UNIT-4 Cash Flow Statements

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Understand the idea of funds flowing through a business
- ✓ Describe the role of working capital in the operations of a business
- ✓ Use cash flow statements as analytical tools.

Unit 4

Cash Flow Statements

'Funds' can have different meanings, depending upon the user's purpose, but literally, this refers to supplies that can be drawn upon. It includes cash, current assets, or working capital. In this unit, we will use the term 'funds' to refer to working capital, i.e., current assets minus current liabilities.

Any change or movement (inflow or outflow) in a business's current assets and current liabilities is called a fund flow. This movement is necessary in monitoring and managing business operations.

Every business transaction that takes place changes the balance sheet. Therefore, we can say that the business has a dynamic financial situation, which is affected by the inflow and outflow of resources. All these changes take place through funds. The bigger a business becomes the more complex its fund flow gets.

Funds, such as, cash and cash equivalents and important for the day-to-day functioning of the business and movement in funds can be understood through the cash flow statement.

Working Capital and its Need

In order to explain working capital in more detail, we assume that all assets are held by the business with an objective of converting them into cash during an operating cycle. There are some assets that are bought with the help of short-term loans (current liabilities), which have to be repaid during the business's operating cycle. As per our definition of working capital, it is the amount left after subtracting current liabilities from current assets. Therefore, working capital represents the amount of resources invested in current assets from sources of finance other than current liabilities. It is considered a 'fund' for the business. The following example clarifies the concept even more.

Phil & Co. is a retail outlet that deals in domestic electronic appliances and entertainment equipment, owned by Phil. Phil has invested £ 600,000 in buying display counters, cash registers, furniture and fixtures etc. for the showroom. Straight line depreciation is used at the rate of 10% per annum.

Monthly sales worth £1,50,000 are estimated, out of which £50,000 are cash sales and £100,000 are on credit, to be collected in four monthly installments. All sales are made at 25% margin on selling price.

Three months' sales requirement is kept as inventory due to supply constraints and a month's cash expense is held as cash balance.

The company buys initial inventory from cash and new purchases to be added to inventory are bought on a month's credit from suppliers.

£26,000 is the average monthly cash requirement for operating expenses other than purchases. Phil withdraws £4,000 per month for personal use.

1. How much working capital will Phil & Co. require to start operations?
2. Will the company need additional working capital during the first four months, or will it have surplus working capital during the first four months?

These questions can simply be answered by saying that Phil & Co. requires working capital to pay for its inventory, cash balance, and operating expenses, also, the company will be able to meet with some of these requirements through funds it receives from business operations. The more specific question of exactly how much money is required would have to be answered by making a statement that records cash receipts and cash payments on a monthly basis. We can also prepare a Profit and Loss Account and Balance Sheet. Four months indicates one complete operating cycle for the business.

Phil & Co.: Schedule of Cash Payments

Month	Explanation	Amount **£**	Total **£**
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**

Phil & Co.: Schedule of Cash Receipts

Month	Explanation	Amount **£**	Total **£**
January	**Cash Sales**	**50,000**	
	Credit Sales of the month- first installment	**25,000**	**75,000**
February	**Cash sales**	**50,000**	
	Credit Sales of the month- first installment	**25,000**	
	January sales- second installment	**25,000**	**1,00,000**
March	**Cash sales**	**50,000**	
	Credit sales of the month- first installment	**25,000**	
	January sales- third installment		
	February sales- second installment	**25,000**	
		25,000	**1,25,000**
April	**Cash sales**	**50,000**	
	Credit sales of the month- first installment	**25,000**	
	January sales-fourth installment		
	February sales- third installment	**25,000**	
		25,000	**1,50,000**

Opening balance sheet of Phil & Co. will be as follows:

Phil & Co.: Balance Sheet as of January 1,2013

Assets	£	Liabilities and Capital	£
Fixed Assets	**6,00,000**	**Capital**	**9,67,500**
Inventory	**3,37,500**		
Cash	**30,000**		
	9,67,500		**9,67,500**

We have assumed that the entire asset requirement of the company is financed by the owner's capital.

The working capital of Phil & Co. on January 1, 2013 is as follows:

Current Assets: Inventory **Cash**	**3,37,500** **30,000**
Total Current Assets	**3,67,500**
Less: Current Liabilities	**Nil**
Working Capital	**3,67,500**

Phil & Co.: 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**

Phil & Co: Profit and Loss Account for the Month ending

	31st January		28th February		31st March		30th April	
Sales		**1,50,000**		**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**	**5,000**	**1,43,500**	**5,000**	**1,43,500**
Net Profit		**6,500**		**6,500**		**6,500**		**6,500**

Phil & Co.: Balance Sheet as at the end of

Assets	31st January 2013	28th February 2013	31st March 2013	30th April 2013
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	**3,37500**	**3,37,500**	**3,37,500**	**3,37,500**
Receivables	**75,000**	**1,25,000**	**1,50,00**	**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**
Liabilities and Capital				
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**

Phil & Co.: Schedule of Working Capital

	31st January 2013	28th February 2013	31st March 2013	30th April 2013
Current Assets	**4,87,500**	**4,95,000**	**5,02,500**	**5,10,000**
Less Current Liabilities	**1,12,500**	**1,12,500**	**1,12,500**	**1,12,500**
	3,75,000	**3,82,500**	**3,90,000**	**3,97,500**

Funds From Operations

Net Profit	**6,500**	**6,500**	**6,500**	**6,500**
Add: Depreciation	**5,000**	**5,000**	**5,000**	**5,000**
Total funds generated from operations	**11,500**	**11,500**	**11,500**	**11,500**

Initial Investment (Capital)

It is clear from the example above that Phil & Co. "invested money to make money." The Balance Sheet of the company gives us a clear picture of exactly where the company has invested the money. We can tell from the first balance sheet that Phil & Co. has fixed assets such as showroom, furniture and fixtures, inventory etc. that it has bought for the purpose of resale, along with cash for expenses and personal use. This shows the company's initial capital investment. Now we look at these items and accounts receivable separately:

Cash

A certain amount of cash is necessary to start up a business, although, it is difficult to consider cash, in and of itself, as an investment. For example, if you are a retailer, you need to keep a certain amount of cash on hand just in case a customer does not have the exact amount of change. This is your investment in cash. Similarly, every employer and business owner must have cash to pay his employees and suppliers in time. Therefore, an investment in cash is important so that you have the money for day-to-day business requirements. The exact amount which should be kept as cash on hand depends on an estimate of cash inflows and outflows and the uncertainties related to them. The more a business is growing, the more the business has cash at its disposal.

Receivables

It is usually necessary for a business to make credit sales to customers. This is mostly because of market competition and customs of trade. The business has to finance the cost of producing goods for the duration that it has provided credit to the customers. In other words, the company will finance its customer's business to the extent that credit is granted. Bigger businesses have more debtors. It is important to note that financing debtors is not extended to all the sales that the business has made. It is only financing the cost of goods sold of the receivables or debtors in question.

Inventory, Supplies, and Prepaid Expenses

The business must have some merchandise on stand-by, in the form of inventory, in order to run its operations smoothly. The amount of stock to be kept depends on various factors, which include regularity of supply and lead time for delivery. It is important for any business to have some merchandise related inventory as well as non-merchandise inventory like office and factory supplies. Prepaid expenses are those expenses that are paid in advance of utilisingws1qa services, such as, rent, insurance, etc. Therefore, it can be concluded that a business invests in prepaid expenses, supplies, and inventory to ensure unhindered business operations.

Determining Working Capital Requirements

An understanding of capital and how it is financed is important to get more information about how funds flow through a business. The first step is to determine the amount of working capital that is needed and then comparing it to the capital that exists with the business to get an idea of whether it is sufficient or in excess. Specific Techniques for Cash Management or Liquidity will not be applied, yet.

Going back to the example of Phil & Co., we can know that the business requires a month's cash expenses and payment for creditors to be kept as cash in hand, i.e., a minimum of £30,000. This amount includes £4,000 withdrawals made by Phil as well.

The business starts with inventory worth three months' sales. The sales per month amount to £1,50,000 sold at a margin of 25% of selling price. Therefore, we can calculate that the inventory would amount to three times of 75% of sales as shown below:

1,50,000 x .75 x 3 = £3,37,500

We know, from our information, that one-third of the sales are made on cash, while the remaining two-thirds are credit sales, to be collected in four installments. In other words, cash collection, during the month, will include cash sales plus one-fourth of credit sales for the month and one-fourth of the previous three months' credit sales. In the first month, the business will really be making one half of the sales in cash and the other half on credit.

This is shown below:

Total Sales	£ **1,50,000**	
Cash Sales		£ **50,000**
Credit Sales	£ **1,00,000**	
First Installment in Cash		£**25,000**
Total Cash Collection		£**75,000**

Credit sales for the period are as follows:

First month sales on credit less first installment: £ 75,000.

This means;

£ 75,000 credit for one month

£50,000 credit for one month

£25 000 credit for one month

This is equivalent of £ 75,000 credit sales for two months. In terms of working capital requirement, the business requires one month's financing of cost of goods sold with respect to £ 1,50,000 sales i.e. £ 1,12,500.

Phil & Co.'s fund requirement for financing current assets is as follows:

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

Phil & Co. will sell one third of the inventory for **£ 75,000 in cash and the other half, i.e. £ 75,000, will be collected in three installments. Therefore, the business needs additional funds in order to grant credit to customers.**

The company would also need to replenish inventory and make payments for expenses. This will be further examined with the help of Phil & Co.'s Profit and Loss Account and Balance Sheet for the first four months.

Sources of Funds

We have already established that a business requires working capital to finance the portion of current assets that cannot be financed by current liabilities. We also know that current assets will be converted to cash at some point of the business cycle. Usually, all investment in working capital is converted into cash at the end of an operating cycle at an added value, equal to the profit made by the business.

Internal sources of finance are most important for generating working capital. The concept of internal sources is explained in detail below.

Internal Sources

Before assessing the need for working capital, we must first determine whether the business has sufficient existing working capital or not. Therefore, the search for sources for finance must begin from the business itself. Any leftover or excess working capital, that the business might possess, becomes the first internal source of finance. Then, any non-current asset can be useful in generating finance if it is disposed off. This however, is only a one-time source and cannot be a regular source of funds.

Every profitable activity of the business brings funds, which can be used in creating additional working capital. However, when we calculate the profits, we match all revenues against the expenses that were incurred to generate that revenue, regardless of whether funds were used in the current period or not.

Therefore, profits do not measure the actual amount of funds available with the business. In order to calculate the amount of actual funds available, we must add all of those expenses to the profits that did not involve use of funds in the current period. Depreciation is one example of such an expense.

The following possible sources of funds can be listed:

1. **Business activity/operations generated funds i.e. profit plus depreciation and any other amortization;**
2. **Sale of non-current assets; and**
3. **Existing surplus working capital.**

Funds from Operations

According to the following illustration, the Profit and Loss Account of ABC Ltd. shows that their business operations have generated funds worth **£ 360 million during the current period. This amount is a representation of the money made through selling goods and services of the company.**

A portion of these funds is used to meet the cost of producing goods, such as, material, personnel and operating costs. The business has also met interest requirements and cost expiration of machinery and equipment, although, the cost expiration (depreciation) of machinery and equipment does not require the use of funds in the current period.

ABC LTD.
Summarized Profit and Loss Account
For the year ended December 31, 2012

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

*Other income includes £ 1 Million profit on sale of furniture.

Funds generated from operations are all the revenues earned through business activity, minus all costs of goods sold requiring use of funds in the current period. It is the net income or profit after taxes, plus all non-cash expenses, such as, the depreciation and amortisation.

The Fund Flow Statement from the operations of ABC Ltd. will be as follows:

(£ in Millions)	
Operations	**55**
Net Income	
Add: Depreciation and Amortization	**11.90**
	66.90
Less: Profit on sale of furniture	**(1.00)**
Total funds provided for operations	**65.90**

External Sources

There can be two ways of creating external sources of fund generation used by the business to add to its existing funds:

1. By contributing to existing capital or raising additional capital, and
2. By increasing long-term borrowing.

Short-term creditors are not included in external sources because they are a business's current liability and fund has been defined as "current assets minus current liabilities." Therefore, long-term investment in current assets is added in working capital but short-term borrowing does not lead to an increase in it.

The following is a list of sources of funds as shown in a Fund Flow Statement:

Sources of Funds

Operations: _____
Net Profit after taxes _____
Add: Depreciation _____
Other amortizations
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 _____

Uses and Application of Funds

The Need for Additional Funds

A business usually requires additional capital for two main purposes:

1. **Buying additional fixed assets, and**
2. **Acquiring additional working capital.**

The need for investing in adequate fixed assets cannot be overstated. The funds that a business invests in acquiring shops, furniture and fixtures etc. enable it to run its operations. However, fixed assets also limit capacity, as a business cannot expand beyond a certain capacity. For example, in the case of a manufacturing firm, its expansion is limited by plant capacity; for a transportation business, tonnage of trucks, ships, or wagons will limit the business capacity, for an airline, the seating capacity will limited etc. a business requires additional funds to increase its operational capacity.

Therefore, investment in acquiring fixed assets is important if a business is looking to increase its activity. Additional investments are usually judged on the basis of whether they are reducing costs or not and their ability to increase present business output.

Current creditors finance a portion of the additional funds that are required to build more inventory, increase credit to customers and for fulfilling more cash requirements, however, the business still needs working capital for all these purposes.

If, for example, Phil & Co. opens another shop or expands the existing one, they will need funds to invest in fixed assets and they will also need to acquire additional current assets. Whenever a business needs to

invest in non-current assets, they either have to rely on working capital or make other arrangements for financing their investment. Non-current assets can be a source of funds when they are sold by the business.

The following are some applications of funds:

1. Buying new non-current fixed assets;
2. Replacement of long-term debt (loans);
3. Payment of dividends to shareholders; and
4. Increasing working capital (current assets-current liabilities)

An unsuccessful or failing business uses more funds than it can generate.

The Fund Flow Statement illustrated below shows some of the uses of funds:

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 …….

Factors Affecting Fund Requirements

We can conclude from our discussion above that there are several factors, which determine a business' working capital requirements and the level of funds it has.

The type of business is a huge factor in determining fund and working capital requirements. A company providing agency services, for example, will not need a large working capital. However, a retailer will have different working capital needs than a service provider, as it would require more funds for inventory ad credit. Similarly, a manufacturing company's working capital needs will exceed those of the retailer because it would need to carry inventory of raw materials, work-in-progress and finished goods.

Another factor that affects working capital is sales volume. As the sales volume goes up, the business requires more inventory, more funds for operating expenses and for lending money, etc. Working capital requirements are directly influenced by the 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.

Expenses do not always increase in the same proportion as a business's sales volume and there can be an increase in sales volume due to the business granting extended credits. Therefore, investing more funds means greater sales volume.

Seasonal businesses have different fund requirements depending on their kind. Agricultural businesses, for example, would benefit more from purchasing raw materials during harvest season. Similarly, retailers would prefer to keep large inventories during festive seasons. Therefore, seasonal businesses have fund requirements for a limited period and that they do not require a uniform inflow of funds throughout the year.

Another important factor affecting fund requirement is the length of the operating cycle. In case of a short business cycle, current assets will be converted into cash faster and therefore, less working capital will be required. In other words, the faster the period with which current assets circulate, the lesser is the need for net working capital.

Suppliers can also dictate the need for working capital by extending credit terms, as one of the uses of additional funds is to pay back creditors. For example, a business keeps a month's inventory and gives one month's credit to its customers. It would have to fund the inventory cost for two months. If the suppliers extend their credit to two months, the firm's need to hold inventory and funding debtors would be nil.

In another example, let's say that a company has to pay back an amount of £ 10,000 in 30 days and its debtors owe the firm an amount of £ 15,000 in 45 days. This firm's net working capital requirement can be worked out as follows:

	£
Fund required to meet payables due within 30 days	10,000
Less: Funds received from customers- Received in 45 days, that is, £15,000 x 30/45	(10,000)
Fund required in the form of net working capital	Nil

Now let's assume that the time taken by the firm to collect its debt is 90 days:

	£
Fund required to meet payables are due within 30 days.	10,000
Less: Funds received from customers- £15,000 x 30/90	(5,000)
Fund required in the form of additional net working capital	5,000

We can conclude from our discussion above that out of the various factors affecting working capital requirement, a firm's ability to circulate cash, raw materials, work-in-progress, finished goods, and receivables, etc. is the most important. The exact amount of funds to be invested in all these assets would ultimately depend on the period and volume of holding these elements.

Analyzing Changes in Working Capital

One of the first steps involved in understanding financial statements is to analyze changes in a company's financial position by comparing balance sheets. The illustration below is an example of a comparative analysis.

Illustration 1

ABC Limited

Balance Sheet as on December 31, 2013

	(£ in Millions)			
Assets	**December 31, 2013**		**December 31, 2013**	
£	**£**		**£**	
				£
Current Assets				
Cash	19.50	232.00	10.87	180.00
Accounts receivable	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				
Fixed Assets				
Plant and equipment at cost	152.00	81.00	133.00	73.00
Less: Depreciation	71.00	12.50	60.00	6.30
Furniture & fixture at cost	14.50		8.60	
Less: Depreciation	2.00		2.30	
Investments				2.00
Intangible Assets				
Technical Assistance fees	3.00	2.50	1.00	0.70
Less: Amortization	0.50		0.30	
Total		330.00		260

Liabilities and Capital					
Current Liabilities					
Acceptance		4.74	70.00	3.02	52.00
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	
Provisions					
For taxation		25.55	35.00	20.45	28.00
Proposed dividend		2.25		2.25	
For bonus		3.40		2.35	
Other Provision		3.80		2.95	
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					
Authorized : 5,00,000 shares of £ 100 each	50.00		50.00		
Issued Subscribed and Paid-up 3,73,100 Shares of £ 100 each		37.31		37.31	
Reserves and Surplus		97.69		62.69	
Total		330.00		260.00	

The net change in the working capital can be calculated by subtracting the net working capital at the end of one year from the net working capital at the beginning of that year.

ABC LTD

Change in Working Capital

(£ in Millions)

December 31, 2012	December 31, 2013
Current assets	180.00	232.00
Less: Current Liabilities	80.00	105.00
Working Capital	100.00	127.00

Working capital on December 31, 2013	127.00
Working Capital on December 31, 2012	100.00
Increase in Working Capital	27.00

The increase worth £ 27 million in ABC Ltd.'s working capital is due to the change in its operating assets. This figure does not give us an insight into the company's business operations as the increase can be brought on by a change in any current item account. An analysis of all accounts of working capital is required to determine which account caused the change.

Statement of Changes in Working Capital

A statement of changes in working capital is the tool used to locate changes in the business's financial accounts. The first stage in this process is to highlight all changes taking place in individual items and then to determine which item caused an increase or decrease in working capital. Working capital is equal to current assets minus current liabilities; therefore, it increases with an increase in current assets and a decrease in current liabilities and decreases with a decrease in current assets and an increase in current liabilities.

The statement of changes in working capital illustrated below shows a £52 million increase in current assets, mainly due to an increase in cash, receivables, and inventory. Increased payables, taxes, and advances from customers caused a decrease worth £25 million in working capital. Therefore, the net increase in the working capital is equal to £27 million.

Table 7.1

ABC LTD.

Statement of changes in Working Capital for the year ending December 31, 2013

(£In Millions)

	Dec. 31 2013	**Dec. 31 2012**	**Increase (Decrease)**	Working Capital	
				Increase	**Decrease**
Current Assets					
Cash	19.05	10.87	8.18		8.18
Accounts receivable	32.25	20.28	11.97		11.97
Loans and advances					
Other current assets	42.58	33.82	8.76		8.76
Inventory	17.20	15.93	1.27		1.27
Total					
	120.92	99.10	21.82		21.82
	232.00	180.00	52.00		
Current Liabilities & Provisions					
Acceptances	4.74	3.02	1.72		1.72
Accounts payable	27.16	18.75	8.41		8.41
Advances against sales					
Other liabilities	26.60	20.28	6.32		6.32
Interest accrued					
Taxes payable	8.86	7.95	0.91		0.91
Proposed dividend	2.64	2.00	0.64		0.64
Bonus payable	25.55	20.45	5.10		5.10
Other provisions	2.25	2.25	-		-
	3.40	2.35	1.05		1.05
	3.80	2.95	0.85		0.85
Total	105.00	80.00	25.00	52.00	25.00
Working Capital		127.00		100.00	27.00
Increasing Working Capital			27.00		

Fund Flow Statement

After understanding how changes in current assets and liabilities affect the working capital, we need to determine where it has an increase in working capital been applied or in case of a decrease, where have

the funds been released. A statement of changes in a company's financial position can be prepared by combining the information provided by the Profit and Loss Account and the Balance Sheet. This statement contains information regarding inflows and outflows of funds and therefore, it is called a Fund Flow Statement or a statement of Sources and Application of Funds.

As the name suggests, the Fund Flow Statement traces the movement of funds in and out of the business. For example in case of an inflow, the statement would tell us the source of funds and how those were used in the business.

The Fund Flow Statement is divided into two parts: sources of funds or inflows, and application of funds. The section, which is titled ' Sources of Funds' records all transactions that lead to an increase in working capital, whereas, the ' Applications of Funds' provides a summary of transactions leading to a decrease in working capital.

The following figure shows the structure of a Fund Flow Statement:

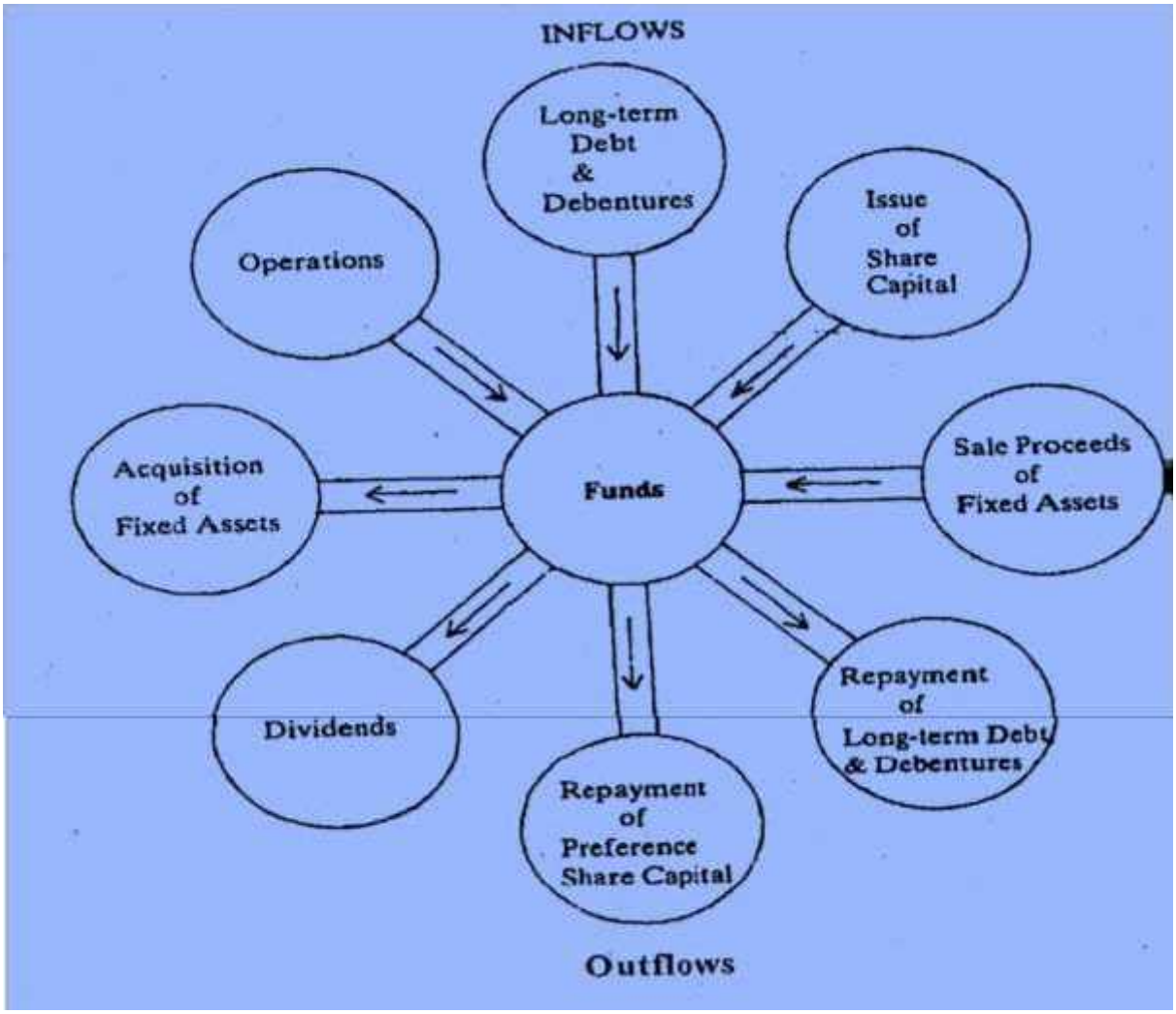

Fig. 7.1

The Fund Flow Statement is a reflection of a company's managerial decisions, its finance and investment policies, its acquisition and disposal of fixed assets, profitability of its operations and distribution of profits.

If we extend our example from illustration 1 further, we will know that almost all of the information, which is required to prepare a Fund Flow Statement, can be derived from a comparative analysis of the Profit and Loss Account and Balance Sheet. Changes in net - working capital brought on by changes in non-working capital items, which can be seen in the balance sheet of ABC Ltd.

Net - working capital increased by an amount of £ 27 million from January 1 to December 31, 2013. This means that the funds from non-current sources exceeded the application of funds by £ 27 million.

The summarised balance sheet provides information on the net changes in each account, rather than showing increases and decreases separately. For example, there was a net increase of £ 5.90 million in furniture and fixtures. This means that funds were used to bring about this increase i.e. the furniture and fixture account was both a source and an application of funds. Furniture and fixtures were purchased for £ 7.90 million, indicating an application of funds, and existing furniture and fixtures were sold for £ 2 million (with a depreciation of £ 1 million), providing a source of funds. The purchase transaction was bigger than the sales transaction; therefore, the net effect will be categorized as 'use of funds.'

Table 7.2

ABC LTD.

Summarized Balance Sheet

(£ in Millions)

	December 31, 2013	**December 31, 2012**	**Changes in Capital**	
			Working Source	**Use**
Working Capital	127.00	100.00	-	27.00
Fixed Assets				
Plant and equipment at cost	152.00	133.00	19.00	
Furniture and fixtures at cost	14.50	8.60	5.90	
Investments	2.00	-		2.00
Intangible Assets				
Technical assistance fees at cost	3.00	1.00		2.00
	298.50	242.60		
Long-term Liabilities				
Bank loans	40.00	32.14	7.86	
10.5% debentures	25.50	25.50		2.14
Loans from Financial Institutions	24.50	22.36		
Allowance and Amortizations				

Accumulated depreciation	71.00	60.00	11.00	0.30
Plant and equipment	2.00	2.30	0.20	
Furniture and fixtures	0.50	0.30		
Amortization of technical assistance fees				
Capital				
Share capital	37.31	37.31		
Reserves &Surplus	97.69	62.69	35.00	
	298.50	242.60	56.20	56.20

Notes:

1) Furniture and fixtures costing £ 2 million with an accumulated depreciation of £ 1 million is sold for cash at £ 2 million.

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

At this point, we have incomplete information for a Fund Flow Statement. We can get more information from the Profit and Loss Account, sales proceeds of assets.and other records of the company.

Funds Flow statement

(£ in Millions)

Sources of Funds		
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
Uses of Funds		

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

- The net income can be calculated by subtracting the previous year's surplus from the current year's balance i.e. £ 97.69 million - £ 62.69 million, which gives an amount of £ 35 million. We add the proposed dividends of £ 2.25 million to this amount and the net income is transferred to Reserves and Surplus.

Importance of Cash and Cash Flow Statement

Cash is a form of fund, which can be drawn upon in a time of need. In this section, the term 'cash' will refer to both cash and cash equivalents, i.e., liquid short-term investments that can be readily converted into cash.

A business has the option of meeting its obligations and liabilities with cash or cheque. It is, however, very important to distinguish between 'profit' and 'cash'. Electricity bills, taxes, cash dividends, and creditors cannot be paid through net profit, therefore, the business must possess actual cash to meet these commitments. The importance of having cash can be highlighted by the fact that even a profitable business can get into serious trouble if it is unable to fulfill its cash requirements on time.

We have established so far that the Profit and Loss Account and Balance Sheets reflect the financial position of a business organization and the Fund Flow Statement traces the movement of funds through the organization. However, none of these financial statements record the movement of cash related to business operations, financing, and investments, etc.

'Cash Planning' is the first step towards determining the sufficient amount of cash that the business must possess. It involves recording the amount of cash entering (inflows) and leaving (outflows) the business. 'Cash Flow Statement' is a statement that explains the changes taking place in a business's cash position.

Managers use cash flow statement for different purposes including planning, organizing, and coordination different operations and predicting and projecting future cash flows. It is also used to ascertain sources of cash in times of need as it paints a complete picture of movement of cash. Actual and projected Cash Flow Statements can be compared together in order to analyze cash movements and better understand the causes for any failures in cash planning.

There are many similarities between cash flow and Fund Flow Statements and some very succinct differences. Fund Flow Statements are broader in nature and cover more meaning than Cash Flow Statements. Fund Flow Statements deal with changes in funds and the effects they have on the working capitals (current assets and current liabilities) during a period under review. Cash Flow Statements, on the other hand, deal with cash only, which is a small but an important part of the total fund. Cash is also the balance available with the bank. Cash Flow Statements tell us all about cash starting from opening of

cash balance to the end of period under review including where it was used and from where it was received.

In Funds Flow Statements, there are no opening and closing balances. Working capital increases when current assets increase or current liabilities decrease. But, cash flow increases when current assets decreases or current liabilities increase.

Sources and Uses of Cash

Business activities, that prove to be sources or uses of cash, can be classified under three broad categories: operating activities, investing activities, and financing activities. We will discuss each of these categories below.

Operating Activities are those which result in cash inflows, such as, sales, interest received, and dividends received, etc. and cash outflows such as payments to suppliers, payment of wages, interest and taxes and other operating expenses. Changes (increase or decrease) in current assets such as, receivables and inventory, etc. and in current liabilities such as accounts payable, wages, and taxes payable etc. also fall under the category of operating activities.

Investing Activities are those which result in the business acquiring long-term assets such as land, buildings, plants, and machinery, etc. Buying these assets signifies a cash outflow, whereas selling them off, is a cash inflow.

Financing Activities involve increase or decrease in equity, preference capital, long-term loans, debentures, etc. Issuing equity, preference shares, and debentures, and raising long-term loans imply cash inflow. Dividend payments, retiring capital, redemption of debentures, and amortisation of long-term loans, etc., which implies cash outflows.

The Cash Cycle: the process of cash moving through a business is called the cash cycle. Managers need to be aware of how cash flows through the business in order to undertake the task of Cash Management. Figures 7.2 and 7.3 illustrate the cash cycle.

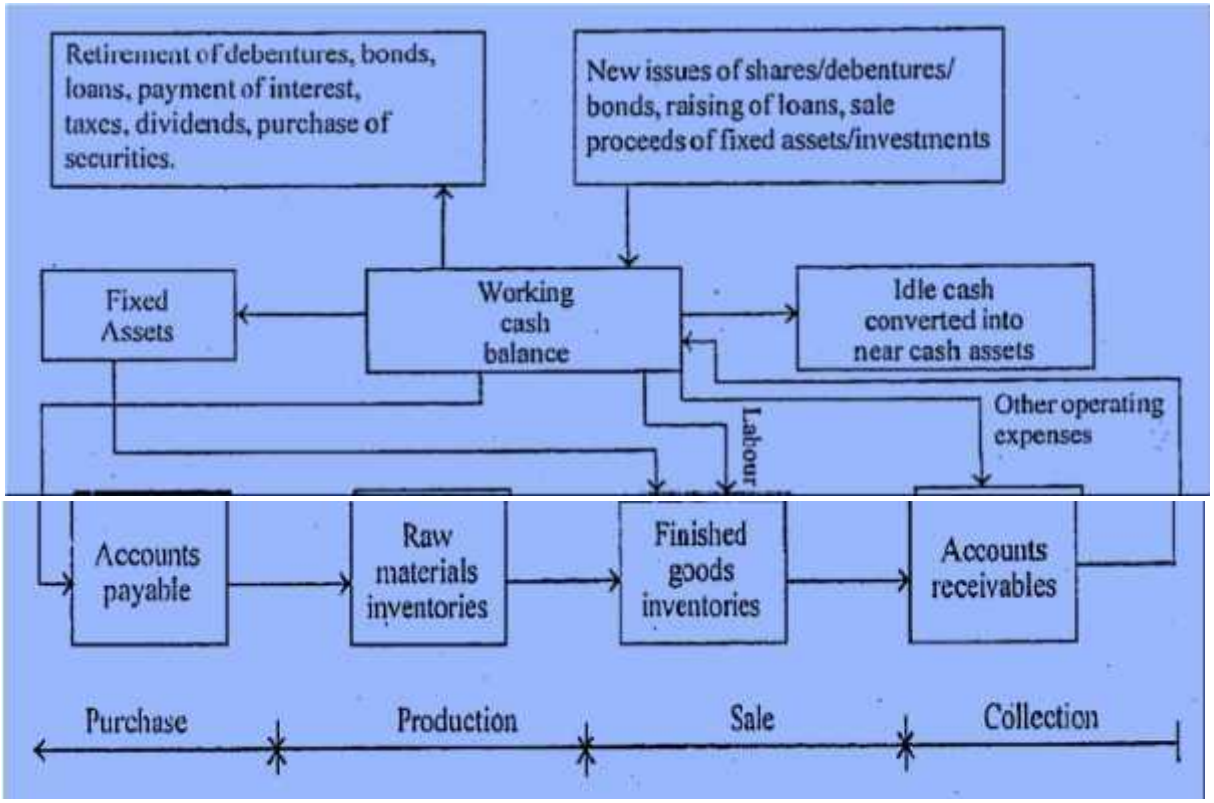

Figure 7.2: Details of the Cash Cycle

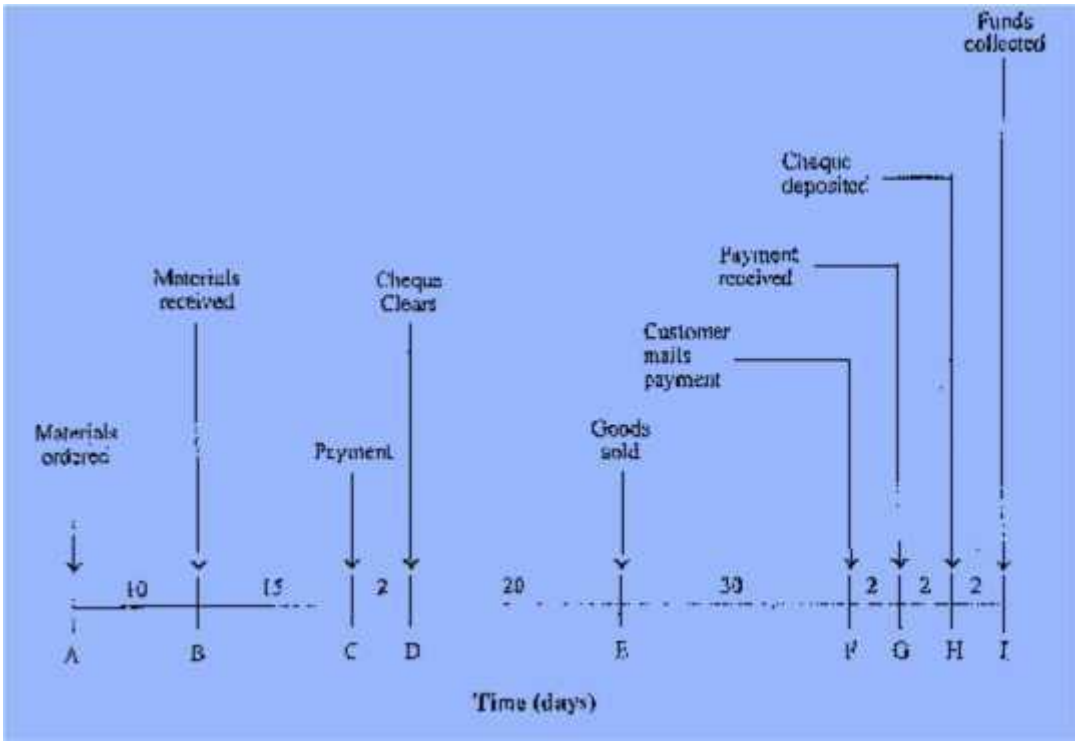

Fig. 7.3

The business uses cash to purchase raw materials for productions of goods. It then uses funds to pay for operating expenses involved in production of goods. When the production of goods is complete, they are sold to customers on cash or credit. In the case of credit sales, pending money is received at a later date. Therefore, the business receives some of the cash immediately at the time of making a sale and some in the future. The cash cycle repeats itself.

While figure 7.2 gives general information about the channels of cash flow in a business, figure 7.3 illustrates a more detailed explanation about the magnitude and timing of cash flows.

The following information is provided in figure 7.3:

a) Raw material for production of goods is received 10 days after the business has placed the order for it;
b) The raw material is converted into finished goods, ready for sale in 37 days (15+2+20) from point B to E;
c) The payment for material purchased can be put off for 17 days (15+2) after it has been received assuming that it takes 2 days for collection of payment through cheque. This is shown by the distance between points B and D;
d) The payment for goods sold by the business is received 32 days (30+2) after the sale of goods, as depicted by the duration between points E and G; and
e) The cash spent until point D is recovered after 56 days (20+30+2+2+2) as shown between points D and J.

Management of inflows (cash collection) and outflows (cash disbursements) is discussed in later units.

Preparation of Cash Flow Statement

The first step towards preparing a Cash Flow Statement is to get two Balance Sheets from successive accounting periods and two Profit and Loss Accounts from the corresponding periods.

The statement can be prepared in two ways. The first is called the **"Profit Basis"** Statement. It starts with the operating cash balance, and then, a Profit or Loss Account is added or deducted from it. Then, the change in each item of current assets and liabilities is brought into effect along with additions to and subtractions from other assets, shareholders' funds and long-term liabilities. Finally, we arrive at the closing cash balance. In other words, changes in current assets, long-term assets and liabilities, current liabilities, and shareholders' funds, are organized in the three categories discussed earlier i.e. operating, investing, and financing activities, the opening cash balance is adjusted to these changes and closing cash balance is calculated.

The second type of Cash Flow Statement is called **"Cash Basis"** Statement. This does not consider non-cash items, such as depreciation, written off expenses, etc. This type of statement is easy to prepare, as the students only have to distinguish cash items and categorise them into inflows and outflows.

The more complicated Profit Basis Cash Flow is explained in further detail below:

1. The closing cash balance from both Balance Sheets is taken and written as opening cash balance in the Cash Flow Statement;
2. In case the net profit figure is not given and only Profit and Loss Account balances are provided in the Balance Sheet, an 'adjusted Profit and Loss Account' is prepared to calculate the net - profit. This is done by taking all items of profit appropriations, together with non-cash expenses and income, and adding them to or subtracting them from (whatever the case may be) the Profit and Loss Account balance. This results in the 'profit from operations';
3. Increases and decreases in current assets and liabilities are adjusted to the profit from operations figure to arrive at "cash from operations;"
4. Cash from operations is added into the opening cash balance. Cash flow, from sources like non-current assets and liabilities, such as, equity and debentures issues, long-term loans, and sale of fixed assets is also added. Then, cash outflows involving non-current fixed assets and liabilities such as redemption of preference shared and debentures, paying back loans, purchasing fixed assets are subtracted; and
5. The cash balance calculated after performing step four should be the same at the closing cash balance in the second balance sheet.

Changes in assets and liabilities as explained in steps three and four can be categorised under operational, financing, and investing activities to achieve more clarity.

A Profit Base Cash Flow Statement is prepared below according to the procedure discussed earlier.

Illustration 2

M/s Mathew & Sons		
Balance Sheets as at	**31st March, 2012 £**	**31st March, 2013 £**
Assets:		
Freehold Property	1,50,000	1,50,000
Plant and Machineries Less: Depreciation	1,10,000	1,70,000
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, 2012 £	31st March, 2013 £
Liabilities:		
Share Capital	4,00,000	5,00,000
(40,000 Equity Shares @ £10/share)		60,000
General Reserve	50,000	65,000
Dividend Equalization 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 £ 1.50' per share.;
2. During the year, the tax liability of £20,000 for 2012, was paid;
3. During the year, £11,000 was the depreciation of Plant and Machinery;
4. A plant with a written down value of £20,000 was sold at £25,000;
5. The dividend at 7.5% was paid during the year; and
6. Part of the investment costing £ 30,000 was sold at £ 35,000, and the profit was recorded in Profit and Loss Account.

We determine the cash inflow and outflow, involving investment, plant and machinery, and tax, based on the information given above. This information cannot be found in the two Balance Sheets that are provided above. We need to prepare the respective profit and loss accounts and consider the effects of the additional information that is provided. Then, an adjusted profit and loss account is prepared to calculate Net Profit in light of the additional information, which finally leads to the preparation of a Cash Flow Statement.

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 (depreciation)	11,000
To Bank	91,000	By Closing balance	1,70,000
	2,06,000		2,06,000

Provision for Taxation

To Bank	20,000	By Opening Balance	20,000
By Closing balance	35,000	By P & L a/c	35,000
	55,000		55,000

Adjusted Profit and Loss Account

To General Reserve	15,000	By Opening balance	40,000
To Dividend	30,000	By Dividend Equal. 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. By profit for the year (Balancing figure)	5,000 1,01,000
To Goodwill		10,000	
To Preliminary expenses		5,000	
To Closing balance		55,000	
1,61,000		1,61,000	

Table 7.3

Statement of Cash Flow

for the period 1.4.2012 to 31.3.2013

£

Opening Cash balance as on 1.4.2012		20,000
Add/(deduct): Cash flow from Operating Activities		
Net profit (Ref: P&L Adjustment a/c)		1,01,000
Add: Decrease in current assets Increase in current liabilities: Sundry Creditors	Nil 7,000	7,000

Deduct: Increase in current assets Debtors Stock Bills Receivable			24,000 32,000 11,000	67,000
Decrease in Current liabilities Bills payable Payment of tax	5,000 20,000	25,000	92,000	16,000
Add/(deduct): Cash flow from Investing activities				
Add: Sale of Plant & Machinery Add: Sale of Investment			25,000 35,000	60,000
Deduct: Purchase of Plant and Machinery Deduct: Purchase of Investment	91,000 85,000		1,76,000	(1,16,000)
Add/(deduct): Cash flow from Financing Activities				
Add: Issue of share capital Share premium				1,00,000 60,000
Deduct: Payment of dividend Closing Cash Balance as on 31.3.2013			1,60,000 30,000	1,30,000 50,000

Further Reading:

- ✓ *Bhattacharyya Debarshi, (2011), Financial Statement Analysis*
- ✓ *GokulSinha, (2009), Financial Statement Analysis*
- ✓ *N Ramachandran,Ram Kumar Kakani, (2010), How to Read a Cash Flow Statement.*