

## Management of cash in Public sector Enterprises - A case study of ECIL, Hyderabad

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**Abstract:** Short term financing is essential to address the needs of short term planning for a firm. Every business tries to expand, renovate and innovate for better achievements and profitability for which it requires funds that should remain at its disposal. Cash or liquid cash is concerned with minimizing unproductive cash balances, investing temporarily excess cash advantageously and tries to make the best possible arrangements for meeting planned and unexpected demands on the firm's cash. Seriously, cash management of a firm involves managing of cash flows- in and out of the firm, cash flows within the firm and cash balances held by the firm at a point of time. In order to reduce the influence of uncertainties with regard to cash needs and to ensure adequate liquidity, firms have to gauge the need for protective liquidity. This paper makes a modest attempt to analyze the cash turnover and cash inflows and outflows of ECIL, Hyderabad in an analytical way through suitable and select statistical ways.

**Keywords:** cash, cash flow statement, cash ratios, cash turnover

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### I. Introduction

#### 1. Cash Management

Cash management<sup>1</sup> is concerned with minimizing unproductive cash balances, investing temporarily excess cash advantageously, and to making the best possible arrangements for meeting planned and unexpected demands on the firm's cash. It involves managing of cash flows in-and-out of the firm, cash flows within the firm, and cash balances held by the firm at a point of time. Cash management must be thought of in terms of the overall liquidity needs of the firm, specifically its current assets and liabilities. In order to reduce the influence of uncertainties with regard to cash needs and to ensure adequate liquidity, firms have to gauge the need for protective liquidity. The efforts involved for this purpose usually take the form of:

1. Explicit identification of the kinds of contingencies against which protection is desirable.
2. Assessment of the probabilities or odds that each of these will develop within a given period in future, such as 5 years.
3. Assessment of the probabilities that developments creating cash drains will occur at the same time.
4. Assessment of the likely amount of cash drain that will result in each of the contingencies develops.

*1. J.M.Keynes*

*postulated three motives for holding cash, viz., transactions motive, precautionary motive and speculative motive. These can be said to form the basis for cash management in business enterprises.*

An important policy decision regarding cash management is what should be the optimal amount of cash balance to be held? In determining such a balance, the management needs to consider the joint impact of the following factors:

1. The philosophy of the management regarding liquidity and risk of insolvency.
2. The expected cash inflows and outflows based on the cash budget forecasts encompassing long-range and short-range cash needs.
3. The size of sales in relation to fixed asset investment.
4. The degree of deviation between the expected and actual net cash flows.
5. The maturity structure of the firm's liabilities.
6. The firm's ability to borrow at short notice in the event of an emergency.
7. Efficient planning and control of cash.
8. The status of the firm's receivables and inventory.
9. The credit position of the firm.
10. The nature of business.

"Cash management must aim to reduce the required level of cash but minimize the risk of being unable to discharge claims against the company as they arise." If the firm holds too small a cash balance its liquidity position becomes weak, although the overall profitability will be high, the risk of technical insolvency will increase. On the other hand, if the firm maintains too much of a cash balance, it will have a sound liquidity position and less risk. But its overall profitability will be reduced. Therefore, the firm should maintain an optimal cash balance which is neither small nor large. It is that balance where the liquidity and profitability goals meet and there is a tradeoff between risk and return.

Another major cash decision is what exact mix of cash and marketable securities should be maintained? Marketable securities are the means through which cash balances are replenished in the process of their optimization and held to augment the cash balance or to mop up temporary surplus cash. The level of marketable securities is determined by the level of cash, which in turn is constrained by the compensating balance requirements of banks, the need for cash and its predictability, the interest rate on marketable securities, and the transactions and inconvenience costs associated with affecting a transfer between marketable securities and cash. The firm need not hold cash if the transaction and inconvenience costs are zero and the conversion of marketable securities into cash and cash into marketable securities is instantaneous. Since this is not practically possible, excess cash above some minimum level should, as a general rule, be invested in marketable securities. The rule is subject to the qualification that the interest earned over the expected holding period must more than compensate for transactions and inconvenience costs. Under conditions of uncertainty, when the demand for cash is not known in advance, upper and lower limits for cash are set. When cash reaches an upper limit it is invested in securities and when cash reaches a lower limit, marketable securities are converted into cash. The level of marketable securities should also include resources which are saved to meet large expenses. Another consideration that affects the level of marketable securities is the firm's banking relationships, if these are good, it means that the securities balance can be reduced.

There are various collection and disbursement methods which exercise a joint impact on the overall efficiency of cash management. These methods speed up the mailing time of payments from customers to the firm, reduce the time during which payments received by the firm remain uncollected funds, and speed up the movement of funds to disbursement banks.

The methods which accelerate the collection process are concentration banking, lock-box system, special handling of remittances which involve personal picking up of these cheques or the use of air-mail or special delivery, initiating controls to accelerate the deposit and collection of those small cheques which account for a large proportion of total deposits, speeding up inter-bank transfers of cash and transfers between various divisions of the company, closing of unnecessary bank accounts which create unnecessary pockets of idle funds.

The objective of control of disbursements is to slow them down and yet ensure that they are made in time. In exercising such control the firm should give consideration to such aspects as quick shifting of funds to the disbursing bank accounts, preventing excessive balances being built up in a particular bank, establishing well defined operating procedures for disbursement, eliminating or minimizing the loss of cash discounts on accounts payable due to clerical inefficiencies and the timing of payment. Some of the methods of delaying disbursements are : the use of drafts instead of cheques, playing the float, maintaining a separate account for pay roll disbursements in order to minimize cash balance in that account by predicting when the pay cheques are likely to be presented for collection. Establishing a minimum level of cash balances depends in part upon the compensating balance requirements of banks.

One of the main methods of planning and controlling investment in cash is to prepare detailed cash budgets. Cash budgets are the period-by-period forecasts of future cash flows of the business. They are the estimates of when additional finance will be required and when surplus funds are likely to arise. This gives notice to the management about the need for arranging short-term financing in the case of cash shortages and investigate short-term investment opportunities in the case of surplus cash. Cash budgets can be prepared over various time horizons. For purposes of working capital management, it is the short-term horizons, say one year, which is important, although regard should still be had for longer term cash flow statements. The period for which cash flows are computed depends upon the nature of the business. But generally they should be at least monthly. If the cash inflows and outflows fluctuate greatly, a weekly forecasting will be required. The usefulness of a cash budget is dependent on the accuracy of the forecasts on which it rests. Two methods can contribute to the improvement of cash budgeting. The first is to analyze the deviations that occur; and the second is to apply risk analysis to the cash budgets.

## **II. Control and Review**

There are five major approaches for effective control of cash:

1. Exploitation of techniques of cash mobilization to reduce operating requirements of
2. cash, Major efforts to increase the precision and reliability of cash flow forecasting,

3. Maximum effort to define and quantify the liquidity reserve needs of the firm,
4. The development of explicit alternative sources of liquidity,
5. Aggressive search for more productive uses for surplus money assets.

Some of the important techniques of controlling cash are cash budgeting, ratio analysis, linear programming, goal programming, simulation and portfolio management. Ratio analysis is widely in application, some of the important ratios used as measures of cash control are discussed below:

### **2.1. Cash Velocity or Cash Turnover (Sales per period/Initial Cash Balance)**

The ratio explains the speed with which the cash is turned over. The higher the turnover, the less the cash balance required for any given level of sale, and other things remaining constant, it implies greater efficiency. The ratio can also be used to establish the cash balances to be held, once the sales forecasts for various periods have been made, the required cash balance may be calculated, using historical cash turnover figures. However the ratio shows only what is happening to the cash balance without indicating the imperfections and irregularities, caused by the cash flows by the income through sales, which may be partly responsible for decline in liquidity.

### **2. 2. Cash as Percentage of Current Assets**

The ratio of cash in current assets provides an index of current operations and, used correctly, helps determine the minimum level of cash. Monthly control of cash and historical records give some indication of trends. An increasing level of cash in current assets could be caused by a reduction in the credit given by the company's suppliers or by too high a cash balance. The first may be unavoidable, the second is not. The ratio can only give an indication of a potential problem; further analysis is required to determine the cause.

## **III. Objectives Of The Study**

The main objective of the study is to analyze the management of Cash at ECIL, Hyderabad.

## **IV. Data Source And Methodology**

The present study is a case method of research on ECIL, Hyderabad. It used the secondary sources of data. The data was collected from annual reports of the company, Government reports, research journals etc. Besides, the operational problems of working capital of ECIL have been analyzed through the available secondary data collected from internal reports of the finance department of the organization. In the course of data analysis, various financial techniques namely, Ratios, Growth Rates, Trend Analysis, and statistical techniques namely, Percentages, Coefficient of Correlation and Graphical Presentation are employed.

## **V. Analysis And Discussion**

### **5.1. Cash Flow Statement**

In the present chapter a modest attempt has been made to analyze the cash turnover and cash inflows and out flows of ECIL in an analytical way. Cash from operations (Net profit after non-cash expenses and non-operating incomes is known as cash from operations). The main objective is to help the management in judging how much cash has been generated and how cash is used for the important activities viz; operational, investing and financing activities. Cash receipts from operating revenues are compared with the cash payments for operating expenses. If receipts are more than payments, then it means cash is generated from operating activities. On the other hand if cash payments are more than receipts, it means additional cash is made available to operating activities. The data pertaining to the same is analyzed and shown through table 5.1

**Table 5.1:** Cash flow statement for the years from 2002 - 2012

<b>Particulars</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
<b>I.</b> Cash flow from operating activities	2613.34 (100)	-2121.68 (-81.18)	1599.91 (61.22)	-3846.93 (-147.20)	5482.79 (209.80)	-10425.41 (-398.93)	-3856.19 (-147.55)	14353.84 (549.25)	-9073.95 (-347.21)	13400.85 (512.78)
<b>II.</b> Cash flow from investing activities	-2421.38 (100)	-639.56 (-27.00)	435.99 (18.00)	164.28 (6.79)	193.43 (8.00)	-82.30 (4.00)	-1321.09 (55)	-3698.14 (152.73)	1320.95 (-54.55)	1517.98 (-63)
<b>III.</b> Cash flow from financing activities	1045.64 (100)	1122.89 (107.38)	-647.70 (61.94)	53.30 (5.09)	-114.89 (-10.98)	12790.80 (1223.25)	1701.50 (162.72)	-2826.69 (-2073.5)	4405.22 (1129.3)	118.8.61 (421.29)

IV. Net increase (decrease) in cash equivalents( opening balance)	21582.82 (100)	22820.44 (105.73)	21182.09 (98.14)	22570.29 (104.57)	18940.94 (87.75)	24511.14 (113.56)	26794.23 (124.14)	23318.45 (108.04)	31147.46 (144.31)	27799.68 (128.80)
V. Cash and Cash equivalents( closing balance)	22820.44 (100)	21182.09 (92.82)	22570.29 (98.90)	18940.94 (82.99)	24502.27 (107.36)	26794.23 (117.41)	23318.45 (102.18)	31147.45 (136.48)	27799.68 (121.81)	30909.90 (135.44)
<b>TOTAL:</b>	<b>48062.24</b>	<b>42364.18</b>	<b>45140.58</b>	<b>37881.88</b>	<b>49004.54</b>	<b>53588.46</b>	<b>46636.9</b>	<b>36852.6</b>	<b>55599.36</b>	<b>85437.02</b>

(Rs. In lakhs)

**Source:** Annual reports of ECIL

Figures in ( ) are Trend Percentage

It is evident from the table 5.1 that the amount of cash generated by operating activities is the key indicator to know to what extent the operating activities are financed by its own operations. If sufficient surplus is there it can replace loans, pay dividends to share holders and can purchase or invest more in fixed assets and other types of investments. The cash flow from operating activities show a negative trend as it was -81.18 per cent in 2003-04, -147.20 per cent in 2005-06, -398.93 per cent in 2007-08 and -347.21 per cent in the year 2010-11. Coming to 2004-05, 2006-07, 2009-10 and 2011-12 the trend percentage was positive as it was 61.22, 209.80, 549.25 and 512.78 respectively, which shows that due to good cash inflows the organization could happily bear the burden of meeting the operating expenses.

The cash flow from investing activities will help to estimate future incomes and cash inflows. From the table, it is clear that cash flow from investing activities has shown momentous fluctuations. It was 27 per cent, 18 per cent, 6.79 per cent, 8.00 per cent, 4.00 per cent, 55 per cent, 152.73 per cent, 54.55 per cent and 63 per cent over the study period of the range from 2002-03 to 2011-12.

The cash flow from financing activities helps to know the claims of future cash flows. The trend percentage was 107.38 in 2003-04,-61.94 per cent, 5.09 per cent in 2005-06, -10.98 per cent in 2006-07, 1223.25 per cent in the year 2007-08,162.72 per cent in 2008-09, -2703.5 per cent in 2009-10, 1129.3 per cent in 2010-11 and lastly 421.29 per cent in 2011-12 respectively. The investments which are readily convertible into cash without any loss of invested amount and having readily marketable (means quickly can be converted into cash) are known as cash equivalents. It has shown a rise from 105.73 per cent in 2003-04 to 144.3 per cent in 2010-11 and 128.80 per cent in 2011-12. Lastly, the cash or cash equivalents have also grown over the study period as it was 92.82 per cent in 2002-03 and increased to 136.48, 121.81 and 135.44 per cent in 2009-10, 2010-11 and 2011-12 respectively. It can be asserted from the analysis that the cash position of the organization is comfortable on the whole, when the inflows and outflows of cash through operating, investment and financing activities are taken together.

## 5.2. CASH RATIOS

Although receivables, debtors and bills receivable are generally more liquid than inventories, there may be doubts regarding their realization into cash immediately or in time. Cash is regarded as the most liquid asset. Absolute liquid ratio or cash ratio mean the same. Cash velocity ratio is calculated as follows.

$$\text{Cash Velocity Ratio} = \frac{\text{Sales for the period}}{\text{Opening cash balance}}$$

Therefore, higher the ratio more is the efficiency of the firm in utilizing its cash resources as it enables the accomplishment of greater volume of sales with relatively lesser cash resources. This cash velocity ratio proves that, higher the ratio, greater is the degree of liquidity and solvency of a firm and vice versa.

**TABLE 5.2: CASH RATIOS**

Year	Cash to Current Assets	Cash to Current Liabilities	Cash to sales	Cash Velocity Ratio
2002-03	0.47	0.40	0.23	4.64
2003-04	0.30	0.31	0.23	4.10
2004-05	0.30	0.31	0.30	3.64
2005-06	0.19	0.21	0.27	3.1
2006-07	0.17	0.23	0.25	5.3
2007-08	0.17	0.22	0.27	4.09

2008-09	0.13	0.16	0.22	3.96
2009-10	0.18	0.23	0.27	5.10
2010-11	0.16	0.22	0.21	4.44
2011-12	0.21	0.22	0.21	5.3

Source: Annual Reports of ECIL

The ratio of cash in current assets provides an index of current operations and, when used correctly, helps determine the minimum level of cash. An increasing level of cash in current assets could be caused by a reduction in the credit given by the company's suppliers or by too high a cash balance. The first may be unavoidable, the second is not. The ratio can only give an indication of a potential problem; further analysis is required to determine the cause. The percentage of cash in current assets is 0.47 in 2002-03 whereas in the year 2011-12 it came down to 0.21. Some other important ratios that are used as measures of controlling cash balances are cash to current liabilities, cash to sales and cash velocity or cash turnover. The ratios thus computed are compared with the averages of the ratios achieved in the past by the organization or industry ratios in the process of exercising control.

The quick ratio or liquidity ratio or acid test ratio is a more refined measure of the firm's liquidity. The ratio establishes the relationship between quick or liquid assets and current liabilities. An asset is said to be liquid if it can be converted into cash immediately or reasonably soon without the loss of value. Cash is the most liquid asset. The other assets which are considered to be relatively liquid and included in the quick assets are book debts (debtors and bills receivables) and marketable securities (temporary investments). Generally, Absolute liquid ratio or cash ratio of 0.5:1 is considered to represent a satisfactory current financial condition. From the table, it is clear that the absolute liquid assets were 0.40 times in the year 2002-03 which is slightly low than the accepted rule of thumb 0.5. It means that the company needs to improve the short term financial position. It was 0.31 times in 2003-04 and came down to 0.22 times in the year 2011-12. The cash velocity ratio explains the speed with which the cash is turned out in the operation cycle. Higher the turnover, the less cash is required for any given level of sales. It is clear from the table that this ratio is the highest in the years 2006-07, 2009-10 and 2011-12 which stood at 5.3, 5.10 and 5.3 respectively. In 2005-06, it was only 3.1 and in 2004-05 it was 3.64 which indicate that more cash is required to be pumped in the organization for a given number of sales.

## VI. Summary Of Findings And Conclusion

- The cash flow statement of ECIL specifies that the cash flow from operating activities was good and the organization was able to bear the burden of meeting the operating expenses. Similarly, cash flow from investing activities has reported significant fluctuations. The cash flow from financing activities was registered a mixed trend in funds throughout the study period.
- The percentage of cash in current assets was 0.47 in 2002-03 whereas in 2011-12 year it came down to 0.21 per cent. Increase of cash in current assets could be caused by a reduction in the credit given by the company's suppliers. From the analysis, it is inferred that the absolute liquid assets were 0.40 times in the year 2002-03, which is slightly lower than the accepted level as per rule of thumb 0.5. It states that the company needs to improve the short term financial position. The cash velocity ratio explains the speed with which the cash is turned out in the operation cycle. Higher the turnover, the less cash is required for any given level of sales. It is inferred from the analysis that the ratio was 5.3, 5.10 and 5.3 in the years 2006-07, 2009-10 and 2011-12, respectively. It indicates that there was a good cash velocity at ECIL during the study period.

## VII. Suggestions

- The cash management of ECIL presents a mixed trend because the cash flow from operating, financing and investing activities have shown series of fluctuations, which calls for better cash control techniques.

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