Index







# The big picture

Did you know that a business can be profitable and can still have cash flow problems? This can happen when a business makes a sale but is not able to collect the money owed in the expected time.

For example, a car manufacturer sells a car on credit and expects payment in instalments. Although the transaction is technically profitable, if the car seller does not receive monthly payments regularly, it may run into cash flow problems.


**Figure 1.** Extending car loans may result in car sellers having cash flow problems.

Credit: krisanapong detraphiphat, Getty Images

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The restrictions caused by the COVID-19 pandemic had a negative affect on the cash flow of many businesses, especially those in the food, hospitality and entertainment industries. Restaurants and cinemas, for example, were not allowed to operate at full capacity. However, they still had to pay rent, insurance and salaries to their employees. The lack of revenue and continuing costs caused cash flow issues. Many establishments went out of business because they had no cash inflow. The businesses that survived often did so because they made dramatic cuts in their costs.


**Figure 2.** Many restaurants experienced cash flow problems during the COVID-19 pandemic.

Credit: Kanawa_Studio, Getty Images

In Subtopic 3.5 (/study/app/business-hl/sid-351-cid-762729/book/the-big-picture-id-39042/) you learned how it is important for companies to have cash and cash equivalents (referred to as current assets) on hand to cover daily operating expenses. Cash flow is closely connected with a company's solvency, as issues with cash flow will affect the ability of a business to service its short payments and long-term debts.

## Concept

### Sustainability

Many people think of sustainability in terms of treatment of natural resources, however **economic sustainability** is often forgotten. The topic of cash flow highlights the idea of responsible and sustainable cash management. This may involve practices such as cutting costs or finding more efficient methods of production.

Businesses often play key roles in a community: they provide for human needs and contribute tax revenue to support public services. Stable cash inflow ensures that the stakeholders of the business are paid on time and the business has operational

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stability, thus contributing to the community's economic stability.

**Learning objectives from the IBDP Business Management guide with assessment objective level:**

- **Distinguish** between profit and cash flow (AO2)
- **Analyse** and **prepare** cash flow forecasts (AO2, AO4)
- **Explain** the relationship between investment, profit and cash flow (AO2)
- **Recommend** strategies for dealing with cash flow problems (AO3)

3. Finance and accounts / 3.7 Cash flow

# The difference between cash flow and profit

Profit and cash flow Profit and cash flow Working capital Working capital

In Subtopic 3.5 (/study/app/business-hl/sid-351-cid-762729/book/the-big-picture-id-39042/) you learned about profit and profitability ratios. Profit is simply defined as total revenue minus total cost. Generating profit is necessary for a business to stay afloat and grow over time. Cash flow refers to cash inflows and outflows. Cash inflow refers to the money in 'cash' that the company earns from its main operations and other revenue sources, such as the sale of unused fixed assets. Cash outflow refers to the money the company pays for its operations and other irregular expenditure, such as legal fees. Net cash flow is defined as payments received by a business minus payments made. Sometimes you will also see a definition of cash inflows minus cash outflows.

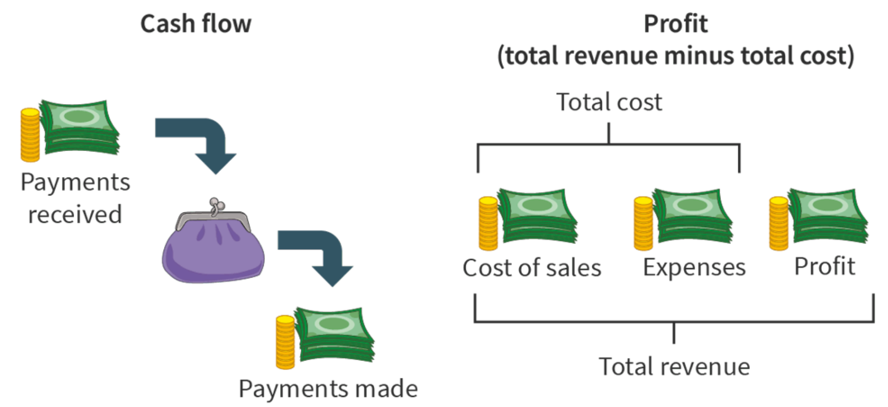


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**Figure 1.** Cash flow versus profit.

More information for figure 1

The image consists of two parts: one representing cash flow and the other representing profit.

On the left, under the heading 'Cash flow,' there's an illustration showing stacks of money with coins labeled 'Payments received' leading to a wallet icon, which then leads to another set of arrows showing 'Payments made' with similar monetary icons.

On the right, under the heading 'Profit (total revenue minus total cost),' a diagram depicts 'Total revenue' at the top, with lines pointing downward to 'Total cost.' Further breakdowns show 'Cost of sales' and 'Expenses,' leading to 'Profit.' Each section is represented by stacks of money and coins.

The image visually depicts the process of both cash flow and profit, illustrating the differences between money movement (cash flow) and revenue calculations (profit).

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Profit and cash flow are closely connected, but show different aspects of a business. It is not uncommon for companies to be profitable and have cash flow problems, as illustrated in the following example.

The Chinon Snack Company earned sales revenue of $50 000 from the sale of packed roasted peanuts, sold in bulk to supermarkets at a cost of $30 000. However, 50% of the sales were on 30-day credit terms, meaning only half of the payment was made at the time of purchase. The company's cash flow and profitability positions were, therefore as follows:

$$\text{Profit} = \text{total revenue} - \text{total cost}$$

$$= \$50\ 000 - \$30\ 000$$

$$= \$20\ 000$$

However, the company's cash flow position was as follows:

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$$\text{Net cashflow} = \text{payments received} - \text{payments made}$$

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$= (50\% \times \$50\ 000) - 30\ 000$

$=$ -\$5000

The Chinon Snack Company therefore had a cash crisis. Because of limited cash inflow, it was unable to pay its employees and meet its other obligations. If it had outstanding long-term debt, then the company would be unable to make the payments on its loans. This would mean there was a risk that the bank could sell any assets the company had offered as collateral at the time of borrowing. Unless the company was able to raise some finance through an overdraft, for example, it could become insolvent. This is because, despite the fact that the business calculated a $20 000 profit, 50% of the sales revenue would only be received the following month.

To help you remember the difference between profit and cash flow, remember that profit refers to the accounting records, while cash flow and sufficient cash is related to the planning and ensuring that payments are made on time.


**Figure 2.** A business can be profitable and can also have cash flow issues.

Credit: Jeffrey Coolidge, Getty Images

## The working capital cycle

Working capital refers to the funds available in the business to meet the needs of its day-to-day operations. It is therefore a very important concept in business because, like cash flow, it affects the survival of the business. You may remember from Subtopic 3.5 (/study/app/business-

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hl/sid-351-cid-762729/book/the-big-picture-id-39042/) that working capital is calculated as follows:

$$\text{Working capital} = \text{current assets} - \text{current liabilities}$$

Just to remind you, current assets include cash, debtors and stock. Current liabilities include creditors, overdrafts and short-term loans. When current liabilities are greater than current assets, the business is unable to pay for its ongoing expenses such as wages, raw materials and suppliers. The business will probably stop functioning. Most of the time, there is a time lag between the production and sale of products and when payment is received. This lag causes a negative cash flow. Businesses need to plan for this so they can cover the costs of operations while they are waiting for payment from customers.

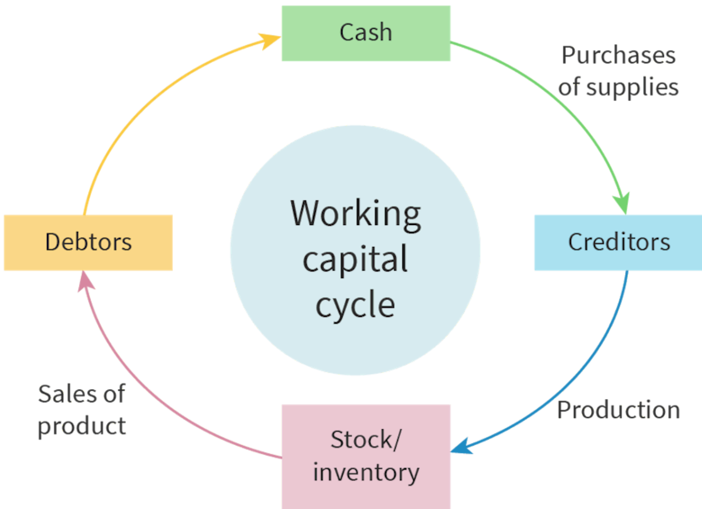


**Figure 3.** The working capital cycle.

More information for figure 3

The image is a diagram illustrating the working capital cycle. At the center, there's a circle labeled "Working capital cycle." Surrounding this are four rectangular labels connected in a cycle by arrows: "Cash," "Creditors," "Stock/inventory," and "Debtors."

1. **Cash** leads to the label "Purchases of supplies" and flows into "Creditors."
2. **Creditors** prompts "Production" which transitions into "Stock/inventory."
3. **Stock/inventory** leads to "Sales of product" and flows into "Debtors."
4. **Debtors** returns to "Cash" completing the cycle with "Cash inflow."

This visual cycle shows how cash is utilized and circulated through different stages of business operations: it starts with the purchase of supplies from creditors, transforms into stock through production, then moves to debtors through sales, finally returning as cash once payments are received.

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You can see a visual representation of the working capital cycle above. If the business purchases supplies and manufactures its stock, it will pay its creditors (cash outflow), but will not be able to collect payment owed to it by its debtors (cash inflow). So it may face interruptions in the working capital cycle. Planning in advance to try to avoid such potential interruptions is essential for maintaining solvency.

## 3 section questions

**Question 1**

Net cash flow is defined as:

1 Payments received minus payments made ✓

2 Sales minus cost of goods sold

3 Profit minus fixed costs

4 Change in total revenue divided by change in output

**Explanation**

Cash flow is defined as payments received minus payments made, or cash inflow minus cash outflow. The other definitions are incorrect.

**Question 2**

Working capital:

1 Refers to the funds needed for the day-to-day operations of the business ✓

2 Is always raised via a bank loan

3 Can be used to purchase delivery trucks

4 Is always raised via an overdraft

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view

**Explanation**

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The business needs cash to pay for operational expenses such as wages, raw materials and electricity. This is called working capital and is different from the funds needed for capital expenditure, such as the purchase of machinery.

A bank loan is part of the current liabilities; taking out a bank loan would in fact lower the working capital.

Capital expenditure, perhaps financed by long-term loans or selling shares, is used for buying delivery trucks, which are not classified as a day-to-day expense that would be financed by working capital. This option is therefore incorrect.

An overdraft forms part of the current liabilities and would in fact reduce the working capital.

**Question 3**

Film Inc sells cameras. The cost of production is $40 000, at $100 000 worth of sales. 50% of the sales are on 30-day credit terms. What is the net cash flow for the cameras before the 30-day credit period is up (assume that debtors take the entire period to pay) ?

1 $10 000 ✓

2 $140 000

3 $50 000

4 $60 000

**Explanation**

Net cash flow is calculated as: $(50\% \times \$100\ 000) - \$40\ 000 = \$10\ 000$

This is because only $50 000 was received in cash while the other $50 000 was on 30-day credit.

3. Finance and accounts / 3.7 Cash flow

# Cash flow forecasts

Cash flow forecasts Cash flow forecasts

Student view

Cash flow is important for the survival of a business. Thus, careful businesses will make a cash flow forecast so they can manage their operations effectively and avoid cash flow problems. A cash flow forecast is a prediction of the future cash inflows, outflows and net cash

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flow for a specific time period.

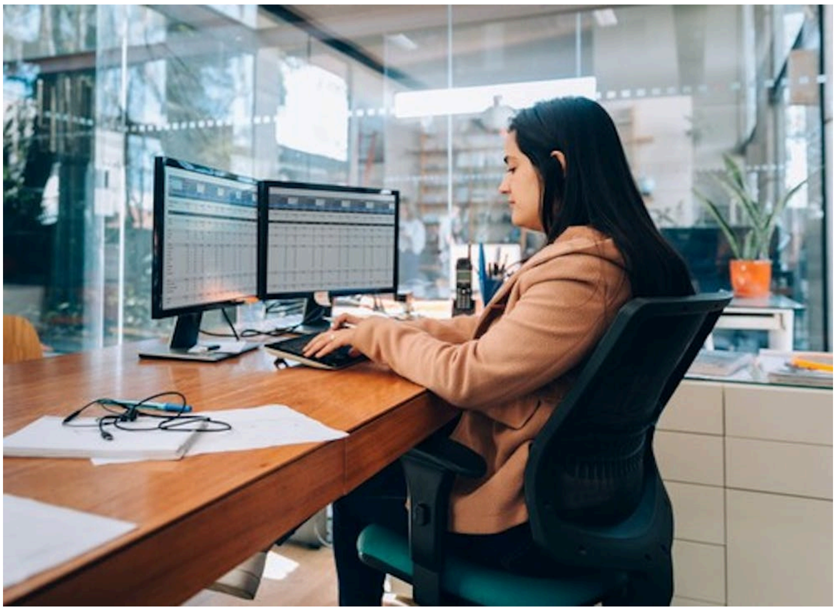

**Figure 1.** A cash flow forecast allows businesses to manage operations effectively.

Credit: cokada, Getty Images

## Constructing a cash flow forecast

Using the Chinon Snack Company (introduced in Section 3.7.1 (/study/app/business-hl/sid-351-cid-762729/book/the-difference-between-cash-flow-and-profit-id-39318/)) as an example, a cash flow forecast can now be created. The terms in the definition, and others relevant to the construction of a cash flow forecast, are explained below:

**Cash inflow** is the amount of cash flowing into or earned by the business from sales, debtors and other activities, such as the sale of unused fixed assets or the rent from extra office space.

**Cash outflow** is the amount of cash paid out by the business for core operations such as raw materials, creditors and electricity and other activities such as legal fees.

**Net cash flow** is the difference between the total cash inflows and cash outflows. It could be positive or negative. Typically, businesses aim for a positive net cash flow, which indicates that that the company is not facing problems.

**Opening balance** refers to the amount of cash the business has in the bank at the beginning of the month. If a business is new, then it will not have an opening balance, so this figure would be zero.

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**Closing balance** refers to the amount of cash that the business has at the end of the month. It is the sum of the opening balance and the net cash flow. This closing balance then becomes the opening balance for the next month. This is calculated using the following formula:

$$\text{Closing balance} = \text{opening balance} + \text{net cash flow for the month}$$

**Table 1.** The Chinon Snack Company cash flow forecast ($). (A negative net cash flow figure is indicated by putting it in brackets.)

| | January | February | March | April | May | June |
|---|---|---|---|---|---|---|
| **Cash inflows** | | | | | | |
| **Cash outflows** | | | | | | |
| **Opening balance** | 3000 | 4000 | 7000 | 10 500 | 9000 | 7000 |
| **Cash sales revenue** | 15 000 | 20 000 | 23 000 | 27 000 | 27 000 | 34 000 |
| **Debtor payments** | 4000 | 3000 | 3000 | 4000 | 6000 | 5000 |
| **Other income** | 0 | 2000 | 0 | 1000 | 0 | 0 |
| **Total cash inflows** | 19 000 | 25 000 | 26 000 | 32 000 | 33 000 | 39 000 |
| **Peanuts** | 5000 | 8000 | 8000 | 11 000 | 12 000 | 12 000 |
| **Packaging** | 1000 | 1500 | 1500 | 2500 | 4000 | 4000 |
| **Rent** | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| **Wages** | 6000 | 6000 | 6000 | 8000 | 8000 | 8000 |
| **Suppliers** | 2500 | 3000 | 3500 | 7000 | 6000 | 6000 |
| **Utilities** | 1500 | 1500 | 1500 | 3000 | 3000 | 3000 |
| **Total cash outflows** | 18 000 | 22 000 | 22 500 | 33 500 | 33 500 | 33 500 |
| **Net cash flow** | 1000 | 3000 | 3500 | (1500) | (2000) | 4000 |

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| | January | February | March | April | May | June |
|---|---|---|---|---|---|---|
| **Cash inflows** | | | | | | |
| **Cash outflows** | | | | | | |
| **Closing balance** | 4000 | 7000 | 10 500 | 9000 | 7000 | 11 000 |

In the above example, the Chinon Snack Company had a good cash flow position from January to March. April and May, however, were not as favourable because the net cash flows were negative. Nonetheless, the company did not face a cash crisis or liquidity problem because the closing and opening cash balances remained positive.

It must be noted that while cash flow **forecasts** are explained above, accountants, at the end of an accounting period or as required, make a cash flow **statement**. A cash flow statement records the actual cash inflows and cash outflows that took place in the period. This is usually tabled alongside the income statement and balance sheet for a comprehensive evaluation of the business's financial position.

### International Mindedness

Most countries require publicly held companies to publish financial statements like the statement of profit or loss (income statement or profit and loss account) and statement of financial performance (balance sheet), as you learned about in Subtopic 3.4 (/study/app/business-hl/sid-351-cid-762729/book/the-big-picture-id-39045/). Cash flow statements are another required financial statement. Depending on the country's accounting standards, the presentation of cash flow statements may differ somewhat from the example above.

# The importance of a cash flow forecast

The predictions from the cash flow forecast can help the company plan in advance to counter any negative developments over a time period. If the business sees in its cash flow forecast that it may have a negative closing balance at the end of one month, it may want to take out a short-term loan to cover any unexpected expenses.

Student view

The business can compare the cash flow forecast and the actual cash flows for the period to help with budgeting and marketing decisions for the future. If, for example, there is a negative variance or difference between the forecast and actual sales figures, then the company can

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implement new advertising strategies for the following year.

## Theory of Knowledge

When reading a company's cash flow and other financial statements, people may be swayed positively or negatively by their own perceptions of the company. For example, if they are convinced of a company's future success, they may not scrutinise that company's performance adequately.

- What role do reason and emotion play when analysing financial performance?

## Activity

**Learner profile:** Knowledgeable
**Approaches to learning:** Thinking skills (transfer)

**Figure 2** shows the cash flow forecast for the for-profit entity Nelson, Nelson and Nelson Ltd for the final three months of the year.

Review the cash flow forecast and fill in the missing figures.

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| | | | | | | |
|---|---|---|---|---|---|---|
| 150 | 116 | 99 | 41 | 111 | 155 | 33 |
| 80 | 19 | 41 | 117 | 130 | 80 | 39 |

Check

**Interactive 1.** Calculate the Missing Figures and Complete the Cash Flow Forecast.

More information for interactive 1

A drag-and-drop interactive table displays the financial data of a cash flow forecast for three months. The table has four columns labeled all figures in thousands of GBP, October, November, and December. Rows are divided into opening balance, cash inflows, cash outflows, net cash flow, and closing balance. Some cells are blank, and users need to drag and drop the correct answer from the options given below.

The cash inflows section includes cash sales revenue, tax refund, and total cash inflow. The cash outflows section includes rent, packaging, salaries and benefits, cost of sales, lighting, transport, and total cash outflow.

The opening balance is 8 for October. Cash sales revenue is 150 for both October and November and 130 for December. Tax refund is 0 for October and December and 5 for November. Rent is 15 for all months. Packaging is 2 for October and December and 3 for November. Salaries and benefits are 35 for all months. Cost of sales is 60 for October and November and 55 for December. Lighting is 1 for all months. Transport is 4 for October, 2 for November, and 3 for December.

Student view

Blank cells are present for total cash inflow, total cash outflow, net cash flow, and closing balance. Blank cells also exist for the opening balance in November and December.

Draggable options available below the table include 150, 116, 99, 41, 111, 155, 33, 80, 19, 41, 117, 130, 80, and 39.

Read below for the solution:
The opening balances for November and December are 41 and 80, respectively.
The total cash inflow for October, November, and December are 150, 155, and 130, respectively.
The total cash outflow for October, November, and December are 117, 116, and 111, respectively.
The net cash flows for October, November, and December are 33, 39, and 19, respectively.
The closing balances for October, November, and December are 41, 80, and 99, respectively.

## 3 section questions

**Question 1**

A cash flow forecast:

1 Is a prediction of the future cash inflows and outflows for a company ✓

2 Shows the profit and loss on a daily basis

3 Always includes a government subsidy

4 Shows the actual cash inflows and outflows of a company

### Explanation

A cash flow forecast predicts cash receipts and payments by the company. It is an estimate.

The profit and loss statement is not calculated on a daily basis but periodically, such as at the end of the year. Furthermore, this would be a calculation of actual figures and is therefore not a forecast. These options are therefore incorrect.

While a government subsidy could form part of the predicted cash inflows, this is not always the case. This option is therefore also incorrect.

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**Question 2**

The closing balance is:

1 The sum of the opening balance and the net cash flow ✓

2 The sum of the net profit and net cash flow

3 The sum of all the working capital for the year

4 The sum of cash inflow and equity

**Explanation**

The closing balance indicates the cash available to the company at the end of a given period. It takes into account the funds of the company at the beginning of the period and the difference between cash inflow and cash outflow (the net cash flow).

**Question 3**

Cash outflow is:

1 The amount of cash paid out by the business for its operations ✓

2 The amount of inflow to a business

3 Revenue minus costs

4 The sum of the opening balance and the net cash flow

**Explanation**

Cash outflow is the cash paid out by the business. The amount of inflow is cash inflow. Revenue minus cost is profit. The sum of the opening balance and the next cash flow is the closing balance.

3. Finance and accounts / 3.7 Cash flow

# The relationship between investment, profit and cash flow

Student view

Profit is revenue minus costs. Cash flow refers to the actual movement of funds in and out of the business. It is therefore possible for a profitable business to become insolvent or bankrupt. You can see this in the example of the Chinon Snack Company in Section 3.7.1 (/study/app/business-hl/sid-351-cid-762729/book/the-difference-between-cash-flow-and-profit-id-39318/) where, despite being profitable, the business faced a liquidity problem because it had a –$5000 net cash flow.

Investment is the purchase of a fixed asset (such as a machine or a factory). It is also referred to as capital expenditure. Investment therefore usually requires a large initial cash payment, and this could have a negative impact on the business's cash flow.

**Figure 1.** Investment is also referred to as capital expenditure.

Credit: Sean Gladwell, Getty Images

Managers and investors often track free cash flow, or the cash that is left over once operational costs have been paid. Having excess free cash flow allows public companies to buy back their own shares or distribute to investors. In other cases, as in the case study below, free cash flow is used for capital investments.

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## Case study

TSMC, based in Taiwan, is the world's largest producer of semiconductor chips. The demand for semiconductors has been increasing globally as they are used in more and more products; not just in traditional electronic devices. Cars and manufacturing machinery, for example, now also use large numbers of semiconductors. The COVID-19 pandemic created further demand for electronics, as people switched to online schooling and work. In December 2021, TSMC's gross profit margin was 53%.

In 2022, as a result of this growth and the free cash flow that it generated in 2020 and 2021, TSMC announced a 46.7% year-on-year increase in investments into factories that will produce advanced 3- and 5-nanometre chips. TSMC believes that semiconductors are entering a period of higher-than-average growth, due to growth in autonomous driving and factory automation. The company believes that this growth justifies the large investment.

However, some shareholders are concerned that TSMC may build too much additional production capacity. If demand for semiconductors declines, the large investment in factories might not pay off. Shareholders are also concerned that, if other semiconductor manufacturers make the same investments, there will be an oversupply of chips and a decline in price and revenue for TSMC.

(Adapted from this article in the Financial Times (https://www.ft.com/content/56f339cc-2c8f-41f0-b685-4a7875eb90f4).)

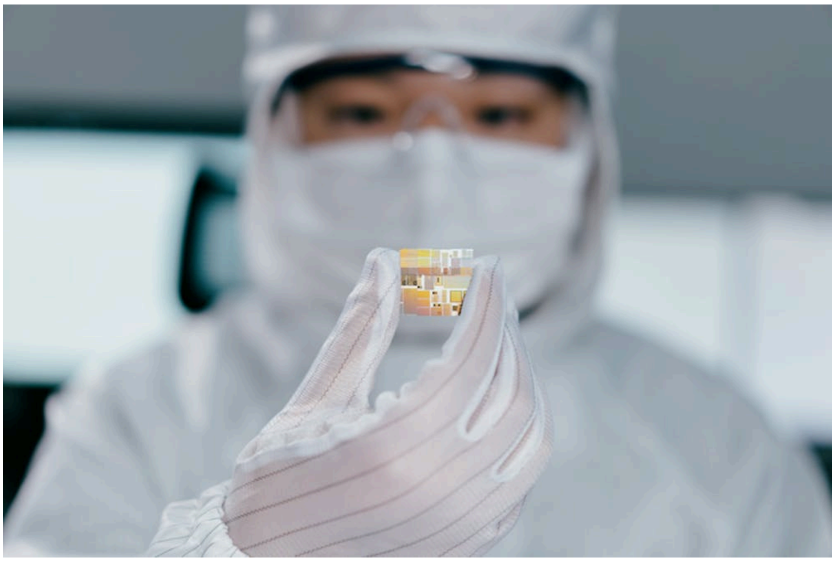

**Figure 2.** TSMC is a leading producer of semiconductors.
Credit: sinology, Getty Images

### Questions

1. Explain one advantage and one disadvantage of TSMC using its excess free cash flow to invest into new factories. [4 marks]
2. Explain two possible threats facing TSMC. [4 marks]

Student view

**Question 1**

Advantages of investment:

- It makes sense to increase production at a time when there is expected to be more demand for semiconductors.
- There is no need for TSMC to take out a loan or seek another form of financing.

Disadvantages of investment:

- There would be a negative impact on cash flow.
- Investors may want profits to be redistributed as dividends.
- There is an opportunity cost of investment. If an investment is made and there is not sufficient demand to justify investment, then profits will have been used inefficiently.

**Explain** is an AO2 level command term, requiring a detailed account including reasons or causes. Explain *why*, explain *how*.

- One mark is given for correctly defining profits or investment and for vaguely linking to one advantage or disadvantage.
- Two marks are given for correctly defining profits and investment and for using information from the case study to identify one advantage or disadvantage.
- Three marks are given for correctly defining profits and investment and for using information from the case study to identify an advantage and a disadvantage with some linkage to the case study.
- Four marks are given for correctly defining profits and investment and for using information from the case study to describe an advantage and a disadvantage with appropriate linkage to the case study.
- To achieve full marks, you must always include theory and application to the case study in your responses.

**Question 2**

Possible answers include:

- Explain that the term 'threats' refers to a business's external environment.
- One threat to TSMC is a change to economic factors in the external environment; in this case, demand. Demand for semiconductors increased during the COVID-19 pandemic as 'people switched to online schooling and work' and also as a result of more semiconductors being used in cars and factory machinery. One possible external threat may be that this high demand will not continue and thus the capital investments will not be profitable.
- A second threat to TSMC is a change in the economic factor of supply. Other companies may also increase productive capacity, creating more

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supply and driving down the price. This will create a threat of increased competition. The case study specifies that 'there will be an oversupply of chips and a decline in price'. TSMC's investment in the factories may not be justified in a highly competitive environment.

**Explain** is an AO2 level command term, requiring a detailed account including reasons or causes. Explain *why*, explain *how*.

- Two marks are given for each challenge identified and explained with examples from the text.
- To achieve full marks, you must always include theory and application to the case study in your responses.

# Cash flow and ratios

In Subtopic 3.5 (/study/app/business-hl/sid-351-cid-762729/book/the-big-picture-id-39042/) and Subtopic 3.6 (/study/app/business-hl/sid-351-cid-762729/book/the-big-picture-id-39311/) you studied profitability and debt ratios. These ratios are closely linked to cash flow as well, although the link is not often direct.

## Gross profit margin and profit margin

Positive profit margins generally mean that a business should be able to cover its costs of production and operation. However, if the business sells on credit (and most businesses do) and customers do not pay on time, high profitability may not prevent the company from running out of cash.

## Debtor days and creditor days (HL only)

Debtor days measures how quickly a business can collect payment, and creditor days measures how quickly a business pays the money it owes as trade credit to its suppliers. To manage its cash flow effectively, it would be helpful for the business to minimise the number of debtor days and maximise the number of creditor days.

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**Figure 3.** Ratios are closely connected with cash flow.

Credit: Prapass Pulsub, Getty Images

More information for figure 3

The image is a bar chart illustrating growth percentages for different categories. The categories are labeled on the X-axis as EKKASIT G1, New SM G1, SUPITCHA G2, PRIN G3, NARAPHAT G1, NARAPHAT G2, and NOPPOL G3. The Y-axis represents the values with a range from 0 to 20,000. The bars are grouped in pairs representing years 2013 and 2014. These bars are annotated with growth percentages: Growth 32% for EKKASIT G1, Growth 54% for SUPITCHA G2, Growth 10.7% for PRIN G3, Growth 19.5% for NARAPHAT G1, and Growth 25% for NOPPOL G3. A pen is placed on the chart, and some additional lines can be seen in the background.

[Generated by AI]

## 2 section questions

**Question 1**

To maximise net cash flow, a business should:

1 Minimise the number of debtor days and maximise the number of creditor days ✓

2 Increase its capital expenditure

3 Ensure it follows national accounting standards

4 Increase its payroll

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### Explanation

In order to maximise cash flow, it would be beneficial for the business to minimise the number of debtor days (ensure debtors pay more quickly) and maximise the number of creditor days (take longer to pay its own debts). This will ensure more cash is available at any point.

Increasing capital expenditure is not the correct answer as it will most likely lead to a cash outflow. Accounting standards should be followed no matter the cash flow situation. Increasing payroll will likely result in a larger cash outflow and thus lower net cash flow.

**Question 2**

Which statement correctly defines the relationship between profit and cash flow?

1 Higher profit will generally result in a positive cash flow if the business only uses cash and does not extend credit. ✓

2 Higher profit will always result in a positive cash flow.

3 There is no relationship between profit and cash flow.

4 Higher profit will lead to a higher investment and therefore a larger cash outflow.

### Explanation

Higher profit will generally, but not always, result in a positive cash flow. There is a relationship between profit and cash flow. However, it is possible to generate profit without generating an immediate positive cash flow. This happens when a business extends loans to its customers.

Higher profits do not necessarily lead to higher investments, as profits can be used to pay debt, pay dividends and buy back shares, as well as to invest.

3. Finance and accounts / 3.7 Cash flow

# Strategies for dealing with cash flow problems

Liquidity position Liquidity position Strategies for cash flow Strategies for cash flow

Section Student... (0/0) Feedback Print (/study/app/business-hl/sid-351-cid-762729/book/strategies-cash-flow-problems-id-39321/print/) Assign

Cash flow problems stem from the inability to either increase cash inflows or control cash outflows. As you have seen, this is critical to the survival of the business; without cash, the business cannot purchase raw materials or pay its bills for the day-to-day running of the

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business.

### Concept

**Sustainability (economic)**

When businesses aim to be sustainable, it also means that they should aim to manage their cash flow in a sustainable manner. Extreme cash flow volatility may either leave a company with excessive cash flow or leave the company short of cash at different moments. This can threaten the solvency of the business and put the stakeholders who rely on the business at risk.

To have a healthy net cash flow, the business must either increase its cash inflows, reduce its outflows or find additional finance. This section outlines some of the ways this can be achieved.

## Reasons for poor cash flow

When discussing poor cash flow, it is important to refer to both cash inflow (payments received) and cash outflow (payments made). Cash flow problems may result from either and may include:

- **Poor stock management.** The company could hold too much stock, having spent much of its cash purchasing the inventory. This might result in inadequate cash in the business.
- **Poor pricing strategy or low sales.** In a bid to penetrate the market or increase sales, the business may have priced the product too low, resulting in lower revenues and inadequate cash inflows.
- **Expanding too fast.** A business may invest and spend on expansion too quickly. Heavy investments in capital or other resources for expansion can result in large debts that need to be paid by the business. These large debt payments can cause cash flow problems. One example of quick expansion that brought cash flow problems was an Icelandic airline company called WOW Air. WOW Air took on significant debt for expansion. Once the terms of debt repayment became harsher, the company found itself with insufficient cash to continue operating.

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**Figure 1.** Icelandic airline WOW Air expanded too quickly and ran into cash flow problems.

Credit: Jonathan Barton, Getty Images

- **High expenses.** If expenses are high then the business cash outflow is much higher than its inflows, resulting in a negative net cash flow figure.
- **Seasonal demand.** Some products, such as ice cream, thrive in the summer and sales are therefore likely to plummet in winter, resulting in low cash inflows.

### Making connections

In Subtopic 5.3 (/study/app/business-hl/sid-351-cid-762729/book/the-big-picture-id-39339/), higher level students will learn how a just-in-time (JIT) inventory management strategy allows a business to efficiently manage its inventory by ordering raw materials immediately before use. In addition to being an efficient operating principle, this strategy allows the business to manage its cash flow more efficiently, as expenses (cash outflows) are not incurred until close to the production and delivery date.

Non-profit social enterprises may also be vulnerable to cash flow problems, as they often rely on grants and donations for their financing. Grants and donations can come with a degree of instability, and the amounts may not be the same each year.

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# Increasing cash inflow

## Effective debt collection

A company must put an effective debt collection system in place that ensures that monies owed to the company are paid in time. This could mean frequent phone calls or emails reminding debtors to pay on time. Although this could discourage further credit purchases by these customers, resulting in a loss of clients. The company must also conduct thorough credit checks on customers to reduce the incidence of slow payment or bad debts in the future.

## Cash transactions only

A company could require that all goods or services are paid for in cash. While this would reduce credit transactions and the possibility of default, the company may lose some good customers who can only buy on credit.

**Figure 2.** Payments in cash may reduce cash flow problems.

Credit: Kwanchai Khammuean / EyeEm, Getty Images

## Increased promotion

In a bid to increase sales, the company could implement new promotion strategies, such as reducing its prices through promotional pricing or increased advertising. These efforts could increase sales. However the drawback is that advertising could be costly and therefore increase the company’s cash outflows, while reducing prices will both lower the company's profit margin and probably only lead to a marginal increase in the cash inflow.

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## Expanding product portfolio

Expanding the product portfolio diversifies risk and increases the revenue or cash inflow streams from a wider variety of products, which is advantageous in the long term. It must, however, be noted that investing in new products will require cash outflows in the short term, with the hope of more sales and therefore higher cash inflows in the future.

**Figure 3.** A larger product portfolio may help diversify risk.



## Going public

Becoming a publicly held company allows a business to sell a portion of its ownership to outside investors through the sale of shares. This method can be effective in raising funds. However, it is a one-time solution and involves additional compliance and reporting.

## Overdrafts

Taking out a bank overdraft is probably the quickest way to increase cash inflow. An overdraft is a facility that allows a business to draw more money than it has in its bank account. It can be fairly easily arranged with the bank, especially if the business has banked with them for a long time. This is particularly useful to pay wages or buy crucial raw materials. The disadvantage of this, however, is that interest on overdrafts can be higher than the usual rate.

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## Loans

Borrowing can be an effective way to pay for immediate expenses. Long-term loans are generally more advantageous than short-term loans, as they imply a predictable and often smaller monthly outflow. To address cash flow problems, a business can restructure short-term bank loans as long-term loans. Disadvantages of taking out a loan are that interest payments will need to be made, and that the bank could change the terms of the loan at some point in the future.

## Government assistance

In some countries, the government gives grants and subsidies to companies that produce essential goods and services or provide employment. The government can also provide low-interest loans for entrepreneurs needing financial assistance. This boosts the company's cash inflow and may help to alleviate the cash flow problems.

Governments often extend preferential tax treatment to non-profit social enterprises, which should be taken advantage of. An advantage of grants, taxes and subsidies are that they do not need to be repaid. A disadvantage is that government assistance is subject to political change and the business cycle.

## Sale of non-current (fixed) assets

A company could increase cash inflow by selling some of its disused non-current assets, such as old machinery or vehicles. While this would increase the cash inflow and help solve the cash flow crisis, care must be taken not to sell assets that may be difficult to replace, thus inhibiting the company's future operations.

Disadvantages of the strategies above could be that these methods do not guarantee a stable cash inflow and are often subject to seasonal (for tax reasons) fluctuations.
In addition to these strategies, non-profit social enterprises may use the following strategies to increase cash inflow:

- campaign to increase one-time donations
- promote subscription-based donations – where donors are charged a fee every month – to increase the predictability of cash inflows
- research and apply for additional grants
- use crowdfunding – where many contributors help fundraise for a project

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**Figure 4.** Many non-profit social enterprises rely on donations.

Credit: Peter Dazeley, Getty Images

# Reducing cash outflow

## Better stock management

Slow-moving stock items tie up the company's funds; the company must ensure that only goods that are popular with customers are stocked. Manufacturing companies could use a just-in-time (JIT) stock management system (covered in HL Subtopic 5.3 (/study/app/business-hl/sid-351-cid-762729/book/the-big-picture-id-39339/)). Using this system, stocks of inputs are only delivered when they are needed in production, thereby reducing the amount of cash tied up in stock. A disadvantage of this strategy is that the business becomes over reliant on the speed with which suppliers fill the orders.

## Renegotiate credit terms

The business could renegotiate an extension for payment of its trade credit. This would give the company a temporary reprieve and reduce its cash outflows. However, there is a limit to how much this can be done and suppliers may refuse to extend credit to the company in the future. Note that a company should always try to negotiate longer creditor days than debtor days to ensure somehow that cash would be received (from debtors) to pay to creditors.

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## Switch to cheaper suppliers

The company could find alternative cheaper suppliers for its raw materials, thereby reducing the cash outflow on inputs. This, however, has the disadvantage that the new supplier's inputs could be cheap due to lower quality, which would eventually be passed on to the company's final products. This could damage the reputation of the company and reduce future sales.

## Reduce expenses

The company could cut unnecessary expenses, such as staff parties, or use its electricity, phones and fuel more conservatively. However, while this would reduce the cash outflows on these items, it could hinder the effective operations of the company, ultimately resulting in lower productivity and sales.

## Lease rather than purchase equipment

A one-off cash payment for a new machine or equipment usually requires a large cash outflow. Leasing, on the other hand, requires smaller monthly payments while the company has use of the machine. This frees up some of the funds from the outright purchase and reduces the cash outflow. The drawback, however, is that the company does not get to own the machine at the end of the lease period.

### Activity

**Learner profile:** Inquirers
**Approaches to learning:** Research skills (information literacy)

Read this article on liquidity problems (https://www.pwc.com/us/en/industries/health-industries/library/covid-hospital-liquidity-crisis.html) faced by hospitals in the US.

- Identify the source of the liquidity problems experienced by these hospitals.
- Identify three ways hospitals can address cash flow problems in the wake of the COVID-19 pandemic.

### Exam tip

In Paper 2 you may be asked to make a recommendation to a company based on a cash flow forecast and other financial statements.

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The command term **recommend** requires you to 'present an advisable course of action with appropriate supporting evidence/reason in relation to a given situation, problem or issue' (IBDP Business Management guide).

This means that you will need to select and interpret financial information presented to you and use it to support your arguments. You may need to combine this with non-financial information presented in the exam. Finally, you should be familiar with the limitations of each financial statement in order to evaluate your recommendation.

Some limitations of financial statements are listed below:

- **Profit and loss account.** This gives an accurate description of annual profits but may be of limited predictive value.
- **Balance sheet**. This is a snapshot of a given point in time. A company's balance sheet may change rapidly if the company sells assets or takes on debt.
- **Cash flow forecast.** Since it is a forecast, it includes assumptions about the future that may not hold true.

## 3 section questions

**Question 1**

Which of the following would decrease a company's cash outflow?

1 Renegotiating credit terms ✓

2 Lower prices

3 More promotion

4 Better credit collection

**Explanation**

Renegotiating credit terms would lead to a reduction in cash outflows.

Lower prices might seem to reduce sales revenue, but may have the indirect effect of increasing the volume of products purchased and thus increasing sales revenue. This option is therefore incorrect.

More promotion would mean an increase in, for instance, advertising expenses, which constitutes a cash outflow. This option is therefore incorrect.

Better credit collection would mean that debtors will settle their debts and therefore increase the cash inflow of the company. This option is therefore incorrect.

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**Question 2**

Which of the following would increase the cash inflow of a business?

1 Effective credit collection ✓

2 More credit transactions

3 Lower prices

4 Less advertising

## Explanation

Effective credit collection would allow the business to ensure that it has sufficient cash flow, as the money owed to the business would be collected quickly.

More credit transactions is an incorrect answer, as increasing credit transactions would mean that the time of collection would be extended, negatively impacting the cash flow. Lower prices would most likely lower the cash inflow. Less advertising may result in fewer products sold and therefore less inflow.

**Question 3**

Better stock management will:

1 Reduce the cash outflow ✓

2 Increase the number of debtors

3 Increase cash inflow

4 Increase the number of creditors

## Explanation

Better stock management will reduce the case outflow. This is because less money will be used to buy stock that cannot be sold.

The increase in cash inflow as a result of better stock management is not guaranteed as the goods still have to be sold. This option is therefore incorrect.

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The number of debtors will fall if stock is properly managed, since the stock will only be sold to creditworthy customers. This option is therefore incorrect.

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The number of creditors will fall if the stock is properly managed, since the company will need to borrow less to replenish stocks. This option is therefore incorrect.

3. Finance and accounts / 3.7 Cash flow

# Terminology exercise

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**Check that you understand the terminology used in this subtopic by dragging the correct word into each space.**

While a business is mainly concerned about maximising profits, it also needs to look at the payments received and payments made. Together these are referred to as the ____________ .

A cash flow ____________ is a prediction of future inflows and outflows and is a useful planning tool for a business. It involves using the cash flow to calculate an opening and a ____________ balance in order to arrive at a ____________ cash flow.

To remain solvent, a business should try to ensure that ____________ are not greater than ____________ in any given month.

If a business is experiencing a cash flow shortfall, it can use various strategies to increase the cash inflow or to lower the cash outflow. For example, a social enterprise may try to increase cash inflow by ____________ or by applying for a government ____________ . And it may try to reduce cash outflow by cutting ____________ .

cash outflows | grant | closing | crowdfunding | expenses | forecast | net | cash flow | cash inflows

Check

**Interactive 1.** Understanding Cash Flow.

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# Checklist



## What you should know

By the end of this subtopic, you should be able to:

- define the following terms: (AO1)
  - cash flow
  - net cash flow
  - cash inflow
  - cash outflow
- distinguish between profit and cash flow (AO2)
- analyse and prepare cash flow forecasts (AO2, AO4)
- explain the relationship between investment, profit and cash flow (AO2)
- recommend strategies for dealing with cash flow problems (AO3)

3. Finance and accounts / 3.7 Cash flow

# Reflection



## Teacher instructions

The goal of this section is to encourage students to pause at the end of the subtopic and to reflect on their learning. Students can use the questions provided below to guide their reflection. The questions encourage students to look at the bigger picture and to consider how the subtopic's contents might have impacted the way they view the subject.

The following table shows you how each prompt aligns to the DP *Business management guide*:

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| Prompt # | Syllabus alignment |
|---|---|
| 1 | **Concept:** Change |
| 2 | **Concept:** Sustainability |
| 3 | **Learner profile:** Balanced |
| 4 | **Concept:** Creativity |

Students can submit their reflections to you by clicking on ‘Submit’. You will then see their answers in the ‘Insights’ part of the Kognity platform.

## Reflection

In this subtopic you learned about cash flows, cash flow forecasts and cash flow issues.

Take a moment to reflect on your learning so far. You can use the following questions to guide your reflection. If you click ‘Submit’, your answers will be shared with your teacher.

1. How can you evaluate the performance of a firm that is going through a lot of cash flow volatility (ups and downs)?
2. The definition of the concept of economic sustainability refers to profit. To what extent do you think it would be helpful to include cash flow in the definition as well?
3. How often do you encounter businesses that ask you to pay in cash? Do you think it is good for their cash flow management? Do you think it is a good business strategy?
4. Imagine a business undergoes a cyber-attack where its accounts get frozen. What creative strategies could the business pursue to manage cash flows?

⚠ Once you submit your response, you won't be able to edit it.

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## Rate subtopic 3.7 Cash flow

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