

Operating Cash Flow Analysis of Indian Banking Industry

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Cash is the life and blood of every organization. Cash flow statement of an enterprise provides useful information to the users of financial statements, to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows. Here, an attempt has been made to analyze the operating cash flow position of Indian banking sector in reference to accounting standard-3 issued by ICAI.

The main objective of present article is to analyze the cash flow from operating activity of Public Sector Banks, old Private Sector Banks, New private Sector Banks and Foreign Banks operating in India and to study the homogeneity of data of different classes of banking industry as mentioned in aforesaid objective.

Though our study reveals a considerable difference amongst the mean size of cash flow from operating activities, however, statistically speaking the difference is not significant. Our null hypothesis is accepted that in turn means the magnitude of observed difference in cash flow from operating activities of above four groups has come out due to chance only. It is evident by ANOVA analysis. Our study indicates that maximum foreign banks in India did not generate adequate operating cash profits for the shareholders.

Keywords : Operating Cash Flow, AS, Investment Activities etc.

Introduction

Finance and growth are closely interlinked. As the economy grows and becomes more sophisticated, the banking sector has to develop *pari passu* in a manner that it supports stimulates such growth. With increasing global integration, the Indian banking system and financial system has had to be as a whole strengthened so as to be able to compete. Hence the financial sector continues to be one of the primary engines of economic growth. A healthy banking system, besides providing necessary architecture for facilitating economic growth, also serves as a strong repository of liquidity³. The banking system in India consists of commercial and cooperative banks, of which the former account for around 98% of banking system assets. Based on the

ownership pattern, the commercial banks can be grouped into three types-state owned or public sector banks (PSBs), private banks under Indian ownership, and foreign banks. The 27 PSBs dominate the commercial banking system of India, accounting for a little more than 80% of the commercial banking assets¹. During the early 1990s, PSBs owned nearly 90% of the total business in the banking industry⁶.

Financial sector reforms, which began in 1991 and 16 years old today. During this period there has been substantial transformation and liberalization of the whole financial system. It is, therefore, an appropriate time to take stock and assess the efficacy of our approach¹. PSBs were owned by the central government and banks

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were given the development role and profit for them was secondary. But now public offering of shares of PSBs has led to reduction in government holding and creation of new interest group as stakeholders. This has called for tighter accounting norms, profit orientation and more transparency in disclosure and financial statements. With the entry of foreign banks in India, the local banks should be strong enough to compete with international and other new generation players. This also calls for strict adherence to Indian as well as international accounting standards. Reserve Bank of India (RBI) constituted a working group on compliance with accounting standards by banks under the Chairmanship of N.D. Gupta, the erstwhile president of Indian Institute of Chartered Accountants of India (ICAI).

On the basis of the recommendation of the working group, the central bank has issued a series of guidelines with a view to eliminating the gaps in compliance of accounting standards. Banks were advised to ensure strict compliance with effect from the accounting year ending March 31, 20035.

Accounting Standard -3

Accounting standard-3 entitled "Cash flow Statement" issued by ICAI is mandatory for preparing along with financial statement for all types of banks. AS-3 deals with provision of information about the historical changes in cash and cash equivalents of an enterprise by means of cash flow statement, which classifies cash flows during the period from operating, investing and financing activities. Operating activities are principal revenue producing activities of the enterprises. It generally involved in producing and delivering goods or providing services and termed as operating activities. The activities of acquisition and disposal of long-term assets and other investment not included in cash equivalents are investing activities. Finance activities are those activities, which result in change in size and composition of owners' capital and borrowing of the

organization. **The evaluation of any organization should be based on the quantum of cash inflows from operating activities, rather than on investing or financing activities. Hence, the present article focuses only on cash flow from operating activities.**

Why Cash Flow?

To analyze the liquidity, cash flow information is more reliable than balance sheet or income statement. Balance Sheet data are static-measuring a single point of time-while the income statement contains many non-cash allocations. In contrast, the cash flow statement records the changes in the other statements and nets out the bookkeeping artifice, focusing on what shareholders really care about: cash available for operation and investments². Cash is the life and blood of every organization. Cash flow statement of an enterprise provide useful information to the users of financial statements, to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows. Here, an attempt has been made to analyze the operating cash flow position of Indian banking sector in reference to accounting standard-3 issued by ICAI. IN present article it is examined that whether banking industry in India is capable to pay their obligations and to provide returns to their investors from their operation. The cash flow statements are important from the view of investors and creditors because they provide vital information regarding the bank's ability to generate future positive cash flows, meet obligations and pay dividends, satisfy it's external financing. Historical cash flow information is often used as an indicator of the amount, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and the impact of changing prices. Cash flow statements, in conjunction with the rest of the financial statements, are useful in assessing the changes in the net assets of the entity,

the ability to generate cash and cash equivalents, the financial structure with an accent on liquidity, solvency and the capacity of the bank to affect the timing and amount of its cash flows in accordance with its ability to adapt to the changing times⁸.

Research Methodology

Objectives

The objectives of the present study are as follows:

- To analyze and comparative study of the cash flow from operating activity of Public Sector Banks, old Private Sector Banks, New private Sector Banks and Foreign Banks operating in India.
- To study the homogeneity of data of different classes of banking industry as mentioned in aforesaid objective.

Hypothesis

The hypothesis of study is that there is a no significant difference among different classes of banking industry in generating to cash flow from operating activities.

Sample selection

The entire banking industry includes commercial banks, co-operative banks and others but present study limited to nationalized banks, private sectors banks and foreign banks in India only. All the banks operating in these fields have been selected for the purpose of present analysis. It includes 28 public sector banks including IDBI bank, 19 old private sector banks, 7 new private sector banks and 26 foreign banks in India.

Source of Data

Only secondary data have been used for the purpose of present study. The relevant secondary data have been collected from the books viz. Performance highlights of private sector banks, Performance highlights of public sector banks and Performance highlights of foreign banks in India (2005-06) published by Indian Banks' Association, Mumbai. Only two years data (2004-05 & 2005-06) have been taken into account for the purpose of present study.

Statistical Techniques Used

The present study used ratio, Mean, SD, CV and analysis of variance (ANOVA) techniques to interpret the financial data.

Analysis of Cash flow from Operating Activity in Banking Industry

Operating activities are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities. The amount of cash flows arising from operating activities is key indicator of the extent to which the operation of the banks have generated sufficient cash flows to maintain the operating capability of the bank, pay dividends and make new investments without recourse to external sources of financing. Information about the specific components of historical operating cash flow is useful, in conjunction with other information, in forecasting future operating cash flows. Net cash flows from operating activities of public sector banks, old private sector banks, new private sector banks and foreign banks in India are analyze as follows:

Table: A

Cash flow from operating activities of Public Sector Banks

(Rs. Crore)

S.N.	Name of Banks	2004-05	2005-06
1.	Allahabad Bank	951.93	34.4
2.	Andhra Bank	1049.54	1117.21
3.	Bank of Baroda	2449.57	2067.91
4.	Bank of India	-777.66	3380.52
5.	Bank of Maharashtra	558.38	-1722.11
6.	Canara Bank	-3365.58	3790.33
7.	Central Bank of India	2269.45	-2438.92
8.	Corporation Bank	905.33	677
9.	Dena Bank	40.5	848.73
10.	Indian Bank	-820.7	6191.27
11.	Indian Overseas Bank	-399.79	-1954.88

12. Oriental Bank of Commerce	4125.54	-3167.37
13. Punjab & Sindh Bank	158.88	-0.92
14. Punjab National Bank	1073.53	14961.44
15. Syndicate Bank	-3613.5	1159.77
16. UCC Bank	2247.92	3819.05
17. Union Bank of India	2730.29	-1124.99
18. United Bank Of India	40.38	943.14
19. Vijaya Bank	204.67	1416.77
20. State Bank of India	-2780.74	6039.14
21. State Bank of Bikaner & Jaipur	174.7	542.16
22. State Bank of Hyderabad	615.05	335.21
23. State Bank of Indore	317.16	720.96
24. State Bank of Mysore	110.85	197.91
25. State Bank of Patiala	1125.97	292.72
26. State Bank of Saurashtra	279.02	82.89
27. State Bank of Travancore	1345.14	1520.38
28. IDBI Ltd.	2507.65	-105.24
Total	13174.08	39624.48
Mean	470.5286	1415.16
S.D.	1746.555	3449.704
C.V.	371.21028	243.7678

Table 'A' shows the cash flow from operating activities of public sector banks for two years i.e., 2004-05. Seven banks reported negative operating cash inflow in both the year. It clearly indicates that these banks are unable to generate sufficient operating cash inflow during these two years. Highest operating cash out flow was reported by Canara Bank in 2004-05 whereas Oriental Bank of Commerce reported highest negative operating cash-inflow in 2005-06. The mean value of cash inflow from operating activities of 2005-06 (Rs. 1415.16 Crore) is improved as compare to 2004-05 (Rs. 470.5286). It implies that entire public sector banks improved their efficiency and capable to generate sufficient operating cash flow surplus to meet out funds requires for new investment and pay dividends. The coefficient of variation (c.v.) is declined by 34.33% in 2005-06 as compare to 2004-05 that means there is a

higher consistency is observed in latter year in cash flow from operating activities. It can be concluded that the variation or variability in cash flow from operating activities is much less in 2005-06.

Table: B
Cash flow from operating activities of Private Sector Banks
(Rs. Crore)

Name of Banks	2004-05	2005-06
Old Private Sector Banks		
Bharat Overseas Bank Ltd.	60.78	151.93
City Union Bank Ltd.	13.92	59.14
Development Credit Bank Ltd.	-275.56	-104.65
ING Vysya Bank Ltd.	31.17	-202.67
The Karnataka Bank Ltd.	504.24	-104.36
Lord Krishna Bank Ltd.	-256.63	96.92
Nainital Bank Ltd.	53.93	67.4
SBI Commercial & Inter. Bank Ltd.	-48.7	12.58
Tamilnad Mercantile Bank Ltd.	201.81	-91.74
The Bank of Rajasthan Ltd.	1135.39	506.18
The Catholic Syrian Bank Ltd.	254.73	-211.84
The Dhanalakshmi Bank Ltd.	62.39	-18.05
The Jammu & Kashmir Bank Ltd.	348.46	-805.54
The Karur Vysya Bank Ltd.	106.94	166.84
The Lakshmi Vilas Bank Ltd.	-85.9	-746.73
The Sangli Bank Ltd.	174.63	N.A.
The South Indian Bank Ltd.	-122.38	517.02
The United Western Bank Ltd.	86.84	-26.06
Total	2559.2	-704.82
Mean	134.69474	-37.095789
S.D.	311.93005	324.044228
C.V.	231.58296	-873.53372

New Private Sector Banks

Centurion Bank Ltd.*	-252.15	-239.8
HDFC Bank Ltd.	-348.06	1724.76
ICICI Bank Ltd.	9131.72	4652.93
Indusind Bank Ltd.	-1045.13	261.45
Kotak Mahindra Bank Ltd.	-263.22	118.08
UTI Bank Ltd.	4334.19	240.17
YES Bank	-55.36	-165.96
Total	11501.99	6591.63
Mean	1643.141	941.6614
S.D.	3755.518	1762.692
C.V.	228.5572	187.1896

On examination of Table 'B' it reveals that two-third old private sector banks reported cash flow from operating activities below the mean value (Rs. 134.69474 crore) during 2004-05. The situation became critical in the year 2005-06 because the mean value of cash flow from operating activities fall in negative zone. It clearly indicates that old private sector banks did not fulfill the expectations of shareholders because there was a no cash surplus for the shareholders. They are unable to create positive shareholder wealth. Only the Bank of Rajasthan Ltd. created cash surplus from the operating activities. The cash flow from operating activities of old private sector banks are more consistent in the year 2005-06 as compare to year 2004-05. It is evident by coefficient of variation as C.V. is declined in 2005-06 and converts into negative zone.

On examination of new private sector banks it is found that no bank other than ICICI Bank Ltd. and UTI Bank Ltd. Reported positive cash in flows in 2004-05. It implies that all the banks cover in this sector except ICICI Bank Ltd. and UTI Bank Ltd. did not generate adequate cash surplus for the shareholders. The C.V. indicates that consistency in generating cash in flow from operating activities by new private sector

banks has been observed in the year 2005-06 because C.V. is dropped by 39.3676%.

Table: C
Cash flow from operating activities of Foreign Banks in India

Name of Banks	(Rs. Crore)	
	2004-05	2005-06
ABN Amro Bank N.V.	1.89	1452.15
Abu Dhabi Commercial Bank Limited	116.49	-159.65
American Express Bank Ltd.	-598.53	-350.06
Antwerp Diamond Bank N.V.	-37.12	19.98
Bank of America NA	-600.48	140.75
Bank of Bahrain and Kuwait B.S.C.	64.21	-16.92
Bank of Ceylon	-6.75	5.71
Barclays Bank PLC	-27.82	207.43
BNP Paribas	-307.22	83-39
China trust Commercial Bank	5.71	7.2
Chohung Bank	14.38	65.97
Citi Bank N.A.	-330.3	1314.3
Calyon Bank	-283.19	-596.46
Deutsche Bank AG	1461.4	325.54
JPMorgan Chase Bank	328.16	-500.97
Mashreq Bank psc	-19.18	-53.52
MIZUHO Corporate Bank Ltd.	3.06	109.65
Omman International Bank S.A.O.G.	-87.98	1.47
Societe General	-116.94	286.88
Sonali Bank	-3.31	-1.54
Standard Chartered Bank	130.17	3276.84
State Bank of Mauritius Ltd.	19.48	12.07
The Bank of Nova Scotia	149.53	-156.25
The Bank of Tokyo-Mits UFJ Ltd.	-90.53	-110.82
The Development Bank of Singapur	4.43	1078.14

The Hong Kong and Shanghai Banking corporation Ltd.	33.56	603.31
Total	-176.88	7044.59
Mean	-6.80308	270.94577
S.D.	365.2742	781.31069
C.V. (SD/Mean) * 100	-5369.25	288.36423

Table 'C' shows the cash flow from operating activities of foreign banks in India during two years. The Deutsche Bank AG reported highest cash inflow from operating activities in 2004-05 (Rs. 1461.4 crore) but declined sharply by Rs. 1135.86 crore in the year

2005-06 (Rs. 325.54 crore). In the year 2005-06 Standard Chartered Bank reported highest cash in flow from operating activities. Thirteen and nine banks out of twenty six in 2004-05 and 2005-06 respectively reported negative cash inflow from operating activities. It clearly indicates that maximum foreign banks in India did not generate adequate operating cash profits for the shareholders. The consistency in generating cash inflows from operating activities in the year 2005-06 is declined as evident by coefficient of variation. To sum up, all the statistical calculations made as above have been summarized as follows:

Table: D
Cash flow from operating activities (Rs. Crore)

	2004-05			2005-06			Combined		
	MEAN	S.D.	CV%	MEAN	S.D.	C.V.%	MEAN	S.D.	C.V.%
PSBs	470.53	1746.55	371.21	1415.16	3449.704	243.7678	942.83	20763	220.19
OPB	134.69	311.93	231.58	-37.09	324.04	-873.53	48.8	2030.78	4161.43
NPB	18.84	258.63	1373.07	941.66	1762.692	187.19	1292.4	4892.85	378.58
FBI-6.80	365.27	-5369.2	270.94	781.31069	288.36	132.07	4510.36	3415.12	

Table 'D' shows the statistical measurement of cash flow from operating activities for two years. The table reveals that mean cash flow from operating activities of OPB has declined and turned into negative zone in the year 2005-06. Thus, it may be said that the OPB did not perform very well in the year 2005-06 and could not generate any cash profits surplus for shareholders. All other three sectors reported increment in cash flow from operating activities in the year 2005-06 as compare to 2004-05. PSBs have a better capacity to generate cash as compare to other segments of banking industry in India in both the years. Foreign Banks in India failed to generate cash flow from operating activities because they reported negative cash in flows (-6.80308) in 2004-05 but improved drastically in the year 2005-06. If we look at the CV of all the four sectors, we find that OPB are highly variable in generating cash in flow from

operating activities i.e., there is a less uniformity in generating cash flows from operating activities as compare to other sector of banking industry. Other sector of banking industry is relatively less inconsistent in generating cash in flow from operating activities.

To test the hypothesis of equality amongst several mean values of cash inflow from operating activities of public sector banks, old private sector banks, new private sectors banks and foreign banks in India, analysis of variance (ANOVA) statistical technique is carried out for both the year separately. Actually ANOVA tests the homogeneity of different sample means through dividing the total variance into different variance component. The calculation has been made on MS-EXCEL 2000. The resultant figures have been shown in the following ANOVA table:

'ANOVA ' Table: E
Cash flow from operating activities

	2004-05			2005-06			Combined		
	MEAN	S.D.	CV%	MEAN	S.D.	C.V.%	MEAN	S.D.	C.V.%
	04-05	05-06	04-05	05-06	04-05	05-06	04-05	05-06	
Between the samples	1627456	1296890	96.7	3	3	5424854	9896366	F=2.3957	F=2.106156
Within the samples	1720900	2635710	7362	75	75	2264342	4698781		
Total	188364587	386796459		78	78				

Table value of 'F' at 5% level of significance is 2.74 and d.f. V1 = 3, V2=75

Though our study reveals a considerable difference amongst the mean size of cash flow from operating activities. However, statistically speaking the difference is not significant. A comparative study of cash flow from operating activities in both years (2004-05 and 2005-06) of public sector banks, old private sector banks, new private sector banks and foreign banks in India reveals that statistically there is a no significant difference amongst the mean size of cash flow from operating activities of all the four sectors because the calculated value of 'F' is much below the table value at 95% level of confidence. The difference is not due to assignable factor but may arise due to sampling fluctuations. Our null hypothesis is accepted that in turn means the magnitude of observed difference in cash flow from operating activities of above four groups has come out due to chance only. Thus, on an average cash flow from operating activities of all groups is more or less equal. However, foreign banks in India reported negative mean value in the year 2004-05 and OPB in 2005-06.

Concluding Remark

From the foregoing analysis following can be concluded:

- * On the basis of above analysis it can be said that the growth of cash in flow from operating activities of PSB, NPB and FBI was better in 2005-06 as compares to the 2004-05.
- * It may be said that the OPB did not perform very

well in the year 2005-06 and could not generate any cash profits surplus for shareholders because they reported negative mean value of cash flow from operating activities. They are unable to create positive shareholder wealth.

- * At 5% level of significance, our null hypothesis is accepted because calculated value of 'F' is less than the table value in both the years. Hence, there is a no significant difference amongst the different sector of Indian banking industry in generating cash in flow from operating activities.
- * Andhra Bank, Bank of Baroda, UCO Bank and Punjab National Bank in public sector, ICICI in new private sector bank category and Chinatrust Commercial Bank Chohung, Bank The Development Bank of Singapore Ltd. and Standard Chartered Bank in foreign bank category reported positive cash in flow from operating activities in both the years.
- * PBSs have put up a better capacity to generate cash as compare to other segments of banking industry in India in both the years.
- * Thirteen and nine banks out of twenty six in 2004-05 and 2005-06 respectively reported negative cash inflow from operating activities. It clearly indicate that maximum foreign banks in India did not generate adequate operating cash profits for the shareholders.

* Student 't' value has been calculated for checking the significance difference between two means as follows:

Table F

Difference between	D. F.	Table value at 5% level of significance	Calculated 't' Value
PBS & OPSB	45	2.015	0.1871105
PSB & NPSB	33	2.0357	0.04423
PSB & FBI	52	2.0084	0.19914
OPSB & NPSB	24	2.064	1.3397473
OPSB & FBI	43	2.021	0.1751044
NPSB & FBI	31	2.042	0.5931576

On examination of above table it can be concluded that there is a no significant difference between two mean values of cash in flow from operating activities of different groups of banking industry because in all the cases the calculated value is less than table value at 5% level of significance. Again our null hypothesis is also accepted through another statistical technique i.e., 't' test that all the groups of the banking sector are equally capable in relation to generate cash in flow from operating activities.

There are some reservation for the present results that should be carefully examined in further research. First, the present study was based on very short time series of selected banks because of the time constraints. Further studies should make use of longer time series and more advanced statistical methods. Second, the analysis was restricted only to a limited to cash flow from operating activities. The present study can be extended to cash flow from financing and investing activities.

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