



Cash flow Forecasting

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The purpose of cash

- **Cash is the 'lifeblood' of a business** as without it a business will likely become **insolvent** relatively quickly
 - It is the most **liquid** form of **current asset** in the form of notes and coins on a businesses premises as well as money deposited in the bank
- Cash performs a variety of functions in a business
 - It is used to **cover regular operating expenses** such as workers' pay, supplier invoices and overheads such as rent and utility bills
 - It can also be used to **meet unexpected expenses** such as the replacement of broken equipment
- A new business may have to **pay cash on purchase for all of its supplies** until its suppliers trust them enough to provide **trade credit**
 - A supplier may then give the business 30 or 60 days to pay what they owe
 - Stock is received from a supplier
 - The business **sells its products** and receives cash in the form of **sales revenue**
 - At the end of the credit period, the supplier is paid

Comparing cash and profit

- **Profit** and **cash** are different **financial terminologies**
 - Profit is calculated at a specific point in time
 - While a business may ultimately make a profit, they **may lack cash at times** because some customers may not actually have paid them yet
- **Profit** is the **difference between revenue generated and total business costs** during a specific period of time
 - Profit can be an important indicator of a company's **financial health** and long-term **sustainability** as it helps to assess the effectiveness of a company's operations
- **Cash** is measured by taking into account the full range of **money flowing in and out of a business**
 - This includes revenue from sales, operating expenses, investments, loans, and any other cash-related transactions
- Cash-poor businesses will struggle to pay suppliers, meet rent payments or struggle to pay workers
 - A profitable business is likely to **fail** if it does not have **sufficient cash**

- E.g. Lifestyle retailer Joules announced plans to **liquidate** in December 2022 as a result of cash-flow difficulties, despite making a profit of £2.6 million during the previous year

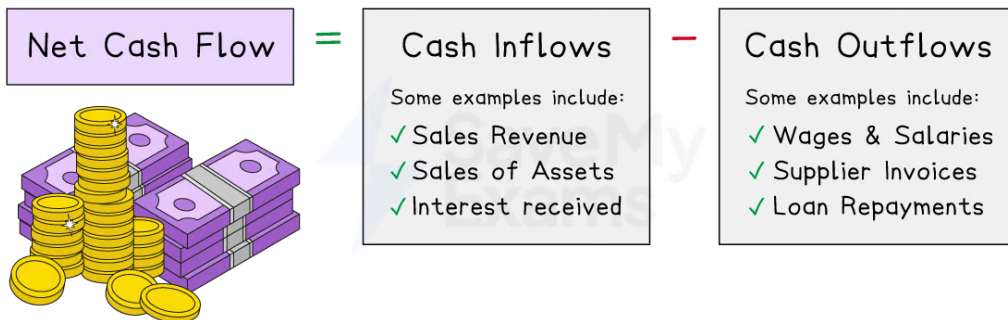


Your notes

Cash inflows and outflows

- **Cash inflows** are sums of **money introduced** to the business
 - Examples include money earned from sales, monies received such as loans or owners' capital and **interest** from investments

Calculation of net cash flow



Net cash flow is calculated by subtracting cash outflows from cash inflows during a given period of time

- **Cash outflows** are sums of **money leaving** the business
 - Examples include payments to suppliers, wages and salaries, loan repayments and advertising expenses
- The **difference** between cash inflows and cash outflows during a period of time is known as the **net cash flow**



Examiner Tips and Tricks

Remember, cash is not the same as revenue. Revenue is one form of cash inflow that is earned at the point of sale but may not flow into a business at that time. If a business sells products on credit, it earns revenue on the day it is sold but the customer will not pay for, perhaps, 30 days. When they do pay, the business receives cash.



Introduction to cash flow forecasts

- A **cash flow forecast** is a **prediction** of the anticipated **cash inflows and cash outflows**, usually for a **six to twelve month** period
- A **business plan** should include a **cash flow forecast**
 - Business **owners** can identify its financial needs
 - Lenders such as **banks** can determine whether loans are capable of being repaid

The uses and limitations of cash flow forecasts

Uses	Limitations
▪ Cash flow forecasts can support an application for a loan and are an integral part of business decision making ▪ They can help identify where the business may experience cash shortfalls or cash surpluses so that plans can be made to manage these periods (e.g. arranging an overdraft) ▪ Cash flow forecasts aid planning and help a business avoid costly mistakes	▪ Forecasts are usually based on estimates and in reality inflows and outflows may differ significantly from the estimates ▪ Cash flow forecasts require appropriate skills, insight, research and time to prepare and update adequately ▪ External factors that can impact inflows and outflows may not be reflected in the cash flow forecast

Constructing a cash flow forecast

- A business must first **gather information** about **all cash inflows and cash outflows** it expects to encounter over the period
- The following steps should then be taken to **construct the cash flow forecast**

Step 1 – Calculate total cash inflows

	March	April	May
Cash Inflows			
Cash from sales	€4,500	€4,800	€5,300
Capital introduced	€6,000	€0	€0
Total cash inflows	€10,500	€4,800	€5,300

- In this instance, the business expects to receive cash inflows from sales in March, April and May
- Owners' capital of €6,000 will be introduced in March
- The total for each month is calculated by adding cash from sales to capital introduced



Your notes

Step 2 – Calculate total cash outflows

	March	April	May
Cash outflows			
Rent	€1,400	€1,400	€1,400
Stock purchases	€6,800	€600	€800
Wages	€2,100	€2,100	€2,100
Utilities	€460	€460	€480
Total cash outflows	€10,760	€4,560	€4,780

- In this instance, the business expects to pay rent of €1,400 in March, April and May
- It will purchase a significant amount of stock in March with smaller amounts in April and May
- Wages are expected to be €2,100 in each month
- Utilities of €460 will be paid in March and April, increasing to €480 in May
- Total cash outflows each month is calculated by adding these together

Step 3 – Calculate net cash flows

- The **net cash flow** is calculated by subtracting total cash outflows from total cash inflows

	March	April	May
Net cash flow	-€260	€240	€520
Opening balance	€0	-€260	-€20
Closing balance	-€260	-€20	€500

- In March the net cash flow is $€10,500 - €10,760 = €(260)$
 - Net cash flow is negative as cash outflows are greater than cash inflows
- In April the net cash flow is $€4,800 - €4,560 = €240$
- In May the net cash flow is $€5,300 - €4,780 = €520$

- In both months, net cash flow is positive as cash inflows are greater than cash outflows



Your notes

Step 4 – Calculate Opening and Closing Balances

- The **opening balance** is the previous month's closing balance carried forward
- The **closing balance** is calculated by adding the net cash flow to the opening balance

	March	April	May
Net cash flow	-€260	€240	€520
Opening balance	€0	-€260	-€20
Closing balance	-€260	-€20	€500

- In March the opening balance of €0 is added to the net cash flow of €(260) to leave a closing balance of €(260)
- In April the closing balance from March is carried forward to become its opening balance of €(260)
- This opening balance is added to April's net cash flow of €240 to leave a closing balance of €(20)
- In May the closing balance from April is carried forward to become its opening balance of €(20)
- This opening balance is added to May's net cash flow of €520 to leave a closing balance of €500

The complete cash flow forecast

	March	April	May
Cash Inflows			
Cash from sales	€4,500	€4,800	€5,300
Capital introduced	€6,000	€0	€0
Total cash inflows	€10,500	€4,800	€5,300
Cash outflows			
Rent	€1,400	€1,400	€1,400
Stock purchases	€6,800	€600	€800
Wages	€2,100	€2,100	€2,100
Utilities	€460	€460	€480
Total cash outflows	€10,760	€4,560	€4,780
Net cash flow	-€260	€240	€520
Opening balance	€0	-€260	-€20
Closing balance	-€260	-€20	€500

Analysis of the cash flow forecast example



Your notes

- Overall, this cash flow forecast **supports an application for the business to borrow £6,000** in January to cover the initial low inflows, significant outflows and **negative net cash flow**
- Healthy sales mean that from April, **inflows are greater than outflows** and the business **has a positive net cash flow**



Worked Example

Here is a simple three-month cash flow forecast for a small seaside café

	March	April	May
Cash Inflows			
Sales	46,000	54,000	61,000
Cash Outflows			
Inventory	13,000	13,000	13,000
Wages	28,000	28,000	
Miscellaneous	3,500	4,000	4,000
Total Cash Outflows		45,000	48,000
Net cash flow	1,500	9,000	
Opening balance	4,000	5,500	14,500
Closing balance		14,500	30,500

Complete the cash flow forecast to show

- Total cash outflows for March
- Closing balance for March
- Wages for May
- Net cash flow for May [4 marks]

Step 1: Add all of March's cash outflows to calculate the total

$$\begin{aligned}\text{Total Outflows for March} &= 13,000 + 28,000 + 3,500 \\ &= 44,500\end{aligned}\quad \text{[1 mark]}$$

Step 2: Add the opening balance to the net cash flow to calculate March's closing balance

$$\text{Opening Balance} + \text{Net Cash Flow} = \text{Closing Balance}$$

$$= 4,000 + 1,500$$

[1 mark]

$$= 5,500$$

Step 3: Subtract inventory and miscellaneous outflows from total cash outflows to calculate wages

$$\text{Wages for May} = 48,000 - 13,000 - 4,000$$

[1 mark]

$$= 31,000$$

Step 4: Subtract total cash outflows from total cash inflows to calculate net cash flow

$$\text{Total Cash Inflows} - \text{Total Cash Outflows} = \text{Net Cash Flow}$$

$$= 61,000 - 48,000$$

[1 mark]

$$= 13,000$$



Examiner Tips and Tricks

When calculating opening and closing balances, work through each month in turn.

Always double-check your calculations in cash flow forecasts as one mistake will have a knock-on effect elsewhere and, in some cases, lead you to make inaccurate judgements.



Your notes



Identifying cash flow problems

- Drawing up a cash flow forecast helps a business to identify cash flow problems
 - Identify periods of **cash shortfalls**
 - Recognise where there is a significant **excess of cash**

Example of a start-up six-month cash flow forecast (£s)

	Jan	Feb	Mar	Apr	May	Jun
Inflows						
Cash received from sales	2,600	2,800	3,600	3,900	4,600	5,000
Capital introduced	4,000	0	0	0	0	0
Total inflows	6,600	2,800	3,600	3,900	4,600	5,000
Outflows						
Inventory	1,500	850	950	1,100	1,200	1,200
Wages	2,000	2,000	2,000	2,000	2,000	2,000
Utilities	840	840	840	882	882	882
Loan repayments	0	284	284	284	284	284
Miscellaneous	230	240	250	220	260	240
Total outflows	4,570	4,214	4,324	4,486	4,626	4,606
Net cash flow	2,030	-1,414	-724	-586	-26	394
Opening balance	500	2,530	1,116	392	-194	-220
Closing balance	2,530	1,116	392	-194	-220	174

- Overall, this cash flow forecast **supports an application for the business to borrow £4,000** in January to cover the initial low inflows, significant outflows and **negative net cash flow**
- **During April and May, the closing balance is negative**
- As sales increase from June, **inflows are greater than outflows**, and the business **has a positive cash flow**

January

- The cash flow forecast assumes that the bank approves a £4,000 loan in January (capital introduced)
- The opening balance of £500 has been introduced by the owner
- The business is expected to achieve sales of £2,600
- Total inflows are therefore expected to be £6,600 (£2,600 + £4,000)
- Total outflows are expected to be £4,570
- The **Net Cash Flow** is expected to be £2,030 (£6,600 - £4,570)
- January's closing balance is expected to be £2,530 (£2,030 + £500)

February

- The closing balance from January becomes the opening balance for February
- Sales of £2,800 are expected to be the total inflows
- Total outflows are expected to be £4,214
- The Net Cash Flow is expected to be -£1,414 (£2,800 - £4,214)
- The closing balance is expected to be £1,116 (-£1,414 + £2,530)

June

- The closing balance from May becomes the opening balance for June
- Sales of £5,000 are the total inflows
- Total outflows are expected to be £4,606
- The Net Cash Flow turns positive and is expected to be £394 (£5,000 - £4,606)
- The closing balance is expected to be £174 (£-220 + £394)

Strategies to improve cash flow

- The cash flow forecast example above identifies a **cash flow problem** in April and May where the **closing balance is negative**
- It has a range of ways to solve this issue to prevent **insolvency**
 - The most suitable method may be to arrange a flexible, short-term **overdraft** facility with its bank

Ways to solve cash flow problems

Method	Explanation
Reduce the credit period offered to customers	▪ Collecting money owed from customers more quickly will increase the level of current assets in the business ▪ However, customers may move to competing businesses that offer better credit terms
Ask suppliers for an extended repayment period e.g an extension from 60 to 90 days	▪ Current liabilities will not be reduced ▪ The business can use cash it would have paid to suppliers for other purposes ▪ Suppliers may be unwilling to extend credit terms



Your notes



Your notes

Make use of overdraft facilities or short-term loans	▪ Current liabilities will increase ▪ The business can spend more money than it has in its bank account ▪ Banks may be reluctant to lend to businesses with cash-flow problems
Sell off excess stock	▪ Less liquid current assets will be reduced and converted into more liquid forms of current asset (e.g. cash) ▪ Storage and security costs may also be reduced ▪ Stock may need to be sold at a low price to attract sales
Sell assets and lease fixed assets instead (e.g. sale & leaseback)	▪ Both current assets and current liabilities will increase ▪ The business will continue to have the use of assets but must make regular payments to the leasing company
Introduce new capital and reduce drawings from the business	▪ Current assets will be increased ▪ New capital may be introduced by the owner or from additional investors ▪ This may result in the dilution of control of the business

- A business can also have **too much cash**
 - If it **holds large amounts of cash**, it may **miss out** on the benefits of investing it in fixed assets or savings
 - This may represent a significant **opportunity cost** especially when interest rates are high



Examiner Tips and Tricks

You will not have to construct a cash flow forecast in the exam, though you may have to enter missing figures into a forecast. Make sure you revise calculations for net cash flow, opening balance and closing balance as the formulas are not provided for you.