



International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 3, December 2024



# **Capital Adequacy: A Financial Soundness Indicator for Banks**

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Abstract: A robust banking system is essential to sustaining economic activity, providing for the financial requirements of all societal segments, and so advancing the nation's overall development. Banks must be financially stable in order to satisfy the diverse needs of different industries and ensure the seamless flow of credit in an economy. One metric that guarantees banks' ability to withstand a fair level of loss is the capital adequacy ratio. Although there have been capital adequacy standards for a long time, the Basel committee of the Bank for International Settlements established the two most significant ones. This research outlines the fundamentals of Basel's standards for banks' minimum capital needs and illustrates the many elements of regulatory capital. Additionally, the research examined the CAR value trends for India's top ten scheduled commercial banks. According to the survey, Bank of India had the lowest place while ICICI Bank retained the highest CAR.

Keywords: Capital Adequacy Ratio, Bank Solvency, Banking Supervision

# **I. INTRODUCTION**

Because financial intermediation is the most leveraged sector of an economy, banks face a variety of risks while doing this operation. As a result, risk and uncertainty are a natural element of banking. Since risk management is the foundation of all banking services, a high capital adequacy ratio is thus necessary. Capital regulation is crucial for preventing systemic disasters, promoting stability, safety, and soundness of the banking system, reducing bank failures, and eventually lowering losses for bank depositors.

The Basel Accords, or regulations pertaining to capital requirements, were released by the Basel Committee on Banking Supervision, a group of banking regulatory agencies. A comprehensive collection of reform initiatives, BCBS aims to improve the banking industry's oversight, regulation, and risk management. The capital measuring method known as Basel I was first implemented by BCBS in 1988. The updated, revised, and more intricate Basel II criteria were released by BCBS in 2004.Basel II covers market and operational risks in addition to credit issues, while Basel I exclusively addresses credit risk. Basel III, which was published in December 2010, placed more emphasis on the capital base's quality, consistency, and openness. Basel I criteria were accepted by India in 1999, and by 2009, Basel II guidelines were being phased in. Phased implementation of the Basel III capital rule began in India on April 1, 2013, and it will be completed by March 31, 2018.

# NEED FOR MINIMUM CAPITAL REQUIREMENT

The minimum capital requirement is the amount of capital that banks must have on hand in order to comply with financial regulators. While providing loans and advances to different sectors, banks are subject to a variety of risks. It is essential that banks have enough capital to cover any losses they incur from their operations. In addition to protecting depositors against unanticipated events, banks with sufficient capital also support the stability and effectiveness of financial institutions.

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DOI: 10.48175/568



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International Journal of Advanced Research in Science, Communication and Technology

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### COMPONENTS OF CAPITAL

**Tier I Capital:** Paid-up capital, statutory reserves, disclosed free reserves, perpetual non-cumulative preference shares subject to periodically applicable laws, innovative perpetual debt instruments, and capital reserves that represent excess proceeds from asset sales are all components of Tier I capital. It is often known as the core capital, which gives depositors more safety by absorbing losses without forcing a bank to shut down.

**Tier II Capital:** Undisclosed reserves, revaluation reserves, general provisions and loss reserves, hybrid capital instruments, subordinated loans, and investment reserve accounts are all components of Tier II capital. Because it takes losses in the case of winding up, the supplemental capital offers its depositors less security. To the degree that they cover losses resulting from the operations of the bank, Tier II items are considered regulatory capital.

**Tier III Capital:** This is set up to address a portion of market risk, which includes shifts in interest rates, currency rates, stock prices, commodity prices, and so on. Assets must be unsecured subordinated, have a minimum duration of two years, and not exceed 250% of a bank's Tier I capital in order to be classified as Tier III capital.

# CAPITAL ADEQUACY RATIO

The ratio that shields banks against excessive leverage, bankruptcy, and trouble is known as the capital adequacy ratio. It is the proportion of a bank's capital to its risk-weighted assets and current liabilities. A measure of a bank's assets that has been adjusted for risks is called risk weighted assets. While the bank's net worth is adequate to withstand any financial downturns without going bankrupt, a suitable level of capital adequacy guarantees that the bank has enough money to grow its operations. Banks' ability to satisfy their time obligations and other risks, including credit, market, and operational risk, is determined by this ratio. While public sector banks are urged to maintain this ratio at 12%, Indian SCBs are required by RBI regulations to have a CAR of 9%, or 1% higher than the Basel standards. The definition of the capital adequacy ratio is:

CAR= <u>Tier I + Tier II + Tier III capital (capital funds)</u> Risk Weighted Assets (RWA)

# **OBJECTIVES OF STUDY**

To examined the various aspects of regulatory capital. To analyze the trend in CAR values of the SCBs in India as per Basel norms I and II.

### **II. RESEARCH METHODOLOGY**

The research is carried out over a five-year period, from 2008–09 to 2012–13.Based on their business mix, ten banks were chosen as a sample for the research. The majority of the secondary data used in this research was taken from "A Profile of Banks 2012-13, RBI. Additionally, a variety of capital adequacy-related publications, studies, and research papers that have been published in various business journals, magazines, newspapers, and periodicals, as well as data that is accessible online, are of concern. The research analyzed and interpreted the data using percentage, ratio, average, and standard deviation.

S. No	SCBs	Business Mix
1	SBI	22,483,562
2	Bank of Baroda	8,020,691
3	Punjab National Bank	7,002,853
4	Bank of India	6,712,071
5	Canara Bank	5,980,326
6	ICICI Bank	5,828,630
7	HDFC Bank	5,359,676
8	Union Bank of India	4,718,638

 Table 1: Top 10 Commercial banks as per business mix (Advances + Deposits) on 2013

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Impact Factor: 7.57

	Axis Bank	4,495,796
0	IDBI Bank	4,234,229

#### **III. ANALYSIS AND INTERPRETATION**

Table 2: Trend in capital adequacy ratio [capital to risk weighted assets ratio (CRAR)] of Scheduled Commercial Banks (SCBs)

		CRAR(in percent)						
	SCBs	2009	2010	2011	2012	2013	Avg.	Std. Dev.
1	SBI	14.25	13.39	11.98	13.86	12.92	13.28	.882
2	Bank of Baroda	14.05	14.36	14.52	14.67	13.30	14.18	.543
3	Punjab National Bank	14.03	14.16	12.42	12.63	12.72	13.19	.833
4	Bank of India	13.01	12.94	12.17	11.95	11.02	12.22	.815
5	Canara Bank	14.10	13.43	15.38	13.76	12.40	13.81	1.082
6	ICICI Bank	15.53	19.41	19.54	18.52	18.74	18.35	1.633
7	HDFC Bank	15.69	17.44	16.22	16.52	16.80	16.53	.652
8	Union Bank of India	13.27	12.51	12.95	11.85	11.45	12.41	.754
9	Axis Bank	13.69	15.80	12.65	13.66	17.00	14.56	1.782
10	IDBI Bank	11.57	11.31	13.64	14.58	13.13	12.85	1.388

Table 2 demonstrates that every SCB has kept its CAR over the required level, which is 9%. In 2013, ICICI Bank had the highest CAR value, followed by Axis Bank and HDFC Bank. The data makes it clear that ICICI Bank has the highest average CAR and standard deviation. Bank of India has the lowest CAR, followed by Union Bank of India and IDBI Bank.

### **III. CONCLUSION**

One crucial metric for assessing the robustness and stability of the banking system is capital sufficiency. Banks with a decent CRAR are better equipped to withstand unforeseen losses and lower their financing costs, both of which increase the banks' overall profitability. According to the survey, leading Indian banks are keeping their CRAR levels at a suitable level. It was discovered that Bank of India had the lowest CAR, while ICICI Bank had the highest, followed by HDFC and Axis Bank. This led us to the conclusion that private sector banks are better positioned to maintain a higher capital adequacy ratio than public banks. The average CAR for all banks ranges from 12.22% to 18.35%, suggesting that even the adoption of Basel III standards won't provide many challenges for Indian banks, at least not at first. The global financial crisis has made capital adequacy standards even more crucial. Financial crises have little effect in India because of the country's robust capital structure regulations.

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International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

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