

# Cash Flow Statements

## Introduction

The profit and loss account and the balance sheet are two financial statements that have been the focus of study up to now. A third financial statement called the **cash flow statement** is used along with the other two statements when making an assessment of past cash flows. This statement helps us to forecast future cash flows and it is a primary financial statement.

Cash flow statements describe and examine the inflows and outflows of cash that leads to the change in the cash figure from one balance sheet to the next. They analyse these inflows and outflows in order to explain the difference between cash balances at the beginning and at the end of the accounting period.

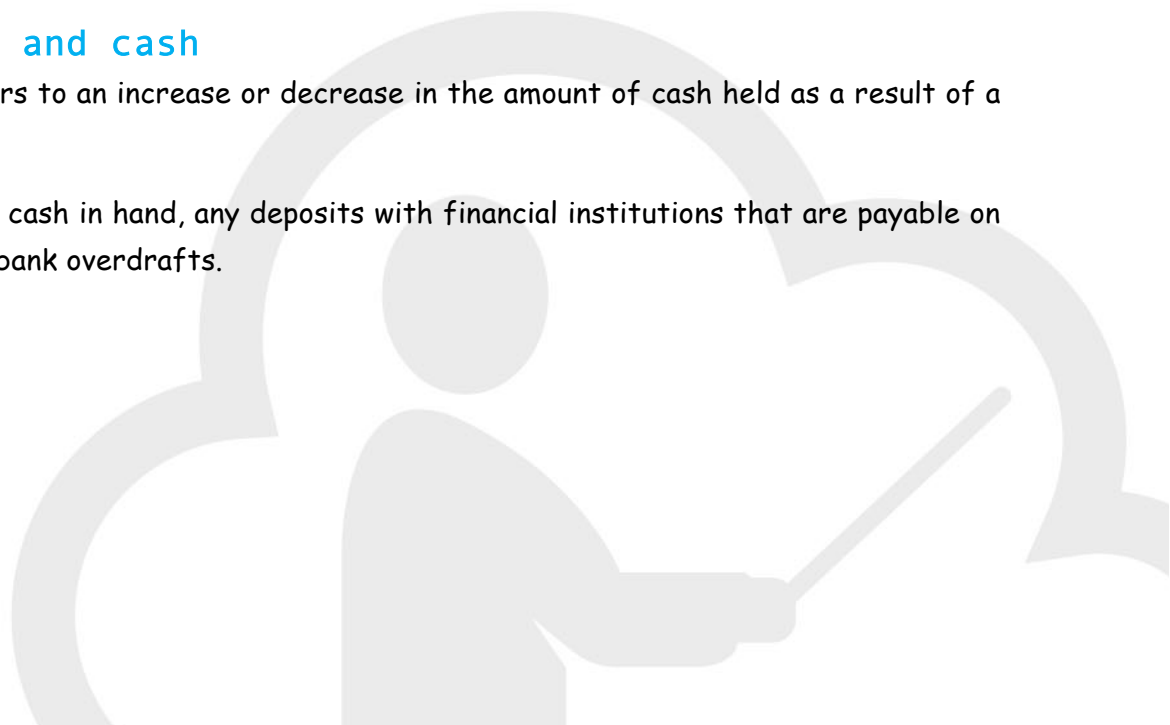
### The Purpose of Cash Flow Statements:

- To show cash inflows and outflows during the year
- To facilitate an assessment of the liquidity of the firm
- To show that profit does not always equal cash
- To help management in the financial planning of the business
- To predict future cash flows
- To assist if a loan is needed
- To comply with legal requirements

## Cash flow and cash

Cash flow refers to an increase or decrease in the amount of cash held as a result of a transaction.

Cash refers to cash in hand, any deposits with financial institutions that are payable on demand minus bank overdrafts.



Cash Inflows	Cash Outflows
Profits	Losses
Decrease/sale of stock	Increase/purchase of stock
Reduction in debtors	Increase in debtors
Increase in creditors	Decrease in creditors
Interest received	Interest paid
Dividends/investment income received	Dividends paid
Sale of fixed assets	Purchase of fixed assets
Capital introduced/issue of shares	Drawings/loans to directors
Loans received	Repayment of loans
Tax refund	Taxation paid

What do these inflows and outflows mean?

1. Profits bring cash inflow into a business while losses cause cash to flow out
2. Cash flows into a business as a result of decrease/sale of stock, but flows out as a result of increase/purchase of stock
3. A reduction in debtors brings extra cash into a business while an increase in debtors drains cash from it due to increase in credit
4. An increase in creditors can be used to finance activities and therefore is an inflow, but a reduction in creditors causes an outflow of cash
5. Interest received brings in cash while interest paid brings about an outflow
6. Dividends received from outside the business brings in cash, while dividends paid causes cash to flow out
7. Cash comes in from the sale of fixed assets, but cash flows out through their purchase
8. Capital introduced or issue of shares brings cash into a business but drawings or loans to directors cause cash to flow out
9. Loans received bring cash into a business but the repayment of loans causes cash to flow out
10. Tax refunds bring cash into a business but taxation paid causes cash to flow out

## Non-cash items

Non-cash items in the profit and loss account affect the net profit, but they do not change the cash situation. Non-cash items refer to adjustments such as:

- Depreciation
- Profit or loss on sale of fixed assets
- Provision for bad debts

These three adjustments will have an effect on the net profit, but they do not bring about an inflow or outflow of cash.

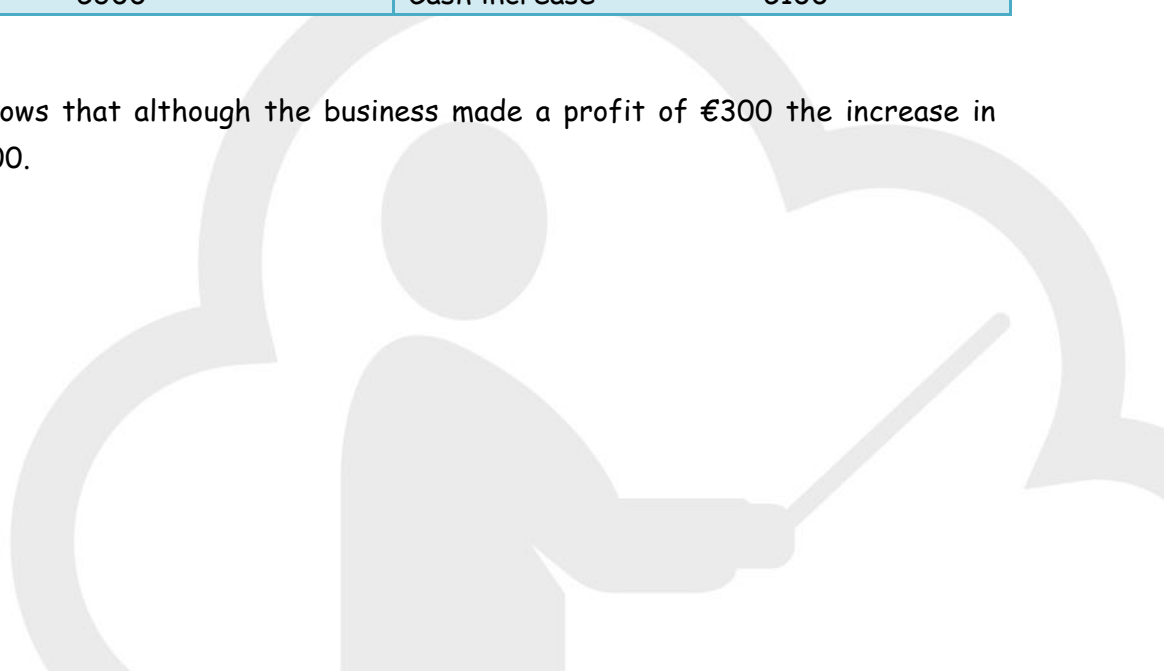
There is a difference between bad debts written off and a provision for bad debts. Bad debts written off bring about a reduction in debtors and so we have a cash outflow. A provision for bad debts do not reduce the amount owed by debtors and so does not bring about an outflow of cash.

## Difference between profit and cash

It is important that we make a distinction between profit and cash. If we take an example of a business that purchases goods for €600 cash and sells all of these goods for €900 cash, assuming no expenses, then the profit is exactly the same as the cash. If however €200 of the sales of the business were on credit, then it would receive cash €700 and the cash would not be equal to the profit in this case.

Profit Statement		Cash Statement	
Sales	€900	Cash received	€700
Less purchases	€600	Less cash paid	€600
Profit	€300	Cash increase	€100

This clearly shows that although the business made a profit of €300 the increase in cash is only €100.



### Transactions that affect cash flow but do not affect profit:

- Purchase or sale of fixed assets increases or decreases cash, but does not change profit
- Capital introduction or withdrawn increases or decreases cash but does not change profit
- Non-cash losses, including provisions, decrease profit but do not change cash
- Non-cash gains, including provision reductions, increase profit but do not change cash

## Importance of Cash Flow Statements

Cash flow information helps to assess liquidity, viability and financial flexibility. Cash flow analysis should ideally be used along with ratio analysis to get a clear picture of the financial position of a company. The financial viability and survival prospects of a business depend on its ability to produce net cash inflows. If a business is unable to create sufficient cash it will eventually fail.

Solvency is related to cash, a solvent company is one with adequate cash to pay its debts. An insolvent company is one that has inadequate cash.

Cash flow information provided by the cash flow statement will be relevant to the investment decisions of shareholders and lenders. The information from cash flow statements can control managers from over borrowing and preventing the collapse of a business.

Cash flow statements also help the users of financial statements to understand where the company has generated its cash and how it has been applied.

They also help to answer a number of questions a business may have such as:

1. What brought about changes in the working capital during the year
2. What proportion of cash was generated internally?
3. Why did the bank balance show an overdraft when the company made a profit?
4. How was the purchase of fixed assets financed?
5. How did the company pay a dividend, even though it made a loss?

## What is Financial Reporting Standard No.1 (Revised) FRS 1

FRS 1 (Revised) was issued in October 1996. It requires large companies to prepare a cash flow statement for each accounting period. It also requires that individual cash flows should be entered under certain standard headings according to the activity that give rise to them.

The standard headings and sequence required in cash flow statements are:

- Operating activities
- Returns on investments and servicing of finance
- Taxation
- Capital expenditure and financial investment
- Equity dividends paid
- Management of liquid resources
- Financing

FRS 1 also requires large companies to prepare a reconciliation of operating profit to net cash inflow from operating activities. The purpose of this is to find the net cash generated through operating activities. Cash flows from operating activities are calculated by adjusting the operating profit figure for movements in stock, debtors and creditors as well as for non-cash items that do not involve the movement of cash.

Reconciliation of Operating Profit to Net Cash Inflow from Operating Activities	
Operating profit	X
Depreciation for year	X (non-cash item)
Profit on sale of fixed asset	(X) (non-cash item)
Goodwill written off	X (non-cash item)
Increase in provision for bad debts	X (non-cash item)
Decrease in stock	X (inflow)
Increase in debtors	(X) (outflow)
Increase in prepayments	(X) (outflow)
Decrease in creditors	(X) (outflow)
Increase in accruals	X (inflow)
Net cash inflow from operating activities	<u>X</u>

**Notes:**

- If an asset increases in value, it is an outflow of money i.e. a minus figure
- If an asset decreases in value, it is an inflow of money i.e. a plus figure
- If a liability increases in value, it is an inflow of money i.e. a plus figure
- If a liability decreases in value, it is an outflow of money, i.e. a minus figure
  - *Non-cash items*
- **Depreciation** has already been subtracted from profit in the profit and loss account, so to get the correct net cash figure it must be added back on to the operating profit
- **Profit on sale of fixed asset** has already been added to profit in the profit and loss account, so to get the correct net cash figure it must be subtracted from the operating profit
- **Increase in bad provision** has already been subtracted from profit in the profit and loss account, so to get the correct net cash figure it must be added back on to the operating profit
- **Goodwill** written off has already been subtracted from profit in the profit and loss account, so to get the correct net cash figure it must be added back on to the operating profit



<b>Cash Flow Statement of XYZ for the year ended 31/12/16</b>		
<b>Operating Activities</b>		
Net cash inflow from operating activities	X	
<b>Return on Investment and Servicing of Finance</b>		
Interest paid	(X)	
Interest received	X	
Preference dividends paid	(X)	
<b>Taxation</b>		
Tax paid	(X)	
<b>Capital Expenditure and Financial Investment</b>		
Payment to purchase fixed assets	(X)	
Payments to purchase intangible assets	(X)	
Cash received from sale of fixed assets	X	
Sale of investments		
<b>Equity Dividends paid</b>		
Ordinary dividends paid	(X)	
Net cash inflow before liquid resources and financing	X	
<b>Management of Liquid Resources</b>		
Purchase of government securities	(X)	
<b>Financing</b>		
Receipt from issue of share capital	X	
Receipts from share premium	X	
Repayment of debentures	(X)	
<b>Increase in cash</b>	<b>X</b>	
<b>Proof of Increase in Cash:</b>		
(Cash + Bank at 1/1/16) - (Cash + Bank at 31/12/16)		

**Remember:**

- Movement of net cash to net debt reconciles or matches the increase/decrease in cash to the increase/decrease of net debt
- If liquid resources have been added in the cash flow, then subtract the,
- If debentures have been subtracted in the cash flow, then add them
- Net funds = (cash + bank + government securities) - (debentures + overdraft + loans)
- Net debt is when the debentures etc. are bigger than the cash etc.

Let's take a look at an example:

**Q16.1**

The following information has been extracted from the books of Lawless Ltd:

<b>Profit and Loss (extract) for the year ended 31/12/2012</b>				
Operating profit	€	150,000.00		
Interest paid	-€	6,000.00		
	€	144,000.00		
Taxation	-€	25,000.00		
	€	119,000.00		
Dividends paid	-€	50,000.00		
Retained profit for the year	€	69,000.00		
Profit and loss balance 1/1/2012	€	30,000.00		
Profit and loss balance 31/12/2012	€	99,000.00		
<b>Balance Sheet as at</b>				
	<b>31/12/2012</b>		<b>31/12/2011</b>	
<b>Fixed Assets</b>				
Land and Buildings	€	800,000.00	€	720,000.00
Less Depreciation provision	-€	60,000.00	€	740,000.00
			-€	50,000.00
				€ 670,000.00
<b>Current Assets</b>				
Stock	€	40,000.00	€	38,000.00
Debtors	€	55,000.00	€	60,000.00
Cash	€	90,000.00	€	86,000.00
	€	185,000.00	€	184,000.00
<b>Less Creditors: amounts falling due within one year</b>				
Creditors	€	85,000.00	€	65,000.00
Taxation	€	25,000.00	€	19,000.00
	€	110,000.00	€	84,000.00
<b>Net Current Assets</b>				
Total net assets		€ 75,000.00		€ 100,000.00
		€ 815,000.00		€ 770,000.00
<b>Financed By</b>				
<b>Creditors: Amounts falling due after one year</b>				
10% debentures	€	60,000.00	€	100,000.00
<b>Capital and Reserves</b>				
Ordinary share capital issued	€	656,000.00	€	640,000.00
Profit and loss account	€	99,000.00	€	30,000.00
	€	815,000.00	€	770,000.00

You are asked to:

- Reconcile the operating profit to net cash inflow from operating activities
- Prepare the cash flow statement of Lawless Ltd for the year ended 31/12/2012 using the following headings:



- i. Operating activities
  - ii. Returns on investments and servicing of finance
  - iii. Taxation
  - iv. Capital expenditure and financial investment
  - v. Equity dividends paid
  - vi. Financing
- c) Reconcile the net cash flow to movement in net debt

(a) Reconciliation of Operating Profit to Net Cash Flow from OP.A		
Operating profit	€	150,000.00
Depreciation (60,000 - 50,000)	€	10,000.00
Increase in stock	-€	2,000.00
Decrease in debtors	€	5,000.00
Increase in creditors	€	20,000.00
<b>Net cash inflow from operating activities</b>	<b>€</b>	<b>183,000.00</b>
(b) Cash Flow Statement of Lawless Ltd for the year ended 31/12/12		
<b>Operating Activities</b>		
Net cash inflow from O.A.	€	183,000.00
<b>Returns on Investments and Servicing of Finance</b>		
Interest paid	-€	6,000.00
<b>Taxation</b>		
Tax paid	-€	19,000.00
<b>Capital Expenditure and Financial Investment</b>		
Purchase of fixed assets	-€	80,000.00
<b>Equity Dividends paid</b>		
Ordinary dividends paid	-€	50,000.00
<b>Net cash inflow before financing</b>	<b>€</b>	<b>28,000.00</b>
<b>Financing</b>		
Decrease in debentures	-€	40,000.00
Receipt from sale of share capital	€	16,000.00
<b>Increase in cash</b>	<b>€</b>	<b>4,000.00</b>
Proof of increase in cash		
Cash 31/12/2012 = 90,000 = Increase of 4,000		
Cash 31/12/2011 = 86,000		

c. Reconciliation of Net Cash Flow to the Movement in Net Debt		
Increase in cash during the period	€	4,000.00
Cash used to repay debentures	€	40,000.00
<b>Change in net debt</b>	€	44,000.00
Net debt, 31/12/2011 (cash - debentures)	-€	14,000.00
Net debt, 31/12/2012 (cash - debentures)	€	30,000.00

## Higher Level

We produce an **Abridged** (summarised) Profit and Loss Account to find Operating Profit. Basically we start with an Appropriation Account and work backwards to find the Profit made as follows:

Operating Profit  
 less Interest  
 = Net Profit  
 less Tax  
 = Shareholders Profit  
 less Dividends  
 = Retained Profit  
 plus Opening Reserves/Profit and Loss Balance  
 = Closing Reserves/Profit and Loss Balance

Starting with the Operating Profit, we try to find the Net Cash Inflow from Operations. We exclude non-cash items to do this as follows:

Operating Profit

**Add** Non-Cash Expenses eg Depreciation, loss on disposal, increase in Bad Debt Provision, etc

**Less** Non Cash Incomes eg Profit on Disposal, reduction in Bad Debt Provision

**Add** Working Capital Reductions eg increased stocks, increased debtors, and reduced creditors

**Less** Working Capital Increases ie opposite of above as this means we would have less cash because more is tied up in stock or owed by Debtors, etc

= Net Cash Inflow/Outflow from Operations

6. Cash Flow Statement

The following information has been extracted from the books of Carter Ltd:

Profit and loss (extract) for year ended 31/12/2015	€
Operating profit	140,000
Interest paid	(12,000)
	128,000
Taxation	(28,000)
	100,000
Dividends paid	(42,000)
Retained profit	58,000
Profit and loss balance 01/01/2015	43,000
Profit and loss balance 31/12/2015	101,000

Balance sheets as at	31/12/2015		31/12/2014	
	€	€	€	€
<b>Fixed assets</b>				
Land and buildings	850,000		700,000	
Less depreciation provision	(100,000)	750,000	(88,000)	612,000
<b>Current assets</b>				
Stock	70,000		66,000	
Debtors	38,000		46,000	
Cash	6,000		7,000	
	114,000		119,000	
<b>Less creditors: amounts falling due within 1 year</b>				
Creditors	45,000		40,000	
Taxation	28,000		38,000	
	(73,000)		(78,000)	
<b>Net current assets</b>		41,000		41,000
<b>Total net assets</b>		791,000		653,000
<b>Financed by</b>				
<b>Creditors: amounts falling due after 1 year</b>				
6% Debentures		180,000		150,000
<b>Capital and reserves</b>				
Ordinary share capital issued		500,000		460,000
Share premium		10,000		
Profit and loss account		101,000		43,000
		791,000		653,000

Required:

- (a) Reconcile the operating profit to net cash inflow/outflow from operating activities. (30)
- (b) Prepare the cash flow statement of Carter Ltd for the year ended 31/12/2015 using the following headings:
1. Operating activities
  2. Returns on investments and servicing of finance
  3. Taxation
  4. Capital expenditure and financial investment
  5. Equity dividends paid
  6. Financing. (65)
- (c) Reconcile the net cash flow to movement in net debt. (5)

(100 marks)

6. Cash Flow Statement

(a) Reconciliation of Operating Profit to Net Cash Inflow from Operating Activities

[30]

	€	
Operating profit	140,000	[3]
Add depreciation	12,000	[6]
Increase in stock	(4,000)	[6]
Decrease in debtors	8,000	[6]
Increase in creditors	<u>5,000</u>	[6]
Net cash inflow from operating activities	<u>161,000</u>	[3]

(b) Cash Flow Statement of Connolly Ltd for the year ended 31/12/2015

[65]

	€	
<b>Operating Activities [2]</b>		
Net cash inflow from operating activities	161,000	[4]
<b>Return on Investment and Servicing of Finance [2]</b>		
Interest paid	(12,000)	[8]
<b>Taxation [2]</b>		
Tax paid	(38,000)	[6]
<b>Capital Expenditure and Financial Investment [2]</b>		
Purchase of land/buildings	(150,000)	[6]
<b>Equity Dividend paid [2]</b>		
Dividends paid	(42,000)	[8]
Net cash inflow before liquid resources and financing	(81,000)	
<b>Financing</b>		
Issue of ordinary share capital	40,000	[6]
Share premium	<u>10,000</u>	[6]
	50,000	
Debentures	<u>30,000</u>	[6]
	<u>80,000</u>	
<b>Decrease in cash</b>	<b><u>(1,000)</u></b>	<b>[5]</b>

(c) Reconciliation of Net Cash Flow to movement in Net Debt

[5]

Decrease in cash in the period	(1,000)	[1]
Debentures	<u>(30,000)</u>	[1]
Change in net debt	(31,000)	[1]
Net debt 01/01/2015	<u>(143,000)</u>	[1]
Net debt 31/12/2015	<u>(174,000)</u>	[1]



**Higher Level**

**7. Cash Flow Statement**

The following are the Balance Sheets of Danton plc as at 31/12/2010 and 31/12/2011:

Balance Sheets as at	31/12/2011		31/12/2010	
	€	€	€	€
<b>Fixed Assets</b>				
Land & buildings	850,000		780,000	
Less accumulated depreciation	<u>(120,000)</u>	730,000	<u>(110,000)</u>	670,000
Machinery	349,000		230,000	
Less accumulated depreciation	<u>(225,000)</u>	<u>124,000</u>	<u>(165,000)</u>	<u>65,000</u>
		854,000		735,000
<b>Financial Assets</b>				
Quoted investments		60,000		60,000
<b>Current Assets</b>				
Stocks	111,000		135,000	
Debtors	380,000		180,000	
Government securities	60,000			
Bank	75,000		22,000	
Investment income due	<u>3,000</u>		<u>2,000</u>	
	<u>629,000</u>		<u>339,000</u>	
<b>Less Creditors: amounts falling due within 1 year</b>				
Trade creditors	107,000		93,000	
Corporation tax	110,000		45,000	
Interest due	<u>10,000</u>		<u>15,000</u>	
	<u>227,000</u>	<u>402,000</u>	<u>153,000</u>	<u>186,000</u>
		<u>1,316,000</u>		<u>981,000</u>
<b>Financed by</b>				
<b>Creditors: amounts falling due after more than one year</b>				
10% Debentures (€50,000 redeemed on 31/12/2011)		200,000		250,000
<b>Capital and Reserves</b>				
Ordinary shares @ €1 each	800,000		600,000	
Share premium	120,000		100,000	
Profit and Loss account	<u>196,000</u>	<u>1,116,000</u>	<u>31,000</u>	<u>731,000</u>
		<u>1,316,000</u>		<u>981,000</u>

The following information is also available for the year 2011:

- Buildings, which cost €90,000 were disposed of at a profit of €13,000.
- There were no disposals of machinery during the year.
- The quoted investments yield a fixed return of 5% per annum.
- The total dividend for the year was 5c per share.
- Depreciation charged for the year in arriving at operating profit included €12,000 on buildings.
- Corporation tax due at 31/12/2010 was paid in full.

**You are required to:**

- Prepare an Abridged Profit & Loss account to ascertain the operating profit for the year ending 31/12/2011.
  - Prepare the Cash Flow statement for Danton plc for the year ending 31/12/2011, including Reconciliation Statements. (88)
- Explain why earning profit does not always result in a corresponding increase in cash balances. Use figures from this question to support your answer.
  - Outline **two** responsibilities of the Directors of a plc. (12)

**(100 marks)**

(a)

(i) **Abridged Profit and Loss account for the year ending 31/12/2011**

	€	
Operating profit	337,000	
Investment Income	3,000	[3]
Less debenture interest	<u>(25,000)</u>	[3]
Profit before tax	315,000	
Taxation	<u>(110,000)</u>	[3]
Profit after tax	205,000	
Dividends	<u>(40,000)</u>	[3]
Retained profit	165,000	
Profit and loss balance 01/01/2011	<u>31,000</u>	[3]
Profit and loss balance 31/12/2011	<u>196,000</u>	[3]

(ii) **Reconciliation of operating profit to net cash flow from operating activities**

	€	
Operating profit	337,000	[2]
Depreciation charge for the year W1	72,000	[4]
Profit on sale of buildings	(13,000)	[2]
Decrease in stock	24,000	[3]
Increase in debtors	(200,000)	[3]
Increase in creditors	<u>14,000</u>	[3]
Net cash inflow from operating activities	<u>234,000</u>	

**Cash Flow statement of Danton plc for the year ended 31/12/2011**

	€	€
<b>Operating Activities</b>		
Net cash inflow from operating activities		234,000 [2]
<b>Return on Investment and Servicing of Finance [1]</b>		
Investment income received	2,000 [3]	
Interest on debentures paid	<u>(30,000) [3]</u>	(28,000)
<b>Taxation [1]</b>		
Tax paid W3		(45,000) [3]
<b>Capital expenditure and financial investment [1]</b>		
Receipts from sale of buildings W4	101,000 [5]	
Payments to acquire buildings W5	(160,000) [5]	
Payments to acquire machinery W6	<u>(119,000) [4]</u>	(178,000)
<b>Equity dividends paid [1]</b>		
Dividends paid		(40,000) [3]
Net cash <b>outflow</b> before liquid resources and financing		(57,000)
<b>Management of liquid resources [1]</b>		
Purchase of government securities		(60,000) [3]
<b>Financing [1]</b>		
Repayment of debentures	(50,000) [3]	
Receipts from the issue of ordinary shares	200,000 [2]	
Receipts from share premium	<u>20,000 [2]</u>	170,000
<b>Increase in Cash</b>		<u>53,000 [4]</u>

**Reconciliation of net cash to movement in net debt**

	€
Increase in cash	53,000 [1]
Cash used to purchase liquid resources	60,000 [1]
Repurchase of debentures	<u>50,000 [1]</u>
Change in net debt	163,000
Net debt at 01/01/2011	<u>(228,000) [1]</u>
Net debt at 31/1/2/2011	<u>(65,000) [1]</u>

**Workings**

1. Depreciation	$225,000 - 165,000 + 12,000$	=	72,000
2. Investment income	$2000 + 3000 - 3000$	=	2,000
3. Taxation	$110,000 + 45,000 - 110,000$	=	45,000
4. Sale of buildings	$90,000 + 13,000 - 2,000(\text{dep})$	=	101,000
Depreciation on disposed building	$110,000 + 12,000 - 120,000$	=	2,000
5. Purchase of buildings	$850,000 - [780,000 - 90,000]$	=	160,000
6. Purchase of machinery	$349,000 - 230,000$	=	119,000

(b)

**12**

(i)

Danton plc's Profit and Loss a/c and Cash Flow Statement show that an operating profit of €337,000 was made but the increase in cash for the year was €53,000.

**Reasons:**

Credit sales earn profit but do not increase cash. Debtors increased by €200,000

Non-cash gains/losses increase/decrease profit but not cash. Profit on sale of buildings/ depreciation €13,000/€72,000.

Sale/Purchase of fixed assets Increase/decrease cash but not profit. Receipts €101,000, Payments €160,000 and €119,000

Introduction/withdrawal of capital increases/decreases cash but not profit. Receipts €220,000, payments €50,000

(ii) **Responsibility of Directors**

To comply with the Companies Acts

To keep proper accounting records enabling financial statements to be prepared

Prepare annual financial statements

Select suitable accounting policies

Sign financial statements

Safeguard the assets of the company

Publish Final Accounts and Cash Flow Statement at least once a year

Present an Annual Report to shareholders at AGM to include:

    Directors' report

    Auditor's Report

    Financial Statements