of the bank and defines its balance and profit margin in the destiny. Banks depend on the overall performance of their sturdy profits to do things that consist of funding blessings, maintaining suitable capital degrees, supplying investment possibilities for economic institutions to de velop, innovation strategies and keeping a robust vision.

**Earning Quality of selected banks** 

Paramet	ers	HDFC	SBI	PNB
Return on	Mean	1.93	0.884	-1.600
Assets	RANK	1	2	3
Net	Mean	4.29	2.73	2.55
Interest Margin	RANK	1	2	3
<b>Operating Profit to</b>	Mean	3.38	1.93	1.39
Total Assets	RANK	1	2	3
Non- Interest	Mean	1.85	1.45	0.93
Income to total assets	RANK	1	2	3
Composite	Average	1	2	3
	Rank	1	2	3

Above table infer that HDFC bank has top position in term of earning. Return on Assets is maximum in case of HDFC bank with mean value 1.93. HDFC has highest net interest margin. Operating Profit to Total Assets shows that HDFC has the maximum position.

# **LIQUIDITY**

Liquidity has a enormous effect on financial stability and evaluates the overall overall performance of the bank. Demonstrates the bank's ability to pay off instantaneous loans and face dramatic withdrawals from investors. Liquidity complements the commercial enterprise's ability to convert its property into currencies without losses. Liquidity of banks guarantees that buyers are able to get entry to their budgets every time they need to stand up and raises the resilience and resilience of banks. even though an excessive amount of cash has a bad impact on earnings, too little cash will growth the threat of debt default.

Liquidity Quality of selected banks

Parameters		HDFC	SBI	PNB
Cash	Mean	13.270	5.56	4.480
Deposit Ratio	RANK	1	2	3
Credit Deposit	Mean	83.46	71.49	67.54
Ratio	RANK	1	2	3
Investment	Mean	30.71	39.20	31.190
Deposit Ratio	RANK	3	1	2
Composite	Average	1.66	1.66	2.66
	Rank	1.5	1.5	3

Above table present that liquidity position of HDFC and SBI perform similar. PNB bank secured the lowest position in term of liquidity. HDFC Bank has strong position in case of in case of cash deposit ratio and credit deposit ratio. SBI has highest average investment deposit ratio i.e. 39.20.

### OVERALL RANKING

### Overall ranking of the selected banks based on the CAMELS parameters

Banks	HDFC	SBI	PNB
Capital	2	3	1
Adequacy			
Assets	1	2	3
quality			
Managerial	1	2	3
efficiency			
Earning	1	2	3
Quality			
Liquidity	1.5	1.5	3
AVERAGE	1.2	2.2	2.6
Rank	1	2	3

The overall ranking of the banks considering all the sub criteria rankings under CAMEL analysis of 2018 is presented in the above tables. The group ranking of all the banks considered for the purpose of study is taken and average out to reach at the overall grand ranking. HDFC bank is ranked first under CAMEL analysis followed by SBI bank. PNB bank got the 3<sup>rd</sup> Rank.

# **CONCLUSION AND SUGGESTION**

Looking at all the CAMEL parameters, it is evident that the HDFC is at a high level as it has been tested with the help of using the CAMEL Model compared to the various banks under test. The HDFC Bank is very efficient in terms of material quality, good management efficiency and Earnings efficiency while lagging behind in the event of insufficient funds. On the other hand, PNB is very low compared to the various banks under review due to its poor performance within the context of Capital Adequacy, Earnings Ability and Liquidity while operating more efficiently in the event of insufficient funding. That is why PNB needs to develop its role in specially identified areas.

Therefore, cover makers of related small scale banks should take important steps and try to find a solution to improve their weaknesses with the help of applying the findings of this study.

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