AFM

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BLAB

HANDOUTS

CORPORATE FINANCIAL REPORTING

-FIRST PARTIAL-

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This handout is written by students with no intention of replacing official university materials.

It is a useful tool for studying the subject, but it does not guarantee preparation that is as exhaustive and complete for passing the exam as the material recommended by the University.

The content may contain errors and has not been reviewed or approved by professors in any way. It should be used only as supplementary support, always alongside the official sources and materials indicated in the exam syllabus.

CORPORATE FINANCIAL REPORTING

General framework

Since 2005, **IAS/IFRS have been mandatory for EU listed firms** and, under certain conditions, may be adopted by unlisted companies. IAS/IFRS are important because:

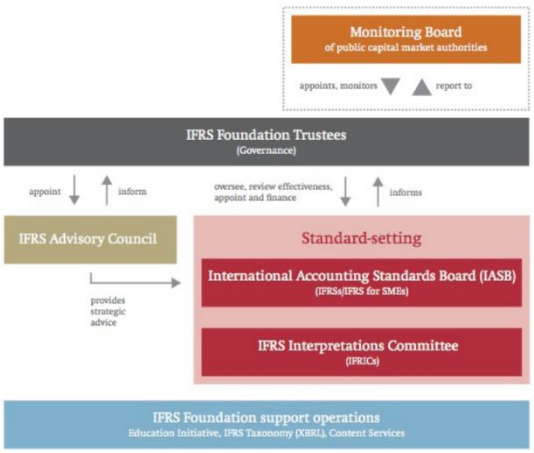
- They are mandatory or widely accepted worldwide -> it is not something that regards only European countries
- Where national standards do not clarify how to recognise/measure an event, it is possible to refer, by way of interpretation, to IAS/IFRS
- IAS/IFRS are also progressively influencing European/national legislation through the so-called "Tax Code". The process of modernisation of the Directives on budgetary matters + a specific document for SMEs (IFRS for Small and Medium-Sized Entities) has already been published, the content of which could contribute to the amendment of the European Directives.

➔ IAS/IFRS (International Accounting Standards/International Financial Reporting Standards) is a **set of standards** -> we need them to understand what companies are doing, and we want to compare companies that are operating in the same sector. Standards do not provide solutions; they provide a direction.

The development of IFRS Standards has the **purpose** of bringing to the financial markets:

- *Transparency* -> by enhancing the international comparability and quality of financial information, enabling investors and other financial participants to make informed economic decisions.
- *Accountability* -> by reducing the information gap between the providers of capital and the people who has entrusted their money by requiring information that are needed to hold management to account.
- *Efficiency* -> they help investors to identify potential opportunities and risks around the world, thus improving capital allocation. For business, the use of a single, trusted accounting language lowers the cost of capital and reduces international reporting costs.

The IFRS Foundation and the International Accounting Standards Board were established in 2001, replacing the International Accounting Standards Committee (IASC), which was set up in 1973. The Monitoring Board was established in 2009. Originally, international standards were used to support the auditing of the consolidated financial statements of multinationals that had subsidiaries in countries where there were no generally accepted accounting standards (Local GAAP).



The IFRS has a **complex governance** in order to allow most (as all is impossible) the jurisdictions and cultures to be represented in setting the rules that are going to influence companies all over the world. The most important roles are covered by:

- *Monitoring Board* -> it is formed of financial market regulators and public capital market authorities (such as the European Commission, the CONSOB

in Brazil, the SEC…). Its roles are to monitor and appoints to IFRS Trustees.
- *IFRS Trustees* -> these are the people start the process of issuing an accounting standard, and most of the time they are professionals, from academia and from politics. In order to practically issue one of them, the process passes through the International Accounting Standard Board (this is the organ that practically issue the accounting standards) thanks to the help of IFRS Interpretation Committee (they issue documents that contains both the principles itself together with the appendixes and examples -> they resolve the problems of institutions that might have problems) and the IFRS Advisory Council.
- *IFRS Foundation support operations* -> once the standard is set, this organ has the function to publish it

➔ The Big4 websites are very useful sources to help us understand these Standards, as they post several examples.

The **process** can take up to several years and is subject to public debate/consultation:

- *Research paper* -> usually the process starts by a research paper from academia regarding an accounting issue raised somewhere and understand if there is the need for a new standard.
- *Agenda decision* -> the Board sets the agenda for the development of a new standard, taking in consideration comments and advices received. It conducts ongoing public consultation on its agenda, as well as consulting with the IFRS Advisory Council and the IFRS Foundation Trustee before each agenda decision. For major projects, the IASB form groups of experts that are supported until the project is concluded.
- The staff project team *develops a series of paper for discussion and consideration by the IASB*. The Board meetings are held in public session and are webcast across the Internet, while the paper themselves is produced as observers notes available on the IASB website.
- *Discussion paper* -> it describes the reason behind the need of a new standard and the core principles, published for receiving public comments from a broad audience (such as the Italian OIC). The Board and staff undertake a comprehensive program of outreach activities, including round tables and discussion forums to seek broad input into the development of new standards. All comment letters received are published on the IASB website. Documents are published for a minimum of 30 days, but most of the time they are available for a period ranging from 4 to 6 months.
- *Exposure draft* -> a draft standard Is published for public comment, and the Board and staff collect all of them during specific activities such as round tables and public forum. As a consequence, the Board will modify the standards accordingly with this comment and the opinion of the IFRS Advisory Council.
- *Final standard* -> the final standard is published as an IFRS with an effective date of generally one to two years after the publication date. This document is published to provide a high-level overview and a summary of a specific project. It outlines how the Board consulted during the process whilst providing rational for Board decisions surrounding the most significant issues raised during the consultation process.
- *Post implementation review* -> the Board will revisit the IFRS after it has been applied for two years to ensure that the standard is functioning as intended and the concerns raised during the consultation process have been adequately dealt with.

In order to be **applied in the European Union**, IFRS must be approved with a specific procedure (so-called endorsement) and published in the Official Journal of the European Union. The endorsement procedure governed by Article 6 of Regulation 1606/2002 provides for the involvement of two bodies:

- the "*ARC Accounting Regulatory Committee*", a political body that assists the commission in its decisions
- "*EFRAG*" (European Financial Reporting Advisory Group), a technical body.

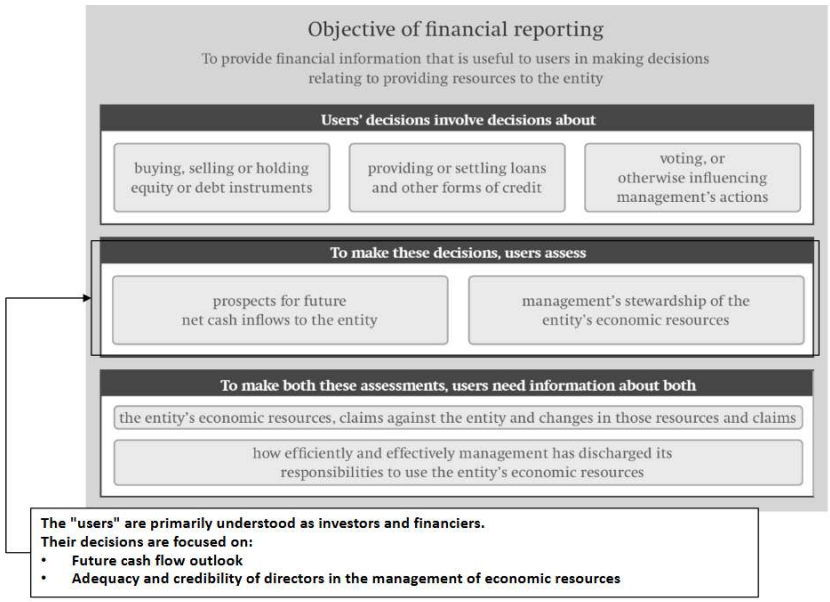
According to the regulation, the adoption of individual international standards is allowed on condition that:

1. do not conflict with the principle of a *fair view* enshrined in the Fourth and Seventh Directives;
2. are in the European public interest.
3. meet the criteria of comprehensibility, relevance, reliability and comparability required by the financial information necessary to make economic decisions and assess the suitability of management.

WHY A CONCEPTUALE FRAMEWORK? The **Conceptual Framework** sets out the fundamental concepts for financial reporting that guide the Board in developing IFRS Standards. It helps to ensure that the Standards are conceptually consistent and that similar transactions are treated the same way, so as to provide useful information for investors, lenders and other creditors. The Conceptual Framework also assists companies in developing accounting policies when no IFRS Standard applies to a particular transaction (we say they are "*principle based*", so we'll never find the exact solution to that problem, but the general principle that can guide us), and more broadly, helps stakeholders to understand and interpret the Standards. In 2005, when in Europe there has been a massive transition to IFRS, these standards were not as well developed as today. As a consequence, there has been several situation where auditors and experts didn't know what to do -> *whenever you don't have a solution, you can rely on the US GAAP*, as they share the same Conceptual Framework with the IFRS.

The 2018 revised Conceptual Framework sets out:

- the objective of **general-purpose financial reporting**
- the **qualitative characteristics** of useful financial information
- a **description of the reporting entity and its boundary**
- **definitions** of an asset, a liability, equity, income and expenses and guidance supporting these definitions
- **criteria for including assets and liabilities in financial statements** (recognition) and guidance on when to remove them (derecognition)
- **measurement bases and guidance on when to use them**
- concepts and guidance on **presentation and disclosure**
- **concepts relating to capital and capital maintenance** (The concept of capital preservation in real terms - physical capital - finds application in a particular version of the so-called "accounting for inflation")



Accounting information are **important for investors** (they are used by public companies, which need to find fund), who use the information to understand if their investment (the accounting numbers need to have certain characteristic that can give investors the possibility to choose to invest or not) is worth or not. In addition to the financial statement, we need the Disclosure given by managers, which gives *additional information inside about the company* (what investment they have done, what they have done in the past and what they want to do in the future…).

In order to be considered useful, a financial information need to have **2 fundamental qualitative characteristics**:

- *Relevance* -> the information is *capable of making difference in the decision made by the user,* which means it can be able to give a predictive value or a confirmatory value
- *Faithful representation* -> the information *must faithfully represent the substance* (to represent contractual rights and obligations faithfully, financial statements must report their substance. In some cases, the substance of such rights and obligations is clear from a contract's legal form. But, in other cases, the terms of the contract, or of a group or series of contracts, may require analysis to identify the substance of the rights and obligations) *of what it purports to represent, which needs to be complete, neutral and free from error* (to the maximum extent possible) -> it is influenced by the level of uncertainty.

Enhancing qualitative characteristics:

- *Comparability* -> we have to be able to compare the results of a company to competitors' and the ones obtained in the previous years. This also comes with the process of representing the BS, the IS and the CF statement, which need to be represented following specific schemes and procedures.
- *Verifiability* -> the auditors need to be able to verify the information communicated by the company and all the investors have the assumption that auditors have done their work correctly
- *Timeliness* -> accrual accounting is not financial accounting, as the general principle says we have to recognize revenues when there are the conditions to do
- *Understandability* -> accounting is a language, so we have to know it to express it correctly

➔ These qualitative characteristics enhance the usefulness of the information, but they cannot make useless information useful. At the same time, it is important that the benefits obtained by this complete and faithful information surpasses the costs of generating and using them.

Financial statements are generated and published by **Reporting entities**, which are entities that are required to or decide to publish a financial statement (not necessarily the entire legal entity, as they could be published also by portions of it or comprise more than one entity). A **financial statement** is a particular form of financial report that provides information about the reporting entity's assets, liabilities, income and expenses. Outside of the financial statements of single entities, we have to introduce the difference between:

- *Consolidated financial statement* -> provides information about assets, liabilities, income and expenses of both the parents and its subsidiaries as a single reporting entity
- *Unconsolidated financial statement* -> provides information about assets, liabilities, income and expenses of the parent only
- *Combined financial statement* -> provides information about assets, liabilities, income and expenses of two or more entities that are not all linked by parent-subsidiary relationship

The most important elements of a financial statement are:

- **Asset** -> *present economic resourced controlled by the entity as a result of a past event and has the potential to produce economic benefits*. If we see the previous definition, the main differences are:

  - Separate definition of an economic resource -> to clarify that is the economic resource, not the ultimate inflow of economic benefits
  - Deletion of "expected flow" -> it does not to be certain, or even likely, that the economic benefits will arise
  - A low probability of economic benefits might affect recognition decisions and the measurement of an asset
- **Liability** -> *a present obligation (which is a duty or responsibility that the entity has no practical ability to avoid) of the entity to transfer an economic resource as a result of a past event. It is the responsibility of the entity to pay that obligation*. If we see the previous definition, the main differences are:
  - Separate definition of an economic resource -> to clarify that a liability is the obligation to transfer the economic resource, not the ultimate outflow of economic benefits
  - Deletion of "expected flow" -> same implication of the assets
  - Introduction of "no practical ability to avoid" criterion to the definition of obligation.
- **Unit of account** -> *the right(s) or obligation(s), or group of right/obligation, to which recognition criteria and measurement concepts are applied*.
- **Income** -> increases in assets or decreases in liabilities that results in increases in equity, other than those related to contributions from holders of equity claims
- **Expenses** -> decreases in assets or increases in liabilities that results in reduction of equity, others than those relating to distribution to holders of equity claims.
- **Derecognition** -> the removal of all or part of the recognized assets or liabilities from an entity's statement of financial position. Derecognition aims at faithfully represent both any asset and liability retrained after the transaction that led to the derecognition and the change in the entity's assets and liabilities as a result of a transaction.

The leading principle for recognition of an asset is the **Historical cost** -> it provides information derived, at least in part, from the price of transaction or other events that give rise to the item being measured. Historical cost of an asset is reduced if they become impaired and the historical cost of liabilities is increased if they become onerous. One way to apply historical cost measurement basis to financial assets and financial liabilities is to measure them at the amortized cost -> we cannot depart from past, so when we recognise an asset it is not possible to reevaluate positively that asset.

Outside of historical cost, there is **Current value measurement bases**. Current value provides information updated to reflect conditions at the measurement date. Current value measurement bases include:

- *Fair value* -> the price that would be received if I sell an asset, or paid to transfer a liability, in a orderly transaction between market participants at the measurement date -> reflects market participants' current expectations about the amount, timing and uncertainty of future cash flows
- *Value in use (for assets)/Fulfilment value (for liabilities)* -> reflects entity-specific current expectations about the amount, timing and uncertainty of future cash flows
- *Current cost* -> reflects the current amount that would be paid to acquire an equivalent asset or received to take an equivalent liability

Which measurement criterion (evaluation) to choose? It *depends on the characteristics of asset/liability value* and *its contribution to cash flows* and the *degree of reliability of the measurement obtained*.

The Framework provides specific indications in the event that more than one measurement basis is applicable. Sometimes, more than one measurement basis is needed for an asset or liability and for related income and expenses in order to provide relevant information that faithfully represents both the entity's financial position and its financial performance.

In most cases, the most understandable way to provide that information is:

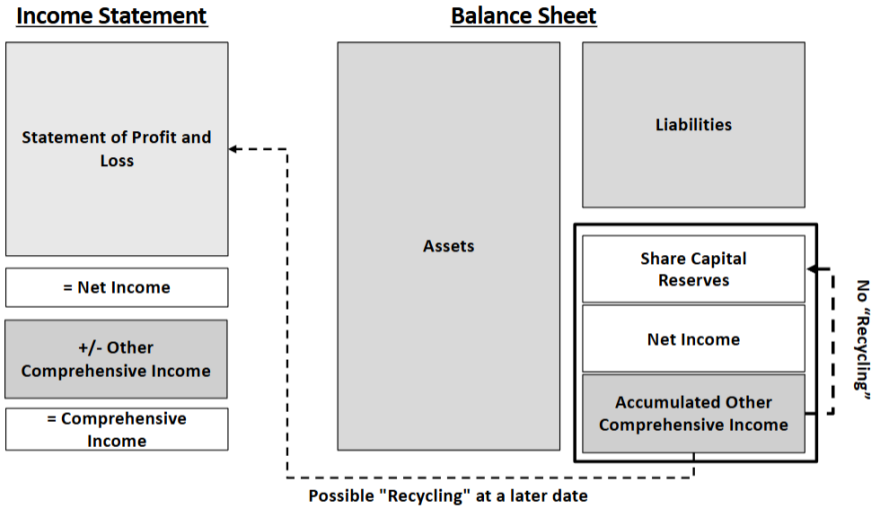
a) to use a single measurement basis both for the asset or liability in the statement of financial position and for related income and expenses in the statement(s) of financial performance
b) to provide in the notes additional information applying a different measurement basis.

However, in some cases, that information is more relevant, or results in a more faithful representation of both the entity's financial position and its financial performance, through the use of:

a) a *current value measurement basis for the asset or liability* in the statement of financial position
b) a *different measurement basis for the related income and expenses* in the statement of profit or loss.

In such cases, the **total income or total expenses** arising in the period from the change in the current value of the asset or liability is separated and classified so that:

a) the *statement of profit or loss includes the income or expenses measured applying the measurement basis selected for that statement*
b) **Other comprehensive income** includes *all the remaining income or expenses*. As a result, the accumulated other comprehensive income related to that asset or liability equals the difference between:
    a. the carrying amount of the asset or liability in the statement of financial position
    b. the carrying amount that would have been determined applying the measurement basis selected for the statement of profit or loss.



When we have different measurement basis for the same asset, we have to use the Other Comprehensive Income, which is a holding the unrealised gain that can last for any period of time. Net equity includes the accumulated value of the OCI items recognized in the comprehensive income statement. Subsequently, some of these values can be transferred back to "Net Income" (so-called "*recycling*") or to other equity accounts -> there are some **transactions where this process cannot be applied**. It is important because without this process, we would have some gain (therefore, some

income) that cannot be distributed as dividend. Also, it can influence the Earning Per Share ratio (the OCI influence the amount of dividends distributed by the company, which will influence the numerator of the Earning Per Share ratio), which can give a wrong image of the company.

Suppose you buy a FI (Financial Instrument, ex. a bond) on 1/10/X at a price of 100. The bond allows the collection of deferred quarterly interest equal to 5. The market value (fair value) of the stock as at 31/12/X is equal to 107. On 1/1/X+1 the instrument is sold at 109. There are 3 possible choices in the presentation of the comprehensive income statement (and therefore also in the balance sheet).

	Choice 1 (On Dec. 31st, the FI are measured at historical cost)	Choice 2 (On Dec. 31st, the FI are measures at FVTPL)	Choice 3 (On Dec. 31st, the FI are measured at FVTOCI)
Net Income (Profit and Loss)	• Interest Income +5	• Interest Income +5 • Revaluation to fair value +7	• Interest Income +5
Other Comprehensive Income (O.C.I.)			• Unrealized Gain from the change in Fair Value +7
	=	=	=
Comprehensive Income (total)	+5	+12	+12

Choice 1: Historical cost -> in this case, only the income from the interest will influence the IS, while all the variations in the FV have no effect on it.

Choice 2: FVTPL -> *fair value through profit and loss* -> we are going to have a permanent effect on the IS even though we haven't sold the FI. This is because in this case the company has decided to hold the FI for a short period of time, so the gain from the difference with the FV can be put in the IS.

Choice 3: FVTOCI -> *Fair value through other comprehensive income* -> in this case the company has stated that it is going to hold the period of time that can be longer or even infinite, so it needs to pass by the recycling process.

Choice 1	FINANCIAL INVESTMENTS at HISTORICAL COSTS	Dr.	Cr.
31/12/X	*No Accounting Entries (value unchanged at historical cost)*		
1/1/X+1	Bank Account (Asset)	109	
	Financial Investments (Asset)		100
	Gain on disposal (N.I.)		9

Choice 2	FINANCIAL INVESTMENTS at FVTPL (FAIR VALUE TROUGH PROFIT AND LOSS)	Dr.	Cr.
31/12/X	Financial Investments at FVTPL (Asset)	7	
	Unrealized Gain from change in FV (N.I.)		7
1/1/X+1	Bank Account (Asset)	109	
	Financial Investments at FVTPL (Asset)		107
	Gain on disposal (N.I.)		2

As it is possible to see from the writing above, all the gain and expenses generated by the fluctuations in FVTPL will influence the Net Income.

Choice 3a FINANCIAL INVESTMENTS (FAIR VALUE TROUGH OTHER COMPREHENSIVE INCOME)		Dr.	Cr.
31/12/X	Financial Investments at FVTOCI (Asset)	7	
	O.C.I. - Unrealized gains on Financial Investments at FVTOCI (Equity)		7
1/1/X+1	*diversi*		
	Bank Account (Asset)	109	
	O.C.I. - Unrealized gains on Financial Investments at FVTOCI (Equity)	7	
	Financial Investments at FVTOCI (Asset)		107
	Gain on disposal (N.I.)		9

If the FI is not a bond but a **stock**, it is not possible to do the recycling, and it does not pass through the IS but only by the BS.

Choice 3b FINANCIAL INVESTMENTS (FAIR VALUE TROUGH OTHER COMPREHENSIVE INCOME)		Dr.	Cr.
31/12/X	Financial Investments at FVTOCI (Asset)	7	
	O.C.I. - Unrealized gains on Financial Investments at FVTOCI (Equity)		7
1/1/X+1	*diversi*		
	Bank Account (Asset)	109	
	O.C.I. - Unrealized gains on Financial Investments at FVTOCI (Equity)	7	
	Financial Investments at FVTOCI (Asset)		107
	Gain on disposal (Equity)		9

The Fair Value (IFRS 13) -> This IFRS:

a) defines fair value.
b) sets out in a single IFRS a framework for measuring fair value
c) requires disclosures about fair value measurements.

IFRS 13 applies when another IFRS requires or permits fair value measurements or disclosures about fair value measurements (and measurements, such as fair value less costs to sell, based on fair value or disclosures about those measurements). The measurement and disclosure requirements of this IFRS do not apply to the following:

1. *share-based payment transactions* within the scope of IFRS 2 Share-based Payment;
2. *leasing transactions* accounted for in accordance with IFRS 16 Leases;
3. *measurements that have some similarities to fair value but are not fair value*, such as net realisable value in IAS 2 Inventories or value in use in IAS 36 Impairment of Assets.

Fair value is a **market-based measurement**, not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available -> **LEVEL 1 FAIR VALUE**
For other assets and liabilities, observable market transactions and market information might not be available. However, the **objective** of a fair value measurement in both cases **is the same** -> to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions.

If there isn't this market where to look into -> **LEVEL 2 FAIR VALUE** -> *Quoted prices in active markets for identical or similar assets or, in absence, of inactive markets* -> Use of inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (pries, rates etc,) or indirectly (ex. beta)

LEVEL 3 FAIR VALUE -> Use of unobservable inputs (such as the CF), which shall reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk (Mark to Model) -> As a result, an entity's intention to hold an asset or to settle or otherwise fulfil a liability is not relevant when measuring fair value.

Presentation of Financial Statements (IAS 1), Basis

of Preparation of Financial Statements (IAS 8) and Operating Segments (IFRS 8)

XYZ Group – Statement of comprehensive income for the year ended 31 December 20X7

(illustrating the presentation of comprehensive income in one statement and the classification of expenses within profit by function)

(in thousands of currency units)

	20X7	20X6
Revenue	390,000	355,000
Cost of sales	(245,000)	(230,000)
Gross profit	145,000	125,000
Other income	20,667	11,300
Distribution costs	(9,000)	(8,700)
Administrative expenses	(20,000)	(21,000)
Other expenses	(2,100)	(1,200)
Finance costs	(8,000)	(7,500)
Share of profit of associates[a]	35,100	30,100
Profit before tax	161,667	128,000
Income tax expense	(40,417)	(32,000)
Profit for the year from continuing operations	121,250	96,000
Loss for the year from discontinued operations	–	(30,500)
PROFIT FOR THE YEAR	121,250	65,500
Other comprehensive income:		
Exchange differences on translating foreign operations[b]	5,334	10,667
Investments in equity instruments	(24,000)	26,667
Cash flow hedges[b]	(667)	(4,000)
Gains on property revaluation	933	3,367
Actuarial gains (losses) on defined benefit pension plans	(667)	1,333
Share of other comprehensive income of associates[c]	400	(700)
Income tax relating to components of other comprehensive income[d]	4,667	(9,334)
Other comprehensive income for the year, net of tax	(14,000)	28,000
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	107,250	93,500

Statement of Profit and Loss (contra-accounts are assets and liabilities items)

Statement of Other Comprehensive Income (contra-accounts are net equity items)

+ Revenues (from customers)
- Expenses (to third parties)
+/- Realized Gains / Losses (with third parties)
+/- Adjustments (inventory, depreciation, impairment, provisions etc.)
? [redacted]
- Income Taxes
= Profit/Loss from Continuing Operations
+/- Profit/Loss from Discontinued Operations
= NET INCOME (Profit/loss)
+/- Other Comprehensive Income (net of taxes)
= TOTAL COMPREHENSIVE INCOME

Can it be argued that the **Net income** is affected by the exchange transactions while the **Other Comprehensive Income (OCI)** section includes income and expenses (better: gains and losses) deriving from fair value measurements (so, not related to cash) and other complex measurements? Is this also in relation to the fact that the distributable profit is given by the NET INCOME and not by the TOTAL COMPREHENSIVE INCOME? (assuming that only profits made through exchanges with third economies can be distributed?) At first it would seem so, let's first see in the next slide what falls into the OCI sections and then we will discover the contents of the hidden box (?)

From IAS 1: "**Other comprehensive income** comprises items of income and expense (including reclassification adjustments) that are not recognized in profit or loss as required or permitted by other IFRSs. The components of other comprehensive income include:

a) *changes in revaluation surplus* (see IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets)
b) *remeasurements of defined benefit plans* (see IAS 19 Employee Benefits) -> different types of pension plans and how changes of the implications impact the information we represent in the financial statements
c) *gains and losses arising from translating the financial statements of a foreign operation* (see IAS 21 The Effects of Changes in Foreign Exchange Rates)
d) *gains and losses on remeasuring Available-for-sale financial (AFS) assets or Held to Collect and Sell* (see IAS 39 and IFRS 9): FVTOCI financial assets
e) *The effective portion of gains and losses on hedging instruments in a cash flow hedge* (see IAS 39)." -> we use derivative accounting for hedging

Items sub a), d) and e) are related to **fair value accounting**. Item sub b) is related to changes in **actuarial assumptions for the pension liabilities** (as it depends from several variables such as how many workers retire or how much the worker is expected to live). Item sub c) arises from the **consolidation of foreign subsidiaries** (whose currency is different from the currency of the parent company)

There are transactions that **relate to FV but that don't go to OCI** (but influence the IS):

- Fair value adjustments of marketable securities (financial assets at fair value through profit or loss or FVTPL) (see IAS 39 Financial Instruments: Recognition and Measurement);
- Fair value adjustments of derivative instruments -> 2 cases: *non hedging* (which will go directly to the IS) and *fair value hedge* (for example, in case a company has several contracts in dollars and want to protect the value of this contracts by using derivatives, depending on the type of hedging we are going to have different accounting treatments)
- Fair value adjustments of Investment Properties (fair value option) (see IAS 40 Investment property)
- Revaluation deficit (see IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets) -> when we have an asset that is revaluated with the FV and realize a loss rather than a gain, we have to put it in the IS;
- Impairment of assets (related to either the fair value or the value in use).

+ Revenues (from customers)
- Expenses (to third parties)
+/- Realized Gains / Losses (with third parties)
+/- Adjustments (inventory, depreciation, impairment, provisions etc.)
+/- Unrealized Gains / Losses (mainly from fair value adjustments)
- Income Taxes
= Profit/Loss from Continuing Operations
+/- Profit/Loss from Discontinued Operations
= NET INCOME (Profit/loss)
+/- Other Comprehensive Income (net of taxes) – O.C.I.
= TOTAL COMPREHENSIVE INCOME

So, the effects of complex valuations based (mainly but not only) on fair value accounting are recorded either into the Net Income section or into the OCI section, depending on the choice of Accounting Standards.

For the purposes of financial statements, **different measurement criteria can be used**: *historical cost vs. current values* (fair market value, value in use, current cost). For some items of the financial statements, the Accounting Standards adopt a *single measurement criterion while for other items they may prefer the use of two different criteria*.

When the valuation criteria chosen for the assets/liabilities in the balance sheet (typically "fair value" criteria) lead to changes that are not reflected in net income -> OCI. The changes in value classified in the OCI can be subsequently reclassified to net income (so-called "OCI *recycling*"): this choice is applied selectively only for *some types of OCI* (for others, in fact, there is never "recycling")

Some income and expenses **are recognized directly in equity accounts** (accounts also classified as OCI): income and expenses are those provided for in the exhaustive list made by IFRS. However, there are other cases of income and expenses, other than OCI items, which, according to various principles, must be recognized directly in equity without being classified as OCI. For example:

- *Gains/losses from share buybacks*,
- *Gains/losses from step-up or step-down transactions on controlling interests*,
- *Premiums for the purchase/sale of options on treasury shares in the event of gross physical settlement*,
- *Gains/losses on the sale of shares classified as FVTOCI*.

These gains and losses **do not therefore appear in any section of the statement of comprehensive income** and must therefore be identified within the change in equity.

Extraordinary items cannot be recognized in the IS -> we cannot used as extraordinary items, but just as non-recurring items.

"*An entity shall not present any items of income or expense as extraordinary items, in the statement(s) presenting profit or loss and other comprehensive income or in the notes.*" (IAS 1) -> In 2002, the Board decided to eliminate the concept of extraordinary items from IAS 8 and to prohibit the presentation of items of income and expense as 'extraordinary items' in the income statement and the notes. The Board decided that items treated as extraordinary result from the normal business risks faced by an entity and do not warrant presentation in a separate component of the income statement. Eliminating the category of extraordinary items eliminates the need for arbitrary segregation of the effects of related external events (some recurring and others not) on the profit or loss of an entity for a period. For example, arbitrary allocations would have been necessary to estimate the financial effect of an earthquake on an entity's profit or loss if it occurs during a major cyclical downturn in economic activity -> "***unusual***" or "***non-recurring***" items are a useful information for the financial analysis ….

For the year ended 31 December Million US dollar, except earnings per shares in US dollar	Notes	2017	2016
Revenue		**56 444**	**45 517**
Cost of sales		(21 386)	(17 803)
Gross profit		**35 058**	**27 715**
Distribution expenses		(5 876)	(4 543)
Sales and marketing expenses		(8 382)	(7 745)
Administrative expenses		(3 841)	(2 883)
Other operating income/(expenses)	7	854	732
Profit from operations before non-recurring items		**17 814**	**13 276**
Restructuring	8	(468)	(323)
Business and asset disposal	8	(39)	377
Acquisition costs business combinations	8	(155)	(448)
Profit from operations		**17 152**	**12 882**
Finance cost	11	(6 192)	(5 860)
Finance income	11	378	652
Non-recurring net finance income/(cost)		(693)	(3 356)
Net finance income/(cost)		**(6 507)**	**(8 564)**
Share of result of associates and joint ventures		430	16
Profit before tax		**11 076**	**4 334**
Income tax expense	12	(1 920)	(1 613)
Profit from continuing operations		**9 155**	**2 721**
Profit from discontinued operations	22	28	48
Profit of the year		**9 183**	**2 769**

In April 2024, IASB approved the *IFRS 18 Presentation and Disclosure in Financial Statements*, which will replace IAS from 1 January 2027:

1. **Presentation of new defined subtotals in the statement of Profit and Loss** -> IFRS 18 requires companies to report operating profit and profit before financing and income taxes -> these subtotals provide *a consistent structure for the statement of profit and loss* (there could be some differences in the Notes, but in the IS and BS there are no differences)*, thereby improving comparability*. IFRS 18 will not affect how companies measure their financial performance and the overall profit figure
2. **Disclosure of management-defined performance measures** -> many companies report alternative performance measures or non-GAAP measures. When those definitions meet the Management-defined Performance measures, IFRS 18 requires companies to disclose reconciliation between those measures and subtotals listed in the IFRS 18 or totals and subtotals required by the International Accounting Standards. MPMs are subtotals of income and expenses used in public communications to communicate management's view of an aspect of the financial performance for the company as a whole. There could be some cases where the managers communicate different results from the one communicated in the annual FS (for example there could be difference between EBITDA and the Operating Income). This is because managers know some information that are communicated only internally, such as the real usage of specific items -> whenever there are differences, managers need to reconciliate these values and disclose them
3. **Enhanced requirements for grouping (aggregation and disaggregation of information)** -> IFRS 18 sets our requirements that help companies determine whether information about items should be in primary financial statement or in the notes and provides principles to determining the level of detail needed for that information. IFRS 18 also includes requirements for the presentation of operating expenses in the statement of profit and loss, disclosure for specific expenses by nature and further information about items grouped together and labelled "other".

An entity shall classify an **asset as current** when:

- it expects to realise the asset, or intends to sell or consume it, in its normal operating cycle
- it holds the asset primarily for the purpose of trading in short term (not cash but almost)
- it expects to realise the asset within twelve months after the reporting period

- the asset is cash or a cash equivalent (as defined in IAS 7) unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

➔ Whatever asset is not considered in these categories, it will be **marked as non-current**.

An entity shall classify a **liability as current** when:

- it expects to settle the liability in its normal operating cycle
- it holds the liability primarily for the purpose of trading
- the liability is due to be settled within twelve months after the reporting period
- it does not have the right at the end of the reporting period to defer settlement of the liability for at least twelve months after the reporting period.

➔ An entity shall classify **all other liabilities as non-current**

Note: Since more than one of the above criteria can be used, it often happens that:

- *Trade receivables, inventories, etc., are classified according to criterion a)*
- *Securities with speculative purposes are classified according to criterion b)*
- *Other financial assets are classified according to criterion c)*

➔ THIS IS A HYBRID REFORMULATION OF THE BALANCE SHEET!

An entity shall present a **statement of changes in equity** including the following information:

1) total comprehensive income for the period, showing separately the total amounts attributable to owners of the parent and to non-controlling interests
2) for each component of equity, the effects of retrospective application or retrospective restatement recognised in accordance with IAS 8
3) for each component of equity, a reconciliation between the carrying amount at the beginning and the end of the period, separately (as a minimum) disclosing changes resulting from:
    a. *profit or loss*
    b. *other comprehensive income*
    c. *transactions with owners in their capacity as owners*, showing separately contributions by and distributions to owners and changes in ownership interests in subsidiaries that do not result in a loss of control.

IAS 8 shall be applied in *selecting and applying accounting policies*, and *accounting for changes in accounting policies*, *changes in accounting estimates and corrections of prior period errors*. The general rule we have to follow when we have an issue, and we don't know which standard to apply we have a hierarchy:

- firstly, we have to look at similar assets (maybe for the nature of that asset or for the contract we have)
- secondly, we can used other financial standards issued by other financial institutions

➔ the most relevant difference from IAS/IFRS and the American GAAP is that these ones are very specific at industry level -> it is possible to find several examples for the specifics assets.

Selection and application of accounting policies -> In the absence of an IFRS that specifically applies to a transaction, other event or condition, management shall *use its judgement* in developing and applying an accounting policy that results in *information that is relevant to the economic decision-making needs of users* and *reliable*.

In making the judgement, management shall refer to, and consider the applicability of, the following sources in descending order:

a) the *requirements in IFRSs dealing with similar and related issues*

b) the *definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the Conceptual Framework*

Management may also consider the most recent pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices, to the extent that these do not conflict with the IFRS.

Changes in accounting estimates -> The effect of a change in an accounting estimate, shall be recognised prospectively by including it in profit or loss in:

a) *the period of the change*, if the change affects that period only
b) *the period of the change and future periods*, if the change affects both.

To the extent that a change in an accounting estimate gives rise to changes in assets and liabilities, or relates to an item of equity, it shall be recognised by adjusting the carrying amount of the related asset, liability or equity item in the period of the change. Examples of accounting estimates that are frequently revised include:

a) a *loss allowance for expected credit losses*
b) the *net realisable value of an item of inventory*
c) the *fair value of an asset or liability*
d) the *depreciation expense for an item of property, plant and equipment*
e) a *provision for warranty obligations*

Errors -> managers might play with and take advantage of the subjectivity that can end in errors. It is not only about the numbers, but also on the Disclosure about those numbers, which are *difficult to detect* (whose work to find them belong on the auditors -> if they are corrupted by managers to not seeing their errors, we cannot notice them) and *can lead to bankruptcy* (most of the time they create fake CF thanks to the presence of companies in other countries). When the error is detected, they *have to restate the financial statement*, which means *present again the financial statement providing information about the situation where that error never occurred*.

Prior period errors are omissions from, and misstatements in, the entity's financial statements for one or more prior periods arising from a failure to use, or misuse of, reliable information that:

a) was available when financial statements for those periods were authorised for issue
b) *could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those financial statements*.

Such errors include the effects of mathematical mistakes, mistakes in applying accounting policies, oversights or misinterpretations of facts, and fraud. Errors can arise in respect of the recognition, measurement, presentation or disclosure of elements of financial statements. Financial statements do not comply with IFRSs if they contain either material errors or immaterial errors made intentionally to achieve a particular presentation of an entity's financial position, financial performance or cash flows.

Potential current period errors discovered in that period are corrected before the financial statements are authorised for issue. An entity shall correct material prior period errors retrospectively in the first set of financial statements authorised for issue after their discovery by:

a) restating the comparative amounts for the prior period(s) presented in which the error occurred
b) if the error occurred before the earliest prior period presented, *restating the opening balances of assets, liabilities and equity for the earliest prior period presented*

For a company, the following changes in the value of inventories were verified:

	Cumulated change	*Change from prior period*
At 31 December 2017: increase of	10.000	+ 10.000
At 31 December 2018: increase of	15.000	+ 5.000
At 31 December 2019: increase of	20.000	+ 5.000

As the inventory is higher, the cost of goods sold is going to be lower -> as a consequence, we are expecting the Return Earnings of the company to be higher of cumulative 20.000€ (as the cost of goods sold is 20.000€ lower) -> How do we inform investors about this change? The income statements of the last 2 years would be as follows (disregarding any tax effect for simplicity) -> comparison between the statements before and after the adjustments (we always compare the data regarding the current year and the previous year):

BEFORE

	2019	2018
Revenues	250.000	200.000
Cost of sales	-100.000	-80.000
Gross Profit	**150.000**	**120.000**
Other expenses	-85.000	-65.000
Net Income	**65.000**	**55.000**

AFTER

	2019	2018
Revenues	250.000	200.000
Cost of sales	-95.000	-75.000
Gross Profit	**155.000**	**125.000**
Other expenses	-85.000	-65.000
Net Income	**70.000**	**60.000**

This would be the change we have to present regarding the IS, but we are still missing the information regarding the financial position thanks to the BS. The error related to the 2017 financial year must be corrected with respect to the beginning amount of the Retained Earnings (the part of the Net Income that is not distributed to shareholders and is reinvested in the company) as at 1 January 2018:

	Retained Earnings (restated)	Retained Earnings (before the restatement)
On 1/1/2018 as originally reported	300.000	300.000
Change in inventory valuation	10.000	
On 1/1/2018 restated	310.000	300.000
Net Income for the year 2018, restated	60.000	55.000
On 31 December 2018	370.000	355.000
Net Income for the year 2019	70.000	65.000
On 31 December 2019	440.000	420.000

We prepare the retained Earnings, starting from the 300k, but we add to the original change in the inventory that should have occurred during 2017, which is still not present in the financial statement -> as we are analysing the financial position of the company in 2019, we cannot influence the IS presented by the company on the 2017 -> the only thing we can do is stating what would have been the financial position in the 2018 with the change in inventory referred to 2017. After that we report the adjusted Net Income, both for 2018 and 2019.

➔ This situation is positive for investors as the EPS are higher, but we are upset about the work of TMT. The financial statement published in 2018 is going to be the same, but we have to change the financial statement published in 2019 that has also 2018. Usually, an error is relevant only if it is maximum 3 years hold, in particular in listed companies.

An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates. When a company disclose its information to investors, they are going to give them to competitors too, so they are reluctant of giving too much information (and in particular the one regarding the operating segments in which they operate). An **operating segment** is a component of an entity:

a) that engages in business activities from which it may earn revenues and incur expenses, whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance,
b) for which discrete financial information is available.

An operating segment may engage in business activities for which it has yet to earn revenues, for example, start-up operations may be operating segments before earning revenues.

Segments are **similar in each of the following respects**:

a) the nature of the products and services
b) the nature of the production processes
c) the type or class of customer for their products and services
d) the methods used to distribute their products or provide their services
e) if applicable, the nature of the regulatory environment, for example, banking, insurance or public utilities.

An entity shall **report separately** information about an operating segment that meets any of the following quantitative thresholds:

a) Its reported revenue, including both sales to external customers and intersegment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments.
b) The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of:
    a. the *combined reported profit of all operating segments that did not report a loss*
    b. the *combined reported loss of all operating segments that reported a loss*.
c) Its assets are 10 per cent or more of the combined assets of all operating segments

For example, from the financial statement we can understand that a company has several segments, but from just that we cannot understand a lot, as it is a good proxy of the complexity of the company, we can understand the geographic presence, we can understand how good auditors need to be.

Statement of Cash Flow (IAS 7)

Statement of Cash Flow -> document of the Financial Statement that represents a zooming on cash and cash equivalents, explaining how these variables have changed across the year and what have been the reasons behind that (classified in operating, investing and financial activities).

Cash -> comprises cash on hand and demand deposits.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash, and which are subject to an insignificant risk of changes in value.

- For an *investment* to qualify as a cash equivalent it must be *readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value* -> only when it has a short maturity of, say, three months or less from the date of acquisition.
- *Equity investments* are *excluded from cash equivalents unless they are*, *in substance, cash equivalents*, for example in the case of preferred shares acquired within a short period of their maturity and with a specified redemption date.

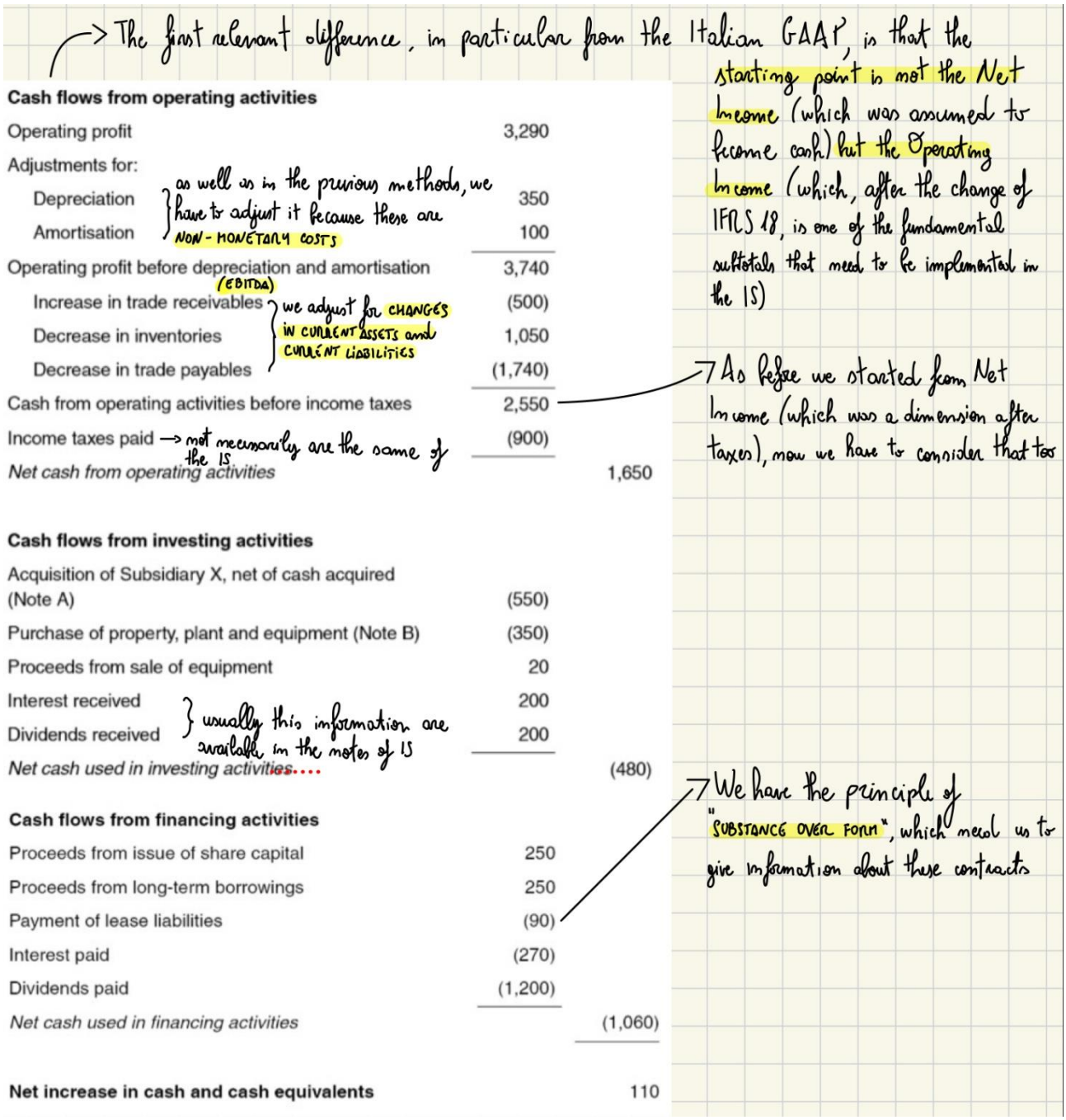
Note: "*Short-term marketable securities*", i.e. bonds and shares (although they can be readily settled), are usually classified by companies outside the category of cash and cash equivalents and are classified as financial assets

Cash equivalents ≠ "Short-term liquidity" (Cash + Short-term securities)

Bank borrowings are generally considered to be *financing activities*. However, in some countries, bank overdrafts which are repayable on demand form an integral part of an entity's cash management. In these circumstances, bank overdrafts are *included as a component of cash and cash equivalents*. A characteristic of such banking arrangements is that the bank balance often fluctuates from being positive to overdrawn -> Although bank accounts with a negative balance are typically reformulated by financial analysts as financial debt, under IAS 7 they directly reduce the amount of cash and cash equivalents.

The **3 sections** of the cash flow statement:

- *Cash flows from operating activities* are primarily derived from the principal revenue-producing activities of the entity. Therefore, they generally result from the transactions and other events that enter into the determination of profit or loss. If a company has a negative CF generated by operating activity, investing is just for speculation. Examples of CF that belongs to this section are cash flows arising from the *collection of operating revenues and the payment of operating expenses*.
- *Cash flows arising from investing activities* represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. Only expenditures that result in a recognised asset in the statement of financial position are eligible for classification as investing activities. Obviously, also the disposal and the relative elimination of the asset from the financial position belong to this section. Examples are the *acquisition/disposal of tangibles, intangibles, equity and debt instruments* (financial assets), *loans made and repaid to other parties* (financial asset) or *interest and dividend income*
- *Cash flows arising from financing activities* are related to the transactions with the providers of capital and borrowings to the entity. Examples are *issuance and acquisition (buy-back) of entity's shares, issuance and repayment of financial liabilities, payment of dividends and payment of interest expenses*



Changes in the ownership interest in subsidiaries and other businesses

The **aggregate cash flows** arising from obtaining or losing control of subsidiaries or other businesses shall be presented separately and classified as *investing activities*. An entity shall disclose, in aggregate, in respect of both obtaining and losing control of subsidiaries or other businesses during the period each of the following:

a) the *total consideration paid or received*
b) the *portion of the consideration consisting of cash and cash equivalents*
c) the *amount of cash and cash equivalents in the subsidiaries or other businesses over which control is obtained or lost*
d) the *amount of the assets and liabilities* other than cash or cash equivalents in the subsidiaries or other businesses *over which control is obtained or lost*, summarised by each major category.

➔ These rules are essential to prevent manipulation of the cash flow statement and related cash flows. This means that *all changes in assets*, other than liquidity, *due to the acquisition/loss of control are excluded from the cash flow statement*. In addition, the company that increases its cash and cash equivalents thanks to acquisition of another company should disclose the amount of it that the company is capable of generating. Finally, they also have to disclose the situation where the acquisition is conducted through equity rather than liquidity

Example of a fraudulent acquisition on 31/12

Cash Flow Statement, 30/Dec./X

Cash Flow from Operating Activities	-200
Cash Flow from Investing Activities	+100
Cash Flow from Financing Activities	+50
Total Cash Flow	-50

A day later…

+600 (2)

- 600 (3)

Cash Flow Statement, 31/12/X

Cash Flow from Operating Activities (2)	+400
Cash Flow from Investing Activities (3)	-500
Cash flow from Financing Activities	+50
Total Cash Flow	-50

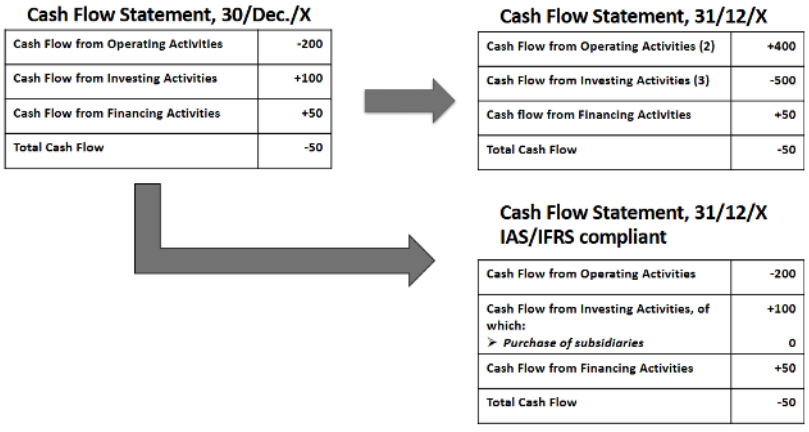
The company does not like this cash flow statement (negative cash flow from Operating Activities partially offset by disposals of assets). So, on 31st of December, the company acquires the full capital of a subsidiary that is very close to bankruptcy; the company pays a price of "zero", only with the objective of manipulating the cash flow statement; the subsidiary presents the following assets/liabilities:

ASSETS		LIABILITIES AND EQUITY (1)	
Plants	600	Accounts payable	600

What we can see is:

1) Assumption: subsidiary's Net Equity = 0 (close to bankruptcy)
2) Change of +600 in comparison with the cash flow at 30th of December: increase of Accounts payable from the consolidation of the subsidiary
3) Change of -600 in comparison with the cash flow at 30th of December: increase of plants from the consolidation of the subsidiary.

According to IAS 7 the price of the acquisition *paid in cash* (net of the cash included in the balance sheet of the subsidiary) must be reported in the Investing Activities section ("Purchase in subsidiaries" in this example is zero). All the non-cash items of the subsidiary (in this example PPE and A/P) have no effect on the cash flow statement (you don't see them at all).



Statement of Cash Flow is the most important resource to identify CAPEX. **CAPEX (Capital Expenditure)** is investment in the current year in fixed and intangible assets, which can be identified in the Statement of Cash Flow. We can calculate CAPEX by identifying the difference in the Gross and Net amount in PPE and Intangible assets, but it requires time. In addition, we have to keep in mind the difference between *Gross CAPEX* (investments without disposals) and *Net CAPEX* (investments with disposals). What are the consequences of these rules?

- Consolidations of assets/liabilities following the acquisition of subsidiaries do not influence cash flows (the Cash Flow Statement only reports "Acquisition of subsidiaries, net of cash acquired" into the Investing section)
- De-Consolidations of assets/liabilities following the disposal of subsidiaries do not influence cash flows (the Cash Flow Statement only reports "Sales of subsidiaries, net of cash disposed" into the Investing section)
- Do not try to prepare a "IAS compliant" cash flow statement by using the consolidated income statement and balance sheet: non-cash assets/liabilities of purchased (sold) subsidiaries are included(excluded) into(from) the ending balance sheet accounts….
- If you want to calculate the CAPEX amount using the cash flow statement, remember:
    - *only tangible/intangible assets that were "directly" purchased/sold are recorded as separate cash flow items* in the Investing Activities section
    - *tangible/intangible assets that are included into the price of purchased/sold subsidiaries are hidden into the two items*: Acquisition of subsidiaries, net of cash acquired and Sales of subsidiaries, net of cash disposed

According to IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations) an entity shall present or disclose the net cash flows attributable to the operating, investing and financing activities of discontinued operations. This information may either be presented in the statement of cash flows or disclosed in the notes.

Investing and financing transactions that do not require the use of cash or cash equivalents shall be *excluded* from a statement of cash flows. Such transactions shall be disclosed elsewhere in the financial statements in a way that provides all the relevant information about these investing and financing activities. Many investing and financing activities do not have a direct impact on current cash flows although they do affect the capital and asset structure of an entity. The exclusion of non-cash transactions from the statement of cash flows is consistent with the objective of a statement of cash flows as these items do not involve cash flows in the current period. Examples of non-cash transactions are:

A) the acquisition of assets either by assuming directly related liabilities or by means of a lease
B) the acquisition of an entity by means of an equity issue
C) the conversion of debt to equity

When building the CF statement, we have to show the impact of discontinuous operation such as the acquisition of a new entity.

An entity shall provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities represented in a table, including both changes arising from cash flows and non-cash changes:

a) changes from financing cash flows
b) changes arising from *obtaining or losing control of subsidiaries or other businesses*
c) the effect of *changes in foreign exchange rates*
d) changes in fair value
e) other changes.

Companies usually provide a reconciliation between the opening and closing balances in the statement of financial position for liabilities arising from financing activities.

	20X1	Cash flows	Non-cash changes			20X2
			Interest expenses	Acquisition	New leases	
Long-term borrowings	1,040	250	–	200	–	1,490
Lease liabilities	–	(90)	–	–	900	810
Long-term debt	1,040	160	–	200	900	2,300
Interest payable	100	(270)	400	–	–	230
	1,140	(110)	400	200	900	2,530

An entity shall disclose the amount of significant cash and cash equivalent balances held by the entity that are not available for use by the group (example: cash balances held by a subsidiary that operates in a country where exchange controls or other legal restrictions apply when the balances are not available for general use by the parent or other subsidiaries). Additional information is encouraged and may include:

- the *amount of undrawn borrowing facilities that may be available for future operating activities* and to settle capital commitments, indicating any restrictions on the use of these facilities
- the *aggregate amount of cash flows that represent increases in operating capacity* separately from those cash flows that are required to maintain operating capacity
- the *amount of the cash flows arising from the operating, investing and financing activities of each reportable segment* (see IFRS 8 Operating Segments).

Consolidated statement of comprehensive income for the period ended 20X2(a)

Sales	30.650
Cost of sales	(26.450)
Gross profit	**4.200**
Selling expenses	(600)
General and administrative expenses	(310)
Operating profit	**3.290**
Share of profit or loss of associates and joint ventures	50
Investment income	450
Foreign exchange loss	(40)
Profit before financing and income taxes	**3.750**
Interest expenses	(400)
Profit before income taxes	**3.350**
Income tax expense	(300)
Profit/total comprehensive income	**3.050**

The entity did not recognise any components of other comprehensive income in the period ended 20X2

NOTES FOR INCOME STATAMENT

1) depreciation on property, plant and equipment and amortization of intangible assets for the period amounted to 350 and 100 respectively;
2) Investment income includes :
   - 200 for interest income
   - 100 for interest on trade receivables
   - 200 for dividends income
   - (50) for a fair value loss on financial instruments
3) the foreign exchange loss is related to a bank account in a foreign currency;

Regarding Depreciation and Amortization, it is possible to find them in the Cost of goods sales (when we are talking about an asset that is usually used for operating activities) or in the General and Administrative costs (in case it is used for general purposes) -> we need the Notes!

Consolidated statement of financial position as at end of 20X2

	20X2	20X1
Assets		
Current assets		
Cash and cash equivalents	230	160
Trade and other receivables	1.900	1.200
Inventories	1.000	1.950
Non-current assets		
Investments in associates and joint ventures	500	450
Investments in other financial instruments	2.000	2.050
Property, plant and equipment	1.880	350
Intangible assets	400	500
Total assets	**7.910**	**6.660**
Liabilities		
Current liabilities		
Trade payables	250	1.890
Interest payable	230	100
Income taxes payable	400	1.000
Non-current liabilities		
Long-term debt	2.300	1.040
Total liabilities	**3.180**	**4.030**
Equity		
Share capital	1.500	1.250
Retained earnings	3.230	1.380
Total equity	**4.730**	**2.630**
Total liabilities and equity	**7.910**	**6.660**

NOTES FOR BALANCE SHEET

1) all of the shares of a subsidiary were acquired for 590. The fair values of assets acquired and liabilities assumed were as follows:
   - Inventories 100
   - Trade and other receivables 100
   - Cash 40
   - Property, plant and equipment 650
   - Trade payables 100
   - Long-term debt 200
2) 250 was raised from the issue of share capital and a further 250 was raised from long-term borrowings.
3) interest expense was 400, of which 170 was paid during the period. Also, 100 relating to interest expense of the prior period was paid during the period.
4) dividends paid were 1,200.
5) during the period, the group acquired property, plant and equipment and right-of-use assets relating to property, plant and equipment with an aggregate cost of 1,250, of which 900 related to right-of-use assets. Cash payments of 350 were made to purchase property, plant and equipment.
6) plant with original cost of 80 and accumulated depreciation of 60 was sold for 20.
7) trade and other receivables as at the end of 20X2 include 100 of interest receivable.

The information regarding the assets of the subsidiary we have acquired during the year are fundamental, as we have to make the right modification in order to avoid these numbers to inflate the ones present in the Statement of CF. We also have to consider that the disposal of the asset did not generate any profit. The Statement of CF generated for this company would be as follows.

CF generated by operating activities

The **starting point** is always the **Operating Income**, which we have to adjust by subtracting the revenues and adding back the costs that do not belong to the operating activities and/or are not monetary (such as with amortisation and depreciation). After that we have to consider **all the variations that occurred in the current assets** which, added to the Operating Income before Amortisation and Depreciation, we get the total CF from the Operating Activities.

Operating Profit	*3.290*	
Amortization	*100*	Note 1) for I/S
Depreciation	*350*	Note 1) for I/S
Operating profit before depreciation and amortisation	**3.740**	
Overall change in trade receivables	*(700)*	
Adjustment: acquistion of a subsidiary	*100*	Note 1) for the B/S
Adjustment: interest receivable (interest income)	*100*	Note 2) for I/S and 7) for B/S
Increase in Trade Receivables	(500)	
Overall change in trade payables	*(1.640)*	
Adjustment: acquistion of a subsidiary	*(100)*	Note 1) for the B/S
Decrease in trade payables	(1.740)	
Overall change in Inventory	*950*	
Adjustment: acquistion of a subsidiary	*100*	Note 1) for the B/S
Decrease in inventory	1.050	
Income tax expense	*(300)*	
Change of Tax payable	*(600)*	
Income taxes paid	(900)	
NET CASH FROM OPERATING ACTIVIES	**1.650**	

- We have to adjust the level of **trade receivables** by the level of the subsidiary and interest receivables from interest income -> we are adding it because we are eliminating an increase in the trade receivables, which is something is considered harmful for the company. In our examples, the A/R pass from 1200 to 1900, so there is an increase of 700 -> the company didn't collect cash for it, so we subtract it. The problem is that from the *subsidiary generated A/R for 100*, so the without the subsidiary, the ending value would have been 1800, so the *total variation would have been of 600*. We also have to make an

additional adjustment, as the Notes indicates that among the A/R there are 100 of interest receivable, which are *not operating expenses*.

- At the same time, regarding the **trade payables**, this number decreases CF as we are eliminating an item that increased the liabilities, which was something positive for the company.
- Regarding the **inventory**, it passes from 1950 to 1000 (total variation of 950), which is good. *Without the subsidiary* (which contributed of 100), the real value at the end should have been of 900, so the total variation was 1050.
- Lastly, regarding **taxes**, we have to combine both the taxes that we have on the IS (which we assume to have paid) and the change in Income Tax payable (which shows us that the real taxes that were outstanding at the beginning of the year, that shows the ones that have been paid are slightly higher).

CF generated by Investing activity

Total consideration for the acquisition	*(590)*	Note 1) for the B/S
Adjustment: non cash portion of the total consideration	-	Note 1) for the B/S
Adjustment: cash acquired	*40*	Note 1) for the B/S
Acquisition of Subsidiary X, net of cash acquired	(550)	Note 1) for the B/S
Overall change in PPE	*(1.530)*	
Adjustment: depreciation	*(350)*	Note 1) for I/S
Adjustment: acquistion of a subsidiary	*650*	Note 1) for the B/S
Adjustment: disposal	*(20)*	Note 6) for the B/S
Adjustment: right-of-use for leasing transaction	*900*	Note 5) for the B/S
Purchase of property, plant and equipment	(350)	
Disposal of PPE	*20*	Note 6) for the B/S
Gain (loss) from disposal	-	
Proceeds from sale of equipment	20	
Share of profit or loss of associates and joint ventures	*50*	
Adjustment: share of profit/loss of associates/joint ventur	*(50)*	
Cash flow from associates and joint ventures	-	
Investment income	*450*	
Adjustment: fair value loss on financial instruments	*50*	Note 2) for I/S
Adjustment: interest receivable (interest income)	*(100)*	Note 2) for I/S and 7) for B/S
Interest and dividends received	400	
NET CASH USED IN INVESTING ACTIVIES	**(480)**	

We have to consider the **investment income** of 450 that we can find in the IS. In the Notes, it tells us that these 450 is formed of different factors. Among these, we have 100 of *interest on trade receivable*, which *has not generated cash* (as in the journal entry it did not have cash on the credit side, but A/R instead) -> we have to adjust it also from the investing activities section, as well as the *fair value loss on the financial instruments* (also in this case we have an accrued variation of the investment income that did not generate any cash variation).

Among the other activities that influenced the investing section, the most relevant is the **acquisition of the subsidiary**, which has been acquired for 590 (we find it in the Notes). Another disclosure according to IFRS we have to give regards the amount that is paid for a subsidiary during a business combination that is referred to no cash payment (like with exchange of shares) -> we don't have to make any adjustment because of this reason, but at the same time we have to consider eventual cash that has been acquired thanks to the acquisition, as it is a value that reduces the total amount paid for it.

After that, we have to communicate the **purchase of fixed assets**. From the Notes, we can understand that the new purchased assets are 1250, of which 900 of right-to-use for leasing and the remaining 350 has been cashed used to purchase PPE. In order to understand the change in PPE, we compare the value in the BS between the 2 years, and we notice an increase of 1530, but the actual increase is influenced by the depreciation (we removed it in first place because it was not an element of the operating activities, while now?????). After that we have to make eventual adjustments caused by acquisition of subsidiaries (in a similar way than we did with the A/R) and isolate the effect of disposal (obviously, we have to subtract the accumulated depreciation to the original cost and add/subtract eventual extra gain/cost generated by the operation -> for our case, it is 20 because it did not generate any additional gain/cost) in order to get *Gross Change in asset* (instead of giving the final number, we give the composition in order to give a higher quality of disclosure).

Lastly, we have to consider **eventual disposal of fixed asset** (like of PPE in our example), which indicates a positive CF that can be used in the company for making new investments.

CF generated by the financing activity

Increase in Share Capital	*250*	
Change in receivables to shareholders	-	
Proceeds from issue of share capital	250	Note 2) for the B/S
Overall change of Retained Earnings	*1.850*	
Adjustment: Net income	*(3.050)*	
Dividends received	(1.200)	
Overall change of long-term borrowings	*1.260*	
Adjustment: acquisition	*(200)*	Note 1) for the B/S
Adjustment: right-of-use for leasing transaction	*(900)*	Note 5) for the B/S
Adjustment: payment of lease liabilities	*90*	*Missing information*
Proceeds form long-term borrowings	250	Note 2) for the B/S
Payment of lease liabilities	(90)	*Missing information*
Interest expenses	*(400)*	
Change in Interest payable	*130*	
Interest paid	(270)	
NET CASH USED IN FINANCING ACTIVIES	**(1.060)**	

We have to give information about the **financing activities** (which gives information about the capability of the company to pay back banks and shareholders), by separating the *one generated from changes in Equity* and the *one generated by changes in Liabilities*. Starting with the one generated by Equity, from the BS we have to look for *changes in Share Capital* (which increases by 250) and *Dividends* (in this case, it is possible to understand the amount just by looking at the Notes. In case we have no direct information about it, we can calculate them as $\Delta\, Retained\ Earnings - Net\ Income$, as technically, in case no dividend is paid, all should go to Retained Earnings). Regarding the part generated by the changes in Liabilities, we have to see the changes in the BS and adjust them for the acquisition. When you control an asset thanks to the operating lease, the IFRS says you have to recognise that asset among the fixed asset, but at the same time you have to put a lease payable (which suggest you own the money for that asset) -> we adjust for 900. In the information provided by the standard (IAS 7), there are missing information regarding the payment of lease liabilities -> this can occur also in real life, as company are not obligated to give all the information regarding the Financial Statement = some assumptions are necessary (in this case, we assumed we have paid 10% of the total amount of the leasing contracts) -> we get a total CF from long-term borrowings that is the same of the amount disclosed in the Notes. Lastly, we have to consider the CF connected to interest expenses (which we assume to pay entirely) adjusted by the changes in Interest payables.

At the end of the CF Statement, we have to give a recap both of the sum of the CFs generated by the different areas and a reconciliation of cash and cash equivalents. In fact, if we add the additional 110 additional Cash and cash equivalents generated during the year, we might still not have the value we have at the EOP -> we have to subtract the loss for the foreign exchange.

Summary of the cash flow statement

Net cash from operating activities	1.650
Net cash used in investing activities	(480)
Net cash used in financing activities	(1.060)
Net increase in cash and cash equivalents	**110**

Reconciliation of cash and cash equivalents

Cash and cash equivalents at beginning of period	160	
Net increase in cash and cash equivalents	110	
Foreign exchange loss	(40)	Note 3) for the I/S
Cash and cash equivalents at end of period	**230**	

Reconciliation of liabilities arising from financing activities

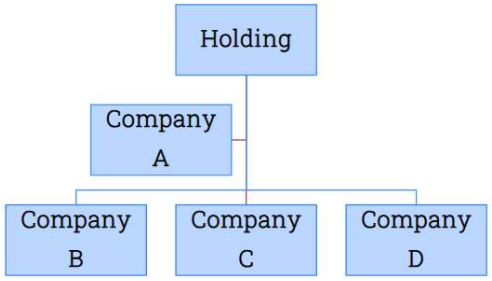
	20X1	Cash flows	Non-cash changes			20X2
			Interest expenses	*Acquisition*	*New leases*	
Long-term borrowings	1.040	250	-	200	–	1.490
Lease liabilities	-	(90)	-	–	900	810
Long-term debt	1.040	160	-	200	900	2.300
Interest payable	100	(270)	400	-	-	230
	1.140	(110)	400	200	900	2.530

Consolidated financial statements

Standard	Title	Scope	Effective Date
IFRS 10	Consolidated Financial Statements	Defines requirements for preparing consolidated financial statements	1 Jan 2013
IAS 27	Separate Financial Statements	Applies only to the parent's separate financial statements	Revised from 1 Jan 2013
IAS 28	Investments in Associates and Joint Ventures	Prescribes use of the equity method for associates and joint ventures	Ongoing (updated with IFRS 11)
IFRS 11	Joint Arrangements	Deals with joint control (joint operations and joint ventures)	1 Jan 2013
IFRS 12	Disclosure of Interests in Other Entities	Specifies disclosure requirements for interests in other entities	1 Jan 2013

We are talking about **multinational companies**, that most of the time they work everywhere in the world -> they can work directly, but most of the time we have the Parent company and several subsidiaries around the world -> all these companies are *separated entities*, and this is reflected in the expectation of having a single Financial Statement for every entity. From the **perspective of the stakeholders** of the company is much more interesting to receive information about the performance of the entity that goes beyond the separation -> the **group** (which consists of a parent company together with one or more subsidiary companies which are controlled by the parent company), which is *separate from the companies that belong to it* and *has to present its own set of Financial Statements* that needs to be presented by the parent company, that has to show all the operations that occurred with parties outside of the group, and don't want to show all the economic profits that occurred within the group (if we do that, we distort the quality of the information provided to investors).

The typical structure of the group we are going to analyse is the following:



The treatment of a financial instrument is different depending on the percentage owned of the company:

- If the percentage owned by the Parent is less of 20% of the interest of the company -> *Financial Instruments* (in particular, Equity)
- Interest between 20 and 50 % -> *equity method*
- More than 50% -> *consolidated*

Type of investment	Separate FS	Consolidated FS
Investments in Subsidiaries	a) Cost, b) Fair Value (IFRS 9), or c) Equity Method (IAS 28).	Full consolidation (IFRS 10 e IFRS 3)
Investments in Associates		Equity Method (IAS 28)
Investments in joint venture		Equity Method (IAS 28)
Other Investments (non-controlling interests)	Fair Value (IFRS 9): changes in fair value can be recognized: 1. Through Profit and Loss (FVTPL) 2. Through Other Comprehensive Income (FVTOCI) – *optional treatment for investments that are not held for trading*	

IFRS 10 includes the following key definitions:

- A **group** is "*a parent and its subsidiaries*".
- A **parent** is "*an entity that controls one or more entities*".
- A **subsidiary** is "*an entity that is controlled by another entity*".
- **Control** exists "*when the investor is exposed to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee*" -> the performance of the parent company is a function of the performances of the subsidiaries (if something bad happens at the subsidiary, it is going to influence both the performance and the financial statement of the parent company).

An investor **controls** an investee when it has all three of the following:

1. *Power over the investee*
2. *Exposure or rights to variable returns* from its involvement with the investee (voting rights, the right to appoint or remove members of the investee's key management personnel, the right to direct the investee to enter into transactions for the investor's benefit, contractual rights).
3. *The ability to use its power to affect returns*

Power can exist even without holding a majority of voting rights. In straightforward cases, power is achieved by owning more than 50% of the investee's ordinary shares. Control exists only if the **investor is exposed to upside or downside risks** from its involvement. Control requires that the investor not only has power and variable returns, but also the ability to use that power to influence those returns. *Returns must be variable, not fixed* -> dividends, fees, residual interests, synergies, cost savings or strategic benefits.

The **parent entity** must consolidate the financial statements of its controlled subsidiaries by using *uniformed accounting policies*. Consolidation begins when control is obtained and ends when control is lost. In order to create the consolidated financial statement, we cannot just add the financial statements of the different subsidiaries, as several information will be missed. For example, if control is not 100%, the group must recognize **non-controlling interests** (NCI, previously called minorities) → the *portion of net assets attributable to minority shareholders* (shown separately in both Equity and Net Income) -> we draw the line in which we include the subsidiaries, but we cannot ignore that

there could be other investors. Over the years, the percentages might change (could increase or decrease), and a subsidiary might disappear from the group (because the parent might decide to disinvest) -> change in control should be represented. *Purchases or disposals of shares that do not result in gaining or losing control*:

- Are treated as equity transactions (like treasury share movements)
- No impact on consolidated profit or loss

When a **parent loses control of a subsidiary**:

- Derecognize the subsidiary's assets and liabilities from the consolidated balance sheet
- Recognize any retained interest (e.g., associate or financial asset) at fair value
- Record a gain or loss in profit or loss from the loss of control

IFRS 10 and IAS 27 **do not** address the techniques to be used in the consolidation process.

In the IFRS framework, **consolidation** is viewed as the accounting result of transactions that involve acquisition or loss of control. These transactions fall under the scope of **IFRS 3 – Business Combinations**, which include all the operations where a company starts to have interest in another company. IFRS 3 covers not only share deals but also other types of significant corporate restructuring, such as *Mergers and spin-offs*, *asset and business transfers* and *exchange of equity interests*. If we use the concept of control to define if a company has control over another one, there could be problems, in particular when during mergers both companies claim to be the acquirer.

Control may be gained or lost through a variety of legal forms, not just share purchases/sales

A **parent company need not prepare group** accounts if:

- the parent company is itself a wholly owned subsidiary or a partially owned subsidiary (and its other owners do not object to the company not preparing group accounts)
- the parent's shares are not publicly traded
- the parent's ultimate parent company presents group accounts that comply with international standards

By summing the "*homogeneous*" financial statements of the companies included in the consolidation area, we obtain **Aggregated Financial Statements**. The objective of the consolidated financial statements is to present the income, financial position, and assets of the group as a single economic entity, distinct from the plurality of legal entities composing it. To transition to the **Consolidated Financial Statement**, it is first necessary to eliminate the investments held by the parent company in the consolidated subsidiaries, offsetting them against the equity of the subsidiaries, in order to have left only the investments and equity of P (which include also the investments of the subsidiaries), as the first group of stakeholders that are interested in what the holding company does are the shareholders of P + NCI. But at this level we are still not satisfied, as there could be some *intragroup activities* (activities between companies belonging to the same group) that could inflate the results of the company.

The consolidation process can follow different theories. Each consolidation theory *differs* from the others in terms of:

- the role assigned to the consolidated financial statements
- the consolidation method used
- differences in the recognition and measurement of minority interests.

The main theories are as follows:

1. **Proprietary Theory** -> Consolidated financial statements are an extension of the parent company's, using the *proportional method to recognize assets, liabilities, revenues, and expenses* based on *parent company ownership*. *Non-controlling interests are not presented*.
2. **Parent Company Theory** -> Consolidated financial statements represent the group's accounting values, but *the group is primarily seen as an economic entity* operating for the parent company's shareholders. The full consolidation method is applied, *recognizing assets, liabilities, revenues, and expenses in full*, regardless of parent company ownership. If a revaluation of assets and liabilities at fair value is necessary*, it's done solely *for the parent company's portion* in the subsidiary (this implies that the total amount of NCI that it is going to be recognised is reduced compared to the one with the Modified Parent Company Theory). Not controlling interests are measured based on the book value of the subsidiaries' equity, and under any circumstance the goodwill should be recognized among the NCI.
3. **Modified Parent Company Theory** -> This theory evolves the previous one by recognizing the current (fair) values of all subsidiaries' assets and liabilities in consolidated financial statements *for the total amount*, regardless of parent company ownership percentage. We are not allowed to recognize the goodwill to the NCI, and we expect the goodwill to be larger.
4. **Entity Theory** -> Under this theory, the consolidated financial statements represent the group as a single economic entity, with the parent company equal to other included entities. *All values*, including consolidation differences and goodwill, *are included in full, and non-controlling interests are measured based on the equity of subsidiaries* at fair value, including goodwill. With this method, part of the goodwill can be recognised among the NCI. As a result, non-controlling interests are determined based on the equity of subsidiaries expressed at fair value (excluding goodwill) -> with this method, we can *show a higher NCI and Goodwill* with this method compared to the one generated with the American GAAP (which do not allow the Equity theory)

➔ International Accounting Standards accept **only** the Modified Parent Company and the Entity theories.

*During the acquisition process, the acquiror pays a **price** that is difference between the Book Value of Equity. The acquiror can look at the assets and liabilities of the subsidiaries, and notice that the fair value of the assets is different from their book value, same for liabilities. Even though we sum these additional FV, there could be some additional value left -> **Goodwill**, which is an intangible asset.

ALFA acquires a 90% interest in BETA for a purchase price of €900. At the acquisition date, BETA's equity amounts to €1,000 (so, there is no difference between the price paid and the portion of the book value of Beta's Equity purchased by Alfa).

BS ALFA

Investment in BETA	900
Equity	900

BS BETA

Assets	5.000
Liabilities	-4.000
Equity	1.000

BA ALFA + BETA

ALFA'S Investment in BETA	900
Assets BETA	5.000
Liabilities BETA	-4.000
Equity ALFA	900
Equity BETA	1.000

After adding together, the Assets, Liabilities, and Equity of ALFA and BETA, the investment of €900 and BETA's equity of €900 are cancelled out, as they refer to the same operation. At the same time, the remaining BETA's equity (€100) is attributed as Minority Interest (Third-Party Equity).

BA ALFA + BETA

ALFA'S Investment in BETA	0
Assets BETA	5.000
Liabilities BETA	-4.000
Equity ALFA	900
Equity BETA	0
Non.Controlling Interest	100

What happens if the purchase price differs from the share of equity acquired? At the time of acquisition, the **carrying amounts** of assets and liabilities in the acquiree's financial statements may **not reflect their current market (fair) values**. The difference between the carrying amount (book value) of an asset or liability, and its fair value (market-based or otherwise adjusted estimate) is referred to as a revaluation difference.

- Step-up adjustment: *Fair value > carrying amount* => Indicates *undervalued* assets or overstated liabilities
- Step-down adjustment: *Fair value < carrying amount* => Indicates *overvalued* assets or understated liabilities

Step-ups and step-downs are recognized as *adjustments* to the assets and/or liabilities to which they relate in the consolidated balance sheet. They do not affect the income statement, and therefore their related tax effects must also be recognized solely in the balance sheet (i.e., they are of balance sheet
origin). Deferred Taxes of Balance Sheet Origin (a.k.a., temporary differences):

- A **Deferred Tax Liability (DTL)** arises in the presence of step-ups (i.e., fair value > carrying amount), which potentially generates a profit -> generates a temporary difference between the accounting and fiscal reporting.
- A **Deferred Tax Asset (DTA)** arises in the presence of step-downs (i.e., fair value < carrying amount), which potentially generates a loss.

No tax effect impacts the income statement, as tax reporting follows different rules than those used by the accounting reporting.

$$\begin{aligned} &\boldsymbol{Book\ Equity\ of\ the\ Acquiree\ at\ the\ Acquisition\ Date}\ (Net\ Assets) \\ &+ \boldsymbol{Step\ ups}\ (net\ of\ Deffered\ Tax\ Effect) \\ &- \boldsymbol{Step\ down}\ (net\ of\ Deffered\ Tax\ Effect) \\ &= \boldsymbol{Revalued\ Net\ Assets}\ (Fair\ Value\ of\ Net\ Assets) \end{aligned}$$

The difference between the purchase price paid for the investment and the parent company's share of the Fair Value of Net Assets gives rise to the Consolidation Difference:

- Purchase Price of the Investment > Share of Revalued Net Assets -> **GOODWILL** (Intangible Asset)
- Purchase Price of the Investment < Share of Revalued Net Assets -> **NEGATIVE GOODWILL** (Financial Income)

IFRS 3 requires that whenever there is a Business Combination, we should open the subsidiaries accounts to see the fair value and understand if there is any positive or negative goodwill. In addition, the goodwill arising on consolidation should be calculated as follows:

- Each of the *subsidiary's assets and liabilities* is *adjusted to its fair value* on the date that the parent company acquired the subsidiary's shares.
- If the parent company has *paid more than the fair value of Net Assets to acquire its stake in a subsidiary*, the excess is "**goodwill arising on consolidation**". This is shown as an asset in the consolidated statement of financial position.
- Goodwill should be tested annually for impairment and written down as necessary.

Negative goodwill is recognized as income and increases the group's reserves (it's a profit recognized at the date of the acquisition since it implies a bargain purchase).

The reserves of a subsidiary will almost certainly change after acquisition by the parent. When preparing the group accounts in subsequent years, such changes should be dealt with as follows:

- Any *post-acquisition increase* in the reserves of a subsidiary should be added to the group reserves shown in the group statement of financial position.
- Any *post-acquisition decrease* in the reserves of a subsidiary should be subtracted from group reserves.

An impairment loss in relation to goodwill is accounted for by reducing both the goodwill figure and group reserves by the amount of the loss.

If a *parent company does not own 100% of a subsidiary's share capital*, the remainder of the subsidiary's shares are held by non-controlling shareholders. In these circumstances, IFRS10 requires that the group statement of financial position should ***include all of the subsidiary's net assets*** (exactly as if the subsidiary were wholly owned) but should then identify separately the amount of those net assets which is attributable to the non-controlling shareholders. This amount is referred to by IFRS10 as the "non-controlling interest".

On January 1, X, the company Alfa acquired an 80% interest in the company Beta for a total consideration of €12,000. At the acquisition date, Beta's book equity amounted to €10,000. The fair value of Beta's assets and liabilities at that date was the same as their book values, except for the following items:

Item	Carrying Amount	Fair Value	Difference
PPE	3,500	5,000	1,500
Patents	500	1,500	1,000

The residual useful life of the property, plant, and equipment is estimated at 20 years, while that of the patents is 10 years. The residual positive consolidation difference is allocated to goodwill. For illustrative purposes, a tax rate of 50% is assumed

Carrying Amounts at the time of the acquisition of Beta

	ALFA	BETA	AGGREGATE
Non-current assets			
PPE	9.000	10.000	19.000
Goodwill			
Other intangible assets	1.000	1.000	2.000
Investments	12.000		
Deferred tax assets			
Current assets			
Inventories	3.000	2.500	5.500
Trade receivables	4.000	2.000	6.000
Cash and cash equivalents	3.000	1.500	4.500
Total assets	**32.000**	**17.000**	**37.000**
Parent Company Equity			
Share capital + Reserves	25.000	9.000	27.000
Net income for the year	2.900	1.000	3.900
Minority interest equity:			
Share capital and reserves			
Net income for the year			
Total Equity	**27.900**	**10.000**	**30.900**
Non-current liabilities			
Provisions	2.500	1.500	4.000
Deferred tax liabilities	1.100	2.000	3.100
Current liabilities			
Other current liabilities	500	3.500	4.000
Total Liabilities	**4.100**	**7.000**	**11.100**
Total equity and liabilities	**32.000**	**17.000**	**42.000**

At this point, we have to calculate the Goodwill, and there are two ways depending on the theory we are going to follow.

Goodwill Calculation – Option 1 (Minority Interest as % of the Fair Value of Net Assets, i.e., **Modified Parent Company Theory**)

Book Equity at 1/1/X	10,000
Step-ups (Fair Value Adjustments)	2,500
Tax Effect (50%)	(1,250)
Fair Value of Net Assets	**11,250**
80% Share of the Fair Value of Net Assets (Parent's Share)	9,000
Purchase Price	12,000
Goodwill (Consolidation Difference)	**3,000**
Fair Value of Non-controlling Interests (20% of 11,250)	**2,250**

Alternatively:

Purchase Price	12,000
+ Non-controlling Interest at Fair Value	**2,250**
= Total Acquisition Value	14,250
- Fair Value of Net Assets	11,250
= Goodwill	**3,000**

31/12		+	-
SHARE CAPITAL		10,000	
PPE		1,500	
PATENTS		1,000	
GOODWILL		3,000	
	INVESTMENT		12,000
	NON-CONTROLLING INTEREST		2,250
	DT LIABILITY		1,250
		15,500	15,500

Goodwill Calculation – Option 2 (Minority Interest at Fair Value, i.e., **Entity Theory**) -> Assume that minority's shares have a fair value a value of 3,000, as determined by an independent appraisal

Purchase Price	12,000
+ Non-controlling Interest at Fair Value	**3,000**
= Total Acquisition Value	15,000
- Fair Value Equity	11,250
= Goodwill	**3,750**

31/12		+	-
SHARE CAPITAL		10,000	
PPE		1,500	
PATENTS		1,000	
GOODWILL		3,750	
	INVESTMENT		12,000
	NON-CONTROLLING INTEREST		3,000
	DIT LIABILITY		1,250
		16,250	16,250

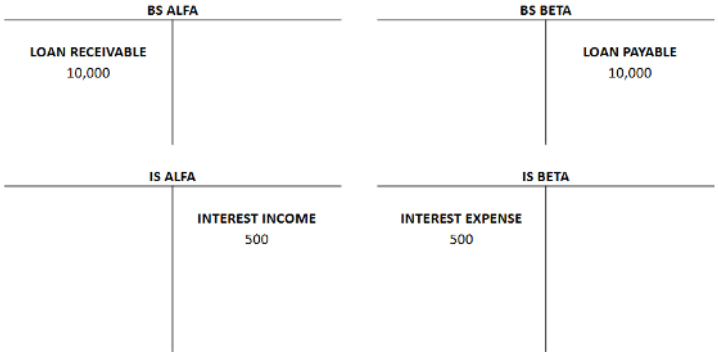
	Option 1	Option 2
SHARE CAPITAL	10,000	10,000
PPE	1,500	1,500
PATENTS	1,000	1,000
GOODWILL	**3,000**	**3,750**
TOTAL DEBIT	*15,500*	*16,250*
INVESTMENT	12,000	12,000
NON-CONTROLLING INTEREST	**2,250**	**3,000**
DT LIABILITY	1,250	1,250
TOTAL CREDIT	*15,500*	*16,250*

What caused the difference of 750? With the second method, we recognize 100% of goodwill also for the NCI -> 3.750€ for the goodwill refers to the company as a whole by consolidating at fair value assuming the control of the subsidiary -> in order to increase it, we have to increase also the value of the NCI

Intra-group balances (such as loan/account payable/receivable) -> Intra-group balances are cancelled out when preparing a group statement of financial position (as with consolidation we want to communicate what happened between the group and the external parties). Such balances may arise as follows:

- *One group company may lend money to another group company*. The loan will be an asset for the lending company and a liability for the borrowing company.
- One group company may *buy goods or services on credit from another group company*. The supplier company will have a trade receivable, and the customer company will have a trade payable.
- One group company may *have a current account with another group company*. The balance on this account is an asset for one company and a liability for the other

During fiscal year X, ALFA granted a loan of €10,000 to BETA. In the same year, BETA paid €500 in interest to ALFA.



We use a journal entry that cancel out all these elements, both in the BS and in the IS:

	31/12/X		+	-
Intra-group Loan Payable		Intra-group Loan Receivable	10,000	10,000
Interest Income		Interest Expense	500	500

The assets shown in the financial statements of a group company may include items acquired from another group company at a price in excess of original cost. The **unrealised profit must be eliminated** in the group accounts.

IFRS10 requires **that profits or losses on intra-group transactions must be eliminated in full on consolidation**, irrespective of whether the subsidiary companies involved are wholly-owned or partly-owned.

- If an asset is sold from parent to subsidiary, any *unrealised profit on the transaction is subtracted from group retained earnings*.
- If an asset is sold from subsidiary to parent, any *unrealised profit on the transaction is allocated proportionately between group retained earnings and the non-controlling interest*.

➔ Any unrealised profit on inventories is *deducted from the inventories* figure shown in the group statement of financial position. A reduction in closing inventory causes an *increase in cost of sales*, so the cost of sales figure in the group statement of comprehensive income must be increased by the amount of any unrealised profit.

In compliance with IFRS, **goodwill is not amortized**. If the goodwill arising on consolidation has suffered an impairment loss during the accounting period, this loss is shown as an expense in the group statement of comprehensive income (IAS 36). We have two problems:

- Firstly, we have an asset that all of the sudden shows up in the BS but that cannot be amortized -> the company cannot use the cost advantage for taxes
- Private companies can amortize goodwill, which creates a cost competitive advantage.

➔ Legislators are discussing the possibility of reintroducing the amortization of goodwill

Fair value adjustments (step-ups/step-downs) on the subsidiary's assets and liabilities may be recognized at acquisition to reflect current values. Once recorded, these adjustments follow the accounting treatment of the related asset or liability:

- If linked to *depreciable* assets, they must be depreciated over the asset's remaining useful life.
- If related to assets no longer present at consolidation date (e.g., sold), the adjustment must be reversed through profit or loss.
- Deferred tax effects must be recognized for all the above adjustments

We refer back to the data provided in the example discussed during the previous lesson, which is reproduced below for ease of reference:

- PROPERTY, PLANT AND EQUIPMENT (PPE) -> Step-up of €1,500, which generated a Deferred Tax Liability of €750. Based on a residual useful life of 20 years, a higher depreciation of €1,500 / 20 = €75 must be recognized in order to show the higher value compared to the book one.
- PATENTS -> Step-up of €1,000, which generated a Deferred Tax Liability of €500. Based on a residual useful life of 10 years, a higher amortization of €1,000 / 10 = €100 must be recognized

31/12/X		+	-
Depreciation (PPE)		75	
Amortization (Patents)		100	
	PPE		75
	Patents		100

Since the adjustment impacts the consolidated income statement, the related deferred tax effect must also be recognized. This involves reversing part of the deferred tax liability previously recorded. The reversal equals 50% of €175, i.e., €87.50. We have to consider that these values are only accounting ones, as the tax authorities do not know about it. They will know about the higher value *only when we dispose the asset*. As the higher value for the FV means more value to depreciate, will

means that we have higher costs and lower future potential income -> *decrease DT Liability* -> this depreciation should be carried out until the item is sold or the useful life expires.

	31/12/X		+	-
DT Liability		Deferred Income Tax Expense	87,5	87,5

The purpose of a group statement of comprehensive income is to report the profit or loss of the group as a whole. Also known as the "**consolidated statement of comprehensive income**". IFRS10 requires that a group statement of comprehensive income should be prepared and presented in recognition of the fact that a parent company and its subsidiaries are, in effect, a single economic entity. The group statement of comprehensive income is prepared by adding together (line by line) the individual statements of comprehensive income of all of the companies in the group. This process is known as "consolidation". Any intra-group items are cancelled out in the consolidation process.

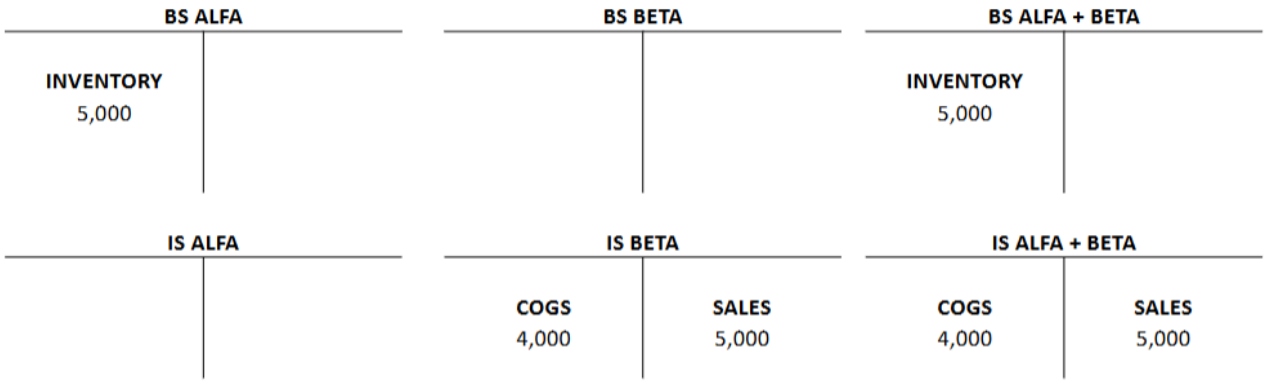
Intra group items:

- **Intra-group sales** are included in the sales revenue of the selling company and in the cost of sales of the buying company. So intra-group sales are deducted from group sales revenue and from group cost of sales (or COGS) when preparing the group statement of comprehensive income.
- **Other intra-group items** that may arise (and which must be cancelled out) include *interest payable by one group company to another* and *management expenses* charged by one group company to another.
- **Dividends** paid by a subsidiary to its parent company (shown in the subsidiary's statement of changes in equity) are cancelled against the dividends received shown in the parent's statement of comprehensive income.

These *eliminations are made in full*, even when minority interests are involved. If the consolidation adjustments give rise to temporary differences that affect the consolidated income statement, the related deferred tax effects must be recognized.

Intragroup profit

In year X, BETA sold goods to ALFA for €5,000. The goods had been originally purchased by BETA for €4,000, generating an **intragroup profit** of €1,000. As of December 31, X, all the goods are still in ALFA's inventory.



We have just to leave the purchase of goods done by BETA, as all the rest of the operations regards internally the group. From the perspective of the tax authority, *there are some taxes that are generated because of this internal profit*. From the consolidated point of view, it makes no sense -> *Deferred Tax Asset*. From the group's point of view, the €1,000 profit is unrealized and must therefore be eliminated. Since BETA recognized income tax expense on this unrealized profit and the profit will only be realized upon future sale to third parties, the taxes recorded are not attributable to the

current period. As a result, the group must recognize a Deferred Tax Asset (DTA): Assuming a tax rate of 50%: DTA = 50% of €1,000 = €500

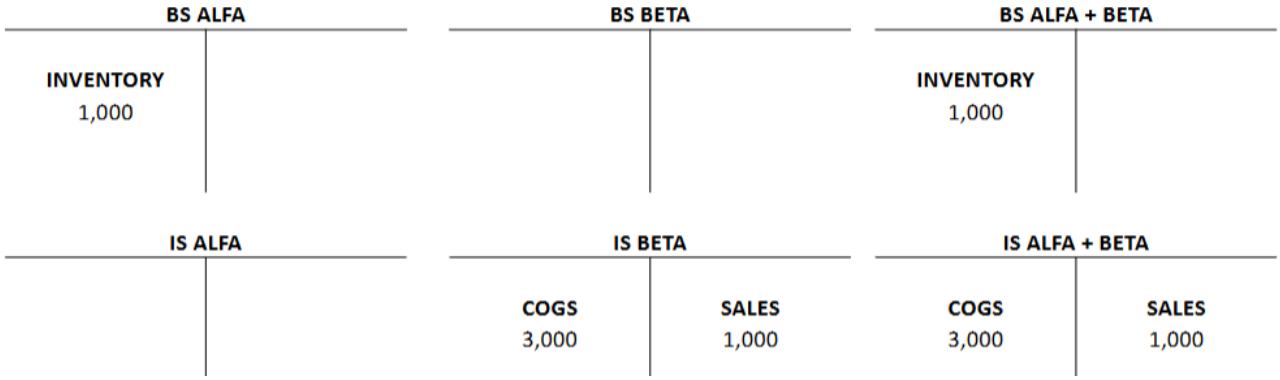
31/12/X		+	-
COGS		1,000	
DT ASSETS		500	
	INVENTORY		1,000
	DEFERRED INCOME TAXES		100

In the case of a *negative margin* (i.e., intragroup sale at a loss):

- The inventory must be written back up in the consolidated financial statements.
- A corresponding Deferred Tax Liability (DTL) must be recognized

Intragroup loss

In year X, BETA sold goods to ALFA for €1,000. The goods had been originally purchased by BETA for €3,000, generating an **intragroup loss** of €2,000. As of December 31, X, all the goods are still in ALFA's inventory.



From the group's perspective, the €2,000 loss is unrealized. Therefore, it must be reversed, by: *Increasing the value of closing inventory in both the income statement (reducing COGS)* and the *balance sheet*. The lower taxes recognized by ALFA on this unrealized loss are not attributable to the current period, as the loss hasn't occurred for the group. As a result, the group must recognize a Deferred Tax Liability (DTL): At a 50% tax rate: DTL = 50% of €2,000 = €1,000

31/12/X		+	-
INVENTORY		2,000	
DEFERRED INCOME TAXES		500	
	COGS		2,000
	DTL		100

In the case of a negative margin (i.e., intragroup sale at a loss):

- The inventory must be written back up in the consolidated financial statements.
- A corresponding Deferred Tax Liability (DTL) must be recognized

In-depth analysis of the intra-group items

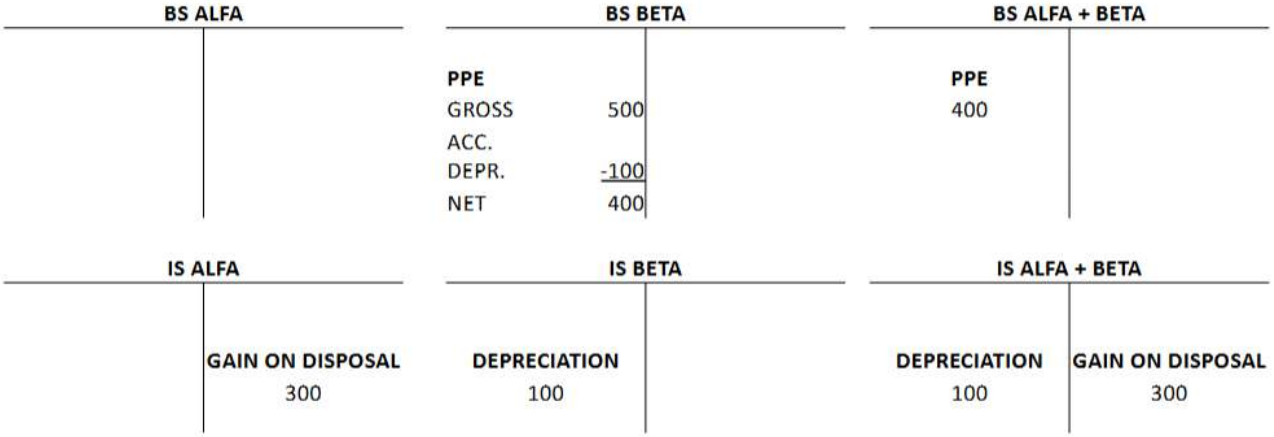
ALFA sells goods to BETA for €1,200, originally purchased for €1,000. All goods remain in BETA's inventory at year-end. This generates an intragroup profit of €200, which is unrealized at group level. We all know that the IAS 2 (which is dedicated to inventory) requires that we check that the value that we have for accounting purposes reflects the fair value of the inventory.

a. The fair value of the goods at year-end is €1,150. BETA recorded *inventory at the lower of cost* (€1,200) and fair value (€1,150) -> a *write-down of €50*, already recognized by BETA. The original intragroup profit was €200. Since €50 of it has already been reversed by BETA through the write-down, only the remaining €150 is unrealized and must be eliminated in consolidation.
b. The fair value of the goods at year-end is €1,000. BETA recorded *inventory at the lower of cost* (€1,200) and fair value (€1,000) -> *write-down of €200*, already recognized by BETA. The entire €200 intragroup profit has already been implicitly eliminated through BETA's write-down. Therefore, no further intragroup profit adjustment is required in the consolidated financial statements.
c. The fair value of the goods at year-end is €900. BETA recorded *inventory at the lower of cost* (€1,200) and fair value (€900). As a result, the intragroup profit has been fully absorbed by the write-down already recorded in the financial statements, and no further adjustment is required in the consolidated accounts

An *intragroup loss should not be reversed if it reflects a real decline in value of the goods*. For example: ALFA sells to BETA below cost because the sale price matches the fair value of the goods at that time. In this case, no reinstatement is needed, since ALFA would have had to write down the inventory to fair value even without the sale

Fixed asset sale

ALFA sells a fixed asset to BETA for €500. The asset had a net book value of €200, resulting in an *intragroup gain of €300*. By year-end (exercise X), BETA depreciates the asset by €100. Had the asset remained with ALFA, depreciation would have been €80 (which represents the depreciation at group-level) -> **20€ as a difference in the depreciation**.



In the absence of the sale, ALFA would *not have recorded any gain* but would have recognized *depreciation of €80*. In its balance sheet, the net book value of the asset would have been: €200 – €80 = €120. To Eliminate the Effects of the Intragroup Asset Sale:

- Eliminate the gain of €300 recognized by ALFA.
- Reduce depreciation by €20 (BETA recorded €100 instead of the group-level €80).
- Adjust the asset's carrying amount by reversing €280, bringing it from €400 (post-sale net book value in BETA) down to €120 (group-level net book value). Since the above adjustments *reduce consolidated profit by €280*, a Deferred Tax Asset (DTA) must be recognized to reflect the related tax effect.

➔ Tax rate: 50% => DTA = 50% × €280 = €140

31/12/X		+	-
GAIN ON DISPOSAL		300	
DT ASSETS		140	
	DEPRECIATION		20
	PPE		280
	DEFERRED INCOME TAXES		140

In some cases, *depreciation may need to be increased* (reinstated on the debit side), for example, when the intragroup sale results in a *loss*. In such cases:

- The intragroup loss is recorded on the credit side
- corresponding increase in the asset's value (restoring it in the balance sheet)
- deferred tax assets or liabilities are calculated on the net effect (loss minus adjusted depreciation). If the intragroup loss reflects a real loss of value (e.g., due to impairment of the fixed asset), then neither the loss nor the related depreciation should be reversed.

31/12/X		+	-
GAIN ON DISPOSAL		300	
DTA		140	
	DEPRECIATION		20
	PPE		280
	DEFERRED INCOME TAXES		140

Intra-group dividends

This is effectively an intragroup resource (equity) transfer. This is a common practice within multinational companies in order to transfer the earning to countries with a lower taxation in order to receive more dividends. *A consolidation adjustment is required to remove the distribution*. Note: In most cases, dividends distributed in a given year come from profits earned in the previous year.

In year X, BETA, which is 80% owned by ALFA, distributes and pays dividends of €1,000. This intragroup transaction must be eliminated.

BS ALFA	
CASH	
800	

BS BETA	
CASH	RETAINED EARNINGS
-1,000	-1,000

BS ALFA + BETA	
CASH	RETAINED EARNINGS
-200	-1,000

IS ALFA	
	DIVIDENDS
	800

IS BETA	

IS ALFA + BETA	
	DIVIDENDS
	800

31/12/X		+	-
DIVIDENDS		800	
NON-CONTROLLING INTEREST		200	
	RETAINED EARNINGS		1,000

Attribution of Net Income to Non-controlling Interests (NCI)

In consolidated financial statements, in case the ownership of one subsidiary is not 100% from the parent company, the group's net income must be allocated between:

- *Parent company shareholders* (based on their ownership percentage)
- *Non-controlling interests* (non-controlling shareholders)

In preparing the consolidated financial statements, the assets, liabilities, revenues, and expenses of all companies included in the consolidation scope must be *recorded in full* (100%), regardless of the parent company's ownership percentage in each subsidiary. The same principle applies to all consolidation adjustments they must be carried out at 100%. After full consolidation, the share attributable to minority shareholders is shown separately in:

- *Non-controlling interest in equity* -> Determined after eliminating the investment and may be partially adjusted due to intragroup dividend eliminations.
- *Non-controlling interest in net income* -> Recognized at the end of the consolidation process, and calculated based on the subsidiary's profit attributable to minority shareholders (we have to look at the potential losses and gains realised by the subsidiary, from the operation where the subsidiary sells goods or services to the parent company, net of the tax effect. This is because, as we have seen before, following IFRS 10 these are considered to influence the Non-controlling interest in the Net Income):

$$\%\ NCI\ x\ (NI\ of\ Subsidiary\ +/-\ Consolidation\ adjustments\ affecting\ subsidiary'\ NI)$$

Net Income of BETA at 31/12/X is 1,000. Minority Interest is 20%.

Consolidation Adjustments (affecting BETA's profit):

1. **Depreciation of step-ups (net of taxes):**
   €75 (property) + €100 (patents) = €175 gross
   Net after tax (50% tax rate): €175 – €87.5 = €87.5 reduction to income
2. **Intragroup unrealized profit in inventory:**
   Gross: €1,000
   Net after deferred taxes (DTA = €500): €500 reduction to income

% NCI x (NI of Subsidiary +/- Consolidation adjustments affecting subsidiary' NI)

20% x (1,000 - 87.5 – 500) = 82.5

The accounting recognition results in a reduction of the group's net income in favour of the non-controlling interests' share, both in the consolidated income statement and in the consolidated balance sheet.

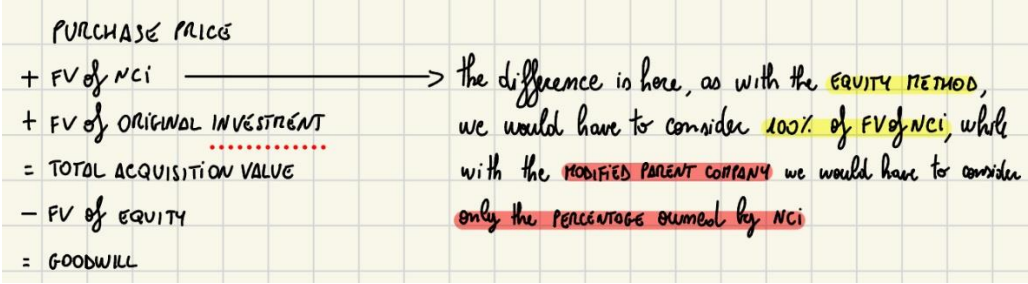
EQUITY - GROUP		82.5	
NET INCOME - NCI		82.5	
	NET INCOME - GROUP		82.5
	EQUITY – NCI		82.5

In the case of intragroup losses arising exclusively from sales by the subsidiary to the parent company (and not the reverse), such losses should instead be added back, again net of the corresponding tax effect.

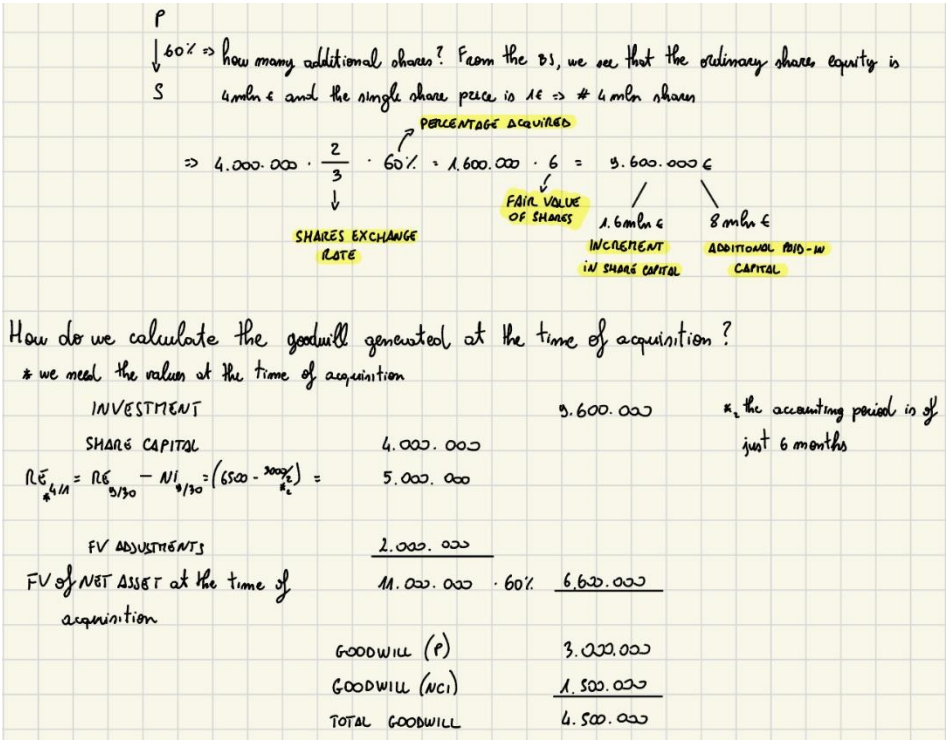
Additional possible modifications and tips while building the consolidated Financial Statements:

- **Impairment loss** -> it occurs when an asset's book value (or carrying amount) exceeds its recoverable amount, meaning the asset has suffered a permanent and unexpected reduction in value that cannot be recovered by future economic benefits. In this case there is a write down of the asset (which could be both tangible and intangible) and, on the other side of the journal entry, in case we have the *P&L statement*, we just register the loss, otherwise we reduce the Retained Earnings

- **Intragroup sales** -> because we have to eliminate all the intragroup sales that hasn't been sold to external parties, we have to eliminate the additional profit one company has generated. In case we receive just the total value of the acquisition (which include the surplus), we can divide it by *1+surplus* to get the net amount, and identify the total profit as difference (so, for example, if there is an intragroup sales for 8000€ where the selling company has applied a 60% surplus, the net value is 8000/(1+0.6)=5000€ -> surplus of 3000€) -> then we *reduce inventory* and *increase COGS/reduce the Retained Earnings*
- **NCI income** -> as we saw before, we have to assign part of the NI to the NCI. In case we don't have the P&L, we can calculate it as difference between the value at 31/12 and 1/1, and adjust by the dividends that, eventually, have been distributed -> we have to *do it for every subsidiary*. A similar adjustment needs to be made for the changes in Reserves.
- In order to understand if we have to use the Modified Parent Company theory or the Equity Theory in order to calculate the Goodwill, we have to see if we have the fair value of the goodwill attributable to the NCI -> Equity theory. How do we compute the value in both cases?



- There could be situations where, instead of a simple acquisition, there could be combinations of companies, which, most of the time, results in an **exchange of shares** rather than having the simple acquisition price. The first thing to consider is how many additional shares have been issued -> we take the *shares before the combination*, we multiply by the *rate of share exchange* (if we know that "Pedantic acquired 60% of the equity share capital of Sophistic in a share exchange of two shares in Pedantic for three shares in Sophistic", we would have to multiply the shares of Sophistic times 2/3) and then multiply by the percentage acquired by the company. After that we have to multiply this number by the fair value of the shares, which most of the time is much higher than the face value -> if, for example, the fair value of the shares is 6 and the face value is 1, we would have to multiply the additional shares by 1 in order to understand the *increment in share capital*, while the remaining 5 is for *Additional Paid-in capital*



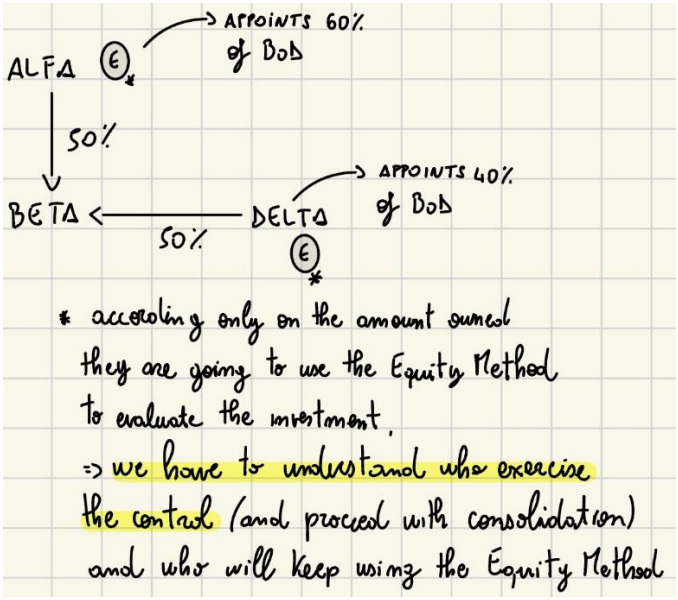
Associates and Joint Arrangements

Standard	Title	Scope	Key Features
IAS 28	Investments in Associates and Joint Ventures	Applies to entities with significant influence or joint control over an investee.	Equity Method for associates and joint ventures
IFRS 11	Joint Arrangements	Deals with joint control (joint operations and joint ventures)	Joint control exists when two or more parties share control of an arrangement. Requires a contractual agreement granting shared control to two or more parties.

As we have seen before, in case a company makes investments in equity of a different enterprise has a different treatment according to the amount invested:

- *Equity investment < 20%* -> financial instruments
- *20% < Equity investment < 50%* -> equity method (partial consolidation), where there is a significant influence (the company can influence the decision of the company but does not exercise control, as there are other people)
- *Equity investment > 50%* -> consolidation

What happens if two companies own 50% of the same company?



IAS28 includes the following definitions:

- An **associate** is "an entity over which the investor has significant influence".
- **Significant influence** is "the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over these policies".

When an investor *company owns (directly or indirectly) at least 20% of the voting power* of an investee company, significant influence is presumed to exist unless it can be clearly demonstrated that this is not the case. Owning at least 20% of a company's voting power normally means owning at least 20% of that company's ordinary shares.

The existence of significant influence may be evidenced by:

- *representation on the board of directors which governs the investee company*
- *participation in policy-making processes* of the investee, including participation in decisions about dividends or other distributions
- *material transactions between the investor and the investee*
- *interchange of managerial personnel*
- *provision of essential technical information*.

IAS28 requires that an investment in an associate should normally be accounted for using the "**equity method**". The equity method is defined as "*a method of accounting whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the investor's share of the investee's net assets*" -> If the equity of the investee increase, the value of the investment increases too. The profit or loss of the investor should include the investor's share of the investee's profit or loss. We have to think more carefully about the *effect of intragroup transactions* -> we have a very similar situation as before, where there is an unrealized profit/loss, but it won't change the Retained Earnings but the Comprehensive Income of the investor = we have an effect on the IS rather than the BS. In addition, we have to consider that when there are intragroup operations (such as the distribution of dividends or sales), the elimination will cause a reduction in the Retained Earnings and the Equity.

The investment made by the investing company is recorded initially at cost. In subsequent years:

- The investor's share of the investee's profit or loss for the year is recognised in the investor's *statement of comprehensive income* and is either added to or subtracted from the carrying amount of the investment shown in the investor's statement of financial position.

- Any dividends received from the investee are subtracted from the carrying amount of the investment

These are transactions between an investor and an associate. IAS28 requires that unrealised profits resulting from such transactions should be eliminated to the extent of the investor's interest in the associate, as follows:

- **Upstream**. In the investor's financial statements, the unrealised profit is subtracted from the investor's share of profit from associates. This automatically reduces the investment in associates figure shown in the investor's statement of financial position.
- **Downstream**. The unrealised profit is subtracted from the investor's gross profit (usually by increasing cost of sales) and is also subtracted from the investment in associates figure shown in the investor's statement of financial position

On 01/01/2025, the company ECO acquires a 40% interest in the company RENEW for a price of €50,000. The investment is to be classified as an associate. The tax rate is 25%. At the acquisition date, the statement of financial position of the investee showed the following values:

Building	22,000
Plant	15,000
Other assets	60,000
Total Assets	**97,000**
Total Liabilities	47,000
Total Equity	50,000
Total Equity and Liabilities	**97,000**

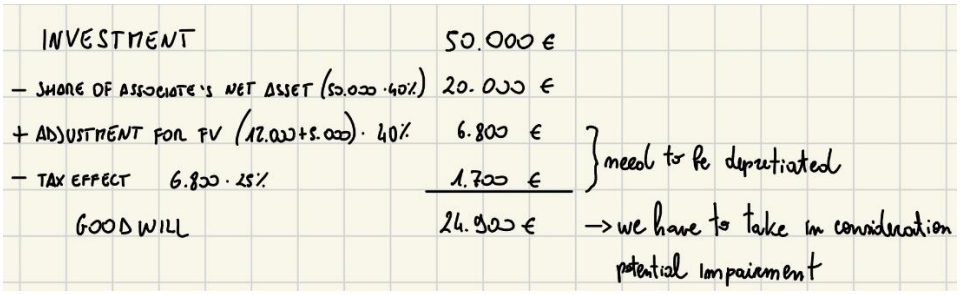
The fair value analysis of RENEW's assets and liabilities at the acquisition date highlights the following differences

	Carrying Amount	*Fair Value*
Bulding (useful life of 25 years)	22,000	34,000
Plant (useful life of 10 years)	15,000	20,000

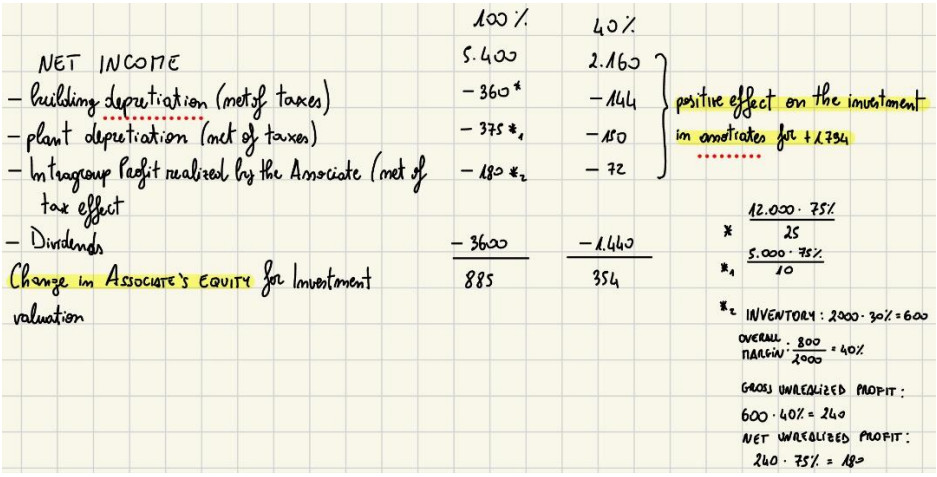
Additional Information:

- On 30/06/2025, RENEW sold a batch of goods to ECO for a total sale price of €2,000.
- These goods had previously been purchased by RENEW for €1,200. By 31 December, ECO resold 70% of the goods to external third parties for €1,250.
- On 30/04/2025, RENEW distributed total dividends of €3,600.
- At the end of the fiscal year, the associate (RENEW) reported a net income of €5,400.

Breakdown of the Purchase Price of the Investment



Change in thee Carrying amount of the investment



		DEBIT	CREDIT
01/01/2025 *(Acquisition of the Investment)*			
Investment in Associates (BS)		**50,000**	
	Cash (BS)		**50,000**
30/04/2025 *(Dividends)*			
Cash (BS)		**1,440**	
	Investment in Associates (BS)		**1,440**
31/12/2025 *(Change in the Value of the Investment)*			
Investment in Associates (BS)		**1,794**	
	Income from Associates (IS)		**1,794**

IFRS11 includes the following definitions:

- A **joint arrangement** is "*an arrangement of which two or more parties have joint control*."
- **Joint control** is "*the contractually agreed sharing of control of an arrangement*, which exists only when *decisions about the relevant activities require the unanimous consent of the parties sharing control*."

➔ The important characteristic of a joint arrangement that distinguishes it from a subsidiary or associate is that there is *a contractual arrangement to share control*.

IFRS11 identifies *two types of joint arrangement*:

- **Joint operations**. A joint operation is "*a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement*."
- **Joint ventures**. A joint venture is "*a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement*."

➔ IFRS11 also prescribes *the accounting treatment for each type of joint arrangement*.

Joint operations -> This form of joint arrangement does not usually involve the establishment of a new business entity. Instead, the "joint operators" each *use their own assets* for the purposes of the operation and *incur their own liabilities*. An agreement between the joint operators specifies the way in which the revenue and expenses of the operation should be shared between them. The assets, liabilities, revenues and expenses associated with the operation are recognised in the individual financial statements of the joint operators for the percentage of interest in the operation by the two different companies using the *equity method* -> no need to prepare financial statements for the joint operation itself.

Joint ventures -> This form of joint arrangement usually involves the establishment of a new business
entity. The "joint venturers" have a contractual agreement to *jointly control* this entity. The jointly

controlled entity *has its own assets*, *incurs its own expenses and liabilities and earns its own revenue*. It maintains its own accounting records and presents its own financial statements. *Each joint ventures* have an interest in the net assets of the jointly controlled entity (generally by virtue of subscribing for shares in that entity) and is entitled to a share of the entity's profits

IFRS12 Disclosure of Interests in Other Entities requires an entity to disclose:

- the significant judgements and assumptions have made in determining the nature of its interest in other entities
- the nature, extent and financial effects of its interests in associates and its interests in joint arrangements
- the nature of any risks associated with its interests in associates and joint arrangements.

Business combinations

A **business combination**, following the IFRS 3 (it is the principle that also allow us to define the goodwill arising from business combination), is a transaction or event in which an acquirer gains control of one or more businesses. **Control** is assessed under IFRS 10: power over investee, exposure to variable returns, and ability to affect returns through power. Example: Company A acquires 80% of Company B's shares and obtains control over operations and strategic decisions.

Components of a Business -> A "*business*" consists of inputs, processes, and capable of producing outputs. Even if outputs do not yet exist, the presence of inputs and substantive processes may qualify as a business. Assessment of whether an acquisition is of a business or group of assets is *crucial*. IFRS 3.B7-B12D defines the concept of a business and the "concentration test." Example: Acquisition of a research facility with staff and IP but no current sales may qualify as a business.

IFRS 3 applies to *mergers*, *acquisitions of subsidiaries*, *acquisitions of entities meeting the definition of a business*. Excluded from scope joint arrangements (IFRS 11), business combinations under common control and formation of joint ventures

Objective of the IFRS 3:

- Ensure transparency, comparability, and relevance in accounting for business combinations.
- Highlights fair value measurement and recognition of goodwill or gain.
- Requires the acquisition method to present economic substance over legal form, as there could be situations where even though there is no business, there could still be an acquisition

➔ when a business combination occurs, we have to give the substance of that operation.

Four steps under the acquisition method:

a. *Identify the acquirer*
b. *Determine the acquisition date*
c. *Recognize and measure identifiable net assets, NCI, and consideration*
d. *Recognize goodwill or bargain purchase*

Step 1 – Identify the acquirer

Whenever there is a *change in control*, there is an *acquire*. Even when there is a merge, the new company should be run by a single one, and there is no business combination with an acquiring. The **acquirer** is the entity that obtains control of the acquiree (for example, in the merging process between Banco di Verona and Banco di Milano, the first one affirm that they were the acquire because of the higher capitalisation at the time of the acquisition. In reality, the control is owned by Banco di Milano, as they were the main companies that appointed the BoD). Control is defined per IFRS 10:

- Power over the investee
- Exposure to variable returns
- Ability to affect those returns through power

In *straightforward share acquisitions*, the acquirer is usually the entity that transfers cash or other consideration. *In complex transactions* (e.g., mergers or reverse acquisitions), determining the acquirer may require judgment. Example: In a reverse acquisition, the legal subsidiary may be the accounting acquirer -> IFRS 3.6–7, B13–B18 provide guidance on identifying the acquirer.

Inverse acquisition (or *Spac, Special Purpose Acquisition Company*) -> let's assume there is a *listed company that acquires a private company, but in the end the private company controls the listed company* (like appointing the majority of BoD members) -> it is usually used by private companies to go to the financial market without going through IPO. There could be some investing vehicles that have a lot of money with a span life of 2-3 years waiting for a company to acquire and use them to do the IPO. The only reason why they are admitted in the market is that they usually have investors that can support the existence while waiting for an acquirer.

The *acquirer is the entity that*, through the transaction, **obtains**:

- Power over more than half of the voting rights of the other entity, by virtue of an agreement with other investors
- The power to determine the financial and operating policies of the other entity, based on its bylaws or a contractual arrangement
- The power to appoint or remove the majority of the members of the board of directors (or equivalent governing body) of the other entity
- The power to cast the majority of votes at meetings of the board of directors (or equivalent governing body) of the other entity

If the fair value of one of the combining entities is *significantly greater* than that of the other, the entity with the higher fair value is likely the acquirer. If the business combination *results in one entity's management team* having the ability to dominate the selection of the management team of the combined entity, the entity whose management has this influence is likely the acquirer

➔ The governance is more important than the capitalisation in order to identify the acquirer

Step 2 – Determine the consideration Transferred

The **acquisition cost** (consideration) must be determined at the acquisition date. The consideration includes:

- *Cash paid*
- *Fair value of assets transferred*
- *Liabilities incurred*
- *Equity instruments issued*

If the combination is achieved in stages (step acquisition), the previously held interest is remeasured at fair value. IFRS 3.37–40 detail how to calculate and recognize the purchase consideration.

If the **consideration is monetary**, the acquisition cost equals the amount of cash or cash equivalents transferred to the seller. Otherwise:

- If settlement of all or part of the consideration is *deferred*, the fair value of each component must be determined by discounting the payment to present value as of the transaction date (only if significant).
- If the business combination agreement includes contingent consideration (i.e., adjustments dependent on future events), the fair value of such contingent consideration must be *included in the acquisition cost at the acquisition date*.

- If the acquisition is made through *an exchange of shares*, the market price of the shares issued at the exchange date provides the best evidence of fair value.

Acquisition-related costs are the costs incurred by the acquirer to affect a business combination. These costs include *broker's fees, consulting, legal, accounting, and valuation fees, other professional or advisory services, general administrative costs*, including those for maintaining an internal acquisition department, *registration and issuance costs for debt and equity instruments*. The acquirer must expense these costs in the periods in which they are incurred, and the services are received *Important exception*: Costs related to the issuance of debt or equity instruments must be accounted for in accordance with IFRS 9

Control triggers consolidation (IFRS 10 link). **Acquisition date** is when control passes – crucial for fair value measurements. All assets and liabilities are measured as of this date. Example: If legal ownership transfers on July 1 but control transfers June 25 → acquisition date is June 25.

Step 3 – Allocate the purchase price

The acquirer must allocate the total consideration to:

- *Identifiable assets acquired*
- *Liabilities assumed*
- *Contingent liabilities*

All must be *measured at fair value* at the acquisition date -> we have to open the box of asset and liabilities, determine if there are any additional value because of differences between FV and carrying amount. Any excess of consideration over net assets is recognized as *goodwill*. If net assets exceed consideration, a bargain purchase gain is recognized in profit or loss. IFRS 3.18–31 cover recognition and measurement of assets and liabilities.

It is possible that, at the acquisition date, the acquirer recognizes assets that were not previously recognized by the acquiree. This may include, for example, *intangible assets* (e.g., customer relationships, trademarks), *contingent liabilities and deferred tax assets arising from tax loss carry forwards*. These elements may not have been recognized in the acquiree's books due to the *lack of recognition criteria at that time* but must be recognized at fair value in the consolidated financial statements upon acquisition.

Goodwill is defined as "an asset representing the future economic benefits arising from … assets acquired in a business combination that are not individually identified and separately recognized". Goodwill acquired in a business combination is recognized as an asset and measured initially at cost. The cost of the goodwill is equal to the excess of the cost of the business combination over the net fair value of the identifiable assets and liabilities which have been acquired.

$$\boldsymbol{Goodwill} = consideration + NCI + FV\ of\ previous\ interest - net\ assets$$

Bargain purchase arises when net assets > consideration transferred -> Bargain purchase gain goes to profit or loss

NCI can be measured in two ways:

- At *fair value* (full goodwill method)
- At *proportionate share of net assets* (partial goodwill method)

Choice affects amount of goodwill recognized, IFRS 3.19 provides option for measuring NCI. Example: Acquire 80%, NCI 20% → NCI can be FV or 20% of net assets

Post consolidation accounting -> Consolidate all assets, liabilities, income, and expenses of the acquiree. Eliminate intragroup transactions. Test goodwill annually for impairment (IAS 36)

Step acquisition

A *step acquisition* occurs when an investor *initially holds a non-controlling interest* (e.g., 20% or 30%) and then *acquires additional shares to obtain control of the investee* (maybe it adds 40%, that together with the previous 20%, force the parent company to change from the financial instruments to consolidation)

Relevant Standards:

- IFRS 3 – Business Combinations: governs the acquisition of control
- IFRS 9 – Financial Instruments: applies if the original investment was classified as a financial asset
- IAS 28 – Investments in Associates and Joint Ventures: applies if the original stake was an associate

Why does it matter?

- Ensures consistency with IFRS 3's acquisition accounting model
- Reflects the idea that a new business combination is taking place at the moment control is obtained

Upon gaining control:

- The previously held interest must be *remeasured at fair value* on the acquisition date
- Any gain or loss from remeasurement is *recognized in profit or loss*. This applies regardless of prior classification (IFRS 9 or IAS 28)

Transactions that change ownership % but not control:

- Treated as equity transactions
- No impact on P&L

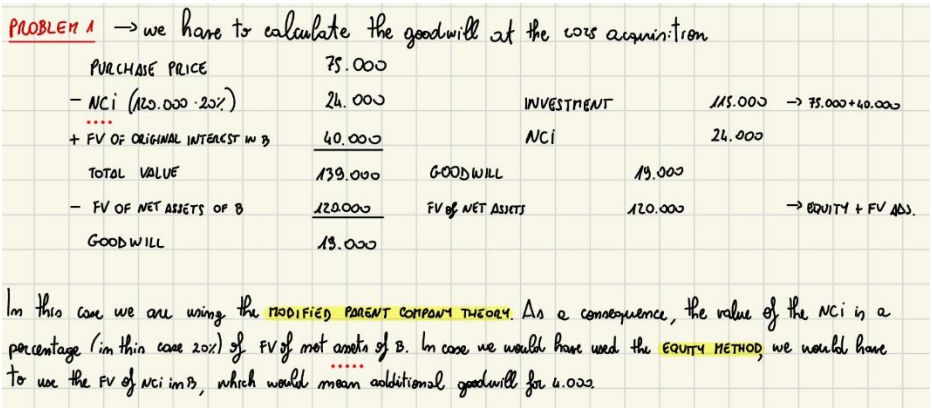
➔ Recognize difference in equity (NCI and parent)

Let's see some examples.

Problem 1

A invests an interest in B in two subsequent moments .	
In 2021 A buys shares of B :	30%
Purchase Price	32,000
Fair Value of Net Assets of B :	100,000
In 2025 A buys more shares of B :	50%
Purchase Price	75,000
Fair Value of Net Assets of B :	120,000
Fair Value of the original interest in B:	40,000
Fair Value of non-controlling interest in B:	28,000

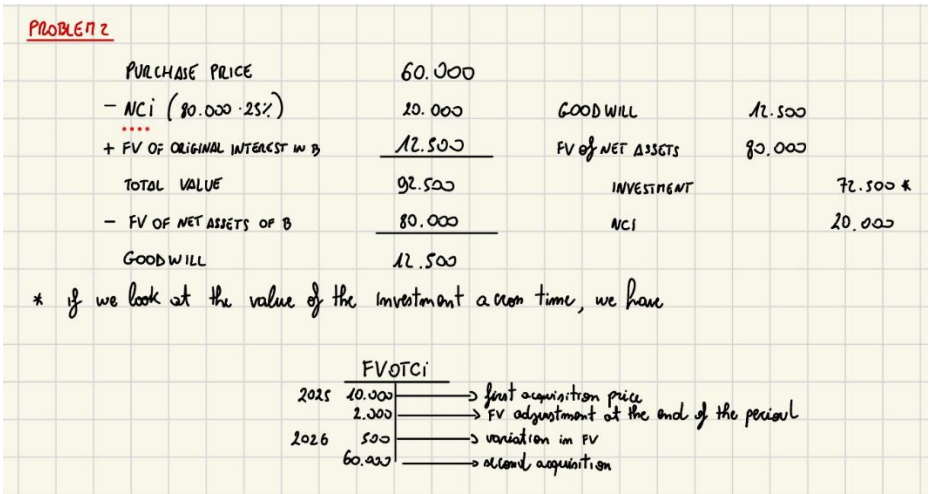
In this example, the classification of the initial 30% investment and the treatment of the change in its value at the time control is acquired are not considered.



Problem 2

A invests an interest in B in two subsequent moments .	
In 2025 A buys shares of B :	15%
Purchase Price	10,000
The Investment Is Measured at Fair Value in Equity Under IFRS 9	
At Year-End, a Change in the Fair Value of the Investment Is	
Recognized Equal to	2,000
During2026 A buys more shares of B :	60%
Purchase Price	60,000
FV of Net Assets of B	80,000
Original FV of investment in B:	12,500
FV of non-controlling interest in B :	28,000

Goodwill Is Calculated by Measuring Non-Controlling Interests as a Percentage of the Fair Value of the Acquired Net Assets



Problem 3

A invests an interest in B in two subsequent moments .	
In 2025 A buys shares of B :	40%
Purchase Price	40,000
FV of Net Assets of B	80,000
The Investment Is Measured using the Equity Method Under IAS 28	
At Year-End, the Investment Has a Value, Under the Equity Method, Equal To:	48,000
During 2026, A Acquires Additional Shares of B Equal To:	35%
Il prezzo pagato è pari a:	55,000
FV of Net Assets of	110,000
Original FV of investment in :	50,000
FV of non-controlling interest in :	30,000

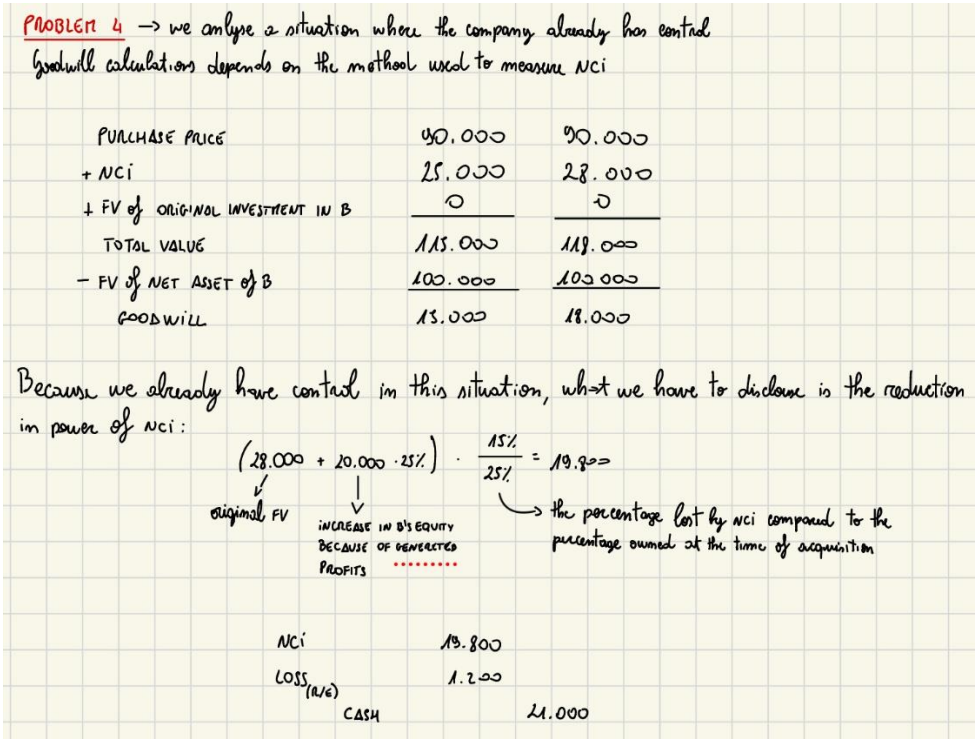
Goodwill Is Calculated by Measuring Non-Controlling Interests at Fair Value -> equity method!

PROBLEM 3

PURCHASE PRICE	55.000
+ NCi	30.000
+ FV of ORIGINAL INVESTMENT in B	50.000
TOTAL VALUE	135.000
− FV OF NET ASSET OF B	110.000
GOODWILL	25.000

Problem 4

In 2021 A buys shares of B :	75%
Purchase Price	90,000
FV of Net Assets of B	100,000
FV of non-controlling interest in B :	28,000
In the Following Years, B's Equity Increases, Due to Generated Profits, by:	20,000
During 2026, A Acquires Additional Shares of B Equal To:	15%
Purchase Price	21,000
The Following Ownership Percentages Are Therefore Held:	
A	90%
Non-controlling interest	10%



Problem 5

Example of a partial disposal:

In 2021 A buys shares of B:	100%
Purchase Price	125.000
FV of Net Assets of B:	100.000
In the following years, B' Equity increases, due to generated profits, by:	20.000
During 2025 A sells shares of B:	30%
Selling Price:	40.000

Accounting Effects on the Consolidated Financial Statements:

Acquistion of the Controlling Interest	***Debit***	***Credit***
FV of the Net Assets of the Acquiree	100.000	
Goodwill	25.000	
Investment		125.000

Partial disposal (maintaining the control)	***Debit***	***Credit***
Cash	40.000	
Non-controlling interest		36.000
Profit recognized in Equity		4.000

➔ There is no adjustment to the carrying amount of goodwill of 25,000 because control has been
retained

Problem 6

In 2021 A buys shares of B:	100%
Purchase Price	125.000
FV of Net Assets of B:	100.000
In the following years, B' Equity increases, due to generated profits, by:	20.000
During 2025 A sells shares of B:	75%
Selling Price:	120.000
The residual investment is classified as "associate" according to IAS 28;	
FV of the residual investment:	38.000

Accounting Effects on the Consolidated Financial Statements:

Acquistion of the Controlling Interest	***Debit***	***Credit***
FV of the Net Assets of the Acquiree	100.000	
Goodwill	25.000	
Investment		125.000

Partial disposal (losing the control)	***Debit***	***Credit***
Cash	120.000	
Investment in Associate	38.000	
Book value of the Net Assets disposal		120.000
Goodwill		25.000
Gain from the disposal of a subsidiary (net income)		13.000

Note:
Following the loss of control, the remaining interest is recognized at fair value. This implies that the recognized capital gain (13,000) contains two components:
- comparison of the fair value of the remaining interest (38,000) and the remaining portion of the fair value of net assets and goodwill (36,250 = 145,000 x 25%): 1,750;
- comparison of the price of the sold interest (120,000) and the sold portion of the fair value of net assets and goodwill (108,750 = 145,000 x 75%): 11,250.

Following the loss of control, the investment is accounted for using the Equity method. Therefore, the goodwill included in the remaining interest must be identified, according to the following calculation:

+ Fair value of the investment following the loss of control (38,000)
- Fair value of net assets (30,000 = 120,000 x 25%)
= Goodwill included in the Associate's investment (8,000 = 38,000 – 30,000)

Property, Plant and Equipment (PPE)

The main IAS/IFRS principle for **Property, Plant and Equipment (PPE)** is the *IAS 16*, which objective is to prescribe the accounting treatment so that users of the financial statements can discern information about an entity's investment in its PP&E -> the most relevant issues are about the *recognition*, the *determination of the carrying amount* and the *determination of the depreciation charges and impairment losses*. The *principle is not applied to*:

- *PP&E classified as held for sale (IFRS 5)*
- *Biological assets related to agricultural activity (IAS 41)*
- *The recognition and measurement of exploration and evaluation assets (IFRS 6)*
- *Mineral rights and mineral reserves such as oil, natural gas and similar non- regenerative resources*

Definition (IAS 16) -> PP&E are tangible assets that are held by an enterprise for use in the production or supply of goods or services, for rental to others, or for administrative purposes and are expected to be used during more than one period. The **cost** of an item of PP&E shall be recognized as an asset if and only *if the cost of the item can be measured reliably* and it is *probable that future economic benefits associated with the item will flow to the entity*. For example, if the government requires the company to affix new pollution reduction equipment, and the estimated price of equipment is €350.000 (so, automatically, the measure of the cost is reliable), there could be in some cases uncertainty if this cost needs to be classified as a normal expense for the company or PP&E. If costs are incurred to obtain the economic benefits or to increase the economic benefits from other assets, it meets the future benefits criterion -> can be classified as PP&E.

Initial costs and measurement at recognition

At the beginning of the life of a PP&E, there are several costs the company faces for purchasing or buying it. In case the cost (or the fair value, in the case of accounting with the revaluation model) can
be measured reliably and there are probable economic benefits associated to the asset, it is possible for the company to recognize that expense as a PP&E. However, for the different costs, usually there are additional criteria that need to be respected:

- *Professional fees of architects and engineers* -> *Can be capitalized if the costs are directly attributable to the asset*. Costs that are not directly attributable to the asset cannot be capitalized (i.e. administrative costs and overheads are excluded from the element of cost). Furthermore, *all costs not directly necessary for the construction are excluded*, such as for example feasibility studies, costs incurred for staff training and costs relating to abnormal waste of material and work in a self-constructed asset.
- *Estimated dismantling costs* -> the estimated cost for the disposal and removal of the asset and reclamation of the site is accounted for with a provision in liabilities -> must be amortized.
- *Delivery and handling costs* and *site preparation costs* -> The cost includes all costs necessary to put the asset into operation for normal use -> must be entirely recognized
- *Purchase / production costs*

Example 1: Company X, which owns a chain of supermarkets, has acquired a new store. The new shop needs, however, some renovation works which will mean that the shop will be closed for 3 months. The management has prepared a budget which includes expenses related to the implementation of the renovation works, the costs of the personnel who prepare the shop before opening and the costs relating to utilities (electricity, heating, etc.). Can management capitalize those costs incurred before the store opened?

- costs related to renovations are costs necessary to make the store operate in the manner intended by management. The shop could not be opened without considering incurring such expenses -> capitalized.
- as regards the costs relating to wages, utilities and storage of goods before sale through the shop, these are not necessary to bring the shop into its "operational" condition as they would have been incurred in any case if the shop has been opened -> cannot be capitalized

Recognition of costs of the carrying amount of an asset ceases when the asset is capable of operating **as intended by management**. Therefore, the following costs cannot be included in initial recognition:

a) *costs incurred for an asset that has yet to be used* or *is not yet operating at full capacity,* but it is already capable of operating in the manner intended by management.
b) *initial operating losses*, such as those incurred while demand for the item's products builds up
c) the *costs of reallocating and reorganizing part or all of the entity's business*

Example 2: a company bought a machine for €100. Additional costs include 7% sales tax, €10 to transport to plant, €5 storage cost (plant not ready), €3 labor to calibrate the machine, €2 materials to calibrate the machine, used at 50% of capacity (costs = €50, sales = €55), €11 consultancy fees related to choice of machine and calibration -> what is the cost of the machine?

Cost	Amount (€)
Invoice and tax (100 + 7)	107
Transportation	10
Calibration (3 + 2)	5
Professional fees	11
Machine cost	**133**

Example 3: On 31 July 2018, a company which prepares financial statements to 31 March every year bought equipment for €540.000. This amount was made up as follows:

Cost	Amount (€)
Manufacturer's price	500.000
Less: Trade discount	*(30.000)*
	470.000
Delivery charge	4.300
Installation and testing charges	24.500
Small spare parts	5.200
Servicing contract fees for the year to 31 July 2019	36.000
Total	**540.000**

➔ Small spare parts and servicing contract fees do not belong to the PPE

Component approach -> Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately (for example, planes or ships, the nacelle has a different duration than seats, etc.).

IAS 23 defines **borrowing costs** as "interest and other costs that an entity incurs in connection with the borrowing of funds". Borrowing costs that are *directly attributable to the acquisition, construction or production of a "qualifying asset"* must be capitalised as part of the cost of that asset. A *qualified asset* is "*an asset that necessarily takes a substantial period of time to get ready for its intended use or sale*". Other borrowing costs are recognised as an expense in the period in which they are incurred. So, we can summarize:

- *Specific borrowings* directly related to the funding of the asset -> Borrowing costs = interest expense of the specific borrowings
- *General borrowings* directly related to the funding of the asset -> Borrowing costs = weighted average interest rate of general borrowings over the capitalization period

Example: A company, which prepares financial statements to 30 June each year, has the following general borrowings outstanding throughout the year to 30 June 20X1. On 1 October 20X0, the company began construction of a qualifying asset and incurred expenditure of €300.000. A further €240.000 was spent on 1 February 20X1. Both of these amounts were financed out of general borrowings. Construction of the asset was still underway at 30 June 20X1. What is the amount of borrowing costs that should be capitalized?

Borrowing	Amount (€)
7.5% Bank Loan	800.000
9% Bank Loan	500.000
8.5% Bank Loan	1.200.000

The *total borrowing costs* incurred in relation to general borrowings for the year to 30 June 20X1 are:

$$(€800.000 * 7.5\%) + (€500.000 * 9\%) + (€1.200.000 * 8.5\%) = 207.000€$$

If we compare it with the total amount of borrowings (2.500.000€), we get the *weighted average interest rate*, which is equal to:

$$\frac{207.000}{2.500.000} * 100 = 8{,}28\%$$

We have to apply this rate *only on the amount of borrowing that have been used for the construction process* (which are 300.000€ and 240.000€) and *only along the capitalization period* (which goes from the moment the payment has been made until the moment the PP&E is ready for the use. Because the product, at the end of the accounting period is not ready yet, we have to split the 12 months according to the period passed between the different payments -> October-February for the first payment and February-June for the second payment). The total amount of borrowing costs that should be capitalized are:

$$\left(€300.000 * 8.28\% * \frac{9}{12}\right) + \left(€240.000 * 8.28\% * \frac{5}{12}\right) = 26.910€$$

Subsequent costs

After installing assets and making them ready for use, a company incurs **additional costs** that range from ordinary repairs to significant additions. They can be recognized as an asset *only if it is probable that the future economic benefits associated with the item will flow to the enterprise* and if the *cost of the item can be reliably determined*. Example:

- Modification of an element of the plants to improve the useful life or the capacity of the assets
- Improvement of machine parts to achieve substantial improvement in product quality
- Development of new production processes capable of obtaining a substantial reduction in production costs.

We have to make a distinction between:

- **ADDITIONS** -> *costs incurred to increase the efficiency, capacity or useful life of an assets* -> capitalise!
- **IMPROVEMENTS** (the substitute of the current asset with a better asset) or **REPLACEMENTS** (the substitute of the current asset with a similar asset) -> *if the expenditure increases the future service of the asset* => capitalise. The company should simply remove the cost of the old asset and related depreciation and recognize a loss, if any. It should then add the cost of the new substituted asset.

Example 1: On 1 September 20X1, a company paid €80.000 to replace the wall lining of its furnaces. The furnace had been acquired seven years ago and its carrying amount on 1 September 20X1 (before the replacement of the lining) was €320.000. Of this amount €10.000 related to the original wall lining. Assuming recognition criteria are satisfied, the cost of the replacement wall lining should be capitalised and the carrying amount of the original lining should be derecognised. The carrying amount of the furnace becomes:

$$€320.000 + €80.000 - €10.000 = €390.000$$

In case the company would face **major repairs**, the costs should be *capitalised*. On the other hand, if the company faces **ordinary repairs** (such as maintenance) or **re-arrangements/re-organization** (refers to the movement of assets from one location to another. IFRS indicates that the recognition

of costs ceases once the asset is in the location and condition necessary to begin operations as management intended), these should be classified as *expenses*.

Example 2: On 1 September 20X5, a company paid €250.000 for a major inspection of one of its aircraft. It is a legal requirement that such an inspection is carried out at least once every three years. The previous inspection took place in March 20X3 at a cost of €210.000. The carrying amount of the aircraft on 1 September 20X5 (before the new inspection) was €1.200.000. Of this amount €70.000 related to the previous inspection. Assuming recognition criteria are satisfied, the cost of the new inspection should be capitalised and the carrying amount of the previous inspection should be derecognised. The carrying amount of the aircraft becomes:

$$€1.200.00 + €250.000 - €70.000 = €1.380.000$$

Measurement after the recognition

Regarding the measurement after the recognition, there are 2 main models:

- **Cost model** -> After recognition as an asset, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.
- **Revaluation model** -> Current value at the date of the revaluation net of accumulated depreciation and any write-downs. This method can be *applied only to entire categories of fixed assets* (so, it is not possible to apply it only for specific assets). In this case, we have two options:
    - *Option A: Reevaluate the gross value* and proportionally *revaluate accumulated depreciation and write-down* (used when using revaluation coefficient).
    - *Option B: Reevaluate the net value* (usually used for buildings).

example: cost 100, accumulated depreciation 40, Fair value 90:

- Option A -> plant =150; accumulated depreciation = 60.
- Option B -> plant = 90.

The revaluation must be:

1. *Carried out regularly* -> if there are no significant fluctuations it is not necessary to carry them out every year, it is enough every 3-5 years
2. *Credited directly in the statement of the other components of the comprehensive income statement and credited (or debited) to shareholders' equity*, unless they reabsorb previous write-downs which are transferred, as usual, to the income statement

example:
year 1: fair value 100;
year 2: write-down 20 (to profit and loss);
year 3: fair value 110: 20 charged to profit and loss; 10 is charged directly to a equity's reserve.

The **fair value revaluation reserve** becomes available only when the revaluation is definitive -> this "transition" (from unavailable reserve to available reserve) does not pass through the income statement. Assets valued at fair value continue to be depreciated (it will be a matter of adjusting the depreciation rates).

Example 1: Company X prepares financial statements to 31 May each year. On 31 May 20X5 the company acquired land for €400.000. The acquisition was financed by a bank loan. This land was revalued at €450.000 on 31 May 20X6 and at €375.000 on 31 May 20X7. Assuming the company uses the revaluation model, let's explain how the above transactions should be dealt with in the financial statements:

- 31 May 20X6 -> First revaluation is a SURPLUS for € 50.000 (from €400.000 to €450.000) -> €50.000 credit to revaluation reserve (via OCI)
- 31 May 20X7 -> Subsequent revaluation is a DEFICIT for € 75.000 (from €450.000 to €375.000):
    - €50.000 debit to revaluation reserve (reverse the previous surplus)
    - €25.000 debit to P/L

Example 2: Company Y prepares financial statements to 30 June each year. On 30 June 20X5 the company acquired land for €600.000 with a cash payment. This land was revalued at €540.000 on 30 June 20X6 and at €620.000 on 30 June 20X7. Assuming the company uses the revaluation model, let's explain how the above transactions should be dealt with in the financial statements:

- 30 June 20X6 -> First revaluation is a DEFICIT for € 60.000 (from €600.000 to €540.000) -> €60.000 debit to P/L
- 30 June 20X7 -> Subsequent revaluation is a SURPLUS for € 80.000 (from €540.000 to €620.000):
    - €60.000 credit to P/L (reverse the previous deficit)
    - €20.000 credit to debit to revaluation reserve (via OCI)

Depreciation and write down

Depreciation must take place on a systematic way over the *useful lifetime* of the asset. The useful lifetime of the asset should be determined considering:

- *Expected usage of the asset*
- *Expected physical wear and tear* (which depends also on the maintenance of the asset)
- *Expected physical technical or commercial obsolescence arising from changes or improvements in production*, or from a change in the market demand for the product or service output of the asset
- *Legal or similar limits on the use of the asset*.

The depreciable value must be determined by deducting the residual value. The depreciation criterion must be reviewed in each financial year -> *any change incorporates a change in the estimates*, and the effect is an *ordinary* (and not extraordinary) *component of income*. **Impairment losses** (recognized to the P/L) must be recorded according to the IAS 36:

- comparison between the *net carrying amount* and the *recoverable amount*
- recoverable amount is the *higher of the value in use* and the *fair value less cost to sell*.

There are **3 methods** to identify depreciation:

- *Straight-line depreciation* -> A constant charge over the useful life of the asset
- *The diminishing-balance method* -> A decreasing charge over the useful life of the asset. If the expected productivity or revenue-earning power of the asset is relatively greater during the earlier years of its life or where maintenance charges tend to increase during later years, this method may provide the most satisfactory allocation of cost.
- *The sum-of-the-units method* -> A charge based on the expected use or output of the asset

Example for depreciation:

Cost of a machine: €40.000

Estimated residual value: EUR €1.024

Estimated useful life: 4 years

Total units produced over 4 years: 9.744
- Units produced during year 1: 2.260
- Units produced during year 2: 2.430
- Units produced during year 3: 2.550
- Units produced during year 4: 2.504

Straight-line method -> *Amount to be depreciated = Cost - Residual value* = €40.000 - €1.024 = €38.976. Annual depreciation charge = €38.976 ÷ 4 years = €9.744.

Diminishing-balance method -> Fixed percentage to be applied: 60%

	Amount (€)
Cost of machine	40.000
Year 1 depreciation charge (60% of cost)	*(24.000)*
NBV	16.000
Year 2 depreciation charge (60% of NBV)	*(9.600)*
NBV	6.400
Year 3 depreciation charge (60% of NBV)	*(3.840)*
NBV	2.560
Year 4 depreciation charge (60% of NBV)	*(1.536)*
Residual value	**1.024**

Sum-of-the-units method -> Depreciation charge per unit produced = (Cost – Residual value) ÷ number of units produced = €38.976 ÷ 9.744 units = €4

Depreciation charge for year 1 = €4 x 2.260 = €9.040
Depreciation charge for year 2 = €4 x 2.430 = €9.720
Depreciation charge for year 3 = €4 x 2.550 = €10.200
Depreciation charge for year 4 = €4 x 2.504 = €10.016

Land -> Lands must be separated (accountingly) from the buildings, even when they are purchased jointly. Land usually is not depreciated.

Exercises

Problem 1: For plants, IAS provide that the concept of fair value, where there are no reliable market parameters, is represented by the so-called current replacement cost (IFRS 13 par B9).

Plant purchased on 1.1.20X2 at cost of 40.000. Estimated useful life: 10 years. 1/1/20X5: gross replacement cost: 50.000 -> the depreciated replacement cost is equal to 7/10 of 50.000 (gross replacement cost reduced by the depreciation of 3 years, i.e. 20X2, 20X3 and 20X4).

➔ EVALUATE THE PLANT AT FAIR VALUE

The plant must be revaluated by 10.000 (from 40.000 to 50.000) and the accumulated depreciation must be revaluated by 3.000 (from 12.000, which is the 3 years accumulated depreciated value in case of a cost of €40.000, to 15.000, which is the 3 years accumulated depreciated value in case of a cost of €50.000). The revaluation balance increases a shareholders' equity reserve and therefore does not go to the income statement. In accounting term, the entry will be:

Plant	**10.000**	
Accumulated depreciation		**3.000**
Revaluation reserve		**7.000**

Problem 2: On 1 January 202X, Alfa Spa purchased a tangible fixed asset for a value of 100,000 with a useful life of 5 years, immediately ready for use. The valuation method used is at fair value. The company determines the fair value of the property at the end of each financial year, after the allocation of the year's depreciation charge calculated linearly on a time basis. Assume the following evaluations at FV:

year	fair value
202X	90.000
202X+1	59.400
202X+2	35.000
202X+3	25.000
202X+4	0

With these values, it is possible to fill the following table that represents how each year treatment will be:

year	goss value	depreciation	net value	fair value	revaluation reserve variation	profit and loss	revaluation reserve at year-end
202X	100.000	20.000	80.000	90.000	10.000	-	10.000
202X+1	90.000	22.500	67.500	59.400	- 8.100	0	1.900
202X+2	59.400	19.800	39.600	35.000	- 1.900	2.700	-
202X+3	35.000	17.500	17.500	25.000	4.800	- 2.700	4.800
202X+4	25.000	25.000	-	-	0	0	4.800
	total	**104.800**			**4.800**	-	

As can be seen from the table:

a. *Positive changes (surplus)* are recorded in the revaluation reserve, in an item of the other components of the comprehensive income statement, unless this change offsets previous deficits recorded in the income statement
b. *Subsequent negative changes (deficit)* are charged as a reduction of the aforementioned reserve until it is zero.
c. *Any further negative changes must be charged to the income statement*.

IAS 40

The **objective** of this principle is to prescribe the accounting treatment for investment property and related disclosure requirements so that users of the financial statements can discern information about an entity's property held as an investment. Property which is acquired as an investment rather than for use is not consumed in the entity's operations and does not have a useful life -> *IAS 16 is generally inappropriate for such property*. The objective of IAS 40 is to offer a more suitable accounting
treatment for property held as an investment.

In this case, the methods used for recognition are:

- *Cost model* -> In the case of valuation at cost, it is necessary to proceed with depreciation and write-downs in the event of lasting losses in value.
- *Fair Value model* -> In the case of measurement at fair value:
  - the increase in value (as well as the write-downs) *pass through the income statement*
  - the measurement must *take place every year* and the *fixed asset ceases to be depreciated* (unlike the application of the fair value to instrumental PPE, which continues to be depreciated).

➔ The accounting policy must be the same for the entire category (land and buildings purchases as an investment).

Intangible Assets

Under IAS, **asset** means a resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. An **Intangible Asset** is a *non-monetary asset, identifiable* and *without physical substance*.

Definition

IAS 38 -> The definition of intangible asset is satisfied only when **three conditions are simultaneously met**:

- *IDENTIFIABILITY* -> alternatively presupposes:
  - *Separable* -> the asset can be separated from the entity's assets and sold separately **or**
  - *Contractual or legal rights* -> The asset arises from contractual or other legal rights regardless of whether those rights are transferable or separable from the entity.

➔ N.b.: identifiability is needed to distinguish specific intangible assets from the goodwill, which, by definition, cannot be separated from the company as a whole.

- *CONTROL* -> requirement refers to whether or not the entity is able to control the future economic benefits deriving from it. The *existence of legal protection* on the activity is certainly a condition that *legitimizes controllability* (technical or scientific knowledge can give rise to future economic benefits, but must be controlled through, for example, trademarks and patents). However, it is not a necessary condition, as the entity may be able to control by other means. A particular example of an intangible asset is a portfolio of customers.
- *FUTURE ECONOMIC BENEFITS* -> The economic benefits can be measured both as future income deriving from the use of the asset and from any cost savings that that asset may be able to produce.

Recognition

An item is **recognised as an intangible asset** only if it meets the definition of an intangible asset and it is probable that the future economic benefits attributable to the item will flow to the entity and the cost of the item can be measured reliably. The items that are *not intangible assets* are, for example, *original goodwill, start-up expenses, personnel training expenses, advertising and promotional expenses, reorganization expense, cost for the development of customer portfolio*.

Example 1: A large-scale retail company, in order to increase its market share in a competitive context, decides to launch a loyalty card program for its customers. Through purchases in supermarkets, supermarket customers accumulate points which they can later use for future purchases or to receive rewards. Can management capitalize the expenses incurred in organizing the loyalty card program? No, the loyalty program is an internally generated asset that does not meet the recognition criteria dictated by IAS 38 as the *expenses on the program cannot be distinguished from the development cost of the business as a whole*. It would be different if this program were identified as an intangible asset through a business combination.

Initial and subsequent measurement, amortisation

Acquired intangible assets that qualify for recognition shall be **measured at cost**, which includes *borrowing costs* (under IAS 23 conditions), *directly attributable costs* (es. Legal cost) and *purchase costs*.

After the initial recognition, there are two ways in which it is **possible to measure the value of an intangible asset**:

- *Cost model* -> After initial recognition, an intangible asset shall be carried at its *cost - any accumulated amortisation - accumulated impairment losses*.
- *Revaluation model* -> After initial recognition, an intangible asset shall be carried at a *revalued amount*, being its *fair value at the date of the revaluation - any subsequent accumulated amortisation - any subsequent accumulated impairment losses* -> Only by reference to an active market, e.g. production quotas, fishing licenses and taxi licenses. Revaluation gains and losses are accounted for as follows:
    - Revaluation gains are *credited to a revaluation reserve* and recognized as *other comprehensive income* unless it is a reversal of previous write-downs. In this case it goes to the income statement for the part that neutralizes previous write-downs.
    - Revaluation losses are recognized as an *expense in the calculation of profit or loss* except for the part that reduces reserves deriving from previous revaluations.

Amortization and impairment -> we have to make a distinction between:

- *Intangibles with finite useful lives* -> Amortisation and impairment
- *Intangibles with indefinite useful lives* -> Impairment
- *Goodwill* -> Impairment

Useful life -> The first distinction that an entity must make concerns whether the intangible asset has a *finite useful life* or an *"indefinite" useful life*. In particular an intangible asset must be considered by the entity with an *indefinite useful life* when, based on an analysis of relevant factors, there is no foreseeable limit the period until which the asset is expected to generate net cash inflows for the entity -> does not mean infinite useful life.

There are **different factors** to consider in determining useful life -> *expected use of the asset, product life cycles, obsolescence, stability of the economic sector in which the entity operates, actions of competitors and potential competitors, legal restrictions on use, dependence of the useful life on that of other assets to which the intangible is connected*. The useful life of an intangible asset that arises from contractual or other legal rights shall not exceed the duration of the contractual or other legal rights but may be shorter depending on the period over which the entity expects to use such activity.

Internally generated intangible assets

As we know, the **research expenditure** is marked as ordinary expenses when incurred. On the other hand, the **development expenditures** may be capitalised subject to the following conditions:

- Technical feasibility of completion
- Intention to complete and ability to use/sell the asset
- Probability of future economic benefits
- Ability to measure expenditure reliably

Examples of research activities are:	Examples of development activities are:
- the activity aimed at obtaining new knowledge; - the investigation, evaluation and final selection of applications of research results or other knowledge; - the search for alternatives for materials, projects, processes, systems or services; - the conception, design, evaluation and final selection of possible alternatives for new or improved materials, projects, products, processes, systems or services.	- design, construction and verification of prototypes or models (which precede their production or use); - design, construction and activation of pilot plant; - design, construction and testing of alternatives for materials, designs, processes, systems; - design of means, tests, prints, matrices containing new technologies.

Examples of **intangible assets that cannot be recognised** are *trademarks/newspapers/editorial rights, customer lists and similar elements*. This is because they are confused with the goodwill value

(they are not separable from it). However, they can be recognized as specific intangibles assets if deriving from:

- purchases from third party
- business combinations.

Example of software developed for internal use -> Company A employs researchers based in countries around the world. The geographically dispersed nature of its operations makes it extremely difficult for the payroll staff to collect time records, so the management team authorises the design of an in-house, web-based timekeeping system.

PART A - The project team incurs the following costs. Which are the costs can be capitalized under IAS 38?

Cost type	
2,500 Concept design	42,000 Software coding
3,700 Evaluation of design alternatives	30,000 Quality assurance testing
8,100 Determination of required technology	14,000 Training
1,400 Final selection of alternatives	11,200 General and administrative costs
28,000 Software design	6,000 Ongoing maintenance costs

Cost type	Amount	Charged to expense	Capitalised
Concept design	2,500	Research expenditure - expensed as incurred	
Evaluation of design alternatives	3,700		
Determination of required technology	8,100		
Final selection of alternatives	1,400		
Software design	28,000	Development expenditure - capitalised	
Software coding	42,000		
Quality assurance testing	30,000		
Training	14,000	Subsequent costs not satisfying the IAS 38 recognition criteria. Expensed as incurred	
General and administrative costs	11,200		
Ongoing maintenance costs	6,000		
TOTAL	**146,900**	**46,900**	**100,000**

PART B -> he estimated useful life of the timekeeping system is five years. What is the monthly amortisation charge? Only capitalised costs can be amortized during the useful life of the timekeeping system. The total capitalised cost of this development project is €100,000. As soon as all testing is completed, the Company begins amortising using a monthly charge of Euro 1,666.67 (Euro 100,000 / 60 months):

Cost type	Amount	Months	Amortisation charge
Software design	28,000	60	466.67
Software coding	42,000	60	700
Quality assurance testing	30,000	60	500
TOTAL	**100,000**		**1,666.67**

PART C -> Once operational, management elects to construct another module for the system that issues an e-mail reminder for employees to complete their timesheets. This represents significant added functionality, so the cost can be capitalised. By the time this additional work is completed, the original system has been in operation for one year. The following costs are incurred and capitalised:

Cost type	Amount
Software developers	11,000
Quality assurance testing	7,000
TOTAL	**18,000**

What is the monthly amortisation charge for the additional costs capitalised? By the time this additional work is completed, the original system has been in operation for one year. The residual useful life of the timekeeping system is 4 years, therefore the amortisation period for the new module is 4 year:

Cost type	Amount	Months	Amortisation charge
Software developers	11,000	48	229.17
Quality assurance testing	7,000	48	145.83
TOTAL	**18,000**		**375**

Exercise 1 (Amortization) -> A company has purchased the following intangible assets in separate transactions:

a. A patent which expires after 10 years. The company expects to make use of it for 6 years and then dispose it
b. A copyright which expires after 40 years. The company intends to use it for 30 years, after which it is expected to be of no further value
c. A trademark relating to a product. This trademark has an unlimited legal life but the company expects to cease manufacture of the products within 3 years

➔ Determine the useful life of these assets and explain how each asset should be account for (assuming the company does not use the revaluation model)

a. Useful life is 6 years -> the asset should be recognised initially at cost and then amortised over 6 years -> depreciable amount = cost – residual value
b. Useful life is 30 years -> the asset should be recognised initially at cost and then amortised over 30 years -> depreciable amount = cost
c. Useful life is 3 years -> the asset should be recognised initially at cost and then amortised over 3 years; the residual value of the asset depends on whether the company intends to sell the trademark at the end of its useful life and whether or not a customer is likely to be found

➔ In each case, the chosen amortisation method should match the usage pattern of the asset

Exercise 2 (Cost related to website) -> A company has sustained costs for the internal generation of website that can be separately identified for the following phases:

a. Planning costs of the website
b. Development costs of the website
c. Costs for the development of the site's content
d. Operative costs

➔ Determine if the costs can be capitalized under IAS 38.

a. Planning costs of the website -> to profit and loss
b. Development costs of the website -> can be capitalized (If it is demonstrated that these costs determine prospective economic benefits for the company)
c. Costs for the development of the site's content -> to profit and loss
d. Operative costs -> to profit and loss

Impairment Test

IAS 36 (objective) -> to ensure that assets in BS are not overstated. Under IAS 36, an entity is required to conduct impairment tests for its assets to see whether it has incurred any impairment losses. IAS 36 **applies to tangible and intangible fixed assets**, whatever the chosen accounting treatment (cost or revaluation) in order to avoid overevaluation. The scope of application of IAS 36 does not include, among other things:

- IAS 2 Inventories
- IAS 12 Deferred Tax Assets
- IAS 19 Assets deriving from Employee Benefits
- IFRS 9 Financial Instruments subject to IFRS 9
- Assets held for sale

Definition

Impairment loss -> the amount by which the carrying amount (Net Book Value, NBV) of an asset or cash-generating unit exceeds its recoverable amount (which implies the future usage of the asset):

- If *NBV* > *Recoverable Amount*: difference is an IMPAIRMENT LOSS
- If *NBV* < *Recoverable Amount*: NO Impairment is recorded

The **Recoverable Amount** is the greater *of Fair Value less cost of disposal* (more or less the market value) and *Value in use* (the value that I can withdraw from the usage of the asset, in particular considering the CF generated by the asset we are considering). The recoverable amount is usually assessed at the level of the individual asset, but it not always possible, as we have to forecast the cash-in generated by the asset. When an asset *does not generate largely independent cash flows* (maybe because it does not generate any CF or because the CF are related to the business as a whole), it may not be possible to estimate its recoverable amount separately. In such cases:

- If the asset's fair value - costs to sell > carrying amount, no further action is needed.
- Otherwise, the recoverable amount must be estimated with reference to the **Cash Generating Unit (CGU)** the asset belongs to.

Fair value (IFRS 13) -> the price that would be received to sell an asset or paid to transfer a liability in an *orderly transaction* between *market participants at the measurement date*. The fair value measurement assumes that the transaction takes place in the asset's principal market. If no principal market exists, in the most advantageous market available to the entity. In fact, there are **three levels of fair value** (passing from the first to the third level we reduce the amount of certainty and demonstrability of the fair value):

- *First level of fair value* -> we take the value of an asset from the market where it is sold
- *Second level of fair value* -> in case we don't have a specific market where to sell our product, we have to look at the value of similar products sold in their respective markets (market approach)
- *Third level of fair value* -> in case not even the market for similar products is available, we have to estimate the value of the asset by different models, such as the DCF model -> it's the most "dangerous" method as it include different inputs that are under the control of management.

EXAMPLE: A company owns a rare type of industrial metal used in high-end electronics manufacturing. It wants to measure the fair value of this metal as of the reporting date.

- *Scenario A – Existence of a Principal Market* ->The company regularly sells this metal on the London Metals Exchange (LME), which is the most active and liquid market for this specific commodity. The LME consistently has the highest volume and frequency of transactions for this metal, even if the prices are not always the highest -> according to IFRS 13, the company

must use the LME price for fair value measurement because the LME is the principal market, even though a better price might exist elsewhere.
- *Scenario B – No Principal Market Exists* -> The company must use the most advantageous market that could be:
    - an organized commodity exchange
    - a private brokered sale
    - Auction sale

Value in use -> the present value of the future cash flows expected to be derived from an asset. Estimating value in use requires:

- *projecting the future cash inflows and outflows from the continued use of the asset and its eventual disposal*
- *applying an appropriate discount rate to these future cash flows*.

The asset's risk profile can be incorporated either into the expected future cash flows or into the discount rate used. In determining value in use, we have to consider some prescriptions (the objective of the IAS/IFRS is to provide investors of useful information in order to allow them to understand which the most suitable companies are to receive those money, but these are not easy to assess, in particular if we are using the fair value):

- Cash flow projections must be *based on reasonable and supportable assumptions*, with greater weight given to *external evidence* (means something that you can withdraw from the market)
- *Projections must rely on the most recent management-approved budgets/forecasts* (so, based on a document which can include the responsibility of the BoD, in order to have someone accountable for these projections), covering a *maximum of five years* (as usually projections for longer years are difficult to estimate) unless a longer period is justified. They *must exclude future restructurings* (you cannot put in the projections the effect of enhancing and improvement of assets, otherwise there is a lack of conservatism)
- For *periods beyond the approved forecasts*, projections should be extrapolated using a stable or declining growth rate, unless a higher rate is justified (after the business plan period we have the terminal value, which is the value assuming the company generating infinite CF assuming a growing rate that is the same of the general economy). The rate must not exceed the long-term average growth rate of the relevant sector, country, or market.

Future Cash Flow Estimates -> Must include:

- *Cash inflows from the asset's continued use* (the cash-in from the ordinary activities)
- *Necessary and attributable cash outflows to support those inflows* (including costs to make the asset operational)
- *Net cash flows from the asset's disposal at the end of its useful life* (if any).

➔ Cash flow estimates and the discount rate must reflect consistent assumptions about general inflation.

Cash Outflow Projections:

- *Include* -> routine maintenance and general expenses directly attributable (or reasonably allocable) to the asset's use.
- *Do not include*:
    - Future restructurings not yet committed
    - Future investments aimed at improving performance beyond original expectations.

➔ You cannot consider the effect of activities that are not already put in place for the first time, in order to avoid overestimation

Disposal Value Estimates -> Net cash flows from disposal = expected sale price in an arm's length transaction between informed, willing parties, minus disposal costs. Estimate based on current market prices for similar assets in comparable conditions.

Discount rate -> it must be a pre-tax rate (even though you can use the post-tax rate, but you have to use post-tax CF) that reflects current market expectations about the time value of money and the specific risks associated with the asset. It must not reflect risks already included in the estimated cash flows. The rate can be estimated by:

- *Referring to the implied rate from similar recent market transactions*
- *Using the WACC of a listed company with similar assets* (in terms of function and risk)
- *Applying surrogate methods, such as the Capital Asset Pricing Model (CAPM)*, when market data is unavailable

Implications of impairment

An **annual impairment test** is mandatory for intangible assets with indefinite useful life (such as Goodwill) and for assets not yet available for use. For the *other assets*, only when you have evidence or **signals of impairment**. At each reporting date, a company must assess whether there are any indicators of possible impairment. If such indicators exist, it is required to estimate the recoverable amount of the asset -> it doesn't necessarily means that there is going to be an impairment loss. A company must consider at least the following indicators for impairment purposes which are not exhaustive for all types of companies:

EXTERNAL SOURCES OF INFORMATIONS

- ✓ Unexpected decline in the market value of the asset;
- ✓ Significant changes, with negative effects, in the legal, technological, market, economic context in which the company operates or in the market to which the activity is dedicated;
- ✓ Increase in market interest rates which may impact the discount rate to be used in calculating value in use;
- ✓ The book value of the firm exceeds its market capitalization

INTERNAL SOURCES OF INFORMATIONS

- ✓ Evidence of obsolescence or physical damage to the asset;
- ✓ Changes in the way the asset is used or will be used (e.g. restructurings, disposals);
- ✓ Evidence from internal information systems about the deterioration in the expected performance of the business (especially in terms of expected cash flows).

Recognition

An asset must be written down to its *recoverable amount only if this amount is lower than its carrying (book) value* -> this reduction constitutes an **impairment loss**. The impairment loss must be immediately recognized as an expense in the income statement (so it goes through the P&L), unless the asset is *carried at a revalued amount under another standard* (e.g., IAS 16 or IAS 38). In such cases, the loss must be accounted for as a *reduction in the revaluation surplus*, in line with the relevant IAS.

Example -> Wilderness Ltd values all of its assets at their historical cost. One of its assets has a carrying amount of €100.000. The asset is depreciated on a straight-line basis with a remaining useful life of three years and a residual value of €10.000. The asset is expected to generate net cash flows of €20.000 per year for the next three years and then be sold for €10.000. Disposal costs are expected to be negligible. At present, the asset could be sold for €50.000 and disposal costs would be €2.000

REQUIRED:

a. Assuming a discount rate of 10% and that all cash flows occur at the end of each year, determine the asset's value in use

b. Calculate the amount of impairment loss which has occurred and explain how this should be accounted for in accordance with IAS 36 Impairment of Assets
c. Calculate the amount of depreciation that should be charged in relation to the asset for each of the next three years assuming that straight-line method will continue to be used

A) Value in use

Year	Cash Inflows	Discount factor	Present Value
1	20.000	0,909	18.180
2	20.000	0,826	16.520
3	30.000	0,751	22.530
			57.230

B) Impairment test:

- The asset's recoverable amount is the higher of its fair value less costs to sell and value in use
- Fair value less costs to sell: €48.000 = €50.000 − €2.000
- Recoverable amount is €57.230.
- If the asset's carrying amount is €100.000, then there is an impairment loss of €42.770
- The accounting treatment required is to reduce the carrying amount of the asset by €42.770 to €57.230, and the impairment loss of €42.770 should be recognised as an expense in the Income Statement

C) Depreciation:

- Assuming that the residual value remains unchanged at €10.000, the depreciable amount is €47.230 = €57.230 − €10.000
- Annual depreciation: € 47.230/3 years = €15.743

Cash Generation Units (CGU)

When there are indicators of impairment, the *recoverable amount of the individual asset must be estimated*. If this is not possible, the company must assess the recoverable amount of the **Cash-Generating Unit (CGU)** to which the asset belongs, which is necessary is not possibly to assess the CF generated by the asset alone.

Definition: A CGU is defined as the smallest identifiable group of assets that generates cash inflows from continuing use which are largely independent from those of other assets or groups of assets.

A CGU assessment becomes necessary when:

- The *asset's value in use is not close to its net fair value*
- The *asset does not generate largely independent cash inflows*

Identifying a CGU involves a **subjective judgement**, influenced by how management monitors and organizes operations (e.g. by product line, geographic area, business unit, etc.) and have reports of the business -> in order to identify the CGU, you have to look at *how managers organize the business + assess the responsibility for the performances inside of the company* and *have reporting activity of the business* (at level of BoD we have reporting of the activity of that Business Unit) -> it is very different between the different companies and sectors. If there is an active market for the products of a business (or group of businesses), that business (or group of businesses) must be treated as a CGU, even if the products are used internally. In this case, management must estimate the market prices that would be obtained in an open, arm's length transaction.

CGUs related to the same type of activity must be identified using consistent criteria from year to year (examples of information that must be kept consistent are the number of CGU or the boundaries), unless a change is clearly justified. The identification of a CGU can be different even between companies that are similar in size and market, as it can be set according to the BU, the

country where they operate, the group of countries where they operate… The book value of a CGU includes:

- *Assets that can be directly attributed or reasonably allocated to the unit* and that contribute to the *future cash inflows considered in the value in use calculation*
- *Liabilities only if they are essential to determine the recoverable amount of the CGU*.

Example -> A mining company owns a private railway to support its mining activities. This railway could be sold only for scrap value and does not generate cash inflows that are largely independent of the cash inflows from the other assets of the mine. Is it possible to determine the recoverable amount of the railway? The railway's value in use is probably materially more than its scrap value, but it cannot be estimated. Therefore, the recoverable amount of the railway cannot be determined. If there is any indication of impairment, the company should determine the recoverable amount of the CGU to which the railway belongs (i.e. the mine as a whole).

Goodwill impairment

Goodwill *does not generate independent cash flow* but contributes to **multiple CGUs**. Therefore, its recoverable amount cannot be assessed individually. For impairment purposes, goodwill must be *allocated to the CGU (or group of CGUs) that is expected to benefit from the synergies of the business combination*. Each CGU (or group of CGUs) to which goodwill is allocated must:

- Represent the lowest level at which goodwill is monitored internally
- Not exceed the size of an operating segment as defined by IFRS 8 (before aggregation).

Impairment test for goodwill must be performed *at least annually*, and *whenever indicators of impairment exist* (so it is possible to conduct an impairment test more than once along the same year). The test compares the carrying amount and the recoverable amount of the CGU:

- If *recoverable amount* ≥ *carrying amount* → No impairment
- If *carrying amount* > *recoverable amount* → Impairment loss is recognized

Important: Before testing goodwill, all various assets assigned to a CGU must be tested for impairment first.

Corporate assets

Some assets, such as *buildings housing central management, IT systems, or other shared infrastructure*, are considered **corporate assets**, as they serve auxiliary or common functions across multiple units and do not generate independent cash flows. When performing an impairment test on a CGU, it is important to:

- *Identify any corporate assets that can be reasonably attributed to that CGU*
- *Include them* in the impairment calculation.

However, if *it is not possible to allocate a corporate asset to the specific CGU in a reasonable and consistent way*, the impairment test is performed without it. Subsequently, the test must be extended to the smallest group of CGUs to which the asset can be reasonably allocated, in order to assess whether any additional impairment losses should be recognized at a more aggregated level.

Allocation of impairment loss

When the recoverable amount of a CGU is lower than its carrying amount, an **impairment loss must be recognized**, following a specific order:

1) First, *reduce the carrying amount of any goodwill allocated to the CGU*.
2) Then, in case the goodwill is not enough, *allocate the remaining impairment pro rata to the other assets of the CGU*, based on their *carrying amounts*.

However, when reducing the value of individual assets, an entity must not bring any asset below the highest of the following three thresholds:

- *Its fair value less costs of disposal (if measurable)*
- *Its value in use (if determinable)*
- *Zero.*

Any portion of the loss that cannot be allocated to a specific asset due to these limits must be reallocated proportionally to the other assets of the CGU.

EXAMPLE – CGU WITH NO GOODWILL

AlphaCorp has determined that its Chinese division qualifies as a cash-generating unit (CGU). The carrying amounts of the division's assets were assessed as of 30 June 2014.

Asset	Carrying Amount €
Buildings	500.000
Equipment	300.000
Machinery	250.000
Factory	150.000

Alpha calculated the value in use of the division to be €1.188.000, while the carrying amount of the CGU is €1.200,000. Calculate the amount of impairment loss and show how this should be allocated between the assets of the CGU.

Since € 1.188.000 < € 1.200.000 ⇒ Impairment loss of €12.000

Asset (a)	Carrying Amount € (b)	Proportion	Allocation of imp. Loss (a*b)=c	Net carrying amount b-c
Buildings	500.000	41.7%	5.004	494.996
Equipment	300.000	25%	3.000	297.000
Machinery	250.000	20.8%	2.496	247.504
Factory	150.000	12.5%	1.500	148.500
	1.200.000	100%	12.000	1.188.000

EXAMPLE – CGU WITH GOODWILL

The carrying amounts of the assets of a cash-generating unit are as follows:

Asset	Amount
Goodwill	25
Patents and copyrights	50
PP&E	200
Total	275

There are indications that CGU is impaired and therefore its recoverable amount has been determined. The CGU's recoverable amount is €195m. Value in use cannot be ascertained for any of the assets, but fair value less costs to sell is €20m for the patents and copyrights and €160m for the PP&E. Calculate the amount of the impairment loss and show how this should be allocated between the assets of the CGU.

The impairment loss is €80 = €275 -€195. Goodwill is reduced from €25 to zero, leaving €55 of the loss
remaining. This is initially allocated proportionally as follows:

- Patents: 20%*€55 =€11 ⇒Carrying amount of €39 (50-11)
- PP&E: 80% *€55 = €44 ⇒Carrying amount of €156 (200-44)

But, €156 is €4 less than the fair value less costs to sell of the PP&E. Therefore PP&E is set to €160 and an extra €4 is subtracted from the patents. The assets are now patents €35 and PP&E €160 ⇒ total of €195.

Asset	Amount	Impaired Amount
Goodwill	25	0
Patents and copyrights	50	35
PP&E	200	160
Total	275	195

Reversal of impairment loss

At each reporting date, the entity must assess whether there is any indication that a previously recognized impairment loss may have *decreased or no longer exists*. If such an indication exists, the **recoverable amount must be re-estimated**. The assessment should consider *both internal and external indicators*, as outlined by IAS 36. These indicators are generally the opposite of those that would justify the original recognition of an impairment loss (e.g. improved market conditions, internal performance recovery). Any impairment loss recognised for *goodwill shall not be reversed in a subsequent period* (the goodwill never goes up to the level it had before the impairment loss).

When reversing an impairment loss for an asset other than goodwill, the asset's carrying amount cannot exceed the value it would have had (net of depreciation/amortization) if *no impairment had been recognized in prior years*. The reversal must be recognized immediately in the income statement,
unless the asset is carried at a revalued amount (e.g. under IAS 16). In that case, the reversal is treated as a revaluation under the relevant standard. If the reversal concerns a CGU, it must be allocated to the assets of the unit (excluding goodwill) pro rata, based on their carrying amounts.

Example: Let's suppose you have an asset that is valued €100 with a depreciation of €1 per year. In time t you conduct and impairment test, which results in an impairment loss of €40. After five years, in t+5, the reasons behind the impairment test have dissolved -> the carrying amount of the asset if no impairment test would have been conducted is €95 (€100 – 5*€1). How much is the reverse impairment loss?

- Recoverable amount is €90 -> you can't reverse more than €30, because you cannot over the recoverable amount
- Let's suppose that the carrying amount without impairment would have been €70 -> you can't reverse more than €10

However, an asset's carrying amount cannot be increased beyond the lower of:

- Its recoverable amount
- The carrying amount it would have had if no impairment had been recognized.

Any excess amount that cannot be allocated to a specific asset due to these limits is *reallocated proportionally to the other assets of the CGU*, **excluding goodwill**.

Provisions, Contingent Liabilities and Contingent Assets

IAS 37 -> Ensuring that appropriate recognition criteria and measurement bases are applied to Provisions, Contingent Liabilities and Contingent Assets (which, in this case, is particularly important because of the high level of discretion given to management). Ensuring that sufficient information is

disclosed in the notes to enable users to understand their nature, timing and amount. IAS 37 does not apply to provisions and contingent liabilities dealt with:

- IAS 12 Income Taxes
- IFRS 15 Revenue
- IFRS 16 Leases
- IAS 39/IFRS 9 Financial Instruments
- IAS 19 Employee Benefits

Definitions

Accrued Liabilities -> A present obligation of the entity to transfer an economic resource (a right that has the potential to produce economic benefits) as a result of past events. -> I know exactly the nature of the liability, the timing, the amount and the existence of the liability, it's *the element that gives me the highest level of certainty*.

Provisions -> a liability of *uncertain timing or amount* that should be recognized when:

- *an entity has a present obligation as a result of a Past event* (the *obligating event*) -> I have the obligation now and this obligation comes from something occurred in the past
- *it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation* -> simplified, it is probable that I have to pay (probability > 51%), even though it is the hardest part to assess between the 3 requests
- *a reliable estimate can be made of the amount of the obligation*

Obligation event -> A past event, existing independently of an entity's future actions, that creates a legal or constructive obligation that results in an entity having no realistic alternative to settling that obligation:

- *Legal obligation* -> the company has an obligation because of a contract, legislation, other operation of law -> for example, there is a law that oblige the company to
- *Constructive Obligation* -> the entity has created a valid expectation that it will discharge the obligation, even though this is not legally enforceable (so not required by law) -> for example, there is no law that requires cleaning after polluting, but the company has developed a honour code so that whenever I pollute I clean -> it creates an expectation in customers about the company's behaviour.

Contingent liabilities -> Present obligations with *improbable or possible outflow of economic benefits* or unreliable estimate of the amount (probability < 51%) . Possible obligations conditional on uncertain future events that are not entirely under the control of the entity. Contingent liabilities should not be recognised in the balance sheet but should only be disclosed in the notes to financial statements (albeit not always).

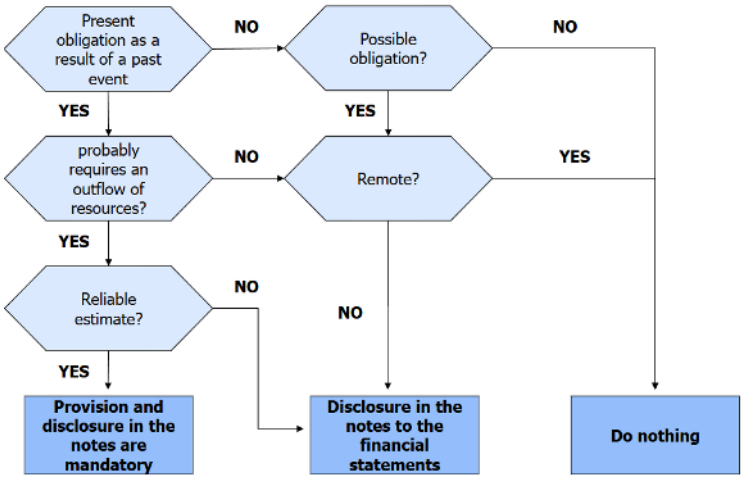
Recognition

Example -> *Constructive obligation – Contaminated Land* -> an oil company causes contamination and operates in a country where there is no environmental legislation. However, the company has a widely published environmental policy in which it undertakes to clean up all contamination that it causes. The company has a record of honouring this policy. Is it possible to recognize a provision?

Present Obligation of a Past Event -> The obligating event is the contamination of land, which gives rise to a constructive obligation because the conduct of the company has created a valid expectation on the part of those affected by it that the company will clean up the contamination.

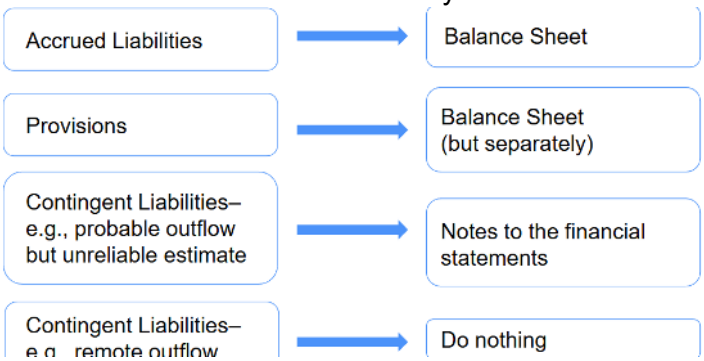
Probable Outflow of Resources -> An outflow of resources embodying economic benefits is probable

Reliable Estimate -> a reliable estimate of the clean up's cost is possible

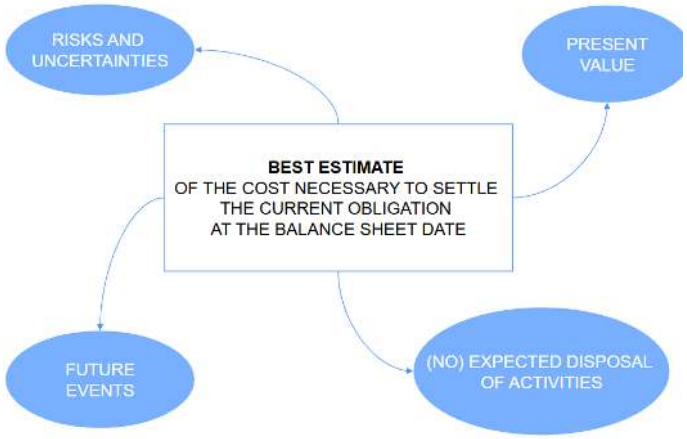


Recognition -> Alpha company provides a guarantee to a bank in relation to a loan provided to Beta company:

- If Beta company is solvent and able to repay the loan without breaching any debt covenants, a contingent liability exists and so disclosure is required in the notes to the financial statements of Alpha company.
- If Beta company has breached the debt covenants and it is probable that Alpha will be called upon as guarantor of the loan by the bank, a provision should be recognized by Alpha for the amount likely to be paid to the bank. This assumes that there is still uncertainty in "timing or amount"; otherwise the amount would be a liability



Best estimate



Best Estimate -> The amount that the entity would rationally pay to settle the obligation or transfer it to a third party. As this is a *matter of judgment*, it may require *advice from independent experts*. Provisions for *one-off events* (e.g., restructuring, environmental clean-up, settlement of a lawsuit)

are measured at the most likely amount. Provisions for *large population events* (e.g., warranties) are measured at a probability-weighted expected value.

Example: the expected value -> An entity sells goods by guaranteeing customers coverage of the costs of repairing any manufacturing defect that appears within six months of purchase. If small defects were found in all the products sold, the repair costs would amount to 1.000.000. If, however, more serious defects were found in all the products sold, the repair costs would amount to 4.000.000. The company's past experience and future expectations indicate that in the coming year, 75% of the goods sold will have no defects, 20% of the goods sold will have small defects, and 5% of the goods sold will have major flaws. The expected value of repair costs is: (75%*0) + (20%*€1.000.000) + (5% *€4.000.000) = 400.000

The risks and uncertainties that inevitably surround many events and circumstances shall be taken into account in reaching the best estimate of a provision. Because risk describes the variability of the outcome, a change in risk can increase the amount at which a liability is estimated. Caution is therefore necessary in arriving at an estimate under conditions of uncertainty. However, uncertainty does not justify the recording of excessive provisions or the intentional overestimation of liabilities.

Present value

When the effect of the time value of money is material, the amount of a provision shall be the *present value of the expenditures* expected to be required to settle the obligation. The discount rate (or rates) must be determined before taxes and must be such as to reflect current market assessments of the current value of money and the specific risks associated with the liability. Over the period between the recognition of a provision and its ultimate settlement, the provision should be increased each year by the discount rate; the increase should be recognized as a finance cost in P/L (“unwinding of the discount”).

In the liabilities we have 80 for provision for cash out we are going to have in the future. When we arrive at the future, when we have the cash out, we have a provision of 100 -> we have to unwinding the effect of present value, which becomes an annual interest that goes through P&L

EXAMPLE 1 – PRESENT VALUE: In April 2024, a company brought into use a new processing plant that had cost €15m to construct and has an estimated life of 10 years. The plant uses hazardous chemicals, which have also contaminated the plant itself as soon as the plant was used. It is a legal requirement that the plant is decontaminated at the end of its life. The estimated present value of this decontamination, using an annual discount rate of 8%, is €5m. How should the company account for the cost of the contamination according to IAS 37?

The company should recognize a full provision of €5m at the end of the current fiscal year, since the contamination has already occurred. It is correct to discount the amount of the provision to its present value, given the long-term nature of the liability.

Future events

Anticipated future events expected to affect the amount required to settle an entity's obligation must be reflected in the amount of a provision, when there is reliable objective evidence that they will occur.

EXAMPLE -> If the company of the previous example 1 believes that the cost of cleaning up the plant at the end of its life will be reduced by future technological changes or by possible new legislation should account the expected cost reductions if supported by sufficient objective evidence. Profits deriving from an expected disposal of an asset, however, must not be considered in determining a provision.

Future operating losses and Onerous contracts

Future operating losses -> PROVISIONS SHALL NOT BE RECOGNISED. An expectation of future operating losses is an indication that certain assets of the operation may be impaired. An entity tests these assets for impairment under IAS 36.

Onerous contract -> The present obligation under the contract shall be recognised and measured as a provision. An onerous contract is a contract in which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received under it. For example, you are an energy company, you have contracts where you have to sell oil for 60. Oil price goes up to 70 -> the cost of purchasing oil is higher than the revenues

Restructuring

The principle defines a restructuring as a program planned and controlled by management, and which significantly changes:

a. The *scope of an activity undertaken by the entity*
b. The *way in which the business is managed*.

A provision for restructuring costs is recognized only if the general conditions required for the recognition of provisions are satisfied. There is a *detailed formal plan* for the restructuring that identifies at least:

i. *the business or part of a business concerned*
ii. *the principal locations affected*
iii. *the location, function, and number of employees*
iv. *the expenditures*
v. *when it will be implemented*

It has raised a *valid expectation in those affected* that it would carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

Where restructuring involves the sale of a business, no obligation arises from this until the business is formally committed to the sale, for example when there is a binding agreement. A restructuring provision shall include only the direct expenditures arising from the restructuring, which are those that are both:

a. *necessarily entailed by the restructuring*
b. *not associated with the ongoing activities of the entity*.

Consequently, a restructuring provision does not include costs such as:

- *ordinary expenses for retraining or redeployment of personnel*
- *marketing expenses*
- *investments in new distribution systems and networks.*

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