



Comparative Analysis of Liquidity Management of Selected Public Sector and Private Sector Banks in India.

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Abstract

Liquidity management refers to the ongoing and future strategies of any business to meet its short-term or immediate cash requirements without incurring substantial losses. It also ensures timely access to cash or liquid funds whenever needed. Therefore, liquidity management in banks is a crucial activity as it affects the viability of their assets and risk management capability.

This paper comprises of comparative analyses of liquidity management of the selected public and private sector banks in India. For this purpose, 5 public sector banks (viz. Punjab National Bank, Bank of India, Bank of Baroda, Union Bank of India and State Bank India) and 5 private sector banks (viz. ICICI, HDFC, AXIS, IDBI and Kotak Mahindra Bank) have been considered for the period of 8 years from 2013-14 to 2020-2021. Cash-Deposit Ratio (CDR), Investment-Deposit Ratio (IDR) and Credit-Deposit Ratio (CRDR) have been used to compare the liquidity management of the public and private sector banks.

Keywords: Liquidity Management, Profitability, Ratios, Cash-Deposit Ratio, Investment-Deposit Ratio, Credit-Deposit Ratio, Public Sector Banks and Private Sector Banks.

1.0.Introduction

In today's ever changing competitive world, the main emerging element contributing in the growth of the economy, creating employment opportunities for the people and last but not the least, the developer of the financial sector of the country is the banking industry. Being the major part of the financial system of any economy, banks play an indispensable role in adding to the economic development of a country. Collection of money in the form of deposits from people, providing loans to the customers, providing interest to the account holders and meeting its own expenses are some of the main functions of the banks. Hence, to operate smoothly banks need to maintain an adequate amount of liquidity and gain profits as a result of its activity.

Liquidity describes the degree to which an asset or security can be quickly bought or sold in the market at a price reflecting its intrinsic value or in other words, the ease of converting it to cash. Liquidity is an indicator of a banks potential to cope with its short term liabilities. Liquidity plays a major role in depicting how a bank is managing its short term monetary requirements and how the cash with the bank is utilized to earn profit. With respect to banking sector, the most crucial element in determining the profitability of the bank is the liquidity management. For banks profitability and effectiveness, the most efficient management of liquidity is essential. Banks need to search for the highest level of funds to fulfill the short term requirement and then to make the investment of further funds to attain high benefits and also have some funds to avail gains from

investment opportunities. Therefore, banks can increase their profitability by efficiently managing their liquidity.

In financial institutions, due to financial liberalization, liquidity management has become out most important due to changes in interest and exchange rates. Indian banks manage their liquidity as per the guidelines of RBI, still certain issues relating to liquidity management are unknown due to fewer studies in this area. Therefore, this paper is an attempt to analyse liquidity management of selected commercial banks in India.

2.0. Literature Review

The study of Maqsood, et al. (2016) depicts the considerable impact of liquidity management on banks profitability. The financial statement from 2004 to 2015 of 8 different banks was used to draw the data for the study. The techniques used for data analyses were regression and correlation. For profitability, return on assets (ROA) is used as dependent variable and for liquidity, current ratio (CR) and cash ratio (CASR) are used as independent variable.

The research of Bassy, et al. (2016) explored the relationship between banks performance and liquidity management in Nigeria. The research result concluded that for the successful survival operations of banks, effective and efficient management of liquidity is out most important.

The positive relationship between the independent variable i.e., liquidity management and dependent variable i.e. profitability using time series data spanning (1989-2013) was highlighted in the research paper of Ikeora and Andabai (2016). Return on assets ratio (ROA) was used to measure profitability and liquidity management includes the broad money supply and aggregate bank deposits. To analyse the hypothesis, ordinary least square (OLS) econometrics method was used.

There is encouraging association among banks profitability and liquidity in study of Khan and Ali (2016). The measures of liquidity are current ratio and quick ratio and the measures of profitability are Gross profit margin and Net profit margin ratios. The last five year (2008-2014) data from annual account of Habib Bank Limited was considered for the study.

The existence of relationship between liquidity and banks profitability was appraised by Akter and Mahmud (2014). Return on assets ratio (ROA) was used to test profitability and current ratio (CR) was used to test the liquidity. The specific commercial banks income statements and balance sheets published in the website of such bank was used to analyse the data for the study. Insignificant relationship exists amongst bank's liquidity and profitability in all categories of banks in Bangladesh as revealed in the conclusion of the study.

Ibe (2013) in his study highlighted the problem of liquidity management in Nigeria. To solve the problem of liquidity management banks need to examine the optimal liquidity position. The whole banking sector of Nigeria was represented in the data collected from randomly selected three banks. Liquidity management include the Bank cash assets (CA), Bank Balance, Treasury Bills and certificate and is considered as independent variable whereas profitability represents the after tax profit dependent variable . The data analysis was done by regression.

The study of Agbada and Osuji (2013) studied the impact of effective liquidity management on banks performance in Nigeria. The result of the study revealed considerable association between banks performance and effective liquidity management. Effective liquidity management can be increased by the soundness of banks.

Arif and Anees (2012) study showed significant effect of liquidity risk factors on banks profitability. This research article comprises of 22 Pakistani banks during the period of 2004 to 2009 to investigate the impact of liquidity risk factor on the Pakistani banks.

Liquidity affects the profitability of commercial banks as stated in study of Olagunju, et al. (2011). When liquidity decreases then profitability of bank increases and when liquidity increases, banks profitability decreases. Both structured and unstructured questionnaires were used to achieve the object of the study. The

data was collect from the management and financial statement of sampled banks. Pearson correlation technique was used to analyse primary and secondary data.

Saleem and Rehman (2011) paper explained the relationship of enterprise profitability and liquidity. The results revealed substantial effect of all ratios on the financial position of enterprise. This study also explained that profitability plays a vital role in enterprise financial position.

The principles of sound liquidity risk management by financial institutions are laid down in BIS (2008). As per BIS (2008), the ability of a bank to fund increases in assets and meet liabilities as and when they become due is called liquidity. For a bank's liquidity, every financial transaction or commitment to enter into any financial transaction has some implications. Meeting cash flow obligations as and when they are due is called effective liquidity management

Srinivasan and Gupta (2007) identified the problems of liquidity management in Indian banks. The reason being excessive use of statutory liquidity ratio (SLR) to fund the credit growth. The study observed that banks lend long term and borrow short term in India increasing the mismatch between assets and liabilities. As inflationary pressures may force central bank in India to use monetary measures to curb inflation, Srinivasan and Gupta (2007) expect the dependence of banks on short term resources.

Mohan (2006) recognized issues related to liquidity management in Indian financial system. India was able to sustain capital inflows which helped Indian central bank to smooth out interest rates, after the financial system reforms started in India in 1991. India evolved Market Sterilisation Scheme (MSS) to sustain open market operations, which helped monetary authorities to manage liquidity cycles. Introduction of Liquidity Adjustment Facility (LAF) helped India to manage liquidity and reduce volatility in the capital flows and short term interest rates. The excess liquidity in Indian financial system was mopped by lending and deposit rates. The central bank—Reserve Bank of India (RBI)—has used Cash Reserve ratio (CRR), Statutory Liquidity ratio (SLR) and bank discount rate (bank rate) as an instrument of liquidity management for a long time.

3.0. Objectives

- 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 a period of 8 years from 2013-14 to 2020-2021.
- To comparatively analyze liquidity management of public and private sector banks.

4.0. Research Methodology

Comparative quantitative research design has been used for this study. The study covered five public sector banks (viz. Punjab National Bank, Bank of India, Bank of Baroda, Union Bank of India and State Bank India) and 5 private sector banks (viz. ICICI, HDFC, AXIS, IDBI and Kotak Mahindra Bank).

4.1. Data Collection

The sample size used in this research is 10 commercial banks, five from public sector banks and five from private sector banks. In this research, secondary data is used. The data has been collected through banks and financial institutions websites for a period of eight year from 2013-14 to 2020- 21.

4.2. Statistical Tools Used

In order 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. Result and Discussions

Efficient liquidity management is the key factor for success of any bank. In the study, liquidity management is determined by CDR, IDR and CRDR. The results of study by CDR, IDR and CRDR signify the efficient liquidity management of selected private sector banks and inefficient liquidity management of selected public sector banks.

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

S. No	Name of Bank	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	TOTAL	AVERAGE	RANK	Max	Min
Public Sector Bank														
1	PNB	63.39	67.47	67.75	67.53	72.52	78.36	78.93	79.79	575.74	71.97	8	79.79	63.39
2	BOI	62.23	66.08	65.64	66.80	68.96	72.91	76.70	76.97	556.29	69.54	9	76.97	62.23
3	BOB	72.61	72.66	72.44	67.79	65.10	67.96	69.35	69.39	557.30	69.66	10	72.66	65.10
4	UBI	66.11	70.86	71.20	73.46	77.11	79.23	78.85	77.89	594.71	74.34	6	79.23	66.11
5	SBI	69.75	74.04	73.94	72.47	77.61	82.72	84.04	85.71	620.28	77.54	5	85.71	69.75
Private Sector Bank														
6	ICICI	85.08	91.30	95.79	98.52	104.71	111.37	110.78	106.38	803.93	100.49	2	111.37	85.08
7	HDFC	89.88	92.47	91.72	89.80	90.22	87.41	85.50	84.84	711.84	88.98	4	92.47	84.84
8	AXIS	90.24	91.34	95.04	95.45	93.86	92.44	85.74	80.60	724.71	90.59	3	95.45	80.60
9	IDBI	56.96	61.56	67.06	70.27	76.26	80.87	82.02	85.19	580.19	72.52	7	85.19	56.96
10	KOTAK	93.10	101.67	108.03	107.60	107.01	111.80	123.54	129.75	882.50	110.31	1	129.75	93.10

Source: Business-standard.com

The above table of CDR reveals that the top 4 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 Kotak bank which has the highest value of average CDR at 110.31cr and 10th position is attained by BOB which has the lowest value of average CDR at 69.66cr.

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

S. No	Name of Bank	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	TOTAL	AVERAGE	RANK	Max	Min
Public Sector Bank														
1	PNB	36.08	33.36	31.20	30.98	29.72	29.65	31.34	33.01	255.34	31.92	7	36.08	29.65
2	BOI	29.84	29.00	27.85	25.44	23.95	23.41	23.66	24.70	207.85	25.98	9	29.84	23.41
3	BOB	29.03	29.62	29.13	25.79	22.39	20.85	20.40	23.31	200.52	25.07	10	29.62	20.40
4	UBI	35.80	32.49	30.67	30.34	28.28	26.66	29.34	31.43	245.01	30.63	8	35.80	26.66
5	SBI	40.39	37.77	40.67	41.55	37.80	34.38	32.19	31.70	296.45	37.06	4	41.55	31.70
Private Sector Bank														
6	ICICI	55.66	56.79	60.80	61.60	61.27	66.95	72.70	77.60	513.37	64.17	1	77.60	55.66
7	HDFC	33.39	32.81	30.86	31.38	34.01	34.44	32.91	34.76	264.56	33.07	6	34.76	30.86
8	AXIS	28.20	27.61	32.50	32.40	33.68	36.72	38.42	42.51	272.04	34.01	5	42.51	27.61
9	IDBI	36.09	39.01	38.99	35.84	34.86	36.25	40.55	43.65	305.24	38.16	3	43.65	34.86
10	KOTAK	49.72	44.24	46.74	45.98	47.60	55.49	65.02	74.96	429.75	53.72	2	74.96	44.24

Source: Business-standard.com

The above table of IDR depicts that the highest average of IDR is maintained by ICICI at 64.17cr which shows its outstanding performance in terms of liquidity management. On the other hand, poorest performance is shown by BOB which depicts inefficient liquidity management in terms of IDR. The lowest value of average IDR by BOB stood at 25.07cr.

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

S. No	Name of Bank	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	TOTAL	AVERAGE	RANK	Max	Min
Public Sector Bank														
1	PNB	4.54	5.10	4.61	4.26	4.33	4.69	4.80	4.69	37.02	4.63	9	5.10	4.26
2	BOI	7.62	5.44	5.82	5.55	5.84	5.88	4.62	4.81	45.58	5.70	5	7.62	4.62
3	BOB	3.78	3.81	4.11	3.92	3.88	3.81	3.55	3.16	30.02	3.75	10	4.11	3.16
4	UBI	4.21	4.70	5.05	4.77	4.45	4.64	5.44	5.20	38.46	4.81	8	5.44	4.21
5	SBI	5.44	5.54	5.79	5.86	6.62	7.08	6.64	5.88	48.85	6.11	3	7.08	5.44
Private Sector Bank														
6	ICICI	4.64	4.95	5.63	5.93	6.14	6.35	6.43	6.14	46.21	5.78	4	6.43	4.64
7	HDFC	6.84	5.75	8.85	9.96	5.72	5.78	6.47	6.03	55.40	6.93	2	9.96	5.72
8	AXIS	10.13	10.06	7.01	7.62	6.88	6.20	6.11	5.98	59.99	7.50	1	10.13	5.98
9	IDBI	5.20	5.18	5.45	5.14	5.10	5.14	5.23	5.03	41.47	5.18	6	5.45	5.03
10	KOTAK	4.09	4.21	4.77	4.74	4.95	5.21	5.32	4.87	38.16	4.77	7	5.32	4.09

Source: Business-standard.com

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 7.50cr. Again, the same pattern of poor performance is observed in the case of CRDR by public sector banks. BOB has the least value of average CRDR at 3.75cr. Only SBI maintained to achieve the third rank while other public sector banks occupying the lower ranks of CRDR.

6.0. Research Findings

In the above Table-I we found that, High value of average CDR in case of private sector banks is an indicator that private banks lend good amount of deposits which results in high profitability, showing efficient liquidity management. On the counterpart, low value of average CDR of public sector banks reveals that public sector banks are not able to manage their deposits resulting in low profitability, indicating inefficient liquidity management.

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

In the above Table-III we found that, with respect to CRDR, High CRDR means stand demand for credit of private sector banks in an environment of relatively slower deposit growth indicating efficient liquidity management. Low CRDR means relatively poor credit growth of public sector banks compared with deposit growth indicating insignificant liquidity management.

7.0. Conclusion

Liquidity management is a significant aspect in banking. Therefore, it has been seriously discussed by researchers and practitioners worldwide. From the inferential statistical results of the study, it is concluded that private sector banks managed to have significant liquidity management than public sector banks during the period-2013-2021. Private sector banks managed to invest their deposits appreciably in different profitability sectors depicting efficient liquidity management which is not evident in case of public sector banks. Hence, it is concluded that public sector banks also need to look for different profitability ventures to invest their deposits so that they can increase their prominent ratios viz. CDR, CRDR and IDR-ratios and in return, can increase their profitability leading to significant liquidity management.

8.0. References

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