

# Chapter 4: Fund Flow & Cash Flow Statements

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# *Flow of Funds*

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- There is a continuous movement of resources into the business, within the business and out of the business
- The funds flow takes place only when there is a movement in the *current assets* or the *current liabilities* during the accounting period
- Funds flow is used to refer to changes in or movement of *current assets* and *current liabilities*
- *Example:* If land is purchased out of a long-term loan, there is no flow of funds. But if financed by a short-term loan or cash, there is an outflow of funds as working capital is reduced

# *Working Capital*

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- Working Capital = Current Assets – Current Liabilities
- All the assets held by the business with the objective of conversion to cash during an operating cycle of the business
  - Part of the assets is financed by short-term credits or borrowing which are to be met or repaid during the operating cycle – these are current liabilities
  - Fund implies amount of resources invested in current assets from sources of finance other than current liabilities

# *Funds Flow Statement*

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- Based on a fundamental equation:
  - ***Sources of Funds – Application of Funds = Change in Working Capital***
- A statement that depicts the ways and reasons for movement in the funds of an entity for a given accounting period
- It is **not mandatory** under any law
- There is no prescribed format or rules that govern this statement

# Need for Working Capital - Illustration

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- *In Ramsons*, a retail outlet, the investment in the showroom, display counters, furniture fixtures and so on was Rs 600,000. Ramsons follows straight-line depreciation of fixed assets at the rate of 10 percent per annum.
- Estimated sales was Rs 150,000 per month: Rs 50,000 cash sales and Rs 100,000 on credit to be collected in four equal monthly installments, with the first installment collected at the time of sale. All sales were made on 25 percent margin on selling price

# Additional Information

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- Supply and sales constraints would warrant carrying three months sales requirement in the form of inventory. Similarly a month's cash expense requirements had to be held in cash balance
- Initial inventory was to be bought for cash and replenishment purchases will receive a month's credit from suppliers
- Average monthly cash requirement for meeting operating expenses other than payment for purchases amounted to Rs 26,000. Ram needed to withdraw Rs 4,000 per month for his personal needs

# Pertinent Questions...

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- How much working capital will Ramsons require to start operations?
- Will he need any addition to working capital during the first four months? Or will he have surplus working capital during the first four months?

# Schedule of Cash Payments

Month	Explanation	Amount Rs.	Total Rs.
January	Operating expenses	26,000	
	Withdrawals	4,000	
			30,000
February	January purchases	112,500	
	Operating expenses	26,000	
	Withdrawals	4,000	
			142,500
March	February purchases	112,500	
	Operating expenses	26,000	
	Withdrawals	4,000	
			142,500
April	March purchases	112,500	
	Operating expenses	26,000	
	Withdrawals	4,000	
			142,500

# Schedule of Cash Receipts

Month	Explanation	Amount Rs.	Total Rs.
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	
			100,000
March	Cash Sales	50,000	
	Credit sales of the month first installment	25,000	
	January sales - third installment	25,000	
	February sales second installment	25,000	
			125,000
April	Cash Sales	50,000	
	Credit sales of the month first installment	25,000	
	January sales - fourth installment	25,000	
	February sales - third installment	25,000	
	March sales second installment	25,000	
			150,000

# Balance Sheet

<b>RAMSONS</b>			
<b>Balance Sheet as of 1<sup>st</sup> January</b>			
<i>Assets</i>	<b>Rs.</b>	<i>Liabilities and Capital</i>	<b>Rs.</b>
Fixed Assets	600,000	Capital	967,500
Inventory	337,500		
Cash	30,000		
	967,500		967,500

Assumption: The entire asset requirements at the first instance are financed by Ram's own capital

# Schedule of Cash Balances

<b>RAMSONS</b>				
<i>Schedule of Cash Balances</i>				
	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>
Opening Balance	30,000	75,000	32,500	15,000
Cash receipts	75,000	100,000	125,000	150,000
Total Cash available	105,000	175,000	157,500	165,000
Less: Cash payments	30,000	142,500	142,500	142,500
Cash Balance	75,000	32,500	15,000	22,500

Less than the required cash of Rs 30000

# P/L Account for the period...

<b>RAMSONS</b>				
<i>Profit &amp; loss Account for the month ending...</i>				
	31 January	28 February	31 March	30 April
<b>Total Sales</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>
Less: Cost of Sales	112,500	112,500	112,500	112,500
Other Expenses	26,000	26,000	26,000	26,000
Depreciation	5,000	5,000	5,000	5,000
<b>Total Expenses</b>	<b>143,500</b>	<b>143,500</b>	<b>143,500</b>	<b>143,500</b>
<b>Net Profit</b>	<b>6,500</b>	<b>6,500</b>	<b>6,500</b>	<b>6,500</b>
Less: Drawings	4,000	4,000	4,000	4,000
<b>Profit Retained</b>	<b>2,500</b>	<b>2,500</b>	<b>2,500</b>	<b>2,500</b>

# Balance Sheet (Assets)

<b>RAMSONS</b>					
<i>Balance Sheet as at the end of</i>					
<i>Assets</i>	1 Jan	31 Jan	28 Feb	31 Mar	30 Apr
Fixed Assets	600000	600,000	600,000	600,000	600,000
Less: Depreciation		5,000	10,000	15,000	20,000
<b>Net Fixed Assets</b>	<b>600,000</b>	<b>595,000</b>	<b>590,000</b>	<b>585,000</b>	<b>580,000</b>
Inventory	337,500	337,500	337,500	337,500	337,500
Receivable		75,000	125,000	150,000	150,000
Cash	30,000	75,000	32,500	15,000	22,500
<b>Current Assets</b>	<b>367,500</b>	<b>487,500</b>	<b>495,000</b>	<b>502,500</b>	<b>510,000</b>
	<b>967,500</b>	<b>1,082,500</b>	<b>1,085,000</b>	<b>1,087,500</b>	<b>1,090,000</b>

# Balance Sheet (Liabilities)

<b>RAMSONS</b>					
<i>Balance Sheet as at the end of</i>					
<i>Liabilities &amp; Capital</i>	1 Jan	31 Jan	28 Feb	31 Mar	30 Apr
Capital	967,500	967,500	967,500	967,500	967,500
Add: Ret. Earnings		2,500	5,000	7,500	10,000
<b>Owners Equity</b>	967,500	970,000	972,500	975,000	977,500
Accounts Payable		112,500	112,500	112,500	112,500
<b>Liabilities &amp; Capital</b>	<b>967,500</b>	<b>1082,500</b>	<b>1,085,000</b>	<b>1,087,500</b>	<b>1,090,000</b>

# Changes in working capital and the possible sources of their funding...

<b>RAMSONS</b>				
<i>Schedule of Working Capital</i>				
<i>Assets</i>	31 January	28 February	31 March	30 April
Current assets	487,500	495,000	502,500	510,000
Less. Current Liabilities	112,500	112,500	112,500	112,500
<b>Working Capital</b>	<b>375,000</b>	<b>382,500</b>	<b>390,000</b>	<b>397,500</b>
<b>Funds From Operation</b>				
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
Less withdrawals	4,000	4,000	4,000	4,000
Net additions to <b>Working Capital</b>	<b>7,500</b>	<b>7,500</b>	<b>7,500</b>	<b>7,500</b>

# Capital Invested In Business

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- ❑ Ramson's Objective: "Invest money to make money"
- ❑ This investment of profits is known as 'retained earnings'
- ❑ The balance sheet(s) of the business shows us how Ramsons has utilized the money

# Ramsons ... we notice that ...

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- ❑ The changes in fixed assets is represented by accumulated depreciation only
- ❑ There were no additions to fixed assets
- ❑ Reduction in fixed assets due to depreciation is a non-cash transaction
- ❑ On the liability side also there was no transaction involving long-term liabilities or capital
- ❑ Only change in the long-term items is the increase in retained earnings
- ❑ All changes are in working capital

# Further...

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- The net change in working capital is an increase of Rs 7,500 per period
- This points to changes in current assets and current liabilities
  - Changes in cash and receivable
  - Only item of current liability to change is the accounts payable during the first period, which is maintained later on
  - The increase in receivable needed funds to finance it and it was provided in part by the increase in payable

# Continued...

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- If an increase in current assets is offset by an equal increase in current liabilities, the net impact on working capital is zero
- This leaves us with the only other item, which could have financed the change in working capital → funds generated by operations
- The operations provided a profit of Rs 6,500 during each period
- An expiration of fixed assets in the amount of Rs 5,000 per month
- Thus operations generated is Rs 11,500 per period
- The owner regularly withdrew cash of Rs 4,000 per period leaving in business additional resources of Rs 7,500 per period, which is the change in working capital

# Changes in Working Capital

	<b>1 Jan</b>	<b>31 Jan</b>	<b>28 Feb</b>	<b>31 March</b>	<b>30 April</b>
<b>Working Capital</b>	<b>367,500</b>	<b>375,000</b>	<b>382,500</b>	<b>390,000</b>	<b>397,500</b>

- We could summarize the normal uses of funds (working capital) as follows:
  1. Acquisition of new non-current assets
  2. Repayment of non-current debt
  3. Profit distribution to owners
  4. Increase in the balance of working capital (current assets - current liabilities)

# Cash and Receivables

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- Cash as an investment!
  - Amount which is required to be kept on hand to meet day-to-day requirement of cash
  - This amount is determined by (a) the regularity and uncertainties related to cash inflows and outflows; and (b) need for investment in other assets
- Receivables as investment!
  - Granting credit to customers implies 'financing the cost of materials for the duration of such credit'
  - Financing only to the extent of cost of goods sold
  - Opportunity aspect of credit granted is that one is deferring receipt to the extent of receivable amount

# Inventory, Supplies, Prepaid Expenses

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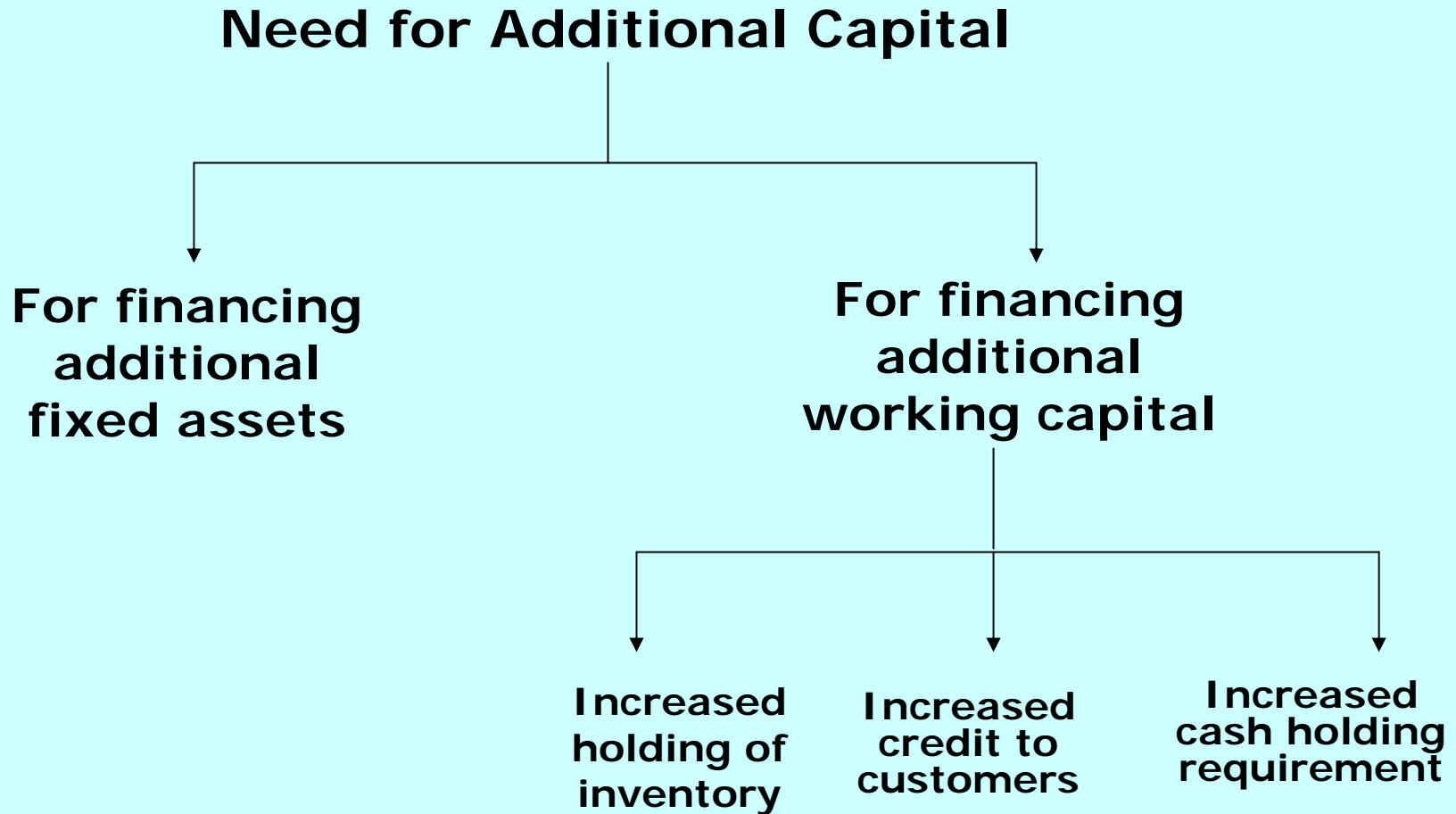
- Inventory is held whenever there is a time lag between procurement and use of inventory of materials and supplies
- Quantum on inventory depends on:
  - Availability and regularity of supply
  - Lead-time for delivery
  - Credit allowed by supplier and terms of sale
  - Storage Capacity, etc.
- Expenses that are to be paid before services are used, such as rent, insurance, etc. in order to ensure smooth operations

# Fixed or Non-current Assets

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- We cannot expand our business beyond a certain capacity that is limited by the facilities created by fixed assets; an additional investment is required
- Need for fixed asset investment and current asset investment will vary from business to business
  - A trading company requires very little investment in fixed assets and very large investment in current assets
  - A complex manufacturing unit may need large investment in factory and equipment
  - Capital requirements will also be determined by specific firms at given volumes of their activity

# *Future Capital Requirements*



# Various Uses of Fund

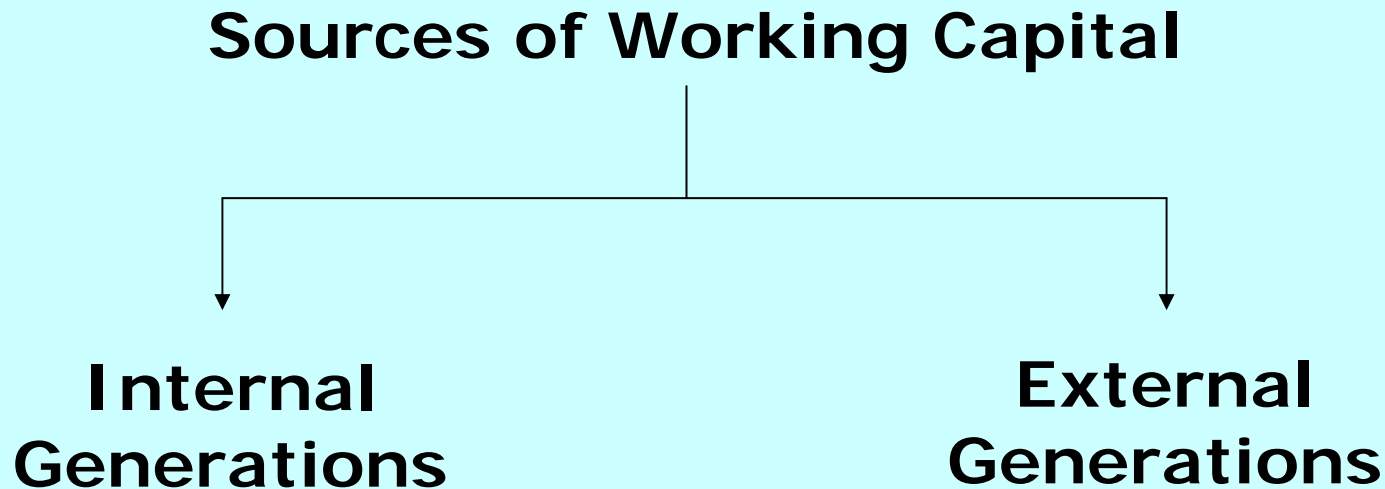
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<b>Uses of fund</b>
Dividends
Non-operating losses not passed through income statement
Redemption of redeemable preference share capital
Repayment of debentures/bonds
Repayment of long term loans
Purchase of fixed assets
Purchase of long term investment
Increase in working capital

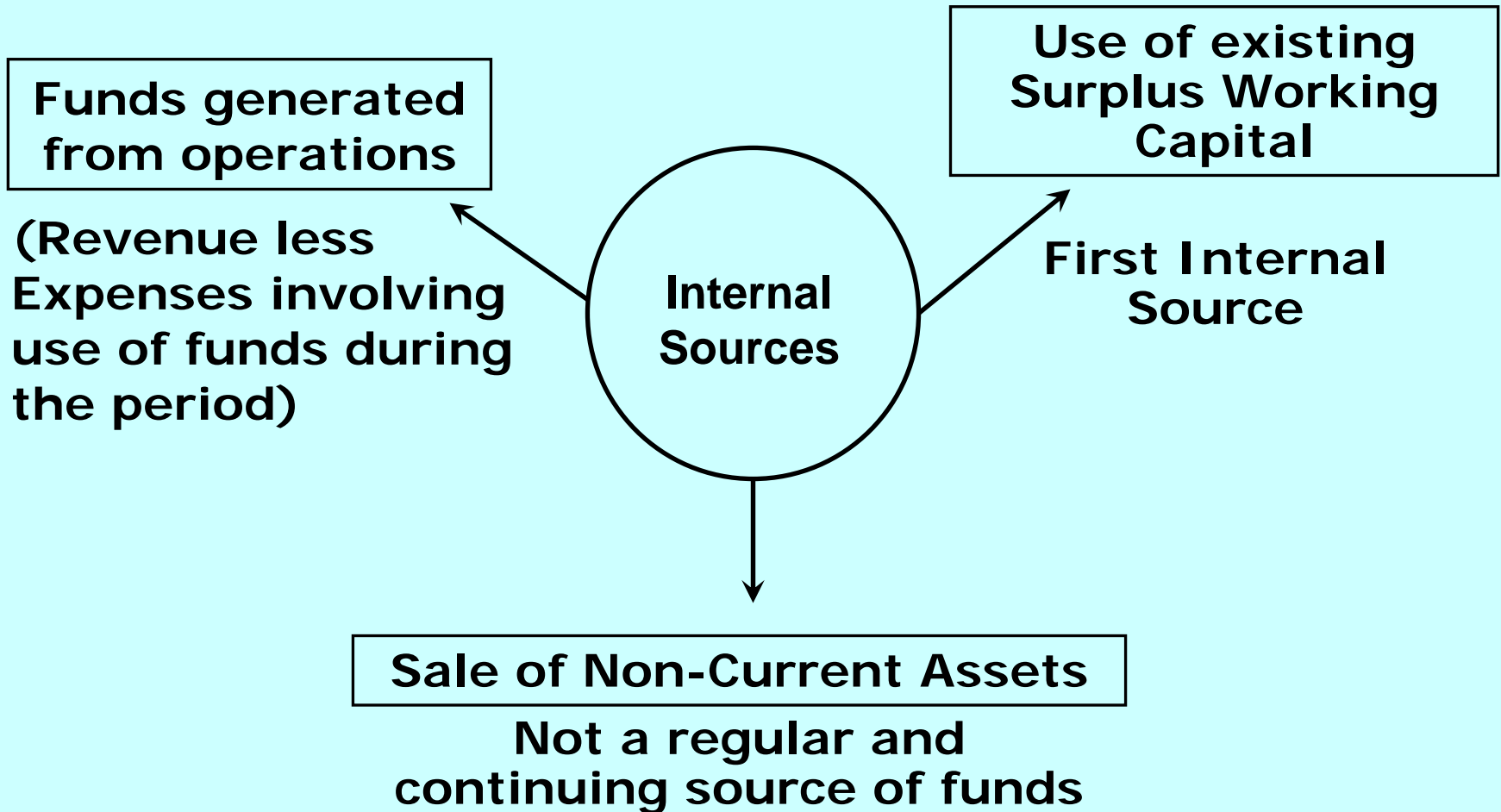
## *Working Capital: Possible Sources*

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- Working capital is required to finance that portion of current assets, which are not financed by current liabilities



# Internal Sources



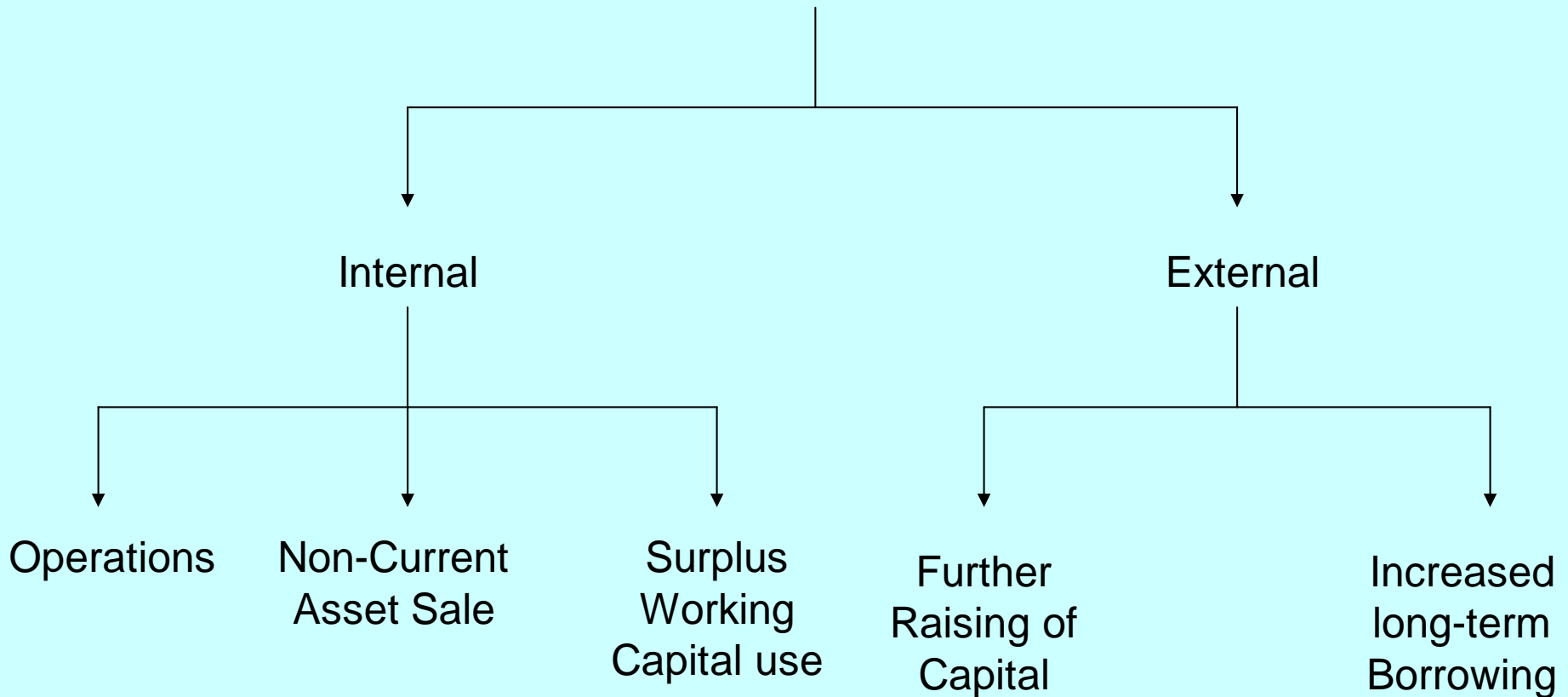
# External Sources

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- Two external sources:
  1. Owners contributing additional capital, i.e. by raising more capital
  2. Increased long-term borrowing
- Short-term borrowing will not increase working capital
  - Working capital represents long-term investment in current assets

# Sources of Working Capital

## Working Capital Sources



## *Factors affecting Fund Requirements*

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- Fund requirements vary with the *nature and type of business*
- Sales Volume growth
  - More inventories and receivables due to extended credits
- Impact of Seasonality
  - Fund requirements are restricted to a limited period
  - Providing funds on a permanent basis may lead to idle funds during most part of the year
- Velocity of Circulation of Current Assets
- Terms available from the Suppliers (Extended credit → Less funds required)

# Illustration

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- A firm carries an average balance of Rs 10,000 accounts payable, payable in 30 days and an average accounts receivable of Rs 15,000 receivable in 45 days.
- The firm will have to keep a net working capital for the differences of receipts from customers and fund required meeting payable as follows:

Fund required to meet payable due within 30 days	Rs 10,000
Less: Funds received from customers within 30 days: Received in 45 days, that is, Rs 15,000 x 30/45	Rs 10,000
Fund required in the form of additional net working capital	NIL

# Illustration...

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

Fund required to meet payable due within 30 days	Rs 10,000
Less: Funds received from customers within 30 days: Received in 45 days, that is, Rs 15,000 x 30/90	Rs 5,000
Fund required in the form of additional net working capital	Rs 5,000

# Analyzing Changes in Working Capital

## Ibis Ltd. – Case Discussion

<b>Ibis Ltd.</b>		
<b>Change in Working Capital (all figures in Rs million)</b>		
	<b>Year 1</b>	<b>Year 2</b>
Current assets	180.00	232.00
Less: Current liabilities	80.00	105.00
<b>Working capital</b>	<b>100.00</b>	<b>127.00</b>
Working capital at the end of Year 2	127.00	
Working capital at the close of Year 1	100.00	
<b>Increase in Working capital</b>	<b>27.00</b>	

# Case Discussion – Ibis Ltd.

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- The Rs 27.00 million increase in working capital of Ibis shows the composite changes in the operating assets
  - Does not tell us much in terms of operations of the business
  - The change could be the net result of changes in all the accounts covered by current items or some other reason
- We need to analyze the changes in each of the working capital accounts

# Case Discussion – Ibis Ltd.

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- ❑ A statement of change in working capital can help us in locating where these changes took place
- ❑ Any *increase* in current assets and any *decrease* in current liabilities shows an *increase* in working capital and vice versa
- ❑ Increases in current assets amounted to Rs 52.00 million
- ❑ Total amount of decreases in working capital resulting from increase in current liabilities amounted to Rs 25.00 million
- ❑ This led to a net increase in working capital of Rs 27.00 million

# Changes in Financial Position

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- An analysis of the fluctuations of current assets and current liabilities
- Tells where increased working capital is invested and if decreased, from where funds have been released
- *Funds Flow Statement*
  - Describes the sources from which funds were received and also the uses to which these funds were applied
  - Traces the flow of funds through the organization

# Fund Flow Statement

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- The statement of funds flow is usually divided into the two logical divisions
  - Sources of funds or inflows – net effect of increasing the working capital
  - Uses of funds or applications of funds – net effect of decreasing the working capital
- Gives a summary of the impacts of managerial decisions on the position of the business
- Reflects the policies of financing, investment, acquisition and retirement of fixed assets, distribution of profits and the success of operations

# Moving Further ...

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- There can be cases when a funds flow statement alone may not be able to provide detailed information and hence not helpful to the investors
  - For example, there would only be a mention that there is an increase in working capital but no information as to where the increase in working capital has been utilized
  - A possible answer to this providing a “statement of cash flow” instead of a “funds flow statement”

# *Statement of Cash Flow*

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- ❑ Is an extension of the funds flow statement explained earlier
- ❑ A statement that presents the flow of cash to and from an organization due to various transactions in a given accounting period
- ❑ Helps assesses the ability of an enterprise to generate cash and to utilize the cash
- ❑ Also helps to assess the liquidity and solvency of the entity

# Illustration – Nasir Enterprises

## Profit & loss Account For the period ending 31-03-20X7

Particulars	Amount Rs.	Particulars	Amount Rs.
Purchases	7,50,000	Sales	10,00,000
Salaries	50,000	(includes 50% credit)	
Wages	30,000		
Office Expenses	10,000		
Selling & Distribution Expenses	12,000		
Depreciation	8,000		
Net Profit.	<u>1,40,000</u>		
Total	10,00,000	Total	10,00,000

# Observations...

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- There is a profit of Rs 1,40,000 but assuming all purchases to be cash purchases there is a net cash outgo of Rs 3,52,000 during the period
- Since, the total cash inflow for the period is 5,00,000 (i.e., 50% of the total sales) and the total cash outflow is Rs 8,52,000 (i.e., all the expenses other than depreciation)
- In the same way there can be a business loss for the period but still can result in a positive cash flow due to the non-cash expenses like depreciation

# Cash Flow Statement

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- It provides information on changes during an accounting period by cash and to classify cash flow under three activities:
- Operating Activities
  - The profit adjusted for depreciation, gains and/or losses on sale of non-current assets, tax paid, and working capital changes
- Investing Activities
  - Purchases of non-current assets and proceeds on the sale of non-current assets

# Cash Flow Statement

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- Financing Activities
  - Proceeds on the issue of equity/preference shares and loans/debentures and the redemption of redeemable preference shares and loan/debentures
- So, a cash flow statement is a consequence of the difference between profits and cash
- It provides the user with a mechanism for providing additional information on its business activities and a better assessment of the current liquidity of a business than a funds flow statement

# *Preparing a Cash Flow Statement*

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- All the cash flow activities are required to be segregated under three activities viz., operating, investing and financing
- The sum of these activities reflects the net increase or decrease in the cash and cash equivalents
- Here, by cash we mean both cash in hand and bank demand deposits, similarly cash equivalents means all the short-term investments which can be readily converted into cash without decline in its value

# Operating Activities

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- It is the principle revenue generating activities of an entity
- Two ways of calculating it
- Direct method
  - We independently analyze the changes that cash transactions cause in each balance sheet non-cash account
- Indirect method
  - The Profit and Loss Account is adjusted for the effects of transactions of non-cash and non-operating nature
  - Also known as "Reconciliation to Net Income"

# Illustration – Kanishk Ent.

Profit & Loss Account  
For the Year ending 31st March 20X7

Particulars	Rs.	Particulars	Rs.
Purchases for the Year	80,000	Sales	1,65,000
Direct Expenses	20,000		
Gross Profit	65,000		
Total	1,65,000	Total	1,65,000
Rent	8,000	Gross Profit B/d	65,000
Salary	20,000	Profit on sale of old machinery	13,000
Depreciation	15,000		
Provision for Bad Debts	5,000		
Proposed Dividends	10,000		
Provision for Taxes	2,500		
Preliminary Exp. written off	1,500		
Net Profit	16,000		

# Solution – Direct Method

## Kanishk Enterprises

### Cash Flow Statement

For the Year ending 31st March 20X7 (all figures in Rs)

#### Cash Flow From Operating Activities:

Cash received on account of sale of goods		1,65,000
<u>Less: Payment made on account of</u>		
Purchases of goods	80,000	
Freight and Cartage	20,000	
Salary Paid	20,000	
Rent Paid	<u>8,000</u>	<u>1,28,000</u>
<b>Cash Inflow →</b>		<b><u>37,000</u></b>

# Solution – Indirect Method

## Kanishk Enterprises

### Cash Flow From Operating Activities:

Net Profit as per Profit & loss Account		16,000
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### Add: Non-cash transaction

Provision for Bad Debts	5,000	
Depreciation	15,000	
Proposed Dividends	10,000	
Provision for Taxes	2,500	
Preliminary Expenses written off	<u>1,500</u>	34,000

### Less: Non-operation incomes

Profit on sale of machinery		<u>13,000</u>
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<b>Cash Inflow →</b>		<b><u>37,000</u></b>
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# Investing Activities

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- Activities related to acquisition and disposal of long-term assets and other investments, which are not taken into consideration under the cash equivalents head are investing activities
- Also includes investments made by business entities in other company's shares and debentures
- Examples of investment activities include cash payments or receipts to acquire or dispose fixed assets, shares, warrants, debt instrument, etc.

# Illustration - Kanishk

- The following transactions occur at Kanishk Enterprises:

<b>Particulars</b>	<b>Amount (Rs.)</b>
Purchased a machinery for	1,50,000
Sold shares worth	2,00,000
Received interest on debentures purchased earlier	10,000
Received dividend on shares held	20,000
Sold old machinery	50,000

# Solution

## Kanishk Enterprises Cash Flow Statement

### **Cash Flow from Investing Activities:**

Sale of Shares	2,00,000
Interest received	10,000
Sale proceeds of old machinery	50,000
Dividend received	<u>20,000</u>
	2,80,000
<b><u>Less:</u> Outflow on account of machine purchase</b>	<u>1,50,000</u>
<b>Cash flow from Investing Activities</b>	<b><u>1,30,000</u></b>

# Financing Activities

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- The activities that result in the change in size and composition of the long-term capital employed in the firm are known as financing activities
- Includes both owner(s) capital and long-term borrowing of the entity
- Example: cash received from issue of share capital, issue of loans and cash payment on dividend, redemption, etc.
- Supposing during the year Kanishk Enterprises has taken a loan of Rs 1,50,000 and paid an interest of Rs 15,000 thereon, the cash flow from financing activities for the year comes to Rs 1,35,000 (i.e., 1,50,000 - 15,000)

# Areas of Confusion

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While preparing the statement of cash flow, the following items usually create confusion:

- ❑ **Interest received** on long-term investments vis-à-vis interest received on short-term investments (including interest on trade advances and operating receivables)
- ❑ **Interest paid** on loans and debts vis-à-vis interest paid on working capital loan
- ❑ **Dividend received** in case of financial enterprises vis-à-vis dividends received by any other type of enterprise
- ❑ **Dividend paid** is always classified as financing activity

# Cash Flow vs. Funds Flow Statement

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- Basic difference is that cash flow tracks cash position for a given period while funds flow tracks the working capital position
- In a cash flow statement, the difference between the sources and applications of cash represent the closing cash balance. The difference in sources and applications of funds, in funds flow statement represents the change in the working capital
- Cash Flow statement takes items on cash basis while in funds flow statement the basis is accrual system of accounting.

# Thank You

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