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# UNIT 6 CONSTRUCTION AND ANALYSIS OF FUND FLOW AND CASH FLOW STATEMENTS

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## Objectives

After you have studied this unit, you should be able to:

- understand the idea of funds flowing through a business in a dynamic situation
- appreciate the role of working capital in the operations of a business
- understand the sources and uses of working capital as well as cash during an accounting period from the financial statements
- understand and interpret changes in working capital identifying the causes of these changes
- use the funds flow statement and the cash flow statement as analytical tools.

## Structure

- 6.1 Introduction
- 6.2 Working Capital and its Need
- 6.3 Determining Working Capital Requirements
- 6.4 Sources of Funds
- 6.5 Uses (Applications ) of Funds
- 6.6 Factors Affecting Fund Requirements
- 6.7 Analysing Changes in Working Capital
- 6.8 Fund Flow Statement
- 6.9 Importance of Cash and Cash Flow Statement
- 6.10 Sources and Uses of Cash
- 6.11 Preparation of Cash Flow Statement
- 6.12 Summary
- 6.13 Key Words
- 6.14 Self Assessment Questions
- 6.15 Further Readings

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## 6.1 INTRODUCTION

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Depending on the user's purpose, the term `funds' may be used differently. Literally, it means a supply that can be drawn upon. In this sense it is used to mean cash, total current assets or working capital. We use it here in the sense of working capital meaning **total current assets less current liabilities**.

Funds flow is used to refer to changes in or movement of current assets and current liabilities. This movement is of vital importance in understanding and managing the operations of a business.

We have seen in the unit dealing with balance sheet that every material transaction changes the position statement (or Balance Sheet). This in other words implies a dynamic situation involving continuous movement of resources into the business,



within the business and out of the business. The complexity of these flows increases with the increasing size and volume of business. Directly or indirectly, all these flow take place in business through the medium of **funds**.

Funds in the form of cash and cash equivalents, in the right quantity are necessary for the smooth functioning of any business. The continuous movement of cash within the business and out of the business could be understood by studying the cash flow statement.

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## 6.2 WORKING CAPITAL AND ITS NEED

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We have earlier defined working capital as total current assets less current liabilities. This, in other words, means all the assets held by the business with the objective of conversion into cash (including cash) during an operating cycle of the business. Of these assets, a part is financed by short-term credits which are to be met during the operating cycle representing current liabilities. Thus current assets less current liabilities or working capital implies amount of resources invested in current assets from sources of finance other than current liabilities. This net amount is also the amount available for use in the business in the form of fund. Consider the following example.

Ramsons is a retail outlet dealing in domestic appliances and entertainment electronics equipment, owned by Ram. The investment in the showroom, display counters, cash register, furniture, fixtures and so on is Rs. 6,00,000. Ram decides to use straight line depreciation at the rate of 10 per cent per annum.

Ramson's estimated sales is Rs. 1,50,000 per month: 50,000 cash sales and

Rs. 1,00,000 on credit to be collected in four equal monthly instalments. All sales are made at 25 per cent margin on selling price.

Supply and sales constraints would warrant carrying three months sales requirement in the form of inventory. Similarly, month's cash expense requirements have to be held in cash balance.

Initial inventory is to be bought for cash and replenishment purchases will receive a month's credit from suppliers.

Average monthly cash requirements for meeting operating expenses other than payment for purchases amount to Rs. 26,000. Ram needs to withdraw Rs. 4,000 per month for his personal needs.

1. How much working capital will Ramsons require to start operations?
2. Will he need additional working capital during the first four months? Or will he have surplus working capital during the first four months?

You can instinctively answer these questions by saying that Ramsons needs working capital to pay for inventory, for expenses and for keeping a safe cash balance. You can also say that Ramsons will receive funds from operations to meet some of these requirements. To be more specific, how much money does he require? This could be done by working out a schedule of cash receipts and cash payments on a monthly basis. It is also possible for us to prepare **proforma** monthly profit and loss account and balance sheet. You can also notice that we have chosen the first **four** months consciously since it completes one **operating cycle** of the business.

**RAMSONS: Schedule of Cash Payments**



| Month    | Explanation        | Amount Rs. | Total Rs. |
|----------|--------------------|------------|-----------|
| January  | Operating Expenses | 26,000     |           |
|          | Withdrawals        | 4,000      | 30,000    |
| February | January Purchases  | 1,12,500   |           |
|          | Operating expenses | 26,000     |           |
|          | Withdrawals        | 4,000      | 1,42,500  |
| March    | February Purchase  | 1,12,500   |           |
|          | Operating expenses | 26,000     |           |
|          | Withdrawals        | 4,000      | 1,42,500  |
| April    | March purchases    | 1,12,500   |           |
|          | Operating expenses | 26,000     |           |
|          | Withdrawals        | 4,000      | 1,42,500  |

**RAMSONS: Schedule of Cash Receipts**

| Month    | Explanation  | Amount Rs. | Total Rs. |
|----------|--|------------|-----------|
| January  | Cash Sales   | 50,000     |           |
|          | Credit Sales of the month-<br><b>first</b> installment | 25,000     | 75,000    |
| February | Cash sales   | 50,000     |           |
|          | Credit Sales of the month-<br><b>first</b> installment | 25,000     |           |
| March    | January sales-second installment                       | 25,000     | 1,00,000  |
|          | Cash sales   | 50,000     |           |
|          | Credit Sales of the month-first instalment             | 25,000     |           |
|          | January sales-third instalment                         |            |           |
| April    | February sales-second instalment                       | 25,000     |           |
|          |  | 25,000     | 1,25,000  |
|          | Cash sales   | 50,000     |           |
|          | Credit Sales of the month-first instalment             | 25,000     |           |
|          | January sales-fourth instalment                        |            |           |
|          | February sales-third instalment                        | 25,000     |           |
|          | 25,000   |            |           |
|          | 25,000   | 1,50,000   |           |

Opening balance sheet of Ramsons will be as follows:

**RAMSONS: Balance Sheet as of January 1,2003**

| Assets       | Rs.             | Liabilities and<br>Capital | Rs.             |
|--------------|-----------------|----------------------------|-----------------|
| Fixed Assets | 6,00,000        | Capital                    | 9,67,500        |
| Inventory    | 3,37,500        |                            |                 |
| Cash         | 30,000          |                            |                 |
|              | <u>9,67,500</u> |                            | <u>9,67,500</u> |

We have assumed that the entire asset requirements are financed by owner's capital.  
Working capital of Ramsons on January 1, 2003 is as follows:

|                           |                 |
|---------------------------|-----------------|
| Current Assets: Inventory | 3,37,500        |
| Cash                      | 30,000          |
| Total Current Assets      | 3,67,500        |
| Less: Current Liabilities | Nil             |
| Working Capital           | <u>3,67,500</u> |



**RAMSONS: Schedule of Cash Balances**

|                      | January  | February | March    | April    |
|----------------------|----------|----------|----------|----------|
| Opening Balance      | 30,000   | 75,000   | 32,500   | 15,000   |
| Cash Receipts        | 75,000   | 1,00,000 | 1,25,000 | 1,50,000 |
| Total Cash available | 1,05,000 | 1,75,000 | 1,57,500 | 1,65,000 |
| Less: Cash Payments  | 30,000   | 1,42,500 | 1,42,500 | 1,42,500 |
| Cash Balance         | 75,000   | 32,500   | 15,000   | 22,500   |

**RAMSONS: Profit and Loss Account for the Month ending**

|                     | 31 <sup>st</sup> January | 28 <sup>th</sup> February | 31 <sup>st</sup> March | 30 <sup>th</sup> April |
|---------------------|--------------------------|---------------------------|------------------------|------------------------|
| Sales               | 1,50,000                 | 1,50,000                  | 1,50,000               | 1,50,000               |
| Less: Cost of Sales | 1,12,500                 | 1,12,500                  | 1,12,500               | 1,12,500               |
| Other Expenses      | 26,000                   | 26,000                    | 26,000                 | 26,000                 |
| Depreciation        | 5,000                    | 1,43,500                  | 5,000                  | 1,43,500               |
| Net Profit:         | 6,500                    | 6,500                     | 6,500                  | 6,500                  |

**RAMSONS: Balance Sheet as at the end of**

| Assets                         | 31 <sup>st</sup> January<br>2003 | 28 <sup>th</sup> February<br>2003 | 31 <sup>st</sup> March<br>2003 | 30 <sup>th</sup> April<br>2003 |
|--------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------------|
| Fixed Assets                   | 6,00,000                         | 6,00,000                          | 6,00,000                       | 6,00,000                       |
| Less: Depreciation             | 5,000                            | 10,000                            | 15,000                         | 20,000                         |
| Net Fixed Assets               | 5,95,000                         | 5,90,000                          | 5,85,000                       | 5,80,000                       |
| Inventory                      | 3,37,500                         | 3,37,500                          | 3,37,500                       | 3,37,500                       |
| Receivables                    | 75,000                           | 1,25,000                          | 1,50,000                       | 1,50,000                       |
| Cash                           | 75,000                           | 32,500                            | 15,000                         | 22,500                         |
| Total Current Assets           | 4,87,500                         | 4,95,000                          | 5,02,500                       | 5,10,000                       |
| Total Assets                   | 10,82,500                        | 10,85,000                         | 10,87,500                      | 10,90,000                      |
| <b>Liabilities and Capital</b> |                                  |                                   |                                |                                |
| Capital                        | 9,67,500                         | 9,67,500                          | 9,75,000                       | 9,77,500                       |
| Add: Retained Earnings         | 2,500                            | 5,000                             | 1,12,500                       | 1,12,500                       |
| Owner's Equity                 | 9,70,000                         | 9,72,500                          | 9,75,000                       | 9,77,500                       |
| Accounts Payable               | 1,12,500                         | 1,12,500                          | 1,12,500                       | 1,12,500                       |
|                                | 10,82,500                        | 10,85,000                         | 10,87,500                      | 10,90,000                      |

## RAMSONS: Schedule of Working Capital



|                              | 31 <sup>st</sup> January<br>2003 | 28 <sup>th</sup> February<br>2003 | 31 <sup>st</sup> March<br>2003 | 30 <sup>th</sup> April<br>2003 |
|------------------------------|----------------------------------|-----------------------------------|--------------------------------|--------------------------------|
| Current Assets               | 4,87,500                         | 4,95,000                          | 5,02,500                       | 5,10,000                       |
| Less: Current<br>Liabilities | 1,12,500                         | 1,12,500                          | 1,12,500                       | 1,12,500                       |
|                              | <u>3,75,000</u>                  | <u>3,82,500</u>                   | <u>3,90,000</u>                | <u>3,97,500</u>                |

### Funds From Operations

|   |               |               |               |               |
|---|---------------|---------------|---------------|---------------|
| Net Profit                                  | 6,500         | 6,500         | 6,500         | 6,500         |
| Add:<br>Depreciation                        | <u>5,000</u>  | <u>5,000</u>  | <u>5,000</u>  | <u>5,000</u>  |
| Total funds<br>generated from<br>operations | <u>11,500</u> | <u>11,500</u> | <u>11,500</u> | <u>11,500</u> |

### Initial Investment (Capital)

Now with the example of Ramsons at hand, it is not difficult for us to understand that Ramsons have invested the 'money to make money'. Where has Ramsons invested the money? It is easy to answer this question because the balance sheet of the business tells us what all things Ramsons has done with the money. Refer to the first balance sheet and you will find Ramsons has fixed assets (show room and facilities), inventory (goods or merchandise) which he has purchased for resale and some cash for meeting expenses and personal needs. This is how Ramsons have invested the capital to start with. Let us first review these items and accounts receivable:

### Cash

It is difficult to perceive cash kept in the vault as an investment. Rather, you would be thinking that if we invest cash, then how can cash itself be an investment? But you

will realise that a certain minimum amount of cash is necessary for any business. Take a simple case: if you are a retailer, will you send away a customer who does not have exact change? However, you can entertain him only if you keel) change. That is your investment in cash; Similarly, you will have to pay your employees and suppliers at a specific time. I n order to do that you need cash. Thus investment in cash is that amount which is required to be kept on hand to meet day-to-day requirements of cash. This amount is determined after taking into account the regularity and amounts of inflows of cash, the amount and frequency of outflows, as also the uncertaintues related to these. Obviously, as your business grows the need for cash will also grow.

### Receivables

In most situations it will be necessary to grant credit to customers. This may be necessary either because of competition or because of the custom of trade. However, when we grant credit to customers it implies that we have to finance the cost of materials for the duration of such credit. In other words, you are financing your customers' business to the extent of the credit granted. Whenever the business is expanding, the volume of receivables will also expand. Please note that the need for financing receivable is not to the full extent of the accounts receivables (sales). You are actually financing only to the extent of cost of goods sold out of the receivables (sales) in question.



## Inventory, Supplies and Prepaid Expenses

You can well appreciate the need for carrying inventory. In order to carry on operations unhindered we need to have sufficient amount of merchandise on hand. The quantum we have to keep in store will be determined by the availability and regularity of supply, lead time for delivery and so on. All the same we should carry some inventory in any case. Similar is the case with non-merchandise inventory such as office and factory supplies. We have to carry a minimum stock of these to ensure smooth operations. We also know that there are several expenses which are to be paid before we actually use the services, such as rent, insurance and so on. In other words we invest your money in these items of assets in order to ensure smooth operations.

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### 6.3 DETERMINING WORKING CAPITAL REQUIREMENTS

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Understanding the existing capital needs and how these are financed will help us in understanding the process of financing of business and the flow of funds within the business. The first question we have to answer is how much working capital is needed to start the operation. We could determine the amount of capital required and compare the same with existing capital to see whether it is sufficient and whether there is any excess available for future use. Please note that we are not applying precise techniques of **cash management** or **liquidity planning** since that is beyond the scope of this unit.

We know from Ramsons that operating requirements of the business requires one month's cash expenses other than payment for creditors to be kept in cash. That is a minimum of Rs. 30,000 cash on hand is required by Ramsons (including Rs. 4,000 his withdrawal).

Ramsons have to keep three months sales in inventory. This means that during the first month he starts with three months' sales in the form of inventory. We know that the sales per month is Rs. 1,50,000 sold at a mark up of 25 per cent on sales. Therefore, inventory required to be maintained is three times of 75 per cent of sales.

That is,  $1,50,000 \times .75 \times 3 = \text{Rs. } 3,37,500$

Similarly, we know from the information available that every month one-third of the sales are made on cash and two-thirds on credit to be collected in four instalments. This means, cash collection during the month will be cash sales plus one-fourth of credit sales of the period and one-fourth of three previous months' credit sales. Similarly, in the first month we will be really making one half of the sales for cash and the other half of on credit. In our example.

|                          |              |                   |
|--------------------------|--------------|-------------------|
| Total Sales              | Rs. 1,50,000 |                   |
| Cash Sales               |              | Rs. 50,000        |
| Credit Sales             | Rs. 1,00,000 |                   |
| First Instalment in Cash |              | <u>Rs.25,000</u>  |
| Total Cash Collection    |              | <u>Rs. 75,000</u> |

Credit period of the sales will be as follows:

First month sales on credit less first instalment Rs. 75,000.

This means.

Rs. 75,000 credit for one month

Rs. 50,000 credit for one month

Rs. 25 000 credit for one month



This is equivalent to Rs. 75,000 sales made for two months' credit. In terms of working capital requirement, we require one month's financing of the cost of sales with respect to Rs. 1,50,000 sales. That is Rs. 1,12,500 is needed for financing this amount.

Thus, we could summarise Ramson's need for funds for financing current asset to start operations, as follows:

|                              |          |
|------------------------------|----------|
|                              | Rs       |
| 3 months' inventory          | 3,37,500 |
| One month's expenses as cash | 30,000   |
|                              | 3,67,500 |

During the first month Ramsons will sell one-third of the inventory generating Rs. 75,000 in cash and the other half of Rs. 75,000 to be collected in three instalments. Thus we need some additional funds to finance our granting credit to the customers.

Similarly, we would need to replenish the inventory and make payments for expenses. We shall examine these with the help of the balance sheet and profit and loss account of Ramsons for the first four months.

## 6.4 SOURCES OF FUNDS

We have seen that working capital is required to finance that portion of current assets which is not financed by current liabilities. We also saw that the investments represented by current assets are converted into cash during the operating cycle. This implies that our need for financing is for one such cycle. Under normal circumstances every unit of investment in working capital is converted into cash at the end of the cycle at an added value, to the extent of profits.

When we are looking at the possible sources of working capital the most important source is this 'internal generation'. The very idea of internal sources implies that there is something 'external'.

### Activity 6.1

1. Please put down what these 'internal' and 'external' sources are:

.....  
 .....  
 .....  
 .....  
 .....

### Internal Sources

When we are looking for sources funds it is but natural to start searching at home. What do we have? While examining the need for working capital we could also make an assessment as to whether the existing working capital is sufficient or not. Thus, the first internal source is any excess working capital that we might be having.

If we have any non-current assets which do not have any use they could be disposed off, thereby generating additional working capital. Please note that this is not a regular and continuing source of funds.

We have seen earlier that every profitable sale brings with it funds in excess of what was expended on the goods sold. In other words, profits generated by the business contribute towards additional working capital. But you may also notice that whenever



we measure profits, we match the revenue against all expenses relating to the revenue, whether it involves use of funds in the current period or not. Thus the profits measured do not reflect the actual amount of funds available in order to assess the actual funds generated from current operations we should add back to the profits: all those items of expenses not involving use of funds during the current period. One major example of such an item is depreciation.

Thus we could summarise the important possible sources of funds as:

1. Funds generated from operations. That is, profit plus depreciation and other amortisations.
2. Sale of non-current assets
3. Any surplus working capital. Did you guess correctly?

### Funds from Operations

Refer to Illustration-6.1. The profit and loss account of TIL shows that operations have provided gross addition of Rs. 360 million to funds during the period. These funds represent the sale proceeds of goods and services by the company.

We also know what part of these funds is utilised for meeting the cost of input such as material, personnel and other operating costs. Apart from these we have also to meet the interest commitments and costs expiration of the machinery and equipment. However, expiration of costs of the machinery and equipment (Depreciation) is one item which does not require use of funds in the current period.

**TOOLS INDIA LTD.**  
**Summarised Profit and Loss Account**  
**For the year ended December 31, 2002**

|                                |       | (Rs. Million) |
|--------------------------------|-------|---------------|
|                                |       | Rs.           |
| Sales                          |       | 350           |
| Other Income*                  |       | 10            |
|                                |       | 360           |
| Cost of goods sold             |       | 150           |
|                                |       | 210           |
| Gross Profit                   |       | 210           |
| Profit expenses:               |       |               |
| Personal                       | 60.00 |               |
| Depreciation and Amortisation  | 11.90 |               |
| Other Expenses                 | 13.10 | 85            |
|                                |       | 125           |
| Operating Profits              |       | 125           |
| Less: Interest Expense         |       | 15            |
|                                |       | 110           |
| Net Profit before income taxes |       | 110           |
| Less Provisions for taxes      |       | 55            |
|                                |       | 55            |
| Net Profit                     |       | 55            |
| Less: Dividends                |       | 20            |
|                                |       | 35            |
| Net Profit Retained            |       | Rs. 35        |

\* Other income includes Rs. 1 million profit on sale of furniture.





Thus the funds provided from the operations are in fact the revenues earned from operations (as also non-operating incomes) less all immediate costs of goods sold requiring use of funds. In other words, it is net income or profit after taxes plus all the non-cash expenses, such as depreciation and amortisation.

The funds flow statement would show funds from operations of TIL as follows:

|                                      | (Rs. in Million) |
|--------------------------------------|------------------|
| Operations                           | 55               |
| Net Income                           |                  |
| Add: Depreciation and Amortisation   | 11.90            |
|                                      | 66.90            |
| Less: Profit on sale of furniture    | 1.00             |
| Total funds provided form operations | 65.90            |

### External Sources

External sources of funds are resources raised from outside the organisation to augment funds availability for any of the uses to be discussed later. Normally, there are only two ways of doing this:

1. By contributing or raising additional capital, and
2. By increased long-term borrowing.

Please note that short-term creditors are not included as a source of funds since we have already defined funds as "current assets less current liabilities". Thus, working capital represents long-term investment in current assets and hence short-term borrowing will not increase working capital.

The sources of funds, as usually presented in the fund flow statement, are enumerated below:

|                                | Sources of Funds |
|--------------------------------|------------------|
| Operations:                    |                  |
| Net Profit after taxes         |                  |
| Add: Depreciation              |                  |
| Other amortisations            |                  |
| Funds provided by operations   |                  |
| New issue of share capital     |                  |
| New issue of debentures/bonds  |                  |
| Additional long-term borrowing |                  |
| Sale proceeds of fixed assets  |                  |
| Sale of long-term investment   |                  |

## 6.5 USES (APPLICATIONS) OF FUNDS

### Need for additional Funds

A business would require additional capital for two purposes:

1. Financing additional fixed assets, and
2. Financing additional working capital.



It should not be difficult to appreciate the necessity for having adequate fixed facilities with which to conduct the business. The amount we have invested in the shop, furniture and fixtures (refer to the example of Ramsons) has created the facilities for carrying on the business. It also limits the capacity. We cannot expand our business beyond a certain capacity which is limited by the facilities created by fixed assets. In case of a manufacturing firm, it will be plant capacity; in case of a transport undertaking it may be tonnage of trucks, ships or wagons; in case of show business is and airlines it may be seating capacity, and so on. Any increase in such capacity would require additional investment.

Thus, investment in fixed assets is required to expand capacity or to improve the current operation. Usually, addition to investments are judged on the basis of its ability to reduce the present costs or to increase the present output.

Additional working capital is required to finance Increased holding of inventory, increased credit to customers and increased cash holding requirements. Obviously current creditors would finance part of this requirements. Obviously, current creditors would finance part of this requirement for working capital.

If Ramsons invests in another shop or in expansion of the existing shop, they will require additional funds for investment in fixed assets as also for increased level of current assets. You will notice that whenever additional investment is to be made in non-current assets, we have to use the funds (working capital) available with us or some separate arrangement is made for their financing. Likewise, when non-current assets are sold they provide funds or result in sources of funds.

We could summarise the usual applications of funds as follows:

1. Acquisition of new non-current assets (fixed assets)
2. Replacement of non-current debt (loans)
3. Payment of dividends
4. Increase in the balance of working capital (current assets-current liabilities)

If the trading or business operations are unsuccessful, they may use funds rather than provide funds. The uses of funds, as they are usually presented in the fund flow statement, are enumerated below:

#### USES OF FUNDS

|   |       |
|---|-------|
| Dividends   | ..... |
| Non-operating losses not passed through P & L A/c | ..... |
| Redemption of redeemable preference share capital | ..... |
| Repayment of debentures/bonds                     | ..... |
| Repayment of long-term loans                      | ..... |
| Purchase of fixed assets                          | ..... |
| Purchase of long-term investment                  | ..... |
| Increase in working capital                       | ..... |

### 6.6 FACTORS AFFECTING FUND REQUIREMENTS

From the discussions we had earlier, it is not difficult to come to the conclusion that several factors affect the fund or net working capital requirements.

Fund requirements vary with the **nature** and type of **business**. A firm that provides agency services may require less working capital compared to a firm which carries on business of merchandising. The merchandising firm of course would require to carry some inventory, give credit and so on. However, a firm which manufactures products may require more working capital than a retailer. The manufacturing company will have to carry inventory of raw material, work-in-process and finished goods.



Working capital requirements are directly influenced by **sales volume**. With every growth in sales volume we need to carry larger inventory, increased number of customers or receivables as also the operating expenses. It is possible that all the expenses may not move up proportionately. However, we will have to finance some of these increases. It is also possible that all the expense may not move up proportionately. However, we will have to finance some of these increases. It is also possible that the increase in sales volume could be brought about by granting extended credits. In other words, by investing more funds we increase the volume of sales.

Fund requirements for the business may be seasonal. For example in industries using agricultural raw materials, it may be more advantageous to procure raw materials during harvest season. In case of consumer retailing it may be necessary to hold large inventories during festive season. Most of the fund requirements are restricted to a limited period, and if we provide it on a permanent basis we may have idle funds during most part of the year.

Yet another important aspect which may condition fund requirement is the **velocity of circulation of current assets**. In other words, the length of the **operating cycle** will influence the need for funds. Shorter the duration of operating cycle faster is the conversion of money invested in current assets into cash and hence lesser the need for net working capital.

Net working capital requirement is also influenced by the terms available from the suppliers. The credit terms extended by the suppliers will determine the amount of additional funds required.

A firm which carries a month's inventory and grants one month's credit to customers, has to fund the inventory cost of two months. If it could avail two months' credit from the suppliers, the need for holding inventory and funding receivables is nil.

In another situation, suppose the firm carries a balance of Rs.10,000 of accounts payable, payable in 30 days and an average accounts receivable balance of Rs. 15,000, receivable in 45 days, the firm will have to keep a net working capital for the difference of receipts from customers and payments to creditors as follows:

|   | <b>Rs.</b> |
|---|------------|
| Fund required to meet payables due within 30 days           | 10,000     |
| Less: Funds received from customers-                        | 10,000     |
| Received in 45 days, that is, Rs.15,000 x 30/45             | _____      |
| Fund required in the form of additional net working capital | Nil        |

Assuming the time taken for collection of receivable is 90 days the situation will be:

|   | <b>Rs.</b> |
|---|------------|
| Fund required to meet payables due within 30 days.          | 10,000     |
| Less: Funds received form customers- Rs.15,000 x 30/90      | 5,000      |
| Fund required in the form of additional net working capital | 5,000      |

We could summarise the discussion in respect of the need for working capital by saying that the ability of the firm to circulate the “cash → raw material inventory work-in process → finished goods inventory → receivables → cash” is the most vital and important factor in determining the amount of working capital. However, the exact amount needed to be invested in all these will be determined by the period and quantum of holding of each of these elements. This in turn is also influenced by the factors we have discussed in this sections.



## 6.7 ANALYSING CHANGES IN WORKING CAPITAL

In understanding the financial statements of a company, one of the first steps involved is the study of the changes in current financial position of the company and the reasons for the changes. We make an attempt at studying these changes and their causes by using the data contained in the summarised comparative balance sheet. (Illustration 6.2) and profit and loss account of Tools India Limited.

### Illustration 6.2

#### Tools India Limited Balance Sheet as on December 31, 2003

(Rs. in Million)

| Assets<br>Rs.                          | December 31, 2003<br>Rs. |        | December 31, 2003<br>Rs. |        |
|--|--------------------------|--------|--------------------------|--------|
| <b>Current Assets</b>                  |                          |        |                          |        |
| Cash                                   | 19.50                    |        | 10.87                    |        |
| Accounts receivable (Sundry debtors)   | 32.25                    |        | 20.28                    |        |
| Loans and advances                     | 42.58                    |        | 33.82                    |        |
| Other Current Assets                   | 17.20                    |        | 15.93                    |        |
| Inventory                              | 12.92                    |        | 99.10                    |        |
| Total Current Assets                   | _____                    | 232.00 | _____                    | 180.00 |
| <b>Fixed Assets</b>                    |                          |        |                          |        |
| Plant and equipment at cost            | 152.00                   |        | 133.00                   |        |
| Less: Depreciation                     | 71.00                    | 81.00  | 60.00                    | 73.00  |
| Furniture & fixture at cost            | 14.50                    |        | 8.60                     |        |
| Less: Depreciation                     | 2.00                     | 12.50  | 2.30                     | 6.30   |
| <b>Investments</b>                     | _____                    | 2.00   | _____                    |        |
| <b>Intangible Assets</b>               |                          |        |                          |        |
| Technical Assistance fees              | 3.00                     |        | 1.00                     |        |
| Less: Amortisation                     | 0.50                     | 2.50   | 0.30                     | 0.70   |
| Total                                  | _____                    | 330.00 | _____                    | 260    |
| <br><b>Liabilities and Capital</b>     |                          |        |                          |        |
| <b>Current Liabilities</b>             |                          |        |                          |        |
| Acceptance                             | 4.74                     |        | 3.02                     |        |
| Sundry Creditors (Accounts Payable)    | 27.16                    |        | 18.75                    |        |
| Advances against sales                 | 26.60                    |        | 20.28                    |        |
| Other liabilities                      | 8.86                     |        | 7.95                     |        |
| Interest accrued but not due on loans  | 2.64                     |        | 2.00                     |        |
|  | _____                    | 70.00  | _____                    | 52.00  |
| <b>Provisions</b>                      |                          |        |                          |        |
| For taxation                           | 25.55                    |        | 20.45                    |        |
| Proposed dividend                      | 2.25                     |        | 2.25                     |        |
| For bonus                              | 3.40                     |        | 2.35                     |        |
| Other Provision                        | 3.80                     |        | 2.95                     |        |
|  | _____                    | 35.00  | _____                    | 28.00  |
| Total current liabilities & Provisions | 105.00                   |        | 80.00                    |        |



### Long Term Liabilities

|                                   |        |        |
|-----------------------------------|--------|--------|
| Bank loans                        | 40.00  | 32.14  |
| 10.5% debentures                  | 25.50  | 25.50  |
| Loans from Financial Institutions | 24.50  | 22.36  |
|                                   | 90.00  | 80.00  |
| Total Liabilities                 | 195.00 | 160.00 |

### Capital

|   |        |        |
|---|--------|--------|
| Authorised : 5,00,000<br>shares of Rs. 100 each                     | 50.00  | 50.00  |
| Issued Subscribed and<br>Paid-up 3,73,100 Shares of<br>Rs. 100 each | 37.31  | 37.31  |
| Reserves and Surplus  | 97.69  | 62.69  |
|   | 330.00 | 260.00 |
| Total   |        |        |

As we have studied at the beginning of this unit, the net change in working capital can be computed easily by subtracting the net working capital at the end of the year from the net working capital at the beginning of the year.

### TOOLS INDIA LTD Change in Working Capital

|                                      | (Rs. in Million)  |                   |
|--------------------------------------|-------------------|-------------------|
|                                      | December 31, 2002 | December 31, 2003 |
| Current assets                       | 180.00            | 232.00            |
| Less: Current Liabilities            | 80.00             | 105.00            |
| Working Capital                      | 100.00            | 127.00            |
|                                      |                   |                   |
| Working capital on December 31, 2003 | 127.00            |                   |
| Working Capital on December 31, 2002 | 100.00            |                   |
| Increase in Working Capital          | 27.00             |                   |

The Rs. 27 million increase in working capital of TIL shows the composite changes in the operating assets. This does not tell us much in terms of operations of the business. This change could be the net result of changes in all the accounts covered by current items. May be there has been qualitative changes resulting from the depletion of liquid items of current assets and increase in non-liquid items such as inventory. In order to answer these questions we try to analyse the changes in each of the working capital accounts.

### Statement of changes in working capital

A statement of changes in working capital helps us in locating where these changes took place. In the first instance we try to show the increase (decrease) in individual items and then try to classify them in terms of increase and decrease in working capital. Since working capital is measured by subtracting current liabilities from current assets, any **increase** in current assets and any **decrease** in current liabilities shows an **increase** in working capital. Similarly, a **decrease** in current assets and an **increase** in current liabilities represent a **decrease** in working capital.



The statement of changes in working capital (Table 6.1) shows that the increases in current assets amounted to Rs. 52 million, a major part of the increase arising out of cash, receivable and inventory. Decrease in working capital came about mostly from the increased accounts payable, advances from customers and taxes payable. Total amount of decrease in working capital resulting from increase in current liabilities amounted to Rs. 25 million, thus, showing a net increase in working capital of Rs. 27 million.

**Table 6.1**  
**TOLLS INDIA LTD.**

**Statement of changes in Working Capital for the year ending December 31, 2000**  
**(Rs. In Million)**

|   | <b>Dec. 31<br/>2003</b> | <b>Dec. 31<br/>2002</b> | <b>Increase<br/>(Decrease)</b> | <b>Working Capital</b> |                 |
|---|-------------------------|-------------------------|--------------------------------|------------------------|-----------------|
|   |                         |                         |                                | <b>Increase</b>        | <b>Decrease</b> |
| <b>Current Assets</b>                       |                         |                         |                                |                        |                 |
| Cash  | 19.05                   | 10.87                   | 8.18                           | 8.18                   |                 |
| Accounts receivable                         | 32.25                   | 20.28                   | 11.97                          | 11.97                  |                 |
| Loans and advances                          | 42.58                   | 33.82                   | 8.76                           | 8.76                   |                 |
| Other current assets                        | 17.20                   | 15.93                   | 1.27                           | 1.27                   |                 |
| Inventory                                   | 120.92                  | 99.10                   | 21.82                          | 21.82                  |                 |
| <b>Total</b>                                | <b>232.00</b>           | <b>180.00</b>           | <b>52.00</b>                   |                        |                 |
| <b>Current Liabilities &amp; Provisions</b> |                         |                         |                                |                        |                 |
| Acceptances                                 | 4.74                    | 3.02                    | 1.72                           |                        | 1.72            |
| Accounts payable                            | 27.16                   | 18.75                   | 8.41                           |                        | 8.41            |
| Advances against sales                      | 26.60                   | 20.28                   | 6.32                           |                        | 6.32            |
| Other liabilities                           | 8.86                    | 7.95                    | 0.91                           |                        | 0.91            |
| Interest accrued                            | 2.64                    | 2.00                    | 0.64                           |                        | 0.64            |
| Taxes payable                               | 25.55                   | 20.45                   | 5.10                           |                        | 5.10            |
| Proposed dividend                           | 2.25                    | 2.25                    | -                              |                        | -               |
| Bonus payable                               | 3.40                    | 2.35                    | 1.05                           |                        | 1.05            |
| Other provisions                            | 3.80                    | 2.95                    | 0.85                           |                        | 0.85            |
| <b>Total</b>                                | <b>105.00</b>           | <b>80.00</b>            | <b>25.00</b>                   | <b>52.00</b>           | <b>25.00</b>    |
| <b>Working Capital</b>                      | <b>127.00</b>           | <b>100.00</b>           |                                | <b>27.00</b>           |                 |
| <b>Increasing Working Capital</b>           | <b>27.00</b>            |                         |                                |                        |                 |

## **6.8 FUND FLOW STATEMENT**

An analysis of the fluctuations of current assets and current liabilities i.e. working capital tells us how the working capital has increased or decreased. We want to know where the increased working capital is applied if it has increased, and from where funds have been released if it has decreased. The profit and loss account gives some indication of the results of operations and its impact on the funds position. We try to integrate the impact of operations reported in the profit and loss account and balance sheet by preparing a statement of changes in financial position. It describes the sources from which funds were received and the uses to which funds were put. This statement of changes in financial position is usually referred to as **fund flow statement** or statement of sources and application funds.

As the title indicates fund flow statement traces the flow of funds through the organisation. In other words, it shows the sources from where the funds were raised and the uses to which they were put.



The statement of funds flow is usually bifurcated into two logical divisions: **sources of funds** or inflows during the periods and **uses of funds** or applications of funds during the period. The division showing sources of funds summarises all those transactions which had the net effect of increasing the working Capital. Uses of funds on the other hand deal with all those transactions which had the effect of decreasing the working capital. We shall illustrate the primary structure of flows as follows (Figure 6.1):

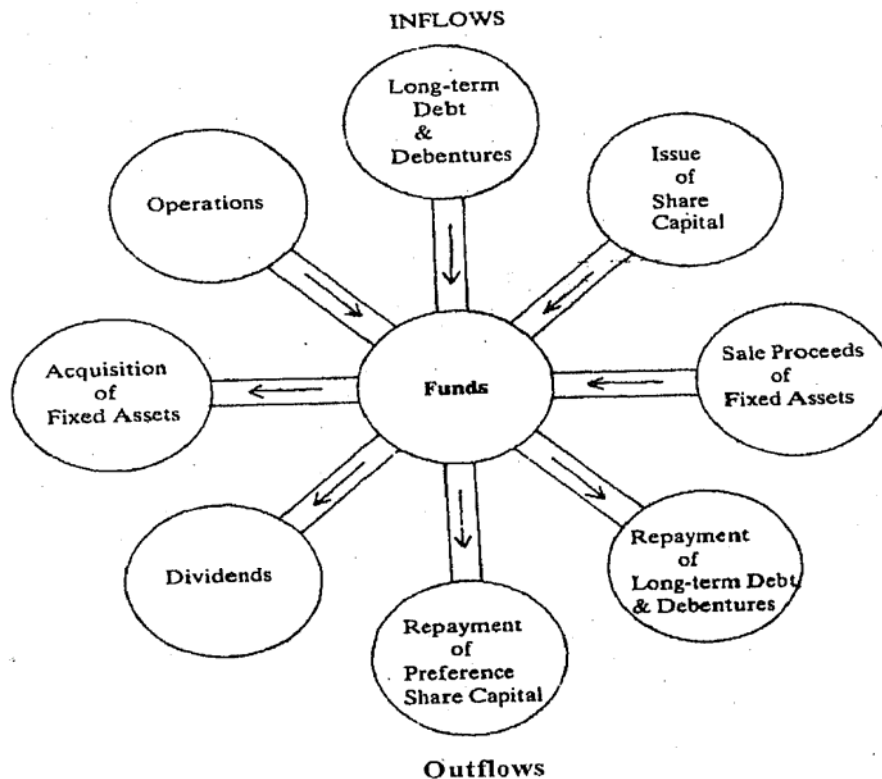


Figure 6.1: Basic Flow of Funds

The **flow of funds** statement gives a summary of the impacts of managerial decisions. As such it reflects the policies of financing, investment, acquisition and retirement of fixed assets, distribution of profits, and the success of operations.

Let us further extend illustration 6.2 in order to prepare a Fund Flow Statement. From a comparative balance sheet and profit and loss account we could obtain most of the information we require for the preparation of a fund flow statement. We have studied that changes in net-working capital amount are caused by the changes in non-working capital items. This could be easily seen from the summarised balance sheet of TIL (Table 6.2).

We have seen that the net working capital amount increased by Rs. 27 million during 2003, January 1 to December 31. This is other words implies that the working capital from **non-current sources** should exceed **non-current uses** by Rs. 27 million.

The summarised balance sheet shows the net change in each account. That is, it does not show the increases and decreases separately. Furniture and fixtures value, for example, has increased by a net amount of Rs. 5.90 million. This increase shows an application of funds. In reality, this account was both a source and an application of funds. We purchased new furniture and fixtures worth Rs. 7.90 million (a use of funds) and sold existing furniture and fixtures which had an original cost of **Rs. 2** million and on which depreciation had accumulated to the tune of **Rs. 1** million

(a source of funds). Since the purchase transaction was bigger in amount than the sale transaction, the net result was in the “use of funds”.



**Table 6.2**  
**TOOLS INDIA LTD.**  
**Summarised Balance Sheet**

(Rs. in Millions)

|  | December<br>31, 2003 | December<br>31, 2002 | Working<br>Source | Changes in<br>Capital<br>Use |
|--|----------------------|----------------------|-------------------|------------------------------|
| <b>Working Capital</b>                       | 127.00               | 100.00               | -                 | 27.00                        |
| <b>Fixed Assets</b>                          |                      |                      |                   |                              |
| Plant and equipment at cost                  | 152.00               | 133.00               |                   | 19.00                        |
| Furniture and fixtures at cost               | 14.50                | 8.60                 |                   | 5.90                         |
| <b>Investments</b>                           | 2.00                 | -                    |                   | 2.00                         |
| <b>Intangible Assets</b>                     |                      |                      |                   |                              |
| Technical assistance fees at<br>cost         | 3.00                 | 1.00                 |                   | 2.00                         |
|  | <u>298.50</u>        | <u>242.60</u>        |                   |                              |
| <b>Long-term Liabilities</b>                 |                      |                      |                   |                              |
| Bank loans                                   | 40.00                | 32.14                | 7.86              |                              |
| 10.5% debentures                             | 25.50                | 25.50                |                   |                              |
| Loans from Financial<br>Institutions         | 24.50                | 22.36                | 2.14              |                              |
| <b>Allowance and<br/>Amortisations</b>       |                      |                      |                   |                              |
| Accumulated depreciation                     | 71.00                | 60.00                | 11.00             |                              |
| Plant and equipment                          | 2.00                 | 2.30                 |                   | 0.30                         |
| Furniture and fixtures                       |                      |                      |                   |                              |
| Amortisation of technical<br>assistance fees | 0.50                 | 0.30                 | 0.20              |                              |
| <b>Capital</b>                               |                      |                      |                   |                              |
| Share capital                                | 37.31                | 37.31                |                   |                              |
| Reserves & Surplus                           | 97.69                | 62.69                | 35.00             |                              |
|  | <u>298.50</u>        | <u>242.60</u>        | <u>56.20</u>      | <u>56.20</u>                 |

**Notes:** 1) Furniture and fixtures costing Rs. 2 million with an accumulated depreciation of Rs. 1 million is sold for cash at Rs. 2 million.

2) Dividend paid during the year amounted to Rs. 2.25 million.

If we are to construct a statement showing sources and uses of funds during the year, we need additional information. Some of this additional information is available from the profit and loss account and the appropriation of net income. Some other information like sales proceeds of assets will have to be obtained from other records of the company.



## Funds Flow statement



|  |       | (Rs. in Million) |
|--|-------|------------------|
| <b>Sources of Funds</b>                      |       |                  |
| Funds from operations:                       | 37.25 |                  |
| Net income*                                  | 1.00  |                  |
| Less profit on sale of furniture             | 36.25 |                  |
| Add: Depreciation, amortization, Provisions: | 11.00 |                  |
| Plant  | 0.70  |                  |
| Furniture                                    | 0.20  | 48.15            |
| Technical assistance fee                     |       |                  |
| Other Sources of Fund                        |       |                  |
| Sale of assets                               | 2.00  |                  |
| Bank loan                                    | 7.86  |                  |
| Institutional loan                           | 2.14  | 12.00            |
|  |       | 60.15            |
| <b>Uses of Funds</b>                         |       |                  |
| Payment of dividends                         | 2.25  |                  |
| Purchase of Plant                            | 19.00 |                  |
| Purchase of furniture                        | 7.90  |                  |
| Investments                                  | 2.00  |                  |
| Technical assistance fees                    | 2.00  |                  |
| Increase of working capital                  | 27.00 | 60.15            |
|  |       |                  |

\* Net income has been obtained by deducting the previous year's balance of Reserves and Surplus from the current year's balance i.e. 97.69 minus 62.69=35 million. To this, the proposed dividend for the current year of Rs. 2.25 million has been added (as it must have been taken into account while determining the net income to be transferred to Reserves and Surplus.

With the necessary background on Profit and Loss Account and Fund Flow Statement having been prepared, you can now watch the Video Programme "**Understanding Financial Statement-Part II**" at your study centre.

### Activity 6.2

1. Please list the four main sources of funds in your organisation.

.....

.....

.....

2. List the four main uses of funds in your organisation.

.....

.....

.....

## 6.9 IMPORTANCE OF CASH AND CASH FLOW STATEMENT

Cash is another form of fund although in a narrow sense, it refers to a supply that can be drawn upon according to the need. Here the term cash includes both cash and cash equivalents. Cash equivalents are highly liquid short term investments which could be easily converted into cash without much delay.

It may however be appreciated that the obligations and liabilities of a business arising on a day to day basis must be met through "Cash" or "Cheque". We must also be able to distinguish between "Profit" and "Cash". One cannot pay the creditors, electricity bills, tax or even dividend by "Net Profit". For such and many other purposes, a business needs either physical cash or balance or credit limits with banks. Not to be



able to meet the business commitments through cash as and when these arise can spell disaster for a business even if it has a strong working capital and has earned handsome profit.

So far we had seen that the balance sheet and profit and loss account provide information about the financial position and the results of operations in a financial period. The funds flow statement explained earlier traces the flow of funds through the organisation. But neither of these financial statements can provide information about the cash flows relating to operating, financing and investing activities.

To ensure that the right quantity of cash is available in accordance with the needs of a business it is necessary to make a "cash planning" by determining the amount of cash entering the business (cash inflow) and the cash leaving the business (cash outflow). The statement which explains the changes that take place in cash position between two periods is called the cash flow statement.

Cash flow statement is an important tool in the hands of the management for short term planning and coordinating of various operations and projecting the cash flows for the future. It presents a complete view about the movement of cash and identifying the sources from which cash can be acquired when needed. The comparison of the actual cash flow statement with the projected cash flow statement helps in understanding the trends of movement of cash and also the reasons for the success or failure of cash planning.

Cash flow and fund flow statements are similar to each other in many respects. The main difference however, lies in the fact that the terms "fund" and "cash" import different meaning. The term "fund" in fund flow statement has a wide meaning. A fund flow statement examines the impact of changes in fund's position during the period under review on the working capital of the concern (working capital refers to current assets - current liabilities). Cash in the cash flow statement refers only to cash and or balance with bank, i.e., a small part of the total fund, although very important. The cash flow statement starts with the opening cash balance, shows the sources from where additional cash was received and also the uses to which cash was put and ends up showing the closing balance as at the end of the year or period under review. Whereas there are no opening and closing balances in Funds Flow statement. Increase in current assets or decrease in current liabilities increases the working capital, whereas the decrease in current assets or increase in current liabilities increases the cash flow.

---

## 6.10 SOURCES AND USES OF CASH

---

There are various activities undertaken by a business which prove to be either source or use of cash. These can be classified under three broad categories, i.e., **Operating activities**, **Investing activities** and **Financing activities**. A brief discussion of each of these categories is given below:

**Operating activities** include cash inflows associated with sales, interest and dividends received and the cash outflows associated with operating expenses including payments to suppliers of goods or services, payments towards wages, interest and taxes, etc. Increase or decrease in current assets, e.g., receivables, inventory as well as increase or decrease in current liabilities, e.g., accounts payable, wages payable, interest payable, taxes payable also reflect operating activities.

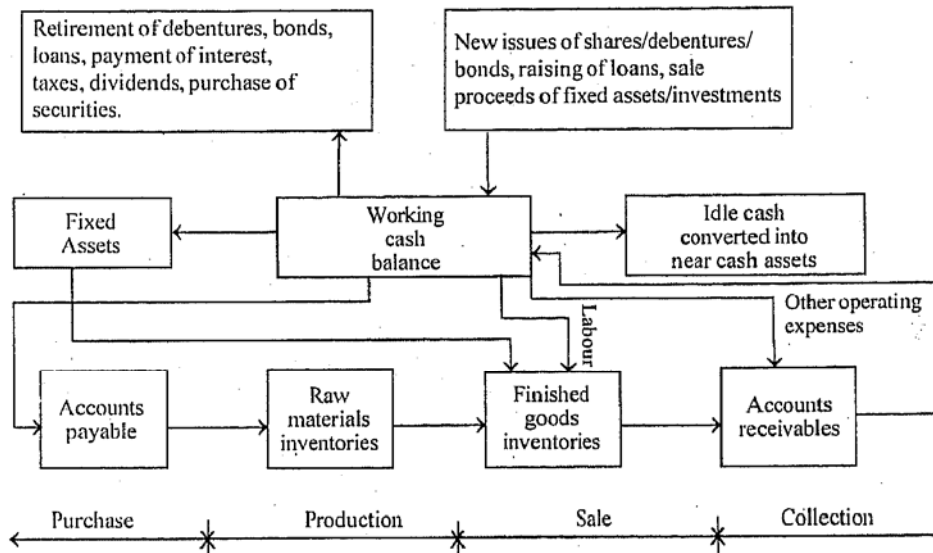
**Investing activities** refer to long life assets like land and building, plant and machinery, investments and the like. Acquisitions of these assets imply cash outflow whereas their disposal means inflow of cash.



**Financing activities** encompass changes in equity and preference capital, debentures, long term loans and similar items. Issuance of equity, preference and, debenture capital as well as raising of long term loans imply cash inflow. Retirement of capital, dividend payments to shareholders, redemption of debentures, amortisation of long term loans, on the other hand are associated with cash outflow.

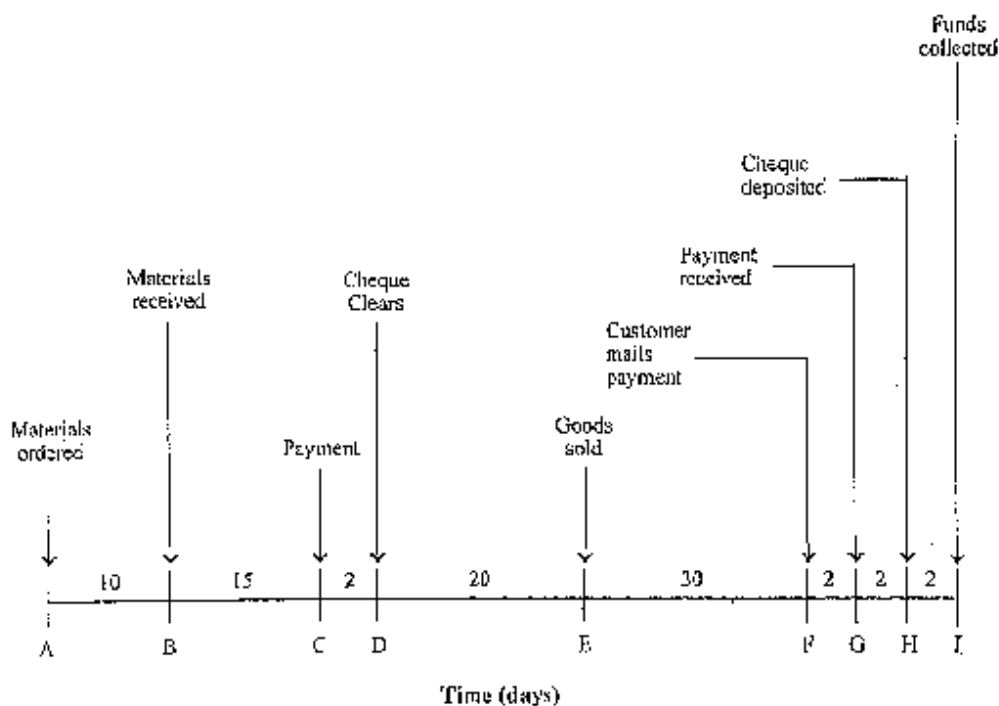
**The Cash Cycle:** In order to deal with the problem of cash management we must have an idea about the flow of cash through a firm's accounts. The entire process of this cash flow is known as **Cash Cycle**. This has been illustrated in Figures 6.2 and 6.3. Cash is used to purchase materials from which goods are produced. Production of these goods involves use of funds for paying wages and meeting other expenses.

**Figure 6.2: The Cash Cycle**



Source: Adapted from Solomon, Ezra and John J. Pringle. An Introduction to Financial Management. Prentice Hall of India, 1978, p. 179.

**Figure 6.3: Details of the Cash Cycle**





Goods produced are sold either on cash or credit. In the latter case the pending bills are received at a later date. The firm thus receives cash immediately or later for the goods sold by it. The cycle continues repeating itself.

The diagram in Figure 6.2 only gives a general idea about the channels of flow of cash in a business. The magnitude of the flow in terms of time is depicted in the diagram given in Figure 6.3. The following information is reflected by Figure 6.3.

- (a) Raw material for production is received 10 days after placement of order.
- (b) The material is converted into goods for sale in 37 days (15+2+20) from point of B to E.
- (c) The payment for material purchased can be deferred to 17 days (15+2) after it is received i.e. (the distance of time between points B to D), assuming that it takes 2 days for collection of payment of the cheque.
- (d) The amount of the bill for goods sold is received 32 days (30+2) after the sale of goods as is depicted by duration of time between point E to G.
- (e) The recovery of cash spent till point D is made after 56 days (20+30+2+2+2) as shown between points D to J.

Managing these inflows (collections) and outflows (disbursements) are discussed in detail in unit 16 in Block No.5.

### Activity 6.3

Meet a responsible executive of Accounting and Finance Department of a manufacturing organisation regarding the following:

- a) What is the length of its Cash Cycle?  
Cash Cycle is approximately of .....days.
- b) Draw the sequence of Cash Cycle showing its successive events with the respective number of days.  
.....  
.....  
.....
- c) Inquire whether or not the organisation is satisfied with its length of cash cycle. What steps it proposes to take for reducing the Cash Cycle?  
.....  
.....  
.....

---

## 6.11 PREPARATION OF CASH FLOW STATEMENT

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To start with, we need two successive balance sheets and the operating statement or profit and loss account linking the two balance sheets.

There are two ways in which this statement can be drawn up. One approach is to start with the operating cash balance, add/deduct the profit/loss from operation to it and then proceed to give effect to the change of each item of current assets and liabilities together with the additions to and reductions in other assets and shareholders funds and long term liabilities and finally arrive at the closing cash balance. This is known as the "Profit basis" statement. For the sake of better understanding, the changes in items of current assets, current liabilities, shareholders' fund, long life assets and long term liabilities can be organised under the three broad categories of operating, investing and financing activities (as discussed above), changes measured under each category, the opening cash balance adjusted to these changes and the closing cash balance arrived at.



The second way is to deal only with cash receipts and disbursements. This does not consider non cash items like depreciation, preliminary expenses written off, etc. **The latter type of cash flow statement is known as "Cash basis" statement.**

Preparation of a cash flow statement on cash basis is a straight forward exercise and left to the students. Here, we would take up the cash flow statement on "profit basis" for further examination. A framework of the steps to be followed for this purpose is appended below:

#### Steps involved in preparation of a "Profit basis" cash flow statement:

1. From the first of the two balance sheets, take the closing cash balance, which will be the **opening cash balance** for the purpose of our cash flow statement.
2. Take the **net profit figure**. If it is not directly given and you are provided with only Profit and Loss account balances in both the Balance Sheets, ascertain it (net profit) by preparing an "Adjusted Profit and Loss account". For this purpose, all items of profit appropriations as well as non-cash expenses and income are to be added to and subtracted from the balance of P&L account, as the case may be. This gives the figure of **"Profit from operation."**
3. Adjust increase or decrease in each item of current assets and current liabilities to the "Profit from operation" figure to arrive at the **"Cash from operation"**.
4. Revert back to the "Opening Cash Balance". Add the "Cash from operation" to it. Also add, cash flow from other sources like non-current assets & non-current liabilities, e.g., equity and debenture issue, raising term loan, sale of fixed assets. Deduct, cash outflow to various uses, again involving non-current or fixed assets and non-current liabilities, e.g., redemption of preference shares/debentures, retirement of term loan, purchase of fixed assets, etc.
5. The balance arrived at (4) above should tally with the **closing balance of cash** in the second balance sheet.

Increases and decreases in various items of assets and liabilities as mentioned under items 3 & 4 above can be optionally organised under operational, investment and financing activities for clarity sake.

We use the above approach and procedure in preparing a "profit-basis" cash flow statement in Illustration 6.3.

#### Illustration 6.3

##### M/s Navyug Udyog

| Balance Sheets as at     | 31st March, 2002<br>Rs. | 31st March, 2003<br>Rs. |
|--------------------------|-------------------------|-------------------------|
| <b>Assets:</b>           |                         |                         |
| Freehold Property        | 1,50,000                | 1,50,000                |
| Plant and Machineries    | 1,10,000                | 1,70,000                |
| Less: Depreciation       |                         |                         |
| Goodwill                 | 15,000                  | 5,000                   |
| Investment               | 75,000                  | 1,30,000                |
| Debtors                  | 1,08,000                | 1,32,000                |
| Stock                    | 70,000                  | 1,02,000                |
| Bills Receivable         | 42,000                  | 53,000                  |
| Cash in hand and at bank | 20,000                  | 50,000                  |
| Preliminary Expenses     | 20,000                  | 15,000                  |
|                          | 6,10,000                | 8,07,000                |



| Balance Sheets as at                        | 31st March, 2002<br>Rs. | 31st March, 2003<br>Rs. |
|---|-------------------------|-------------------------|
| <b>Liabilities:</b>                         |                         |                         |
| Share Capital                               | 4,00,000                | 5,00,000                |
| (40,000 Equity Shares @ Rs. 10/- per share) |                         | 60,000                  |
| General Reserve                             | 50,000                  | 65,000                  |
| Dividend Equalisation Reserve               | 25,000                  | 15,000                  |
| Profit and Loss a/c                         | 40,000                  | 55,000                  |
| Sundry Creditors                            | 60,000                  | 67,000                  |
| Prov. for Taxation                          | 20,000                  | 35,000                  |
| Bills Payable                               | 15,000                  | 10,000                  |
|   | 6,10,000                | 8,07,000                |

**Additional Information:**

1. Shares were issued at a premium of Rs. 1.50' per share.
2. During the year Taxation liability in respect of 2002 was Rs, 20,000 and paid.
3. During the year, Rs. 11,000 was provided for depreciation on Plant and Machinery.
4. An item of the plant the written down value Rs. 20,000 was sold at Rs. 25,000.
5. During the year, a dividend @ 7.5% was paid.
6. Part of the investment costing Rs. 30,000 was sold at Rs. 35,000 and the profit was taken in Profit and Loss account.

Based on the above information, we first set ourselves to ascertain the cash inflow and outflow in respect of Investment, Plant and Machineries and Tax, which cannot be found out by a mere inspection of their balances in two balance sheets. The task is accomplished by preparing the respective accounts and examining the effects of the additional information on each of these. This is followed by preparation of an "Adjusted Profit and Loss a/c" to find out the actual net profit earned during the period, in the light of the additional information now available. In the final stage, the "Cash flow statement" is prepared (Table 6.3).

**Investment Account**

|                               |          |                    |          |
|-------------------------------|----------|--------------------|----------|
| To Opening balance            | 75,000   | By Sale            | 35,000   |
| To P & L a/c (profit on sale) | 5,000    | By Closing balance | 1,30,000 |
| To Bank (Purchases)           | 85,000   |                    |          |
|                               | 1,65,000 |                    | 1,65,000 |

**Plant & Machinery Account**

|                               |          |                               |          |
|-------------------------------|----------|-------------------------------|----------|
| To Opening balance            | 1,10,000 | By Sale                       | 25,000   |
| To P & L a/c (profit on sale) | 5,000    | By P & L a/c-<br>denreciation | 11,000   |
| To Bank                       | 91,000   | By Closing balance            | 1,70,000 |
|                               | 2,06,000 |                               | 2,06,000 |



| <b>Provision for taxation</b> |               |                    |               |
|-------------------------------|---------------|--------------------|---------------|
| To Bank                       | 20,000        | By Opening Balance | 20,000        |
| By Closing balance            | 35,000        | By P & L a/c       | 35,000        |
|                               | <u>55,000</u> |                    | <u>55,000</u> |

| <b>Adjusted Profit and Loss Account</b> |                 |  |                 |
|---|-----------------|--|-----------------|
| To General Reserve                      | 15,000          | By Opening balance                           | 40,000          |
| To Dividend                             | 30,000          | By Dividend Equalisn. Reserve                | 10,000          |
| To Provision for tax                    | 35,000          | By Plant and Machineries profit on sale      | 5,000           |
| To Depreciation                         | 11,000          | By Investment-profit on sale.                | 5,000           |
|   |                 | By profit for the year<br>(balancing figure) | 1,01,000        |
| To Goodwill                             | 10,000          |  |                 |
| To Preliminary expenses                 | 5,000           |  |                 |
| To Closing balance                      | 55,000          |  |                 |
|   | <u>1,61,000</u> |  | <u>1,61,000</u> |

**Table 6.3**  
**Statement of Cash flow**  
**for the period 1.4 2002 to 31.3.2003**

|   |        |        | <b>Rs.</b>    |
|---|--------|--------|---------------|
| Opening Cash balance as on 1.4.2002                       |        |        | 20,000        |
| <b>Add/(deduct): Cash flow from Operating Activities</b>  |        |        |               |
| Net profit (Ref: P&L Adjustment a/c)                      |        |        | 1,01,000      |
| Add:  |        |        |               |
| Decrease in current assets                                | Nil    |        |               |
| Increase in current liabilities:                          |        |        |               |
| Sundry Creditors  | 7,000  |        |               |
|   |        |        | 7,000         |
| Deduct:   |        |        |               |
| Increase in current assets                                |        |        |               |
| Debtors   | 24,000 |        |               |
| Stock   | 32,000 |        |               |
| Bills Receivables   | 11,000 | 67,000 |               |
|   |        |        | 25,000        |
|   |        |        | 92,000        |
|   |        |        | 16,000        |
| <b>Add/(deduct): Cash flow from Investment activities</b> |        |        |               |
| Add: Sale of Plant & Machineries                          |        |        | 25,000        |
| Add: Sale of Investment                                   |        |        | 35,000        |
|   |        |        | 60,000        |
| Deduct: Purchase of Plant and Machineries                 |        |        | 91,000        |
|   |        |        | 85,000        |
| Deduct: Purchase of Investments                           |        |        | 1,76,000      |
|   |        |        | (1,16,000)    |
| <b>Add/(deduct): Cash flow from Financing Activities</b>  |        |        |               |
| Add: Issue of share capital                               |        |        | 1,00,000      |
| Share premium   |        |        | 60,000        |
|   |        |        | 1,60,000      |
| Deduct: Payment of dividend                               |        |        | 1,60,000      |
| Closing Cash Balance as on 31.3.2003                      |        |        | 30,000        |
|   |        |        | 1,30,000      |
|   |        |        | <u>50,000</u> |



### Activity 6.4

Mention the four major operating activities included in a cash flow statement.

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## 6.12 SUMMARY

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In this unit we have tried to develop the idea of flow of funds within the organisation. Starting with the funds requirement for an organisation, we have tried to trace the sources and uses of funds.

We tried to study the important sources of funds, namely, the operations, sale of fixed assets, long-term borrowings and issue of new capital. Similarly, important uses of funds were traced to acquisition of fixed assets, payment of dividends, repayment of loans and capital. The whole exercise reveals the areas in which funds are deployed and the source from which they are obtained. Finally, we learned how to go about doing the funds flow analysis with the help of published accounting information.

We learnt, distinguishing between cash and fund as also cash flow statement and funds flow statement. The importance of cash and cash flow statement was dwelt upon. Our discussion centered around cash flow statement on "cash basis" and "profit basis". We learnt how to go about doing the cash flow analysis with the help of accounting information and finally presenting the cash flows in the form of a "cash flow statement".

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## 6.13 KEY WORDS

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**Working Capital:** Current assets minus current liabilities.

**Funds from Operations:** The change in working capital resulting from operations. Difference between inflow of funds in the form of revenue and outflow of funds in the form of expenses.

**Sources of funds:** The sources from which we obtain working capital for application elsewhere. Sources include operations, extraordinary profits, sale of fixed assets, new long-term borrowings, new issue of capital and the reduction of existing working capital.

**Use of Funds:** Also referred to as application of funds means use of additional working capital and includes amounts lost in operations (Operating loss), acquisition of fixed assets, working capital used for retiring long-term loans, payment of dividends and amounts utilised to increase working capital.

**Cash from Operations:** It refers to "Profit from Operation" duly adjusted against the increase or decrease in the current assets and liabilities.

**Cash Equivalents:** These are highly liquid short term investments which could be readily converted to cash and which are subject to an insignificant risk of changes in value.

**Cash Cycle** represents the time during which cash is tied up in operations.



## 6.14 SELF-ASSESSMENT QUESTIONS/EXERCISES



1. What is working capital and what factors affect the size of working capital in an enterprise?
2. "Current assets to an extent are financed by current liabilities" Explain.
3. "Operations provide funds" Comment.
4. Differentiate between "Schedule of Changes in Working Capital" and "Fund Flow Statement".
5. Does a substantial balance in Retained Earnings indicate the presence of large cash balance?
6. "Net Profit of a business cannot pay dividend". Comment.
7. Explain the purposes of a cash flow statement.
8. What are the differences between a cash flow statement and funds flow statement?
9. X Ltd. has a sales revenue of Rs. 1,000. Depreciation for the period is Rs.200. Other operating expenses are Rs.900. **Net loss** for the period is Rs.100.
  - a) What is the amount of funds generated from operations during the period by X Ltd.?
  - b) Under what circumstances can the funds from operation be zero?
10. The following information and the balance sheet relate to Shyamsons Ltd.:

**SHYAMSONS LTD**  
**Balance Sheet as on 31st December**

|                                  | Year 1          | Year 2 Net change during the year |          |       |
|----------------------------------|-----------------|-----------------------------------|----------|-------|
|                                  |                 | Increase                          | Decrease |       |
|                                  | Rs.             | Rs.                               | Rs.      | Rs.   |
| <b>Assets</b>                    |                 |                                   |          |       |
| Cash                             | 10,000          | 15,000                            |          | 5,000 |
| Receivables                      | 20,000          | 25,000                            |          | 5,000 |
| Inventory                        | 20,000          | 35,000                            | 15,000   |       |
| Plant and Machinery Cost         | 85,000          | 85,000                            |          |       |
| Less: Accumulated depreciation   | (15,000)        | (10,000)                          |          | 5,000 |
| <b>Total Assets</b>              | <u>1,20,000</u> | <u>1,50,000</u>                   |          |       |
| <b>Liabilities &amp; Capital</b> |                 |                                   |          |       |
| Sundry Creditors                 | 8,000           | 10,000                            | 2,000    |       |
| Outstanding expenses             | 7,000           | 10,000                            | 3,000    |       |
| Debentures payable               | 10,000          | 5,000                             |          | 5,000 |
| Long-term loans                  | 5,000           | 25,000                            | 20,000   |       |
| Capital                          | 50,000          | 50,000                            |          |       |
| Retained earnings                | 40,000          | 50,000                            | 10,000   |       |
|                                  | <u>1,20,000</u> | <u>1,50,000</u>                   |          |       |

Net profit for the period after charging Rs.5,000 on account of depreciation was Rs. 20,000. A piece of equipment costing Rs.25,000 on which depreciation accumulated in the amount of Rs. 10,000 was sold for Rs. 10,000. Dividends paid during the year amounted to Rs. 10,000.



Prepare a Sources and Uses of funds statement in the following format:

**SHYAMSONS LTD.**  
**Sources and Uses of Funds**

(in Rs.)

| Uses of funds                   | Sources of Funds               |
|---------------------------------|--------------------------------|
| Purchase of Plant and Machinery | Operations:                    |
| Repayment of Debentures         | Net income                     |
| Payment of dividends            | Add: Loss in sale of machinery |
| Increase in working capital     | Add: Depreciation              |
| Total uses of Funds             | Sale of equipment              |
|                                 | Long-term loan                 |
|                                 | Total Sources of Funds         |

11. The Balance Sheet of Bestwood Limited as at 31st March 2002 and 31st March 2003 are as follows:

|                         | 31st March |          | 31st March                |                   |
|-------------------------|------------|----------|---------------------------|-------------------|
|                         | 2002       | 2003     | 2002                      | 2003              |
|                         | Rs.        | Rs.      | Rs.                       | Rs                |
| Issued share capital    | 60,000     | 80,000   | Freehold property at cost | 50,000 50,000     |
| Profit and Loss account | 54,000     | 46,000   | Equipment (see note)      | 36,000 44,400     |
| Corporation tax due:    |            |          | Stock in trade            | 32,800 35,600     |
| 31st March 2002         | 12,000     | -        | Debtors                   | 27,200 28,000     |
| 31st March 2003         | -          | 8,000    | Bank                      | 4,000 2,000       |
| Creditors               | 24,000     | 26,000   |                           |                   |
|                         | 1,50,000   | 1,60,000 |                           | 1,50,000 1,60,000 |

Note: Equipment movements during the year ended 31st March 2003 were:

|  | Cost<br>Rs. | Depreciation<br>Rs. | Net<br>Rs. |
|--|-------------|---------------------|------------|
| Balance at 31st March 2002             | 60,000      | 24,000              | 36,000     |
| Additions during the year              | 18,000      | 7,600               |            |
| Depreciation provided during the year  | 78,000      | 31,600              |            |
| Disposal during year                   | 8,000       | 6,000               |            |
| Balance at 31 <sup>st</sup> March 2003 | 70,000      | 25,600              | 44,400     |

The company's summarised profit calculation for the year ended 31st March 2003 revealed:

|  |          |          |
|--|----------|----------|
| Sales                                    | Rs.      | Rs.      |
| Gain on Sale of equipment                |          | 2,00,000 |
|  |          | 800      |
|  |          | 2,00,800 |
| Less: Cost of goods and trading expenses | 1,73,200 |          |
| Depreciation                             | 7,600    |          |
|  |          | 1,80,800 |
| Net Profit                               |          | 20,000   |
| Corporation tax on profits of the year   |          | 8,000    |
| Retained profit of the year              |          | 12,000   |

During the year ended 31st March 2003 Bestwood Ltd. made a bonus issue of 1,000 ordinary shares of Rs. 10 each by capitalisation from the profit and loss account.



With the help of the above information, prepare a fund flow statement for Bestwood Ltd. revealing the sources and applications of funds during the year ended 31st March 2003.

### Answers to self-assessment Questions/Exercises

9. (a) Funds generated from operations = Rs. 100  
(b) When operating cash expenses are equal to operating incomes or revenues.

### 10. Solution:

#### SHYAM SONS LTD. Sources and Use of Funds

| Use of Funds                    | Rs.           | Sources of Funds               | Rs.          | Rs.           |
|---------------------------------|---------------|--------------------------------|--------------|---------------|
| Purchase of Plant and Machinery | 25,000        | Operations:                    |              |               |
|                                 |               | Net Income                     | 20,000       |               |
| Repayment of Debentures         | 5,000         | Add: Loss on sale of Machinery | <u>5,000</u> |               |
| Payment of dividends            | 10,000        | Add Depreciation               | 5,000        |               |
| Increase in net working capital | 20,000        |                                |              | 30,000        |
|                                 |               | Sale of equipment              |              | 10,000        |
|                                 |               | Long-term loan                 |              | <u>20,000</u> |
| Total uses of funds             | <u>60,000</u> | Total Sources of Funds         |              | <u>60,000</u> |

|                             | Year 1        | Year 2        |
|-----------------------------|---------------|---------------|
| Current Assets              | 50,000        | 75,000        |
| Less: Current Liabilities   | <u>15,000</u> | <u>20,000</u> |
| Working Capital             | 35,000        | 55,000        |
| Increase in Working Capital |               | <u>20,000</u> |

11. Decrease in working Capital Rs. 400  
Funds from Sale of equipment Rs. 2,800.

## 6.15 FURTHER READINGS

Fraser Lyn. M and Aileen Ormiston, 04/10/2003 *Understanding Financial Statements*, Prentice Hall: New Delhi (Chapter 4).

Pandey, I.M., 1999, *Financial Management*, Vikas Publishing House : New Delhi

Hornigren, Charles T., Sundem Gary, L., 1994 (9th Ed.) *Introduction to Management Accounting*, Prentice-Hall: Englewood-Cliffs of India Pvt. Ltd., New Delhi. (Chapter 14)

Glantier, M. W. E., Underdown B. and A.C. Clark, 1979, *Basic Accounting Practices*, Arnold Heineman: New Delhi: (Chapter 6, Section 6).

Hingorani, N.L. and A.R. Ramanathan, 1986, *Management Accounting*, Sultan Chand : New Delhi. (Chapter 8).