

Accounting



# The accounting treatment of financial instruments

# The accounting treatment of Financial Instruments

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## Learning outcomes.....

- **Identify** the various classifications of financial instrument and describe the accounting treatment of each

# The accounting treatment of Financial Instruments

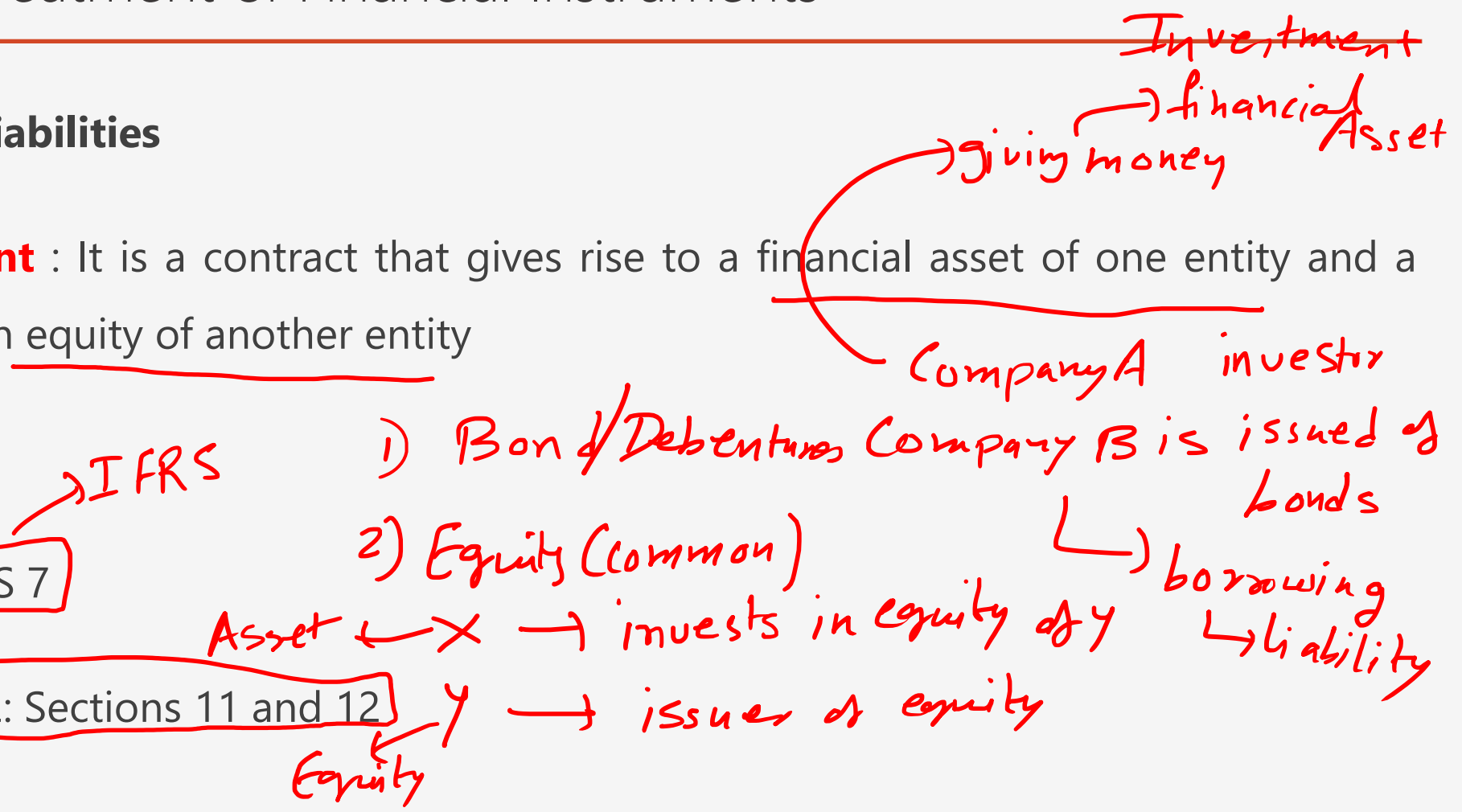
## Financial assets and liabilities

➤ **Financial Instrument** : It is a contract that gives rise to a financial asset of one entity and a financial liability or an equity of another entity

➤ Relevant standards:

➤ IFRS 9; IAS 32; IFRS 7

➤ UK GAAP: FRS 102: Sections 11 and 12



# The accounting treatment of Financial Instruments

## Financial assets and liabilities: **Financial Asset** :

- ▶ cash;
  - ▶ an equity instrument of another entity;
  - ▶ a contractual right to:
    - » receive cash or another financial asset from another entity; or
    - » exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; and
  - ▶ a contract that will or may be settled in the entity's own equity instruments and is:
    - » a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments;
    - » a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instrument.
- Handwritten notes:*
- Cash
  - Receivables
  - Investments
    - ↳ Bonds
    - ↳ Equity
    - ↳ Derivatives
  - Bonds (grouped with Bonds and Derivatives)
  - equity instruments (grouped with equity instruments and Derivatives)
  - Derivatives (grouped with equity instruments)

# The accounting treatment of Financial Instruments

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## Financial assets and liabilities: Financial Liability :

- ▶ a contractual obligation to:
  - » deliver cash or another financial asset to another entity; or
  - » exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; and

→ Derivatives → option. } Bonds Debitures
- ▶ a contract that will or may be settled in the entity's own equity instruments. → Convertible Bonds

Company A buys convertible bonds of Company B.  
↳ has an option to convert bonds into equity of Co. B.

# The accounting treatment of Financial Instruments

Financial assets and liabilities: FRS 102 Treatment: UK GAAP

<u>Section 11 of FRS 102</u>	<u>Section 12 of FRS 102</u>
Covers basic instruments such as cash, <u>commercial paper</u> , <u>bonds</u>	Covers other instruments such as <u>asset-backed securities</u> , <u>options</u> , <u>rights</u> , <u>warrants</u> , <u>hedging instruments</u>

- Financial assets and liabilities should initially be measured at 'transaction price' including transaction costs.

Company A buys shares at @ \$12

Company B issues bonds @ \$1,000,000  
↳ Liability

# The accounting treatment of Financial Instruments

## Financial assets and liabilities: **FRS 102 Treatment** :

Example

### Investment in a listed company

Company A acquires some equity shares in company B. Company B is a listed company on a recognised stock exchange. Company A should measure the investment in company B at the cost of the investment excluding transaction costs which should be recognised in profit or loss. After initial recognition, company A should account for its investment in company B at fair value through profit or loss.

Shares are traded on stock exchange

equity  
listed  
do not

include transaction cost



# The accounting treatment of Financial Instruments

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## Financial assets and liabilities: **FRS 102 Treatment** :

Example

### Investment in an unlisted company

Company X acquires some equity in company Y. Company Y is a privately owned company and is not listed on a recognised stock exchange. Company X should measure the investment in company Y at the cost of the investment including the incremental transaction costs. This is because (unlike in company B previously), it will not be possible for company X to obtain a reliable fair value of its investment in company Y at subsequent reporting dates.

↳ shares are not listed → not traded

# The accounting treatment of Financial Instruments

→ equity  
→ liab

**Financial assets and liabilities: Equity or Financial Liability** : IAS 32

Preference shares }  
Bonds ← liability

- Classification of an instrument as equity or liability should be done considering 'substance' or the transaction not its legal 'form'.
- Financial instrument is equity only if the instrument:
  - Includes no obligation to deliver cash / another financial asset
  - Will or may be settled in issuer's own equity instrument: It could be either
    - a non-derivative contract (with no obligation to deliver variable number of own shares) or derivative contract (with issuer being able to exchange fixed amount of cash for fixed number of shares)

Company that issues equity

# The accounting treatment of Financial Instruments

## Financial assets and liabilities: **Equity or Financial Liability** : IAS 32

Example: *legal form* → *equity* → *paid back*

- A preference share that is redeemable mandatorily is recognized as liability. Hence dividends paid should be treated as interest expense.
- Preference shares if to be regarded as equity, should have no fixed maturity or issuer should have no contractual obligation to pay.

*Bonds*  
↳ *interest*  
↳ *obligation*

*Equity* ← *Proof*  
*Dividends*  
↳ *choice*

# The accounting treatment of Financial Instruments

## Disclosures about risk management and hedges

Under IFRS 7, a company is required to describe its financial **risk management** objectives and policies, including **hedging** policies.

hedging → managing risks

→ Companies / Bank → fail

It should also disclose the following separately for fair value hedges and cash flow hedges (these are defined shortly):

- ▶ a description of the hedge;
- ▶ a description of the financial instruments designated as hedging instruments and their fair values at the balance sheet date;
- ▶ the nature of the risks being hedged; and
- ▶ for cash flow hedges, the periods in which the cash flows are expected to occur, when they are expected to enter into the determination of profit or loss, and a description of any forecast transaction for which hedge accounting had previously been used but is no longer expected to occur.

# The accounting treatment of Financial Instruments

## Disclosures about risk management and hedges

Company A invests in shares of Company B → listed company  
→ risk for A? → share price of B → ↓

Accounting  
differences

A **fair value hedge** is essentially a hedge of the exposure to changes in fair value of a recognised asset or liability.

A **cash flow hedge** is essentially a hedge of an exposure to variability of cash flows.

Qatar Company imports chocolates from Switzerland.  
A flow 3 months → CHF ↑  
Risk → Cash outflow (payment) will be higher  
↳ to be paid in Swiss franc after 3 months

# The accounting treatment of Financial Instruments

## Recognition and De-recognition of Financial Instruments

Recognize financial instruments on balance sheet when <i>→ record</i>	De-recognize financial asset when <i>→ remove</i>
<ul style="list-style-type: none"><li>➤ Company becomes party to contractual provisions of the instrument</li><li>➤ Hence derivatives should be recognized in financial statements</li></ul>	<ul style="list-style-type: none"><li>➤ On expiry of contractual rights</li><li>➤ On transfer of financial asset <i>↳ sell</i></li></ul>

*→ when issue bonds or equity → party to contract*

# The accounting treatment of Financial Instruments

## Classification of Financial Instruments: IFRS 9: New model

### Loans and receivables:

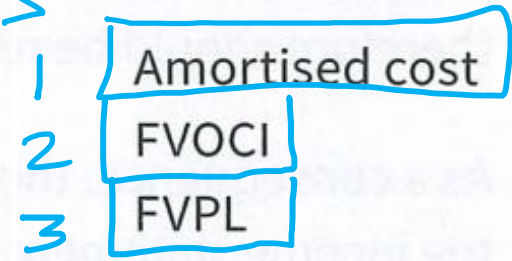
'Basic' loans and receivables where the objective of the entity's business model for realising these assets is either:

- » collecting contractual cash flows; or
- » both collecting contractual cash flows and selling these assets.

All other loans and receivables.

### Mandatorily redeemable preferred shares and 'puttable' instruments

(e.g. investments in mutual fund units)



FVPL

# The accounting treatment of Financial Instruments

## Classification of Financial Instruments: IFRS 9: New model

1) Amortized cost → ignore market price / fair value  
↳ Suppose a company buys bonds → @ 100 \$  
↳ it continues to account for the bond at \$100  
even if market price may be 102 or 98.  
Certain assets not widely used

2) FVPL → Fair value thru Profit or Loss →  
Always value asset at fair value / market price  
If market price ↑ → gain } Profit or Loss Alc  
" " ↓ → lose }

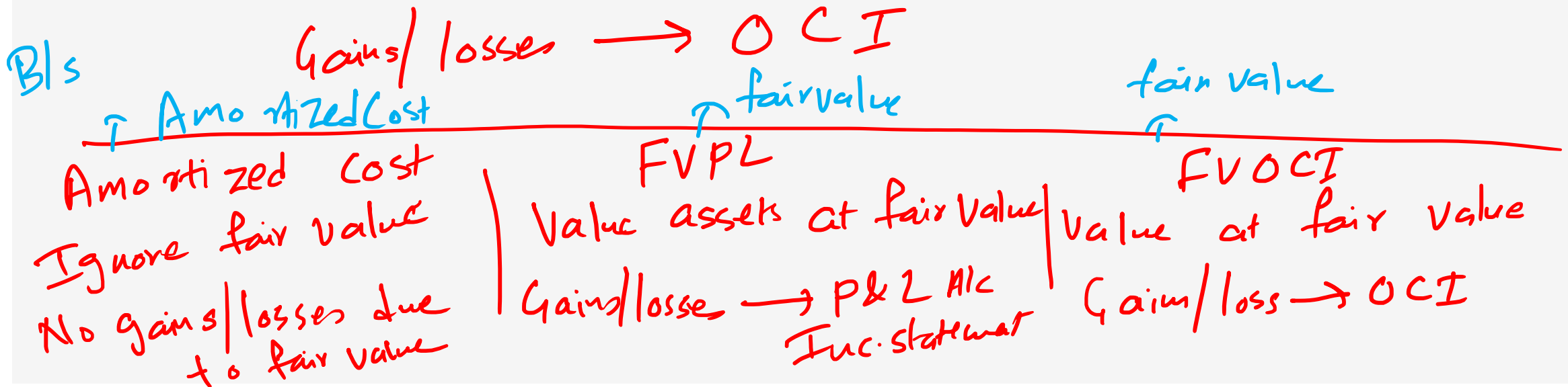


# The accounting treatment of Financial Instruments

## Classification of Financial Instruments: IFRS 9: New model

FVOCI → Fair value thru Other Comprehensive Income

↳ Value assets as per fair value



# The accounting treatment of Financial Instruments

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## Classification of Financial Instruments: IFRS 9: New model

### Freestanding derivative financial assets

(e.g. purchased options, forwards and swaps with a positive fair value at the balance sheet date)

FVPL

### Investments in equity instruments:

Entity irrevocably elects at initial recognition to recognise only dividend income on a qualifying investment in profit and loss, with no recycling of changes in fair value accumulated in equity through OCI.

FVOCI

Other

FVPL

# The accounting treatment of Financial Instruments

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## Financial assets and liabilities: **Financial Instruments: IFRS 9**

➤ New model (IFRS 9) is simpler than older model (IAS 39) but may lead to **more volatility in net profit.**

➤ This is because the default measurement for non-trading assets under IAS 39 is FVOCI old model whereas it is FVPL under IFRS 9.

*New model*

*Invest ~~manager~~ managers → FVPL*

# The income statement and statement of changes in equity

# Income statement and statement of changes in equity

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## Learning outcomes.....

- **Identify** and **Explain** the classification of expenses based on nature or function
- **Explain** the principle of revenue recognition
- **Identify** the following different levels of profit and which classes of expenses are considered in arriving at each level: operating profit and net profit including the implications of using non-statutory profit measures
- **Explain** the objective of, and identify the information to be reported in, a statement of changes in equity

# Income statement and statement of changes in equity

BS → on a particular day

## Income Statement:

- Provides summary of company's performance over a specified period of time.  
*for a time period such as 1 yr or quarter*
- Generally prepared for one year, but companies also required to make it for shorter intervals such as a quarter or six-months

➤ Income statement shows the following:

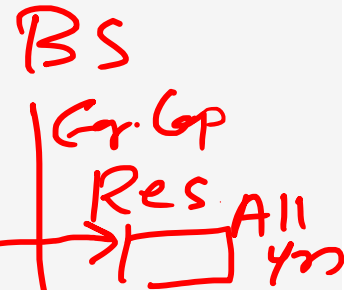
- **Sales less Costs less Taxes less Dividends**  
 these are the earnings re-invested in business.

Revenue ←

Sales	1000
Costs	<u>-600</u>
Profit	400
-Tax	100

The remainder is called **Retained Earnings,**

Net Inc	300
Div.	<u>80</u>
R.E.	220 → Only for yr



↳ Reserves

# Income statement and statement of changes in equity

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## Income Statement: Revenue recognition

→ When should the company record sales?

- Revenue recognition guidelines deal with when a company should recognize revenue?
- This is very important since companies may try to recognize or record revenue earlier than at the correct time in order to boost profits.
- IFRS has revised revenue recognition standards.
- IFRS 15 is a new standard for revenue recognition which introduces a five-step process for revenue recognition as shown in the following slide.

Company receives order for goods 21<sup>st</sup> Nov.

Goods are ready 27<sup>th</sup> Nov.

Goods are dispatched 30<sup>th</sup> Nov.

Client receives goods 6<sup>th</sup> Dec.

Client pays 15<sup>th</sup> Jan 23

# Income statement and statement of changes in equity

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## Income Statement: Revenue recognition: Steps

- **1. Identify contract(s) with a customer:** A contract is a legally enforceable agreement between the seller and buyer that specifies rights and obligations and also sets criteria that need to be met under the contract.
- **2. Identify the performance obligations under the contract:** It is a promise to transfer goods or services to customer.
- **3. Determine the transaction price:** This is the amount seller expects to receive for selling goods / services.



# Income statement and statement of changes in equity

## Income Statement: Revenue recognition: Steps

Elevator supplier: \$1,000,000  
↓  
Cost of Elev.      install      Test/Chg

- **4. Allocate the transaction price to the performance obligations in the contract:** If there is more than one performance obligation the transaction price needs to be allocated to different performance obligations.
- **5. Recognize revenue when the entity satisfies a performance obligation** As per the revised accounting standard (IFRS 15), compared to the old one (IAS 18), industries the bundle the goods / services together are more likely to be affected. The examples include telecom, software development, real estate, industries with long term contracts.

# Income statement and statement of changes in equity

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## **Income Statement: Revenue recognition: Example: Impact due to change in accounting standard**

- In telecommunications industry, many times telecom companies sell prepayment plan and handset together.
- Under new accounting standard, transaction price should be allocated between handset and prepayment plan.
- Under old accounting standard, if the company was giving handset free, then revenue from handset should be zero.
- The new standard may result into (in above example), earlier revenue recognition.

# Income statement and statement of changes in equity

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## Format of Income Statement: Format 1

- Under earlier standard this was known as **classifying expense by function**
- This format is used by most retailing companies and around half of manufacturing companies  
*↳ Trading company*
- If this format is used additional information on the nature of expenses such as depreciation, amortization, employee benefit expenses need to be shown separately
- The example is shown on next slide.

# Income statement and statement of changes in equity

## FORMAT 1: INCOME STATEMENT

EBIT → Earnings before interest & tax

	£
Sales revenue (turnover)	500,000
less Cost of sales	300,000
Gross profit	200,000
less <u>Distribution costs</u>	50,000
less <u>Administration costs</u>	70,000
Operating profit	80,000
less Interest expense	5,000
Earnings before tax	75,000
Tax	15,000
Net income/profit for the period	60,000

Topline ←

← less Cost of sales → Material cost + Prod<sup>n</sup> Cost

= Sales - Cost of sales

← less Distribution costs

← less Administration costs

Bottom line ←

Sales

- Cost of sales

G.P

- Dist<sup>n</sup> Cost

- Adm Cost

OP (EBIT)

- Int

EBT

- Tax

NI

# Income statement and statement of changes in equity

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## Format of Income Statement: Format 1

Cost of sales	Distribution costs	Administration costs
Includes all costs of <u>production</u> such as wages, materials, manufacturing overheads including depreciation	Costs incurred in delivering goods to customers	Other costs, not related to production or distribution. For example, Office expenses or Auditor's fees

# Income statement and statement of changes in equity

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## Format of Income Statement: Format 2

- Under earlier standard this was known as **classifying expense by nature**
- This format is used by around half of manufacturing companies where greater details about operating costs are available.
- The example is shown on next slide.

# Income statement and statement of changes in equity

## FORMAT 2: INCOME STATEMENT

	£	£
Sales revenue (turnover)		500,000
Change in value of inventories		
= inventory at beginning of year	60,000	
+ inventory purchases over year	40,000	
- inventory at end of year	50,000	
	50,000	
		450,000
Raw materials and consumables	150,000	
Staff costs	120,000	
Depreciation	50,000	
Other operating charges	50,000	
	370,000	
Operating profit		80,000
less Interest expense	5,000	
Earnings before tax	75,000	
Tax	15,000	
Net income/profit for the period	60,000	

**EBIDTA**  
 = EBIT  
 + Dep & Am  
 = 80,000  
 + 50,000  


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 130,000

Sales  
 - **COs**  


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 G.P.  
 - **Oper. Costs**  


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 EBIT  
 - Int  


---

 EBT  
 - Tax  


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**EBIT**  


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 Net Inc

# Income statement and statement of changes in equity

## Different ways of reporting performance

- At present the standards (IAS 1) only requires companies to present revenue and profit or loss.
- Other subtotals i.e different levels of profits are not required to be shown. GP/OP → No
- Hence, there is an inconsistency in reporting other measures of profits.
- **Operating profit** = Operating Revenue less cost of goods sold (COGS) less operating expenses – depreciation & amortization
  - It is considered an important measure of profitability since it provides an idea what are the key elements (revenues and costs) for profit generation.
  - All expenses needed to keep business running are included
  - It is different than net income, because in net income all expenses are deducted
  - While arriving at operating profit interest expense and tax expenses are not deducted



# Income statement and statement of changes in equity

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## Different ways of reporting performance: Operating profit

- Depreciation: This expense lowers the value of tangible assets periodically over asset's useful life
- Amortization: This expense lowers the value of intangible assets periodically over asset's useful life
- Operating profit is also known as Operating Income or Earnings before Interest and Tax (EBIT).
- EBIT however may include non-operating revenue in that case it will not be equal to operating profits.
- If a firm does not have non-operating revenue, then its operating profit will equal EBIT.

↓ Revenue not from business

↳ Automobile Company → business → sell cars

↳ invested in stocks/Bonds → Div/Int revenue

# Income statement and statement of changes in equity

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## Different ways of reporting performance: Net Income

- Net income is arrived at after deducting all expenses from revenue.
- Revenue is also referred to as **Topline** and Net income is called **Bottomline**.
- From operating profit, <sup>EBIT</sup> debt related expenses (such as interest expense), taxes and any one time expenses that are unusual in nature are also deducted.
- Similarly, any income from other sources or one time income are added to arrive at net income.

# Income statement and statement of changes in equity

## Non-IFRS or Alternative performance measures

APMs → not mandated by accounting standards

➤ Commonly used measures by the companies are:

➤ **EBIDTA**: Can be calculated as Net income + Tax + Interest + Depreciation & Amortization

OR Earnings before depreciation, Tax, amortization, interest

➤ **EBIDTA** = EBIT (operating profit) + Depreciation & Amortization

➤ EBIDTA is a popular measure because it is used to compare profitability among companies belonging to the same industry.

➤ EBIDTA eliminates the effects of **financing** and **capital expenditures**.

↓  
Debt | Equity

↓  
Old plant  
New plant

# Income statement and statement of changes in equity

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## Non-IFRS or Alternative performance measures

- **Non-GAAP measures** or **APMs** are increasing used by the investors, however there is a concern that these measures may be used to mislead the investors.
- Some concerns regarding these measures are as follows:
  - No clear definitions of APMs or their reconciliations with equivalent IFRS line items
  - Some amounts are excluded from adjusted measures even though they seem to arise from normal business activities
  - Companies may report certain activities which had been reported regularly, as non-recurring activities

# Income statement and statement of changes in equity

## Statement of Comprehensive Income

- The company's performance can be reported in one of the two ways:
  - A single statement of Comprehensive Income
  - An Income Statement and a separate Statement of (Other) Comprehensive Income
- **Comprehensive Income**: Includes the following:
  - ↳ Broad
  - Profit or loss as reported in Income Statement → Regular, operating activity
  - Changes in net assets from other sources that are not recorded in Income statement such as
    - ↳ Fin. mgt → most imp.
    - ↳ Pension → Actuarial gains/losses

	Net Income	Comprehensive Income
P&L	60000	
OCT		-5000
Compreh. Inc		55000

# Income statement and statement of changes in equity

**Statement of Changes in Equity** → Broad → Shareholders' funds

- This statement shows **movements in various equity accounts** during the year.
- It is an important statement and should be presented by companies under IFRS.
- The equity accounts include

- Share capital → Actual capital issued to shareholders in the form of ordinary shares
- Share premium → Additional amt over nominal value of shares at which shares are issued.
- Retained earnings → undistributed profit
- Revaluation surplus → Asset revaluation
- Unrealized gains on investments →

# Income statement and statement of changes in equity

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## Statement of Changes in Equity

Typical information that can be obtained from a statement of changes in equity includes:

- ▶ the amount of new share capital issued; *bot back*
- ▶ the amount of dividend paid during the year to shareholders;
- ▶ the amount by which property, plant and equipment is valued up or valued down; *→ Reval.*
- ▶ the amount of net income retained during the year; and
- ▶ any movement in the unrealised loss or gain reserve and reserve for changes in foreign exchange gain or loss, etc. *OCT*

# The cash flow statement



# The cash flow statement

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## Learning outcomes.....

- **Explain** the purpose of cash flow statement
- **Identify** the classification of cash flow activities
- **Calculate** net cash flow from operations given operating profit (or vice versa) and the relevant balance sheet movements

# The cash flow statement

## Purpose of Cash flow statement

Cash outflows  
Cash inflows

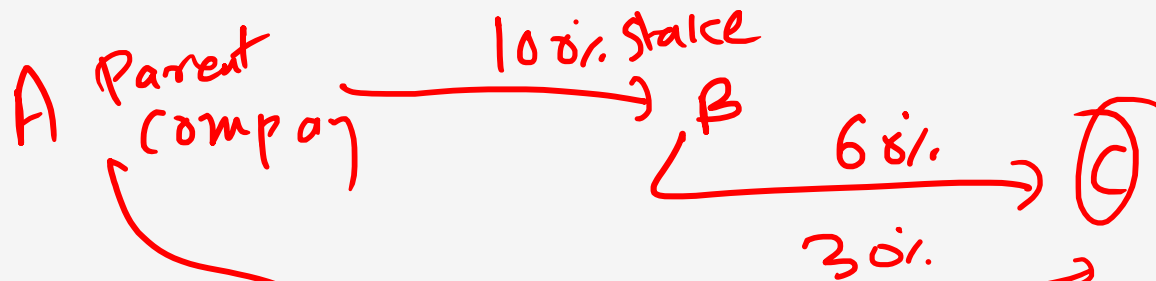
Revenue → \$1000  
Cash infl → \$800

➤ Cash flow statement shows **movement of cash** during the year which Balance Sheet or Income Statement do not show → is king

Raw Mat Exp → \$500  
Cash outflow → \$400

➤ Most companies are required to produce cash flow statement

➤ However "smaller companies" as per Companies Act or subsidiaries where 90% or more voting rights are held within the group as per IFRS are not required to make cash flow statement



# The cash flow statement

## Classifying cash flow activities

Income statement items → Cash flow

➤ Operating activities → Most critical → Business is generating cash or burning cash

➤ Investing activities → Long term assets bought or sold

➤ Financing activities → Debt & equity

Issue Debt or Equity → Cash inflow

Repay Debt or Buyback equity → Cash outflow

↙ Cash outflow

↘ Cash inflow

# The cash flow statement

Inc State Revenue → Cash flow Amt collected from customers

## Classifying cash flow activities: Operating activities

➤ In this section of cash flow statement, net cash flows resulting from firm's operations as shown in Income statement are reported.

➤ UK GAAP and IFRS require a reconciliation between operating profit in the income statement and net cash flow from operating activities.

Why oper profit  $\neq$  oper. C.F.

➤ To reconcile operating profit with cash flow

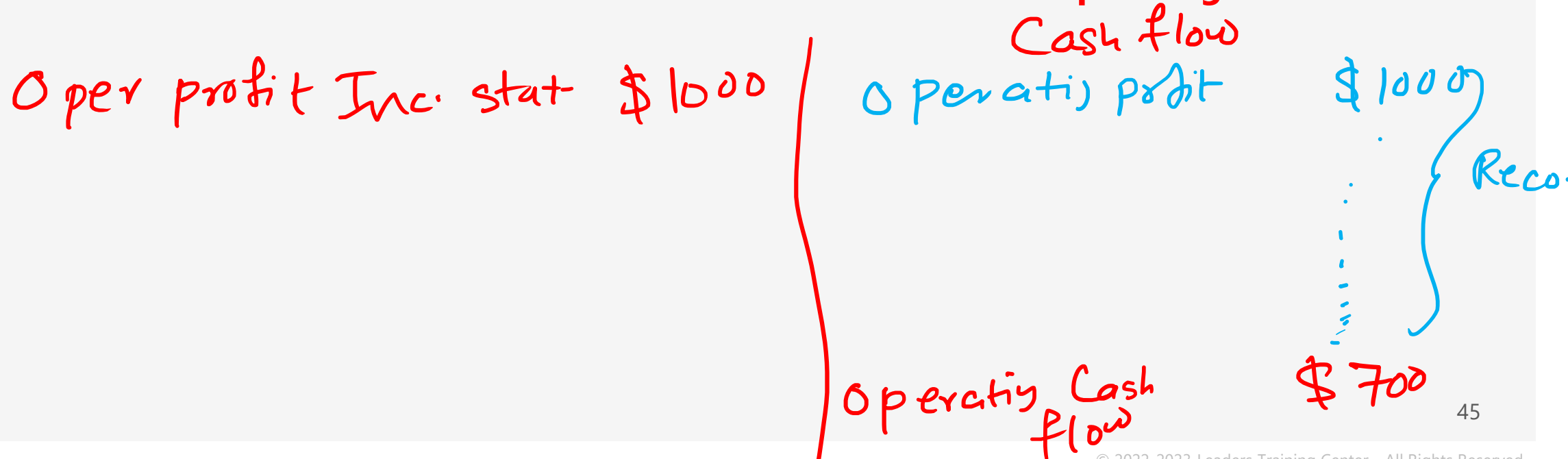
➤ any income or expense items that do not result in cash flows should be removed (i.e. any income item should be deducted, or any expense item (such as depreciation and provisions) should be added back).

➤ any items that change cash flows but are not reported in income statement should be included (list is given on next slide)

# The cash flow statement

## Classifying cash flow activities: Operating activities

- In this section of cash flow statement, **net cash flows** resulting from **firm's operations** as shown in Income statement are reported.
- UK GAAP and IFRS require **a reconciliation** between **operating profit in the income statement** and **net cash flow from operating activities**.



# The cash flow statement

A ↑ (Buying Asset) Cash Outflow  
L ↑ (Taking loan) Cash inflow

## Classifying cash flow activities: Operating activities

- Adjustments (These items cause changes in cash flows but are not included in income statement; they are all short-term items i.e. **current assets and current liabilities**)

- CA ➤ increase/decrease in inventories: deduct from/add to operating profit;
- CA ➤ increase/decrease in trade receivables: deduct from/add to operating profit;
- CL ➤ increase/decrease in trade payables: add to/deduct from operating profit;
- depreciation charges: add to operating profit; and
- increase in provisions: add to operating profit.

# The cash flow statement

## Classifying cash flow activities: Operating activities: Example

A ↑, Cash outflow  
 L ↑, Cash inflow  
 Depre → +  
 ↑ in provision → +

### Example

In one year, Wood plc has an operating profit of £100,000. Its depreciation charges were £10,000 for the year and it had no change in provisions for doubtful trade receivables. Its working capital also increased over the year, due to an increase in inventories of £40,000 and an increase in trade receivables of £10,000, with only an increase of £20,000 in trade payables.

Reconciliation of operating profit to net cash flow from operating activity:

	£	Comment:
Operating profit	100,000	
Increase in inventories	(40,000)	Deduct, as it is a cash outflow
Increase in trade payables	20,000	Add, as it is a cash inflow
Increase in trade receivables	(10,000)	Deduct, as it is a cash outflow
Depreciation charges	10,000	Add back, as it is not a cash outflow
<b>Net cash flow from operating activities</b>	<b>80,000</b>	