3.7 Cash flow

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Working Capital

- Working capital refers to the money that is available for the daily running of a business.
- Working capital is also known as net current assets and is calculated by using the formula:

Working capital = Current Assets – Current Liabilities

Working Capital

- The amount of working capital shows the funds that are available for a business to pay for its immediate costs and expenditure (known as **running costs**).
- It can be used to pay for raw materials, stocks, wages, or any other running costs of a business.
- A lack of working capital means that the firm has insufficient cash to fund its routine operations, such as paying suppliers.
- One of the main reasons why businesses collapse is due to the lack of working capital.

Working Capital

Current assets

- are resources that belong to a business that are intended to be used within the next 12 months.
- Also known as **liquid assets**.
- There are three main types of current assets:
  - Cash
  - Debtors
  - Stocks

Current Assets

Cash

- This is the money that is held in the business or at the bank.

Current Assets

Debtors

- This term refers to people or other organizations that owe money to a business as they have purchased goods on credit.
- Businesses (the creditors) often allow their customers (the debtors) a credit period, i.e. to buy and pay later.
- The figure for debtors is classed as an asset because it is money that the business is owed.

Current Assets

Stocks

- These are unsold stocks of raw materials, semi-finished goods or finished goods used in the manufacturing process.
- Finished stocks are relatively liquid in comparison to raw materials.
- Stocks are also called **inventories**.

Working Capital

Current liabilities

- refer to the money that a business owes that needs to be repaid within the next 12 months.
- Some of the common examples include:
  - Overdrafts
  - Creditors
  - Tax

Current Liabilities

Overdrafts

- This short-term source of finance needs to be repaid quickly as interest rates on overdrafts tend to be higher than those placed on longer term bank loans.

Current Liabilities

Creditors

- Suppliers need to be repaid for items that have been purchased on credit.

Current Liabilities

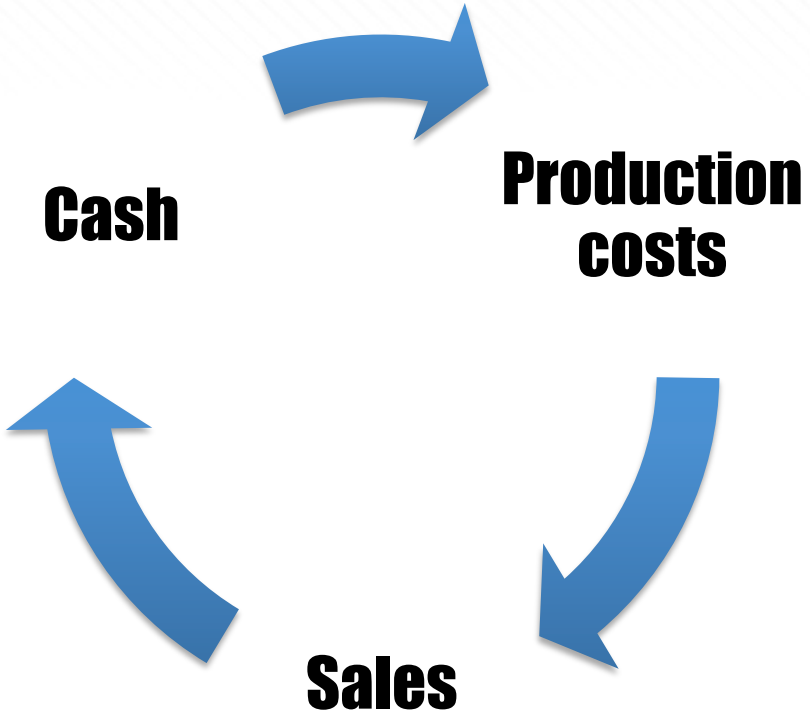
Tax

- Businesses will need to pay a variety of taxes to the government, such as corporation tax and stamp duty.
- It is possible to delay some tax payments, but these still represent a current liability.

Working capital cycle

- There is usually a delay between paying for costs of production, such as the purchase of stock and payment of wages, and receiving the actual cash from the sale of the product.
- This is because production process takes time.
- This time lag between cash payments for the costs of production and receiving the cash from customers is known as the **working capital cycle**.
- If a business has insufficient working capital, then it is likely to struggle to continue financing its operations.

Working capital cycle



Working capital cycle

- Whilst it is important for firms to have sufficient working capital, it does not mean that they should have ‘too much’ liquidity.
- Holding too many current assets in the business can be regarded as being wasteful.
- This is because the assets, such as stocks and cash, could have been used more productively and profitably elsewhere, eg. to expand the business.

Cash vs. profit

Profit

- Profit is the positive difference between a firm's total sales revenue and its total costs of production.

Profit = Revenues – Costs

- When customers pay for the purchase of products, they can use trade credit where they can buy now but pay later (usually a credit period of 30 days).

- This can attract customers to the business, but can cause cash flow problems for the firm since it will need to survive without immediate payment from its credit customers.

Cash vs. profit

- When a firm sells products on credit, it will automatically make a profit on the sale.
- However, since customers pay on credit, the firm does not receive the cash at the time of purchase.
- Hence profit is made before cash is received, i.e. profit is not the same as cash.

Cash vs. profit

Example

- A firm sold $5,000 of goods in a week, with 60% of its customers paying by cash.
- Only $3,000 cash is received.
- The other 40% (or $2,000) is not received until the end of the credit period.
- Hence, the sales revenue ($5,000) is not the same as the cash inflow of $3,000 at the end of the trading week.

Cash vs. profit

Difference between sales revenues and cash inflows

- Sales revenue comes from a single source, i.e. customers.
- Cash inflows come from sales revenues and other sources not limited to trading.

  For example

  - Sale of dormant (unused) assets. This generates cash but not sales revenue.
  - Bank loans, donations and government grants

Cash vs. profit

Profitable but cash deficient

- It is possible for a firm to be profitable but cash deficient.
- The firm offers credit to its customers. In some cases, there is poor credit control and therefore this damages the cash flow position of the business.
- Another case is when a profitable business tries to expand too quickly, so runs out of cash.

Cash vs. profit

Profitable but cash deficient

- Seasonal variations in sales may also mean that there are certain times in the year when demand is low and therefore the firm may experience some short-term liquidity problems.
- A business cannot remain profitable without sufficient cash to pay its employees, suppliers and financiers. A lack of cash will eventually lead to a firm going bankrupt.

Cash Flow Forecasts

- A cash flow forecast is a financial document that shows the expected movement of cash into and out of a business, per time period.
- It is based on three key concepts.
  - Cash inflows
  - Cash outflows
  - Net cash flow

Cash Flow Forecasts

Cash inflows

- Cash inflows usually come from sales revenue, when customers pay for the products that they have purchased.
- Calculations of cash inflows require an accurate sales forecasts for the period in question.
- Cash inflows are often referred to as **receipts**.

Cash Flow Forecasts

Cash inflows

- Cash inflow can also come from:
  - payment by debtors,
  - loans from a bank,
  - interest received from bank deposits,
  - the sale of assets
  - rental income charged on property owned by the business.

Cash Flow Forecasts

Cash outflows

- Cash usually leaves a firm when bills have to be paid.
- Cash outflow is also known as **payments**, **expenses**, or **outgoings**.

Cash Flow Forecasts

Cash outflows

- A cash flow forecast therefore requires a detailed operations budget with itemized expenses such as
  - labour
  - purchase of stocks
  - rent
  - taxes
  - payments to creditors
  - advertising
  - interest repayments
  - dividends

Cash Flow Forecasts

Net cash flow

- This refers to the difference between cash inflows and cash outflows, per period of time.
- Ideally, the net cash flow should be positive, although a firm may be able to temporarily survive if it suffers from negative cash flow.
- A firm might be profitable, but it can only survive in the long run if receipts are greater than cash outflows.

Constructing Cash Flow Forecasts

	Jul	Aug	Sep	Oct	Nov	Dec
Opening balance	5,000	3,000	300	(1,400)	(2,600)	600
Inflows						
Cash sales revenue	6,000	5,000	6,500	6,800	7,500	9,500
Other income	0	0	0	0	4,000	0
Total cash inflows	6,000	5,000	6,500	6,800	11,500	9,500
Outflows						
Stocks	2,500	2,200	2,700	2,700	3,000	3,300
Labour costs	3,500	3,500	3,500	3,500	3,500	3,500
Other costs	2,000	2,000	2,000	1,800	1,800	2,200
Total cash outflows	8,000	7,700	8,200	8,000	8,300	9,000
Net cash flow	(2,000)	(2,700)	(1,700)	(1,200)	3,200	500
Closing balance	3,000	300	(1,400)	(2,600)	600	1,100

Cash Flow Forecasts

Opening balance

- This refers to the amount of cash at the beginning of a trading period.
- Notice that the opening balance is the same value as the preceding month's closing balance,

For example

- At the close of business on 31st July, the cash balance was $3,000.
- Hence, it is logical that the opening balance on 1st August is the same value, i.e. $3,000.

Cash Flow Forecasts

Closing balance

- This refers to the amount of cash at the end of a trading period.
- It is calculated by the formula:

Closing balance = opening balance + net cash flow

For example

- In July, although the net cash flow is negative $2,000, the closing balance is positive $3,000 when we take account of the opening balance.

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Cash Flow Forecasts

Closing balance

- Notice that in the months of September and October, the company has a negative closing balance.
- A business cannot survive without sufficient cash and therefore the cash flow forecast can help the firm to devise plans to deal with cash shortages.

  For example

  Seeking a bank overdraft as a short-term measure to deal with the liquidity problem.

Constructing Cash Flow Forecasts

	Jan ($)	Feb ($)	Mar ($)	Apr ($)
Cash sales	2,000	2,000	**(d)**	4,000
Stock purchases	600	60	900	1,200
Rent	1,000	0	1,000	0
Other costs	2,000	600	800	1,000
Opening cash balance	1,000	**(c)**	1,600	1,900
Net cash flow	**(a)**	800	300	1,800
Closing cash balance	**(b)**	1,600	1,900	**(e)**

Acknowledgement

Paul, Hoang, *Business and Management*, Victoria: IBID Press, 2007