

## A COMPARATIVE CASH FLOW STATEMENT ANALYSIS BETWEEN SELECTED PUBLIC SECTOR AND PRIVATE SECTOR BANKS IN INDIA

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### **ABSTRACT:**

*The cash flow statement is a financial statement that shows how changes in Balance sheet accounts and income affect explain the change during the period in cash and cash equivalents and classifies all cash inflows and outflows as operating, Investing, Financing Activities. Additionally Net cash flow subtotals are reported for each of these activities. Cash flow is very important to understand the companies overall financial health and its operating profitability. The cash flow statement is useful in determining the short term viability of a company. From the financial year 2004-05 it has become compulsory to all the Indian companies to present cash flow statement in their Annual Report. Institute of Chartered Accounts of India (ICAI) and International Accounting Standards Board (IASB) have issued AS-3 and AS-7 respectively for The Cash flow statement. In this paper a Comparative study has been undertaken between a public bank (Bank of Baroda) and a private bank (ICICI).*

**KEYWORDS:** *Cash, Cash flow, Operating Activities, Investing Activities, Financing Activities.*

### **INTRODUCTION:**

The statement of cash flows has always been an important financial report, but has been called in different names over the years. It is the 'Statement of changes in financial position', 'statement of sources and application of funds' and changes in working capital. Success of every business depends on its cash management. So it is necessary to study the composition of cash of an organization and the impact of its cash flow decision on its liquidity, profitability and solvency. The official name for the cash flow statement is the statement of cash flows. A cash flow statement is a financial report that determines the sources of organization cash and how that cash was spent over specified time period. It does not include non cash item. A cash flow statement provides much fruitful information for short term analysis and cash planning. It helps the users in comparing the present value of the future cash flows of the different organizations. To know about the amount, timing and surety of future cash flow,

historical information about cash flow are used. It is also useful in checking the correctness of the past judgments of future cash flow and determining the relationship between cash flow and profitability and also the effect of inflation. It helps the management to predict and analyze these situations when business has huge profits but still deficiency in cash to distribute to among share holders.

The information provider in the cash flow statement helps the users:

1. To find out the liquidity and solvency position of an enterprises.
2. To find out the changes in net assets and financial structure of an organization.
3. It helps in controlling the cash and the management of cash.
4. It discloses success or failure of cash planning and provides remedial measures.

In this research topic a systematic comparative analysis has been undertaken about the cash flow statement between Bank of Baroda (BOB) and Industrial Credit and Investment Corporation of India (ICICI).

### **OBJECTIVES:**

The comparative study of the three important activities (Operating, Investing, Financing) which are very significant parts of cash flow statement. The analysis of all these activities is undertaken with the following objectives.

1. To study the overview of Operating, Investing, Financing Activities for the period of study of selected banks.
2. To compare the various Activities (i.e. Operating, Investing, Financing) of current year with those of last year of selected banks.
3. To provide suggestion and feedback (if necessary) for important in cash management and avoid any unexpected mess.

### **RESEARCH METHODOLOGY:**

**Sample selection:** For the purpose of comparative study four banks SBI, BOB, ICICI and HDFC have been selected.

**Bank of Baroda (BOB):** Bank of Baroda is an Indian state owned International banking and financial service company headquarter in Vadodara in Gujarat India. The bank was founded by the Maharaja Sayajirao Gaekwad

III of Baroda on 1908. Now it's a nationalized bank from 1969 and governed by govt. of India. It is the second largest bank in India next to SBI. It has been a long and eventful journey of almost a century across 25 countries.

**Industrial Credit and Investment Corporation of India (ICICI):** Industrial Credit and Investment Corporation of India (ICICI) bank is an Indian multinational banking and financial services company head quarter in Mumbai. ICICI bank was originally promoted in 1994 by ICICI Ltd. a financial institution. ICICI bank is India's largest private sector bank with consolidated assets of Rs 9860.43 billion at March 31, 2017. ICICI bank currently has a network of more than 4800 branches and near about 14000 ATMs across India.

**Period of study:** The detailed study is conducted for a period of Ten (10) financial years. It is starts from 2007-08 to 2016-17.

**Data collection:** In this study the relevant data are collected from secondary resources. Data has been obtained from the following sources:-

1. Published Annual Report of the selected banks for the financial year from 2007-08 to 2016-17.
2. Website the selected banks.
3. Directory of National Stock Exchange (NSE), Bombay Stock Exchange (BSE)
4. Other related Websites.

## **HYPOTHESIS:**

Considering the objectives of the study the following Hypothesis were formed under investigation.

1. H0: There is no significant difference between the trends of Operating Activities of the selected bank under study. H1: There is significant difference between the trends of Operating Activities of the selected bank under study.
2. H0: There is no significant difference between the trends of Investing Activities of the selected bank under study. H1: There is significant difference between the trends of Investing Activities of the selected bank under study.
3. H0: There is no significant difference between the trends of Financing Activities of the selected bank under study. H1: There is significant difference between the trends of Financing Activities of the selected bank under study.

**Statistical Tools and Techniques:** The following Statistical analysis techniques are selected to analyse the cash flow statement of the selected banks for this study. For this study following techniques are being used:-

- A. **Mean:** Average of statistical Data which enables us to comprehend in a single effort the significance of the whole.
- B. **S. D.:-**Standard Deviation is the positive square value of the arithmetic mean of the square of the deviation of the given observation from their arithmetic mean.
- C. **C.V.:-** Co-efficient of Variation is the percentage variation in Average, S.D., being considered as the total variation in the Mean.
- D. **t-Test:-** If  $x_1, x_2, \dots, x_n$  in a random sample size “n” from a normal population with mean  $\mu$  ( $\mu$ ) and variance  $(\sigma)^2$ , then student “t” statistic is defined as

$$t = \frac{\bar{x} - \mu_0}{S_x / \sqrt{n}} \quad (\text{Here } \sigma \text{ Unknown})$$

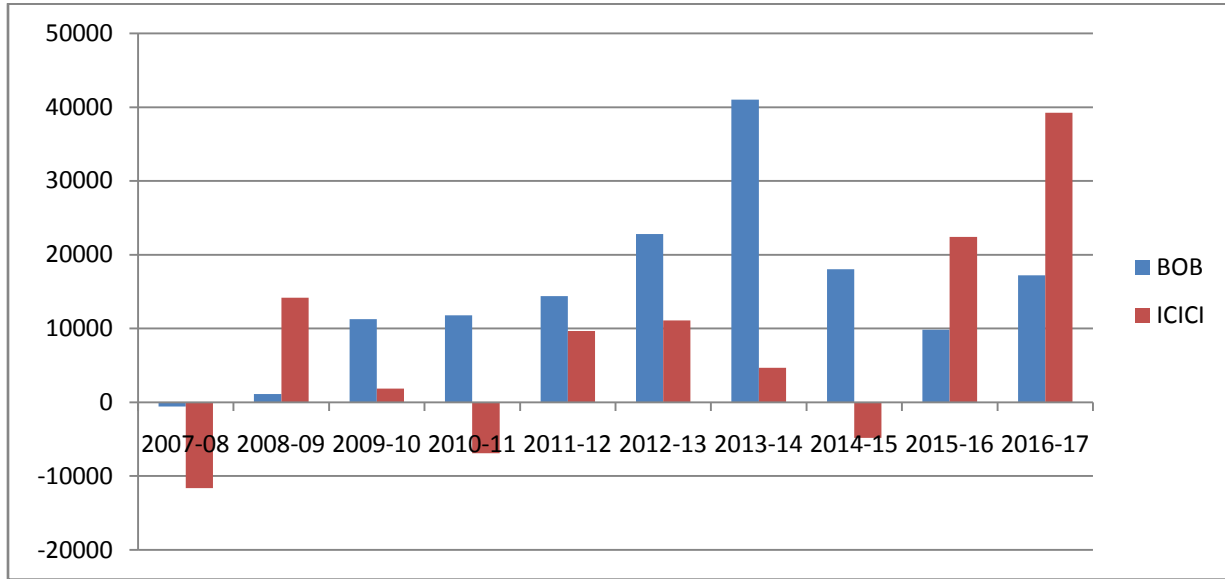
**DATA ANALYSIS AND FINDINGS:**

**Table-1: Statistical analysis of Operating Activities, Investing Activities and Financing Activities**  
Comparative Study (Rs in crore)

YEAR	Operating activities		Investing activities		Financing activities	
	BOB	ICICI	BOB	ICICI	BOB	ICICI
2007-08	-565.02	-11631.2	-183.33	-17561.1	1060.2	29964.82
2008-09	1125.47	14188.49	-238.93	3857.88	901.29	1625.36
2009-10	11252.45	1869.21	-335.01	6150.73	462.5	1382.62
2010-11	11778.81	-6908.92	-489.75	-2108.82	3177.95	3105.97
2011-12	14406.5	9683.82	-337.38	-12280.2	165.35	3829.95
2012-13	22797.08	11102.01	-772.45	-9431.56	-790.26	2989.72
2013-14	41016.38	4668.6	-688.7	-12246.5	5151.33	6838.37
2014-15	18021.05	-4824.49	-539.37	-9199.56	-6.44	15005.67
2015-16	9841.66	22428.47	-3995.41	-3949.98	615.73	-585.07
2016-17	17193.86	39222.81	-426.04	7045.42	198.26	-30378.8
<b>MEAN</b>	<b>14686.82</b>	<b>7979.885</b>	<b>-800.637</b>	<b>-4972.37</b>	<b>1093.591</b>	<b>3377.863</b>
<b>RANK</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>
<b>MEDIAN</b>	<b>13092.66</b>	<b>7176.21</b>	<b>-457.895</b>	<b>-6574.77</b>	<b>539.115</b>	<b>3047.845</b>
<b>RANK</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>
<b>SD</b>	<b>11722.53</b>	<b>15109.25</b>	<b>1137.889</b>	<b>8549.955</b>	<b>1760.579</b>	<b>14969.39</b>
<b>RANK</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>
<b>COVAR</b>	<b>79.81662</b>	<b>189.3418</b>	<b>-142.123</b>	<b>-171.949</b>	<b>160.9906</b>	<b>443.1616</b>
<b>RANK</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>

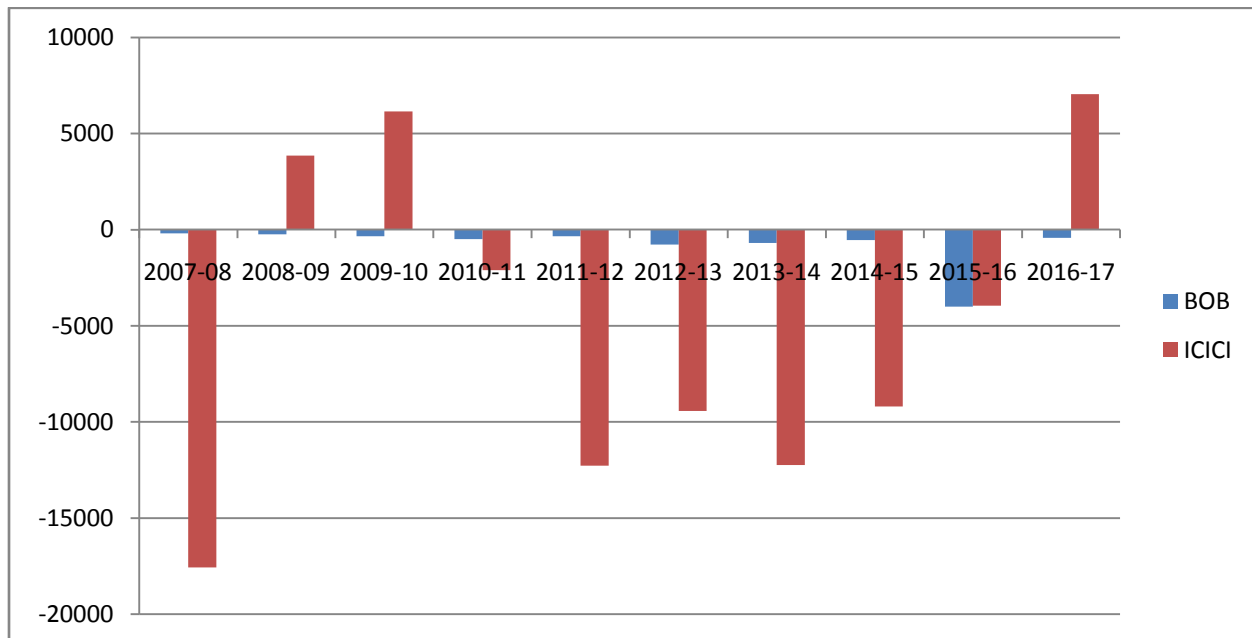
Sources: Annual Reports of selected banks

**Chart- 1: Cash flow from Operating Activities**

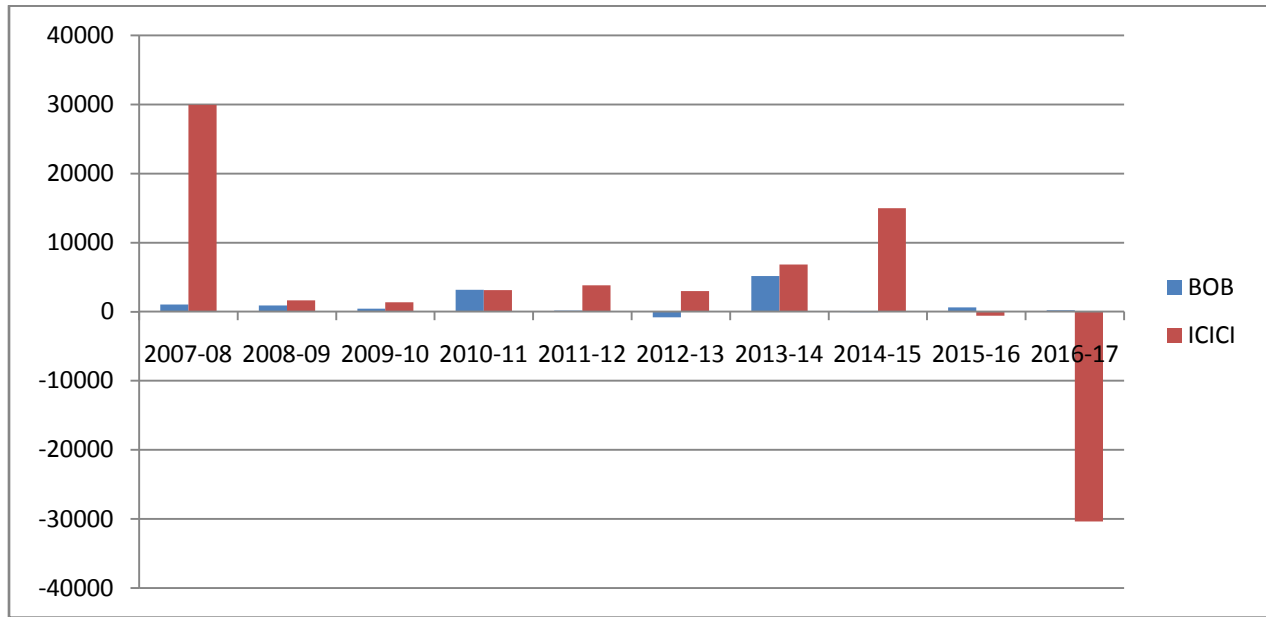


From the above chart of Operating activities it has been clear that there is variance in performance of ICICI whereas BOB shows a stable performance throughout the selective years.

**Chart- 2: Cash flow from Investing Activities**



From the above chart it has been clear that all selected banks had a negative trend in Investing Activities with variance performance.

**Chart- 3: Cash flow from Financing Activities**

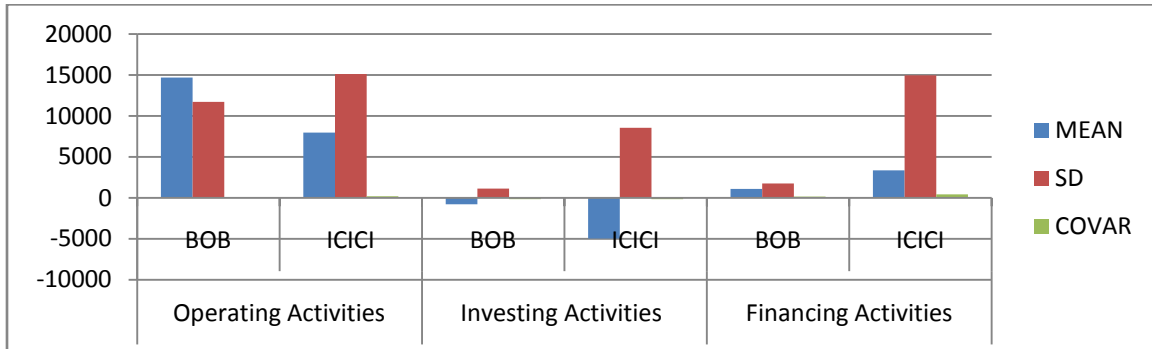
From the above chart it has been clear that both the banks show a positive trend except ICICI in 2016-17 in financing activities. However ICICI is more variance than BOB.

#### **INTERPRETATION OF DATA:**

1. From the table-1 average of cash flow Operating activities and Investing Activities of BOB is higher than other selected bank ICICI. Theoretically, we know that higher the average higher will be the rank and vice versa. So BOB is given the 1<sup>st</sup> rank and finally ICICI gets the 2<sup>nd</sup> rank. But the situation is totally changed in Financing Activities. In Financing Activities the selected bank ICICI is given the 1<sup>st</sup> rank and BOB is given the 2<sup>nd</sup> rank.
2. SD helps to know variation in activities for in case of standard Deviation lower the value higher will be the rank and vice versa. From this aspect it is observed that the SD for all three activities of Bank of Baroda is higher than ICICI bank. So for all the three activities, BOB bank obtained 1<sup>st</sup> the position and ICICI bank obtained the 2<sup>nd</sup> position.
3. Co-efficient of variation is also measures of dispersion, here also lower the value higher will be rank and higher the values of CV, lower will be the rank. The value of BOB in operating activities and financial activities is higher than ICICI bank. In the Investing activities ICICI bank is higher than other bank BOB.

So in Operating and Financing activities BOB obtained the 1<sup>st</sup> rank and ICICI obtained the 2<sup>nd</sup> rank. In investing activities ICICI gets the 1<sup>st</sup> rank and BOB gets the 2<sup>nd</sup> rank.

**Chart- 4: Trend analysis of Mean, S.D. & Co-variance**



**Table- 2: Level of performance**

Level of performance	Operating Activities	Investing Activities	Financing Activities
Best	BOB	ICICI	BOB
Poor	ICICI	BOB	ICICI

**HYPOTHESIS TESTING:-**

**Table-3: t-test: Paired two samples for mean for Operating Activities**

Name of the bank	BOB	ICICI
Mean	14686.82	7979.885
SD	11722.53	15109.25
Observation	10	
Hypothesized Mean Difference	6709.935	
Df (Degree of Freedom)	9	
t- test	1.1096	
t-Critical two -tail	2.262	
Decision	Null hypothesis - Accepted	

**Table-4: t-test: Paired two samples for mean for Investing Activities**

Name of the bank	BOB	ICICI
Mean	-800.637	-4972.37
SD	1137.889	8549.955
Observation	10	
Hypothesized Mean Difference	4171.733	
Df (Degree of Freedom)	9	
t- test	<b>1.5295</b>	
t-Critical two -tail	<b>2.262</b>	
Decision	<b>Null hypothesis - Accepted</b>	

**Table-5: t-test: Paired two samples for mean for financing Activities**

Name of the bank	BOB	ICICI
Mean	1093.591	3377.863
SD	1760.579	14969.39
Observation	10	
Hypothesized Mean Difference	2284.272	
Df (Degree of Freedom)	9	
t- test	<b>0.4792</b>	
t-Critical two -tail	<b>2.262</b>	
Decision	<b>Null hypothesis - Accepted</b>	

**Table-6: Hypothesis Acceptance or Rejection at a glance**

Activities	t calculate value	t table value	Accepted/Rejected
Operating Activities	<b>1.1096</b>	<b>2.262</b>	<b>Accepted</b>
Investing Activities	<b>1.5295</b>	<b>2.262</b>	<b>Accepted</b>
Financing Activities	<b>0.4792</b>	<b>2.262</b>	<b>Accepted</b>

**Hypothesis Testing:**

1. In case of operating activities, the trend for mean, SD and co-variance are equal for both the banks. So it can be said that the hypothesis is accepted.



From t table, it is observed that the calculated value of 't' for operating activities (1.1096) is less than the table value (2.262) at degree of freedom (d.f.) 9, So the null hypothesis is accepted. It means that there is no significant difference between the mean of operating activities of selected banks.

2. But for investing activities the trend for mean, SD and co-variance are different for both the banks. So it can be said that the hypothesis is rejected.

It is observed that the calculated value of 't' for investing activities (1.5295) is lower than the tabulated value (2.262) at degree of freedom (d.f.) 9, so the null hypothesis is accepted. It means that there is no significant difference between the mean of investing activities of BOB and ICICI banks.

3. For financing activities the trend for mean, SD and co-variance are different for both the banks. So it can be said that the hypothesis is rejected.

It is observed that the calculated value of 't' for financing activities (0.4792) is less than the tabulated value (2.262). It means the null hypothesis is accepted and alternative hypothesis is rejected. So it means that there is no significant difference between the mean of financing activities of selected banks.

### LIMITATION OF THE STUDY:

1. The total study is based on published financial statement on the selected banks and others resources. The study based on the secondary data for ten (10) years. Data for more than or less than ten years that gives different results and the secondary data have its own limitation.
2. The information is collected from limited sources. It is not possible to use different tools and techniques of statistical analysis.
3. Some external factors also affect directly or indirectly to the bank performance.
4. The word 'cash' is not clearly expressed. This is influenced by cash receipts and payments of a farm.

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