

A Comparative Study of Liquidity Management of Selected Public Sector Banks and Private Sector Banks in India

1)Vishalbhai Rajeshbhai Gamit ¹

Research scholar,

Shri Govind Guru University, Godhra.

2) Dr. Girishchandra M. Purani ²

Guide,

I/C Principal,

SKUB Arts & N. C. Zaveri Commerce College, Pipaliya

Abstract:

The services your bank provides to its business clients—known as liquidity management—enable them to take advantage of the interest on their checking and current accounts and pool money from several accounts. As a result, your corporate clients may effectively manage the daily liquidity of their companies.

The paper compares and contrasts the liquidity management strategies of a few Indian banks from the public and private sectors. Five public sector banks—Punjab National Bank, Bank of India, Bank of Baroda, Union Bank of India, and State Bank India—and five private sector banks—ICICI, HDFC, AXIS, IDBI, and Kotak Mahindra Bank—have been taken for consideration during the 5-year period between 2018–19 and 2022–2023. Comparisons of the liquidity management of public and private sector banks have been made using the Cash-Deposit Ratio (CDR), Investment-Deposit Ratio (IDR), and Credit-Deposit Ratio (CRDR).

Keywords: liquidity Management, Public sector banks, private sector Banks, Cash-deposit ratio, investment deposit ratio, credit Deposit Ratio.

1.0. Introduction:

The banking business is a significant emerging sector boosting economic development, employing the populace, and last but not least, helping to build the nation's financial sector in today's dynamic, competitive globe. Banks, which make up the bulk of any economy's financial sector, are essential for a nation's ability to expand its economy. Some of the key duties of banks include collecting deposits from customers, lending money to them, paying interest to account holders, and covering their costs. Therefore, for banks to run efficiently, they must maintain an adequate level of liquidity and generate profits from their operations.

Liquidity, or the ease with which an asset or security may be turned into cash, refers to the extent to which an asset or security can be swiftly purchased or sold in the market at a price reflecting its intrinsic value. Liquidity is a sign of a bank's ability to handle its immediate obligations. Liquidity is a key indicator of how a bank manages its short-term monetary requirements and how the money in the bank is used to generate profit. In the banking industry, managing the bank's liquidity is the most significant aspect in determining the profitability of the institution. The best liquidity management is crucial for the profitability as well as the effectiveness of institutions. Banks must look for the highest level of funding to meet business short-term needs, then invest more funding to achieve high returns and have some cash on hand to profit from investment opportunities. Therefore, by successfully controlling their liquidity, banks could improve their profitability.

Due to fluctuations in interest rates and the exchange of foreign currencies, liquidity management has grown in prominence inside financial institutions as a result of financial liberalization. Indian banks manage their liquidity in keeping with RBI requirements, but due to a lack of research in this field, several liquidity management-related refers to are still unknown. As a result, this study attempts to investigate the liquidity management of a few Indian commercial banks.

2.0.Literature review:

The study by Maqsood et al. (2016) shows the significant effect of liquidity management on bank profitability. The study's data came from the financial statements of 8 different banks from 2004 to 2015. Regression and correlation were the methods employed to analyze the information. Return on assets (ROA) is a dependent variable for profitability, and the current ratio (CR) and cash ratio (CASR) are variables that are independent of liquidity.

In Nigeria, the relationship between bank performance and liquidity management was examined by Bassy, et al.'s (2016) research. according to the study's outcomes, managing liquidity effectively and efficiently is crucial for the capacity of banks to run their businesses successfully.

The study work by Ikeora and Andabai (2016) demonstrated a beneficial relationship between the independent variable, liquidity management, and the dependent variable, profitability, utilizing time series data spanning (1989–2013). Profitability was measured utilizing the return on assets (ROA) ratio, and the total amount of bank deposits and the broad money supply have been incorporated into the liquidity management process. The ordinary least square (OLS) econometrics method was used to analyze the hypothesis.

Akter and Mahmud (2014) investigated the potential link between bank profitability and liquidity. The current ratio (CR) was used for evaluating liquidity, and the return on assets ratio (ROA) was used to test profitability. The data for the study have been analyzed using individual commercial banks' income statements and balance sheets that were available on those banks' websites. By the study's conclusion, there is no correlation between bank profitability and liquidity throughout all kinds of banks in Bangladesh.

Ibe (2013) brought attention to Nigeria's liquidity management issue in his paper. Banks must take a look at the ideal liquidity situation to address the issue of liquidity management. The data gathered from three randomly chosen banks represented the whole Nigerian financial services sector. Profitability refers to the after-tax profit-dependent variable, whereas liquidity management encompasses the bank's cash assets (CA), bank balance, Treasury Bills, and certification. Regression analysis was used for evaluating the data.

In their study, Agbada and Osuji(2013), examined how Nigerian banks' performance is impacted by proper liquidity management. The study's findings showed a strong correlation between a bank's success and efficient liquidity management. The stability of banks can boost effective liquidity management.

The profitability of banks was seriously affected by liquidity risk variables, as demonstrated by Arif and Anees' (2012) study. 22 Pakistani banks were included in this study between 2004 and 2009 to examine how the liquidity risk factor affected those banks.

Olagunju (2011), studied that The profitability of commercial banks is impacted by liquidity. Bank profitability improves as liquidity declines and declines when liquidity increases. To accomplish the study's goal, both structured and unstructured questionnaires were used. The management and financial statements of the institutions included as samples were where the data came from. Data from both primary and secondary sources were analyzed using the Pearson correlation method.

The issues with liquidity management in Indian banks were noted by Srinivasan and Gupta in 2007. The statutory liquidity ratio (SLR), which is used excessively to finance credit growth, is the cause. The study found that banks in India are expanding the mismatch between assets and liabilities by borrowing short-term and lending long-term. Srinivasan and Gupta (2007) predict that banks will be dependent on short-term resources as inflationary pressures may lead the Indian central bank to undertake monetary measures to control inflation.

In the Indian financial system, liquidity management problems were acknowledged by Mohan (2006). After the financial sector reforms in India began in 1991, the country was able to maintain capital inflows that assisted the central bank in smoothing out interest rates. India developed the Market Sterilisation Scheme (MSS) to maintain open market operations, which aided monetary authorities in controlling liquidity cycles. India was able to control liquidity and lessen volatility in capital flows and short-term interest rates thanks to the introduction of the Liquidity Adjustment Facility (LAF). The lending and deposit rates cleaned up the surplus liquidity in the Indian banking sector. The Reserve Bank of India's central bank has long employed the Cash Reserve Ratio, Statutory Liquidity Ratio, and bank discount rate (bank rate) as tools for managing liquidity.

3.0. Objectives of the study:

- To identify the major ratios; Cash-Deposit Ratio (CDR), Investment-Deposit Ratio (IDR), and Credit-Deposit Ratio (CRDR) of five public sector banks and five private sector banks over 5 years from 2018-19 to 2022-2023.
- To analyze and contrast the liquidity policies of banks in the public and private sectors.

4.0. Research methodology:

This study has a comparative quantitative research design. Five public sector banks—Punjab National Bank, Bank of India, Bank of Baroda, Union Bank of India, and State Bank of India—as well as five private sector banks—ICICI, HDFC, AXIS, IDBI, and Kotak Mahindra Banks—were included in the study.

4.1. Data collection:

Ten commercial banks which consist of five banks from the public sector and five from the private sector represent the sample size for this study. In this study, secondary data are analyzed. For a period of five years,

from 2018–19 to 2022–2023, the data has been collected through the websites of banks and banking institutions.

4.2. Statistical tools used:

To study the comparative analysis of liquidity management between five public sector banks and five private sector banks, three major ratios- CDR, IDR, and CRDR are studied. The following tools are applied to study liquidity management.

- Mean
- Rank
- Maxima
- Minima

5.0. Results and discussions:

Effective liquidity management is essential for every bank's performance. According to the study, CDR, IDR, and CRDR all affect liquidity management. The findings of the study by CDR, IDR, and CRDR indicate that certain private sector banks have efficient liquidity management, while certain public sector banks have inefficient liquidity management.

Table 1: Cash-Deposit Ratio (CDR) (in Rs. Cr.)

<i>table 1: cash-deposit ratio (CDR) (IN Rs. Cr.)</i>											
Sr. No.	Name of Bank	2018-19	2019-20	2020-21	2021-22	2022-23	Total	Average	Rank	Max	Min
Public sector banks											
1	PNB	4.62	5.11	4.55	4.47	5.55	24.3	4.86	7	5.55	4.47
2	BOI	5.82	5.43	7.6	8.05	6.5	33.4	6.68	3	8.05	5.43
3	BOB	4.01	3.74	3.74	4.67	4.89	21.05	4.21	10	4.89	3.74
4	UBI	5.07	4.72	4.22	4.29	4.48	22.78	4.556	9	5.07	4.22
5	SBI	5.86	5.83	5.59	5.49	5.96	28.73	5.746	4	5.96	5.49
Private sector banks											
6	ICICI	5.85	5.14	4.77	5.32	5.73	26.81	5.362	6	5.85	4.77
7	HDFC	8.85	5.75	6.83	7.85	7.18	36.46	7.292	2	8.85	5.75
8	AXIS	7.04	10.1	10.15	9.54	9.06	45.89	9.178	1	10.15	7.04
9	IDBI	5.45	5.17	5.2	5.73	6.19	27.74	5.548	5	6.19	5.17
10	KOTAK	4.73	4.17	4.05	4.82	5.33	23.1	4.62	8	5.33	4.05

The above table of CDR reveals that the top 2 positions in terms of average CDR are secured by the private sector bank, while the lower positions are attained by public sector bank. Hence, with respect to CDR, liquidity management of private sector banks is more efficient. Top position is secured by Axis bank which has the highest value of average CDR at 45.89cr and 10th position is attained by BOB which has the lowest value of average CDR at 21.05cr.

Table 2: Investment-Deposit Ratio (IDR) (in Rs. Cr.)

<i>table 1: Investment-deposit ratio (IDR) (IN Rs. Cr.)</i>											
Sr. No.	Name of Bank	2018-19	2019-20	2020-21	2021-22	2022-23	Total	Average	Rank	Max	Min
Public sector banks											
1	PNB	30.53	32.07	34.99	33.97	31.65	163.21	32.642	4	34.99	30.53
2	BOI	27.33	28.45	29.24	28.82	29.2	143.04	28.608	10	29.24	27.33
3	BOB	28.09	28.83	28.01	28.67	30.15	143.75	28.75	9	30.15	28.01
4	UBI	30.3	32.13	35.21	34.76	31.99	164.39	32.878	3	35.21	30.3
5	SBI	38.45	36.1	32.73	34.65	36.01	177.94	35.588	2	38.45	32.73
Private sector banks											
6	ICICI	33.84	32.11	31.16	29.62	29.95	156.68	31.336	7	33.84	29.62
7	HDFC	31.12	32.96	33.66	31.07	28.25	157.06	31.412	6	33.66	28.25
8	AXIS	32.82	27.91	28.41	32.81	31.91	153.86	30.772	8	32.82	27.91
9	IDBI	38.85	38.87	35.91	35.34	37.39	186.36	37.272	1	38.87	35.34
10	KOTAK	32.44	29.92	33.18	34.76	32.9	163.2	32.64	5	34.76	29.92

The above table of IDR depicts that the highest average of IDR is maintained by IDBI at 186.36 cr. which shows its outstanding performance in terms of liquidity management. On the other hand, poorest performance is shown by BOI which depicts inefficient liquidity management in terms of IDR. The lowest value of average IDR by BOI stood at 28.608cr.

Table 3: Credit-Deposit Ratio (CRDR) (in Rs. Cr.)

<i>table 1: credit-deposit ratio (CRDR) (IN Rs. Cr.)</i>											
Sr. No.	Name of Bank	2018-19	2019-20	2020-21	2021-22	2022-23	Total	Average	Rank	Max	Min
Public sector banks											
1	PNB	67.66	67.4	63.31	62.26	64.23	324.86	64.972	9	67.66	62.26
2	BOI	65.51	65.95	62.11	62.67	69.88	326.12	65.224	8	69.88	62.11
3	BOB	72.87	73.13	73	73.7	76.38	369.08	73.816	5	76.38	72.87
4	UBI	71.04	70.62	65.92	64	66.18	337.76	67.552	7	71.04	64
5	SBI	73.79	73.35	73.32	68.97	70.01	359.44	71.888	6	73.79	68.97
Private sector banks											
6	ICICI	90.54	86.52	80.95	79.75	83.67	421.43	84.286	4	90.54	79.75
7	HDFC	86.32	87.56	85.66	86.43	86.25	432.22	86.444	2	87.56	85.66
8	AXIS	93.25	89.71	88.7	87.08	87.81	446.55	89.31	1	93.25	87.08
9	IDBI	67.02	61.5	56.91	59.03	63.1	307.56	61.512	10	67.02	56.91
10	KOTAK	89.7	87.06	81.68	83.64	87.6	429.68	85.936	3	89.7	81.68

In the given table of CRDR, the private sector banks once again secure the top positions with AXIS bank securing the first position. AXIS bank gives the highest value of average CRDR at 89.31cr. Again, the same pattern of poor performance is observed in the case of CRDR by private sector banks. IDBI has the least

value of average CRDR at 61.512cr. Only IDBI Is not maintained to achieve the top rank while other private sector banks occupying the top ranks of CRDR.

6.0. Research Findings:

In the previously mentioned Table I, we discovered that private sector banks' high average CDR values indicate that they lend out sizable amounts of deposits, which leads to significant profitability and demonstrates effective liquidity management. On the other hand, public sector banks' low average CDR values show that they struggle to manage their deposits, which leads to low profitability and ineffective liquidity management.

In the above Table-II we found that High value of average IDR by public sector banks shows that public banks are appreciably using their deposits in different profitability sectors. Hence, their liquidity management is significant. On the contrary, private sector banks are not appreciably utilizing their deposits in different profitability sectors resulting in poor liquidity management, only IDBI Bank is using that Deposits in different profitability sectors.

In the previously mentioned Table-III, we discovered that a high CRDR indicates effective liquidity management with reference to the demand for credit from private sector banks in a setting of relatively slower deposit growth. Low CRDR indicates ineffective liquidity management because public sector banks' credit growth is comparably slow to their deposit growth.

7.0. Conclusion:

A crucial element of banking is liquidity management. As a result, it has received significant consideration from researchers and professionals all around the world. According to the study's inferential the results of statistical analysis private sector banks were significantly better at managing their liquidity than public sector banks from 2019 to 2023. Private sector banks were able to invest a significant amount of their deposits in various profitable industries, demonstrating adequate liquidity management, which is not the case for public sector banks. Thus, it is argued that public sector banks must also seek out profitable initiatives in which to invest their deposits in order to raise their key ratios, namely the CDR, CRDR, and IDR-ratios, which will in turn boost their profitability and enable efficient liquidity management.

8.0. References:

1. Maqsood, T., M. A. Anwer, A. Raza, M. Ijaz, and U. Shouqat. (2016). Impact of Liquidity Management on Profitability in Banking Sector of Pakistan. *International review of management and business research*, 5 (2).
2. Bassy, F. A., Tobi, E. G., Bassey, I. F., & Ekwere, R. E. (2016). Liquidity Management and the Performance of Banks in Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(1), 8. doi:10.6007/IJARAFMS/v6-i1/1955.
3. Ikeora, J. J. E. P., and P. W. Andabai. (2016). Liquidity Management and Banks' Profitability in Nigeria (1989-2013): An Empirical Analysis. *Journal of business management and economics*, 4 (7): pp. 01-05.

4. Akter, A., and K. Mahmud. (2014). Liquidity-profitability relationship in Bangladesh banking industry. *International Journal of Empirical Finance*, 2 (4): pp. 112-134.
5. Ibe, S. O. (2013). The Impact of Liquidity Management on the Profitability of Banks in Nigeria. *Journal of Finance and Bank Management*, 1 (1): pp. 37-48.
6. Agbada, A. O., & Osuji, C. (2013). The efficacy of liquidity management and banking performance in Nigeria. *International review of management and business research*, 2(1): pp. 223-233.
7. Arif, A., & Nauman Anees, A. (2012). Liquidity risk and performance of banking system. *Journal of Financial Regulation and Compliance*, 20(2): pp. 182-195.
8. Olagunju, A., David, A. O., & Samuel, O. O. (2011). Liquidity Management and Commercial Banks' Profitability in Nigeria. *Research Journal of Finance and Accounting*, 2(7): pp. 2222-2847.
9. Srinivasan, K. and V.Gupta (2007). Liquidity management in banks - An increasingly complex affair. *ICRA Rating Feature*, February, pp.10.
10. Mohan, R. (2006). Coping with liquidity management in India: A practitioner's view. Paper presented at Eighth annual conference on money and finance in the Indian economy, Indira Gandhi Institute of Development Research. pp. 1-20.
11. <https://www.pnbindia.in/>
12. <https://bankofindia.co.in/>
13. <https://www.bankofbaroda.in/>
14. <https://www.unionbankofindia.co.in/english/home.aspx>
15. <https://www.onlinesbi.sbi/>
16. <https://www.icicibank.com/>
17. <https://www.hdfcbank.com/>
18. <https://www.axisbank.com/>
19. <https://www.idbibank.in/>
20. <https://www.kotak811.com>