Chapter-6

CS449-Professional Issues in Information Technology

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Chapter Outcome:

After studying this chapter, you should understand the purpose of the three most important items in the annual report:

- *the balance sheet;*
- *the profit and loss account; and*
- *the cash flow statement.*

These are known as the financial statements & together they provide a picture of the overall financial health of the business. You should be able to interpret them in simple cases.

Annual Report

The annual report contains information about the company and its activities during the preceding year. It’s an opportunity to be transparent about your financial health and make a bold statement about your brand. It’s also an opportunity to engage with many different audiences, including:

- Stakeholders/shareholders
- Employees
- Potential employees
- Industry colleagues and competitors
- General public

Balance sheet is more like a snapshot of the financial position of a company at a specified time, usually calculated after every quarter, six months or one year.

The Balance Sheet

- The purpose of the balance sheet is to show what the company owns,
  - its *assets*

and what it owes,

  - its *liabilities.& (Owner Equity)*

- It is a snapshot of the state of the company at a particular point in time, normally at the end of the last day of the company's financial(fiscal)year.

Commercial balance sheets: Assets

Assets are classified as *current assets* and *fixed assets*.

Current assets are those items whose life span is for 1 year or less than a year and easily convertible into cash. E.g. Cash in hand, Accounts receivable etc.

OR

Items which are bought and sold in the course of its day to day trading activities.

Fixed assets are those items whose life span is for 1 year or more than a year. E.g. Building, Car etc.

OR

contribute to the company's productive capacity and are held primarily for creating wealth.

Commercial balance sheets: Assets

The fixed assets are further subdivided into *investments* (e.g. shares in other *companies*), *tangible assets* (assets that have some *physical existence or can be touched like Land , Computers*) and *intangible assets* (assets such as *copyright* in software or ownership of *brand names* that have no physical existence).

Commercial balance sheets: Assets…..

The difference between fixed assets and current assets is easily perceived.

A new file *server* bought for program development facilities in a software house, or a *machine tool* used to produce satellite dishes are examples of *fixed assets*.

A *stock of paper* for the laser printer is a *current asset*.

If a software house buys a computer on which it will implement special software before delivering the whole system to a client, the computer is a *current asset*, not a fixed one.

Tangible fixed Assets

- *Tangible fixed* assets have to be recorded in the company's *fixed asset* register and, from time to time, their presence will be physically checked.
- Each year, depreciation must be calculated and, if a fixed asset is sold for a sum higher than its depreciated value, the company must show the difference as <u>income.</u>
- Because of these complicated procedures, it is usual to treat all purchases of less than, say, £1,000 as expenses in the year in which they are incurred.

Tangible fixed Assets….

There are some items that are difficult to classify like Software.

Suppose a company buys payroll package to help carry out part of its day-to-day operations more efficiently. It was with the intention of using it for at least 5 years.

Logically, the package should be treated as a fixed asset and the initial cost depreciated over its useful lifetime.

The rules of accounting allow this to be done. But, because software is intangible, most companies treat the cost of buying it as current expenditure.

Tangible fixed Assets

The treatment of *research and development* is a particular problem.

Logically, <u>resources spent on developing new products should be regarded as an investment that will produce a fixed asset,</u> that is, something that will allow the company to operate more effectively.

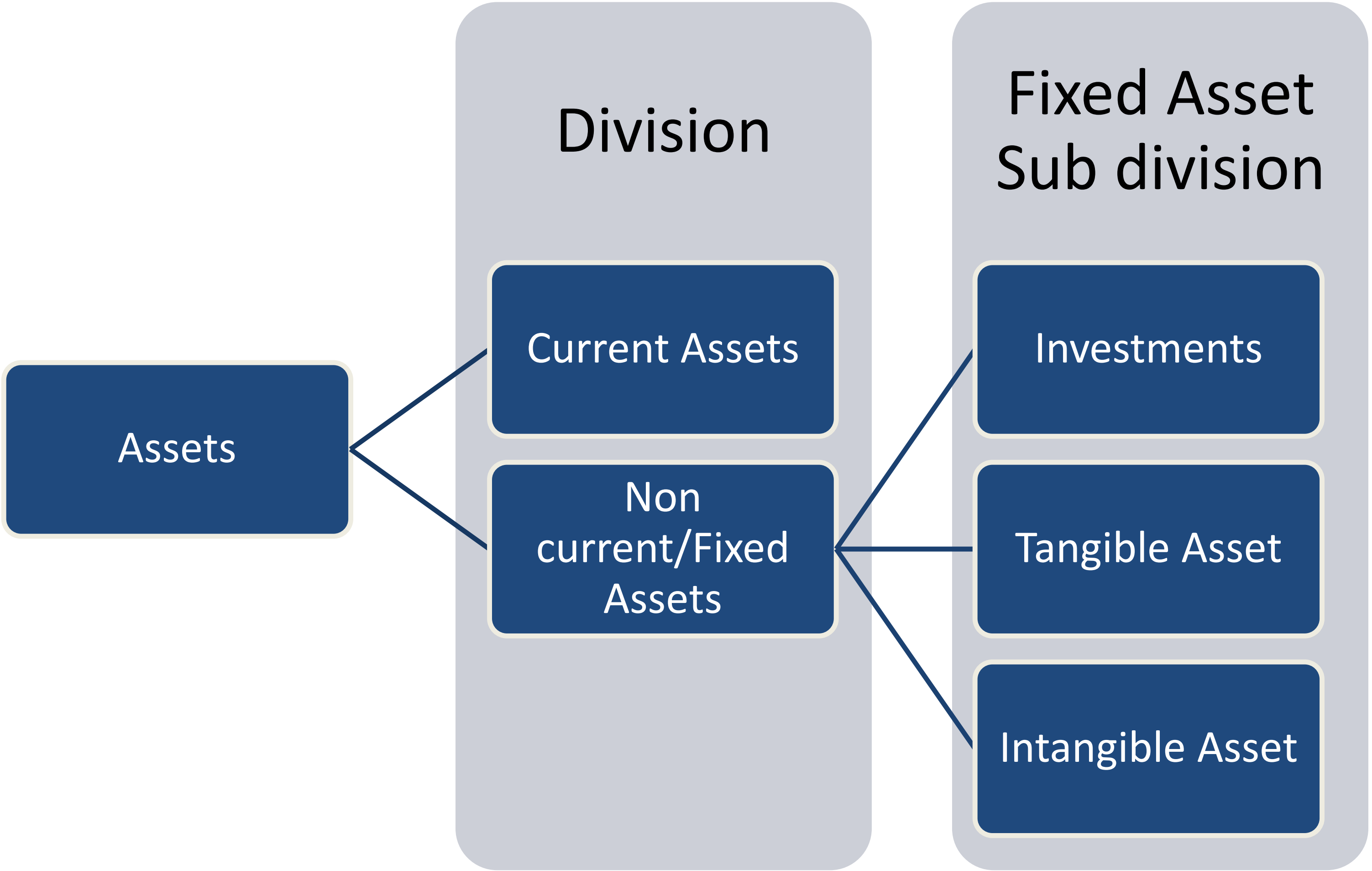
<u>However, the results of research and development are always uncertain</u> and often prove to be worth very little; to treat all the costs as investment would be misleading.

Assets....

In practice, most software companies in the UK treat expenditure on research and development as current expenditure rather than as investment, although the accounting rules allow for more flexible treatment.

USA, have strict rules regarding the capitalization of software that is developed for sale; these rules are based on a rather unrealistic model of the product life cycle.

Classification of Assets



Depreciation

Standard accounting practice is to reduce the value of fixed assets each year to reflect the likely lifetime of each asset; the fall in the value of the asset from one year to the next is called the *depreciation*.

Thus, Jemimah will probably keep her computer for four years before it becomes obsolete and she has to replace it with a new one.

The simplest and commonest way of calculating the depreciation is to assume that it falls in value uniformly, that is, it loses value at a rate of £200 per year.

Depreciation

Suppose a company buys a database server for £100,000 and expects to use it for five years. Then the annual depreciation will be £20,000 (£100,000/5)

What will be the value in the balance sheet at the end of year 1?

£ 80,000

and at the end of year 5.

zero

Depreciation

A new Computer system is bought to a software house which costs 800$ and expects to use it for 4 years, after an year it worth reduces to 600$.

What is the annual depreciation rate of Computer system?

800/4 = 200$

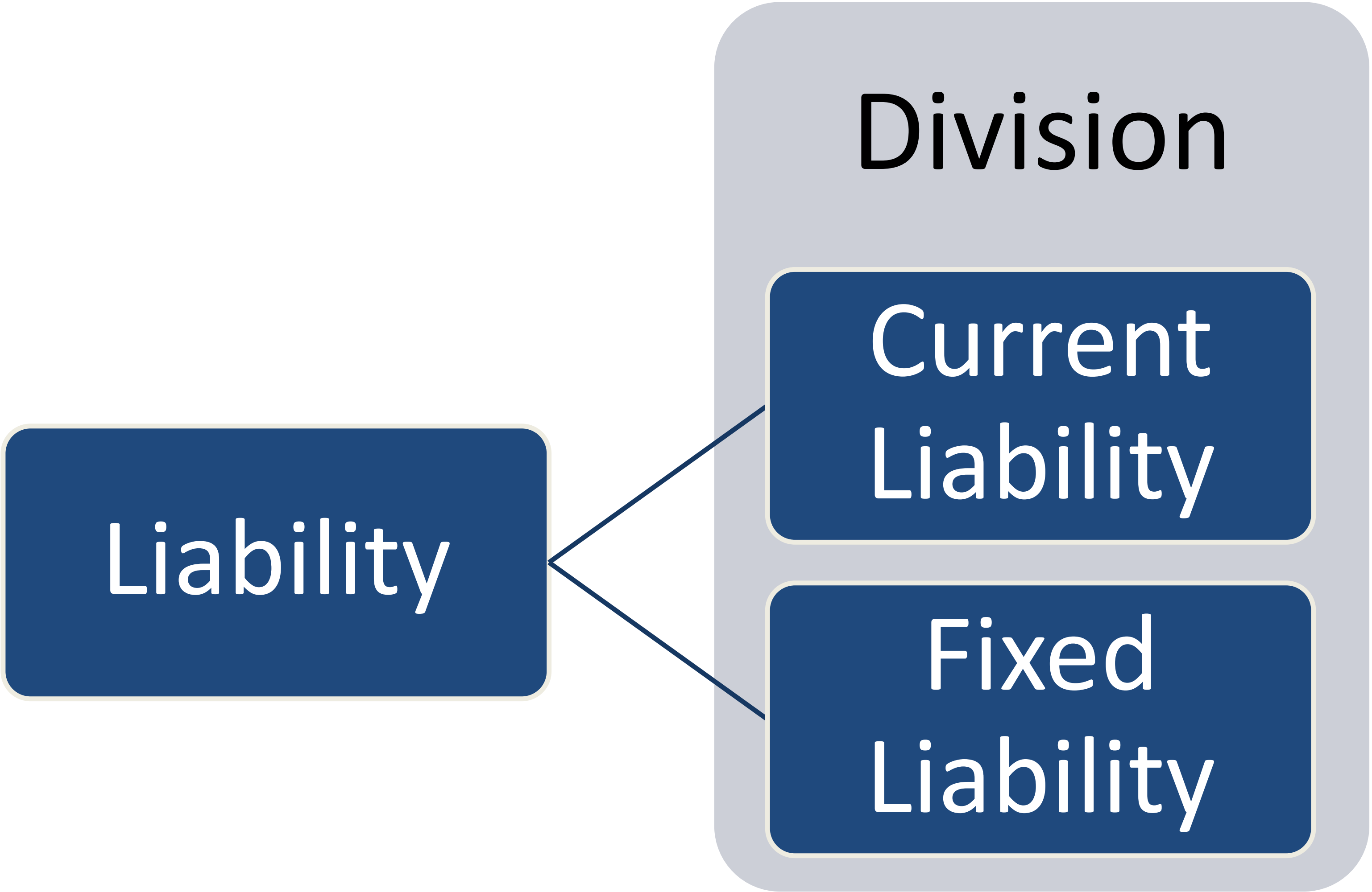
Commercial balance sheets: Assets…..

It is customary to depreciate all items of the same type over the same time period.

It is most company's policy to write off all computer equipment over a period of 3 years and office furniture over a period of 10 years.
Assets are generally valued at their original monetary cost. The value of certain types of fixed assets, like land and buildings, may increase rather than decrease.

Some companies therefore arrange to have their property revalued (*appraisal*) from time to time and include this valuation in the balance sheet.

Classification of Liabilities



Liabilities

- Liabilities are further sub-divided as Current Liability & Fixed Liability.
- Current Liabilities: The one which you have to pay with in one year
- Fixed Liabilities: The one which you have to pay with in the duration of more than a year.

Balance sheet for a student

We take an imaginary student called Jemimah and show her balance sheet with her present position side by side with the position a year ago, so that it is easy to make a comparison.

Notice also the common accounting convention of putting a number in parentheses() to indicate that it is negative, rather than using a negative sign(-) as is normal in science or mathematics.

TABLE 6.1 *Balance sheet for a student*

Jemimah Puddleduck

Balance Sheet

As at 31 October 2004

	2004	**2003**
ASSET		
Cash in hand	25	40
Cash at bank	361	220
Pre-paid accommodation	300	200
Debts owed by friends	18	0
Computer	400	600
CD player	160	180
Total assets	1,264	1,240
LIABILITIES		
Credit card bill	174	64
Student loans	4,800	1,900
Total liabilities	4,974	1,964
NET WORTH	(3,710)	(724)

Liabilities & owners' equity….

Total liabilities subtracted from the total assets, is called the '*Net assets*'. These are balanced by items under the heading '*Capital and reserves*'.

- The total under the heading of '*Capital and reserves*' is often known by names such as *shareholder's equity*, *owner's equity*, or *owner's claim*.
- It notionally represents the value of the company to its shareholders.

Liabilities & owners' equity….

- They are shown in a number of ways. First, the item labelled '*Called-up share capital*'. This is the amount from the par value of the shares that the company has issued to investors.
- When a successful company decides to issue more shares, these are often sold at more than their par value. This is known as the *share premium* & the money raised from this is the '*Share premium reserve*'.
- In our example, the remainder is labelled as '*Profit and loss account*', indicating that it results from the accumulated surplus on the profit & loss account over the life of the company.

TABLE 6.2 *Balance sheet for a services company*

XYZ Software Ltd		
Balance Sheet		
As at 31 October 2004	**2004**	**2003**
	£'000	**£'000**
Fixed Assets		
Intangible assets	475	–
Tangible assets	960	770
Investments	50	82
Total fixed assets	1,485	852
Current assets		
Work in progress	550	621
Debtors	3,400	2,580
Cash in hand and at bank	2,491	1,770
Total current assets	6,441	4,971
Creditors: Amounts falling due within one year	(3,210)	(2,601)
Net current assets	3,231	2,370
Total assets less current liabilities	4,716	3,222
Creditors: Amounts falling due after one year		
Borrowings	(154)	(61)
Provisions for liabilities and charges	(7)	(16)
Net assets	4,555	3,145
Capital and reserves		
Called-up share capital	318	308
Share premium reserve	350	145
Profit and loss account	3,887	2,692
Shareholders' funds – equity	4,555	3,145

Use the following to complete Balance Sheet for Tweet hour

Tweet Hour is a retailer who specializes in exotic birds. They currently have 30,300$ in cash, customer owe them3,500$ for purchase of goods, they have 7,800$ in inventory,1700$ in supplies, and 2,600$ for misc. equipment. The building and land are worth 170,000,Tweet hour currently owes 850$ to suppliers,4600 for wages,1900 for taxes,78,000 in the mortgage, and 43600 for business loan. Bilal initially invested 20,000$, Fahad invested 15000 and Nimra invested 10,000$.The business has 41,950 in retained earnings

Balance Sheet

Current Assets

Fixed Assets (Tangible)

Current Liabilities

Fixed Liability

Tweet Hour Balance Sheet	
Assets	
Cash	$
Accounts Rec.	$
Inventory	$
Supplies	$
Building/Land	$
Equipment	$
Total Assets	$
Liabilities	
Accounts Pay.	$
Wages Pay.	$
Taxes Pay.	$
Loans	$
Total Liabilities	$
Owner's Equity	
Investment Capital	$
Retained Earnings	$
Total Owner's Equity	$

The Profit & Loss Account

- The *profit and loss account* shows how much money has been received and how much has been spent in a given period – usually the organization’s financial year.
- In the case of non-profit-making organizations it is usually called an *income and expenditure account*.
- Table 6.3 shows such an account for our imaginary student.
- It does not include money borrowed or received from the sale of equity nor does it include expenditure on acquiring fixed assets.

TABLE 6.3 *Income and expenditure account for a student*

Jemimah Puddleduck **Income and Expenditure Account** **Year ended 31 October 2004**	**2004**	**2003**
INCOME		
Contribution from parents	1,500	1,300
Income from summer job (net)	1,840	1,682
Total income	3,340	2,982
EXPENDITURE		
Course fees	1,050	1,025
Hall fees	2,100	1,980
Books	30	25
Clothes and personal items	179	120
Transport	134	112
Food	1,400	1,247
Entertainment	1,303	840
Depreciation	220	220
Total expenditure	6,416	5,569
EXCESS OF INCOME OVER EXPENDITURE	(3,076)	(2,587)

Commercial profit and loss accounts

A commercial profit and loss account looks very different, though precisely the same ideas underlie it.

Table 6.4 shows an example for a fictitious computer services company.

Just as with the balance sheet, we see that items have been aggregated into very broad categories.

A package company, for example, might show in the notes how much of its income came from *sales of packages*, how much from *training and consultancy*, and how much from *maintenance contracts*.

TABLE 6.4 *Profit and loss account for a services company*

XYZ Software Ltd		
Profit and Loss Account	**2004**	**2003**
Year ending 31 October 2004	**£'000**	**£'000**
TURNOVER		
Continuing operations	14,311	11,001
Acquisitions	407	
Total turnover	**14,718**	**11,001**
Cost of sales	(11,604)	(8,699)
Gross profit	3,114	2,302
Other operating expenses	(1,177)	(805)
OPERATING PROFIT	**1,937**	**1,497**
Interest payable	(23)	(27)
Profit on ordinary activities before taxation	1,914	1,470
Tax on profit on ordinary activities	719	480
Retained profit for the year	1,195	990

TABLE 6.2 *Balance sheet for a services company*

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Balance Sheet		
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	£'000	**£'000**
Fixed Assets		
Intangible assets	475	–
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Debtors	3,400	2,580
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Creditors: Amounts falling due after one year		
Borrowings	(154)	(61)
Provisions for liabilities and charges	(7)	(16)
Net assets	4,555	3,145
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Cash flow Statement

Balance Sheet	Profit & Loss Account
It is a statement which shows the financial position of the company on a specific date. It lists all the ownership, i.e. assets and Owings, i.e. liabilities of the company.	It is the account that shows the revenue earned and expenses sustained by the company, during the course of business, in a financial year.

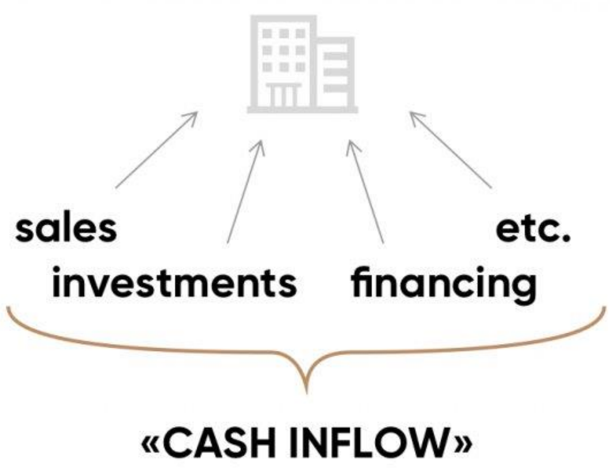
The cash flow statement

The cash flow statement summarizes the amount of cash and cash equivalents entering and leaving a company as Inflow and Outflow.

The link that ties the balance sheet and the profit and loss account to the capital expenditure is the *cash flow statement*.

Cash Inflow

- Cash inflow is the money going into a business. That could be from sales, investments or financing.
- A business is considered healthy if its cash inflow is greater than its cash outflow.



Cash outflow

- Cash outflow is any money leaving a business. This could be from paying staff wages, the cost of renting an office or from paying dividends to shareholders.

The cash flow statement

The balance sheet shows that Jemimah's student loan increased by £2,900 from 2003 to 2004.

This means that she received £2,900 in cash from that source.

While it is an inflow of cash, it is not income, because it will have to be repaid; hence it does not appear as income on the income and expenditure account.

These changes are summarized in Table 6.5, which shows Jemimah's cash flow statement.

The cash flow statement

The first source of cash is the operating profit before tax generated during the year. This needs to be adjusted for certain items which may appear in the profit and loss account but do not involve the movement of money in or out of the company.

The most obvious of these is *depreciation*. This was entered in the profit and loss account to reflect the extent to which the life of the fixed assets was consumed during the year; in no way did it reflect the movement of money out of the company and so it must be added to the profit.

Table 6.5 *Cash flow statement for a student*

Jemimah Puddleduck		
Cash flow statement		
Year ended 31 October 2004	**2004**	**2003**
Cash inflow		
Addition to student loan	2,900	1,900
Add back depreciation	220	220
Total cash inflow	3,120	2,120
Cash outflow		
From income and expenditure account	3,076	2,587
Loans made to friends	18	0
Total cash outflow	3,104	2,587
Increase/(Decrease) in cash over the year	16	(467)

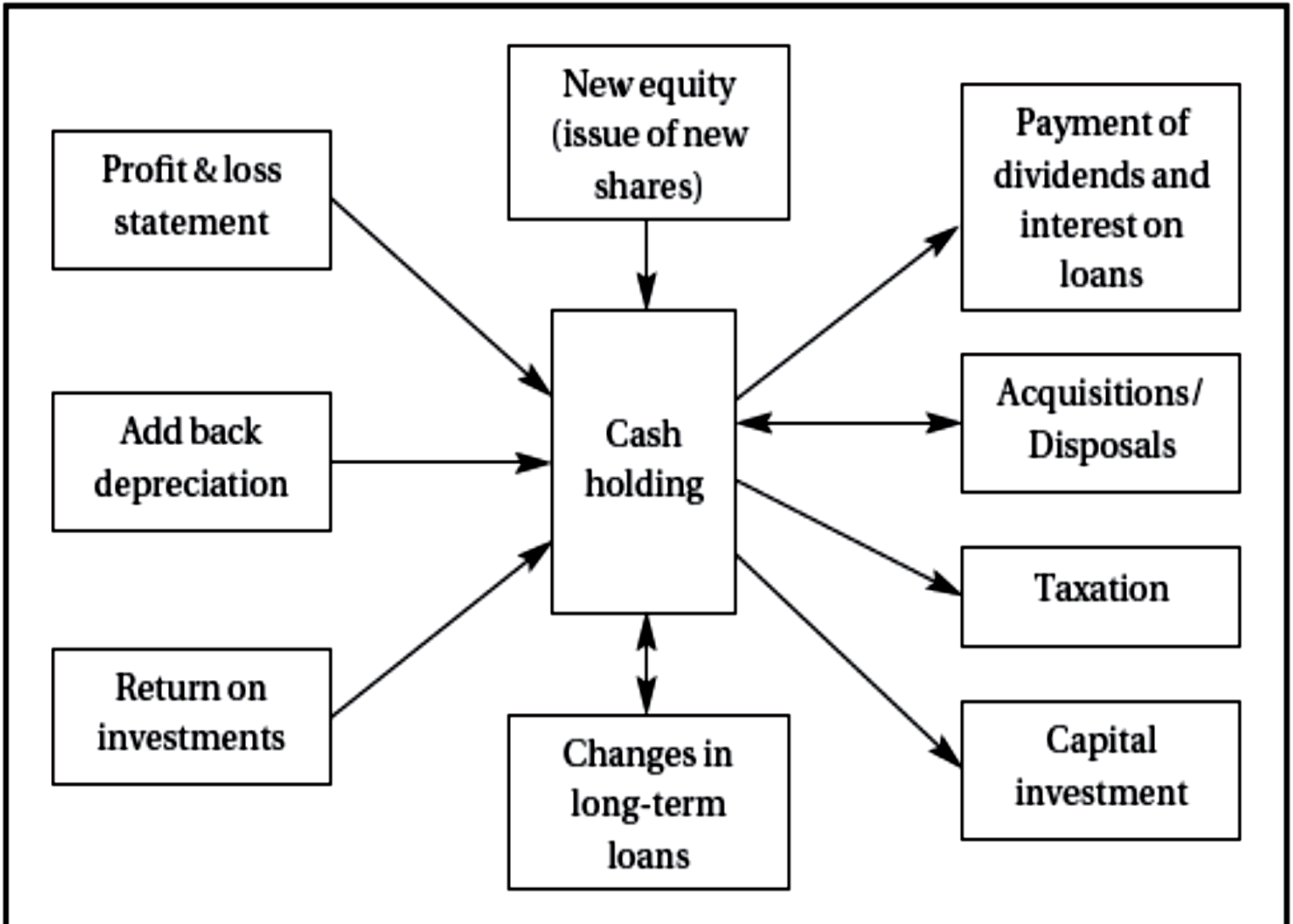
The cash flow statement

Figure 6.1 shows the cash flows that are captured in the cash flow statement of a typical company.

The arrows show the normal direction of the flow in a profitable company, but it is always possible for the flows to be in the opposite direction

Table 6.6 shows the cash flow statement for our example company.

FIGURE 6.1 *Sources and destinations of cash flows*



Cash Flow Analysis

The Cash flow statement analysis is partitioned into three segments,

namely:

1) cash flow resulting from operating activities;
2) cash flow resulting from investing activities;
3) cash flow resulting from financing activities.

Operating activities

Cash flow from operating activities (CFO) indicates the amount of money a company brings in from ongoing, regular business activities. such as manufacturing and selling goods or providing a service. Cash flow from operating activities does not include long-term capital or investment costs.

It is also known as operating cash flow (OCF) or net cash from operating activities.

Investing activities

Examples of Investing activities are

- Purchase or Sale of an asset (assets can be land, building, equipment, marketable securities, etc.)
- Loans made to suppliers or received from customers
- Payments related to mergers and acquisition

Financing activities

Financing activities include the inflow of cash from investors such as banks and shareholders, as well as the outflow of cash to shareholders as Dividends.

- Payments of dividends
- Payments for repurchase of company shares
- For non-profit organizations, receipts of donor-restricted cash that is limited to long-term purposes

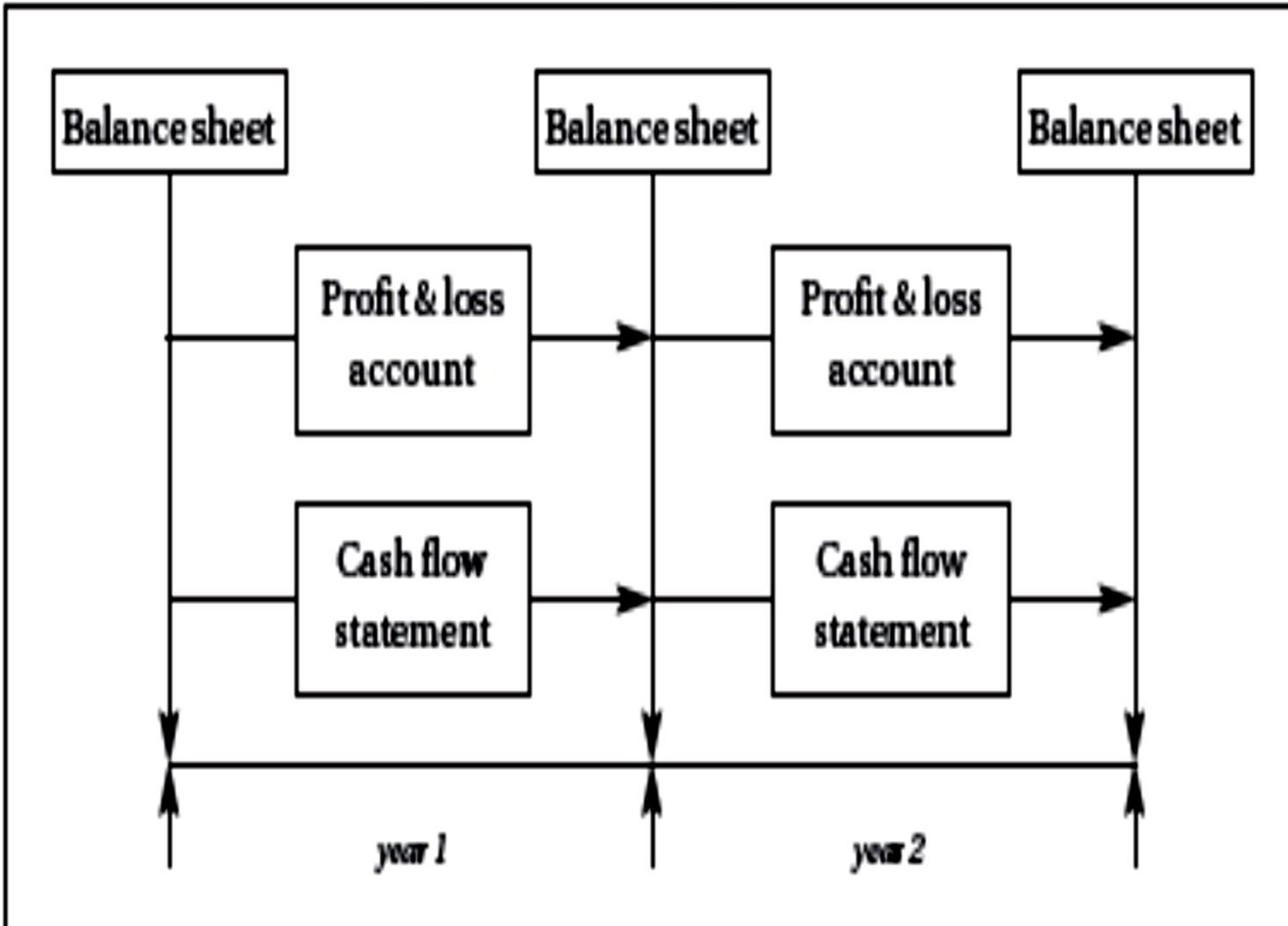
CoolGadget Corp: Consolidated Cash Flow Statement

	2013	2012
Cash at Start of Year	**50,000**	**100,000**
Operating Activities		
Net Income	8,000	-90,000
Adjustments To Net Income:		
Inventory	-25,000	-10,000
Net Receivables	-10,000	5,000
Accounts Payable	50,000	50,000
Deferred Taxes	2,000	0
Other	5,000	5,000
Total Cash Flow From Operating Activities	**30,000**	**-40,000**

	2013	2012
Investing Activities		
Capital Expenditures	-100,000	-150,000
Investments in Marketable Securities	-50,000	-100,000
Business Acquisitions	0	0
Other	-10,000	-10,000
Total Cash Flow From Investing Activities	**-160,000**	**-260,000**

	2013	2012
Financing Activities		
Dividends Paid	0	0
Sale/Purchase of Stock	0	0
Net Borrowing	85,000	200,000
Other	0	50,000
Total Cash Flow From Financing Activities	**85,000**	**250,000**
Change In Cash and Cash Equivalents	**-45,000**	**-50,000**
Cash at End of Year	**5,000**	**50,000**

FIGURE 6.2 *The relationship between the three financial statements*



The overall Picture

The *balance sheet*, the *profit and loss account*, and the *cash flow statement* cannot be understood alone. Their relationship to each other needs to be understood in assessing the financial state of a company.

The balance sheet shows a snapshot of the financial position of a company at the end of an accounting period (usually the company's financial year), while the profit and loss account and the cash flow statement describe what has happened during the accounting period and thus explain the relationship between successive balance sheets, this is shown in Figure 6.2.

The overall Picture…..

The *profit and loss account* explains the relationship between the *owner's equity* in the two balance sheets, while the *cash flow statement* explains the relationship between the cash item shown in the two balance sheets.

This is illustrated in Figure 6.3.

FIGURE 6.3 *How the cash flow statement and the profit and loss account affect the items in the balance sheet*