Financial Reporting and Analysis: Understanding Balance Sheets

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INTRO BIG PICTURE

CÓMO VA A SER EL CURSO

BALANCE

COMO ESTOY

CUENTA DE RESULTADOS

COMO ME HA IDO

Cash Flow

MEMORIA

1. Bla, bla, bla
2. Bla, bla, bla
3. Bla, bla, bla

BALANCE SHEET

VNC

QUÉ TENGO

QUÉ DEBO

BALANCE PERSONAL

QUÉ TENGO	QUÉ DEBO

BALANCE SHEET

Consolidated statements of financial position at December 31

Millions of euros	Notes	2019
ASSETS		
A) NON-CURRENT ASSETS		**94,549**
Intangible assets	(Note 6)	16,034
Goodwill	(Note 7)	25,403
Property, plant and equipment	(Note 8)	32,228
Rights of use	(Note 9)	6,939
Investments accounted for by the equity method	(Note 10)	140
Financial assets and other non-current assets	(Note 12)	7,123
Deferred tax assets	(Note 25)	6,682
B) CURRENT ASSETS		**24,328**
Inventories	(Note 13)	1,999
Receivables and other current assets	(Note 14)	10,785
Tax receivables	(Note 25)	1,561
Other current financial assets	(Note 15)	3,123
Cash and cash equivalents	(Note 16)	6,042
Non-current assets classified as held for sale	(Note 30)	818
TOTAL ASSETS (A+B)		**118,877**

	Notes	2019
EQUITY AND LIABILITIES		
A) EQUITY		**25,450**
Equity attributable to equity holders of the parent and other holders of equity instruments	(Note 17)	17,118
Equity attributable to non-controlling interests	(Note 17)	8,332
B) NON-CURRENT LIABILITIES		**63,236**
Non-current financial liabilities	(Note 18)	43,288
Non-current lease liabilities	(Note 20)	5,626
Payables and other non-current liabilities	(Note 21)	2,928
Deferred tax liabilities	(Note 25)	2,908
Non-current provisions	(Note 24)	8,486
C) CURRENT LIABILITIES		**30,191**
Current financial liabilities	(Note 18)	9,076
Current lease liabilities	(Note 20)	1,600
Payables and other current liabilities	(Note 22)	14,903
Current tax payables	(Note 25)	2,560
Current provisions	(Note 24)	1,672
Liabilities associated with non-current assets classified as held for sale	(Note 30)	380
TOTAL EQUITY AND LIABILITIES (A+B+C)		**118,877**

The accompanying notes and appendices are an integral part of these consolidated statements of financial position.

describe the elements of the balance sheet: assets, liabilities, and equity;

Balance Sheet

Reports a company´s financial position at a point in time

Consists of:

- Assets
- Liabilities
- Equity

- **Assets**: Resources controlled by the firm as a consequence of past transactions that are expected to generate a future economic benefit
- **Liabilities**: Obligations as a result of past events that are expected to result in an outflow of economic resources
- **Equity**: Owners´ residual interest in assets after deducting liabilities

An item should be recognized in the balance sheet if:

- Future economic benefit from the item (to or from the firm) is **probable**
- Item´s value or cost can be measured reliably

describe the uses and limitations of the balance sheet in financial analysis

Balance Sheet can be used to:

① Assess a firm´s liquidity → Ability to meet short term obligations

② Assess a firm´s solvency → Ability to meet long term obligations

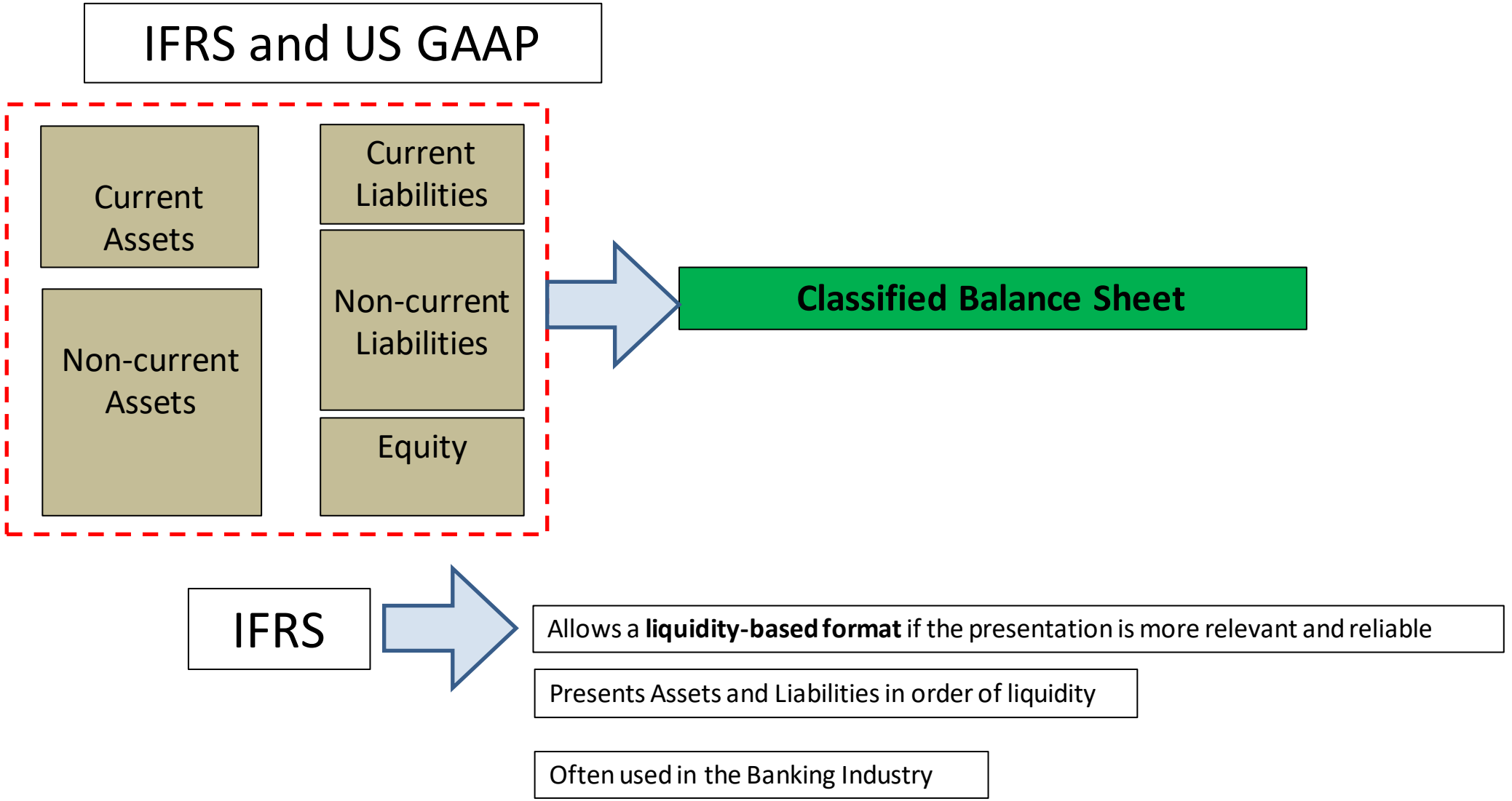
③ Assess a firm´s ability to distribute cash to shareholders

Balance Sheet elements should not be interpreted as market value or intrinsic value because:

① Some assets are reported at historical cost while others are reported at fair value

② Even if all assets were reported at fair values, fair value may have changed since the balance sheet date

③ There are a number of assets and liabilities that do not appear in the balance sheet and that have value for the firm (e.g. reputation, employee quality)


IFRS and US GAAP
Current Assets
Non-current Assets
Current Liabilities
Non-current Liabilities
Equity
Classified Balance Sheet
IFRS
Allows a liquidity-based format if the presentation is more relevant and reliable
Presents Assets and Liabilities in order of liquidity
Often used in the Banking Industry

Distinguish between current and non-current asset, and current and non-current liabilities

Current Assets → Cash, accounts receivable, inventories, etc…

Assets that will be converted into cash or used up in one year or one operating cycle (the greater of the two)

Operating Cycle → Time it takes to purchase or produce inventory, sell it, and collect the cash.

Current assets are normally presented in order of liquidity, with cash as the most liquid asset

Current assets give information about the operating activities of the firm

Current Liabilities → Obligations that will be satisfied in one year or one operating cycle (the greater of the two). If a liability meets any of the following, is deemed to be current:

① Settlement is expected during the normal operating cycle

② Settlement is expected within one year

③ Held primarily for trading purposes

④ There is no unconditional right to defer settlement for more than one year

Distinguish between current and non-current asset, and current and non-current liabilities

Working Capital = Current Assets − Current liabilities

Not enough working capital may indicate liquidity problems

Too much working capital may indicate an inefficient use of assets

Non Current Assets

- They will not be used or converted into cash in less than one year or one operating cycle
- Provide information about investing activities (Fixed Assets)

Non Current liabilities

- Liabilities that don't meet any of the four criteria for "current" classification
- Provide information about the firm´s long term financing activities

Current Assets

Cash and cash equivalents

Cash equivalents are short term , highly liquid investments readily convertible to cash. Very short maturities that make interest rate risk insignificant. (e.g. Treasury bills, commercial paper and money market funds)

Marketable securities

Financial assets traded in the public market and whose value can be easily and rapidly determined.

Treasury bills, treasury notes, bonds and equity securities.

Accounts receivable

Amounts owed to the firm by customers as a result of services rendered or goods sold.

Accounts receivable are reported at **Net Realizable Value**

Net Realizable Value = Original cost − Bad debt provision

Firms are required to disclose significant concentrations of risk (customer concentration, geographic concentration, and industry concentrations)

AR should be analyzed relative to sales. Bad debt provision too.

Current Assets

Inventories

Goods held to be sold to customers or used in the manufacturing of the final goods to be sold

Manufacturing firms separately report within inventories:

- Raw materials
- work-in-process
- Finished goods

Costs included within inventory

- Purchase cost
- Conversion Cost
- Other costs necessary to bring inventory to its present location and condition

Costs not included within inventory

- Administrative overhead
- Selling costs
- Storage costs (unless they are necessary as a part of the production process)
- Abnormal costs

Standard Costing

Assigning predetermined amounts of materials, labor and overhead to goods produced

Often used by manufacturing firms

Retail Method

Measure inventory at retail prices less a standard gross profit

Inventory Valuation

IFRS & US GAAP non LIFO or retail

LOWER OF | COST | NET REALISABLE VALUE

NRV = SALES PRICE − SELLING & COMPLETION COSTS

IF COST > NRV → WRITE DOWN

IF subsequently NRV, NRV, NRV → WRITE UP ≤ WRITE DOWN

US GAAP non LIFO or retail

LOWER OF | COST | MARKET

MARKET = REPLACEMENT COST

BUT

NRV ≥ REPLACEMENT COST ≥ NRV – Normal Profit margin

IF COST > NRV → WRITE DOWN

NO → WRITE UP

INVENTORY VALUATION

Exercise

Compute the value of the Inventory as at 31st December 20X4 and 31st December 20X5, both under IFRS and US GAAP.

Inventory Valuation Exercise		
	20X4	**20X5**
Original Cost	3,000	3,000
Replacement Cost	2,600	3,500
Normal Profit Margin (as a percentage of original cost)	5%	5%
Estimated selling costs	300	300
Estimated selling price	3,100	3,800

5 min

Inventory Valuation

IFRS

20X4

NRV = SALES PRICE − SELLING & COMPLETION COSTS

3,100 − 300 = 2,800

Cost = 3,000

Write Down = 200

20X5

Cost = 2,800

NRV = 3,800 − 300 = 3,500

Write Up = 200

US GAAP

20X4

Replacement Cost = 2,600

2,800 ≥ REPLACEMENT COST ≥ 2,650

Replacement Cost = 2,650

Write Down = 350

20X5

Replacement Cost = 3,500

3,600 ≥ REPLACEMENT COST ≥ 3,450

Replacement Cost = 3,500

Cost = 2,650

Write UP NO

Current Assets

Other current assets

Amounts that, if shown separately, may not be material

- Prepaid expenses

Deferred tax assets

Created when the amount of taxes payable exceeds the amount of income tax recognized in the income statement

Current Liabilities

Accounts payable

- Amounts owed by the firm to suppliers for goods of services purchased on credit.
- Accounts payable should be analyzed in conjunction with purchases

Notes Payable and current portion of lt debt

- Notes payable → Obligations to creditors and lenders
- Current portion of lt debt → Maturities with less than 1 year

Accrued liabilities

- Expenses recognized in the income statement but not yet contractually due.
- Some firms report Income Tax Payable as an accrued liability.
- Interests Payable.
- Wages payable
- Accrued warranties

Unearned Revenue

- Arises when cash is collected before providing the services or the goods.
- When analyzing liquidity, analysts should bear in mind that unearned revenue will not entail a cash out.

Non-Current Assets

Property, plant and Equipment

Tangible assets used in the production of goods or services. (land, buildings, machinery, furniture, natural resources, etc…)

IFRS		US GAAP
COST MODEL	REVALUATION MODEL	COST MODEL

COST MODEL → Use of amortized cost

Amortized Cost = Historical Cost − Depreciation − Depletion − Impairment losses

Historical cost includes the purchase price plus any cost necessary to put the asset in use (delivery, installation)

REVALUATION MODEL →

Fair Value − Accumulated Depreciation

Non-Current Assets

Investment property

Land or buildings held to earn rental income or capital appreciation under IFRS. No definition by US GAAP

Under IFRS can be reported at **AMORTIZED COST** or **FAIR VALUE**

Intangible assets

Non monetary assets that lack physical substance

Identifiable intangible assets

Patents

Trademarks

Copyright

Purchased Identifiable Intangible Assets

IFRS

COST MODEL

REVALUATION MODEL

Unidentifiable intangible assets

GOODWILL

US GAAP

COST MODEL

Non-Current Assets

Intangible assets → created internally → R&D expenses

Under US GAAP → Expensed as incurred

Under IFRS → Differentiated between:

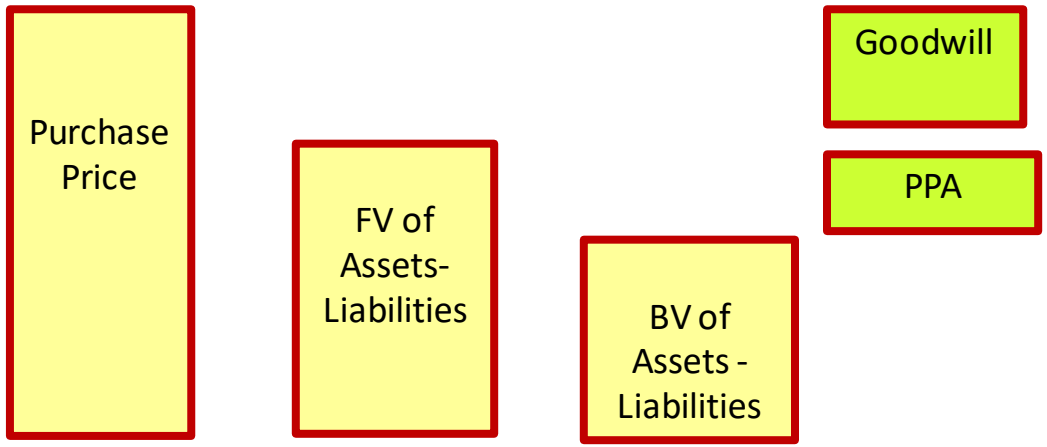
- Research Stage → Discovery of new scientific or technical knowledge → EXPENSE
- Development Stage → Using research results to plan or design products → CAPITALIZE

Both under IFRS and US GAAP, all of the following should be expensed as incurred:

technical and commercial feasibility

1. Start-up and training costs
2. Administrative overhead
3. Advertising and promotion
4. Relocation and reorganization costs
5. Termination costs

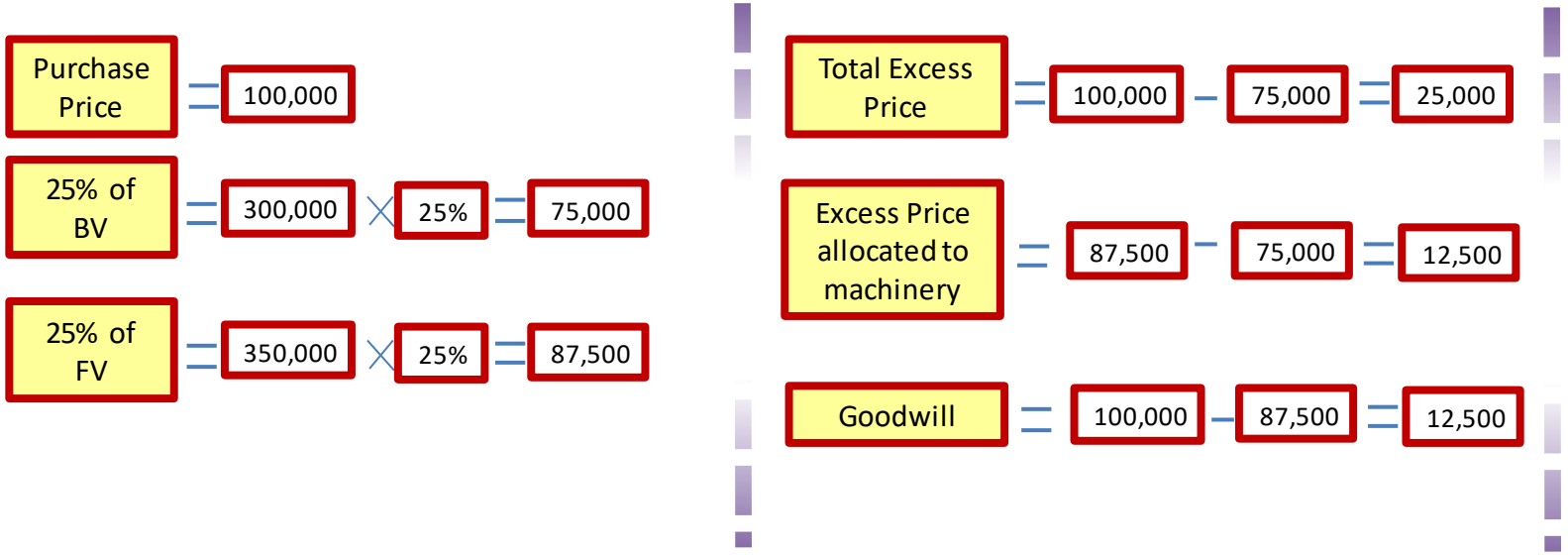
Goodwill


Purchase Price
FV of Assets- Liabilities
BV of Assets - Liabilities
Goodwill
PPA

Investments in Associates-Goodwill- Exercise

Calculate: 1) the Goodwill that resulted from the acquisition of Target

1-1-20x3	Popeye acquired 25% of Target	Price= $100,000
	Book Value of Target Assets =$700,000	Book Value of Target Liabilities=$400,000
	Fair Value of Target Assets =$750,000 ($50k increase in machinery)	Fair Value of Target Liabilities =$400,000
Target N. Income 20X3=40,000	Dividends Paid = 4,000	Machinery (Straight line depreciation; 5 years; no salvage value)



BUSINESS COMBINATIONS- Impairment of Goodwill

IFRS

One Step Process

IF Carrying Value of CGU > Recoverable Amount → Impairment

Recoverable Amount = HIGHER OF (Fair Value – Selling costs; Value in Use)

Value in Use = Present Value of Future Cash Flows (assuming Going Concern)

IF subsequently Fair Value > Fair Value → NO WRITE UP

US GAAP

Two Step Process

1. Recoverability Test

IF Carrying Value of reporting unit > Fair Value of reporting unit → Impairment

2. Measuring the Impairment

Impairment = Carrying value of goodwill – Implied value of goodwill

IF subsequently Fair Value > Fair Value → NO WRITE UP

Non-Current Assets

Financial assets → Investment securities (bonds, stocks, derivatives, loans, and financial receivables

FINANCIAL INSTRUMENTS
Beyond Scope but

FINANCIAL INSTRUMENTS

IFRS

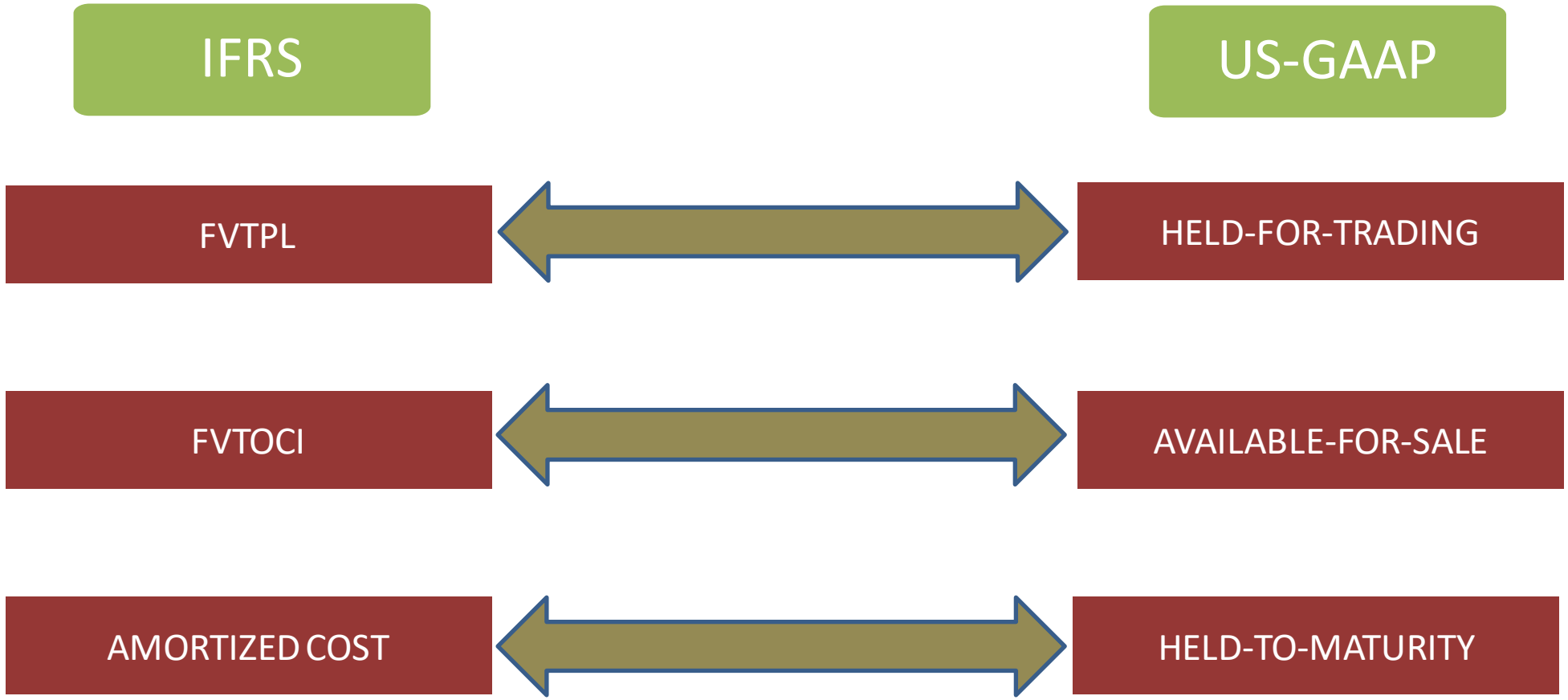
IFRS-9

MUCH MORE INTUITIVE

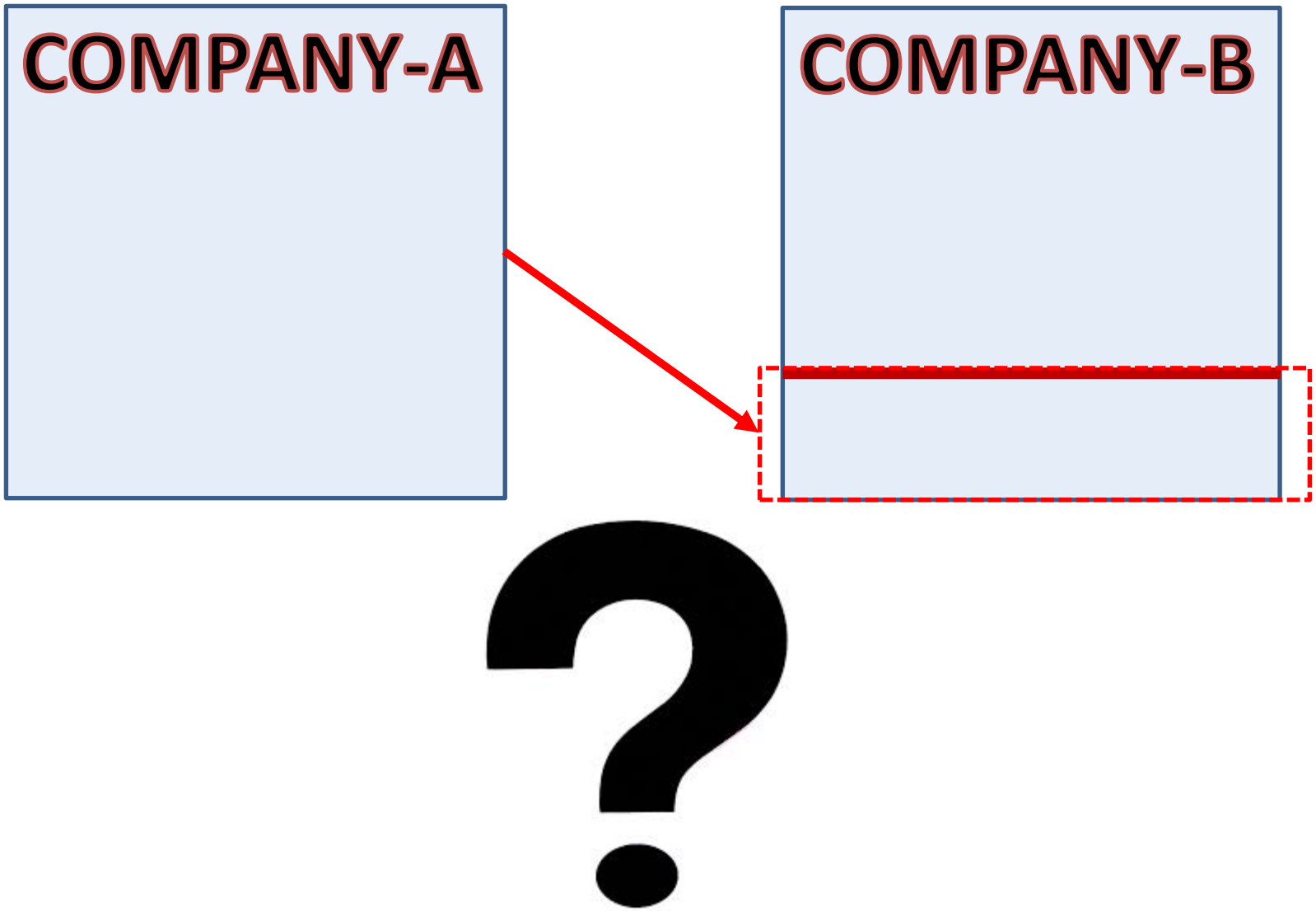
CONVERGENCE
IFRS <-> US GAAP

US-GAAP

FINANCIAL INSTRUMENTS



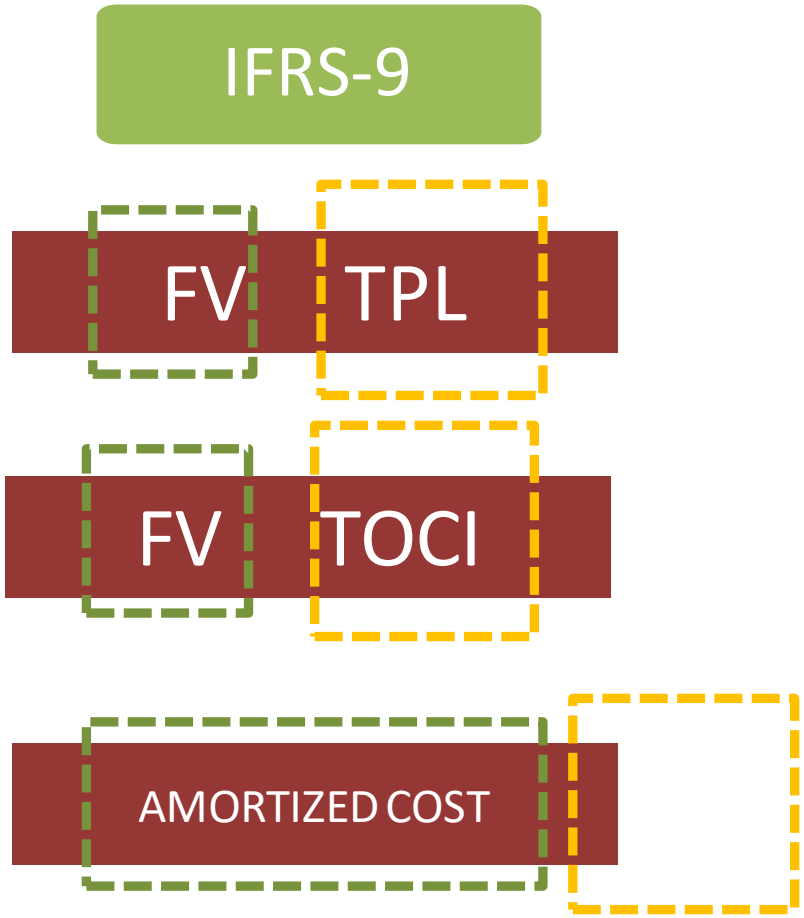
INTERCORPORATE INVESTMENTS- WTF?



¿CÓMO REFLEJO EL VALOR DE ESA INVERSIÓN?

¿CÓMO REFLEJO LOS CAMBIOS EN EL VALOR DE ESA INVERSIÓN?

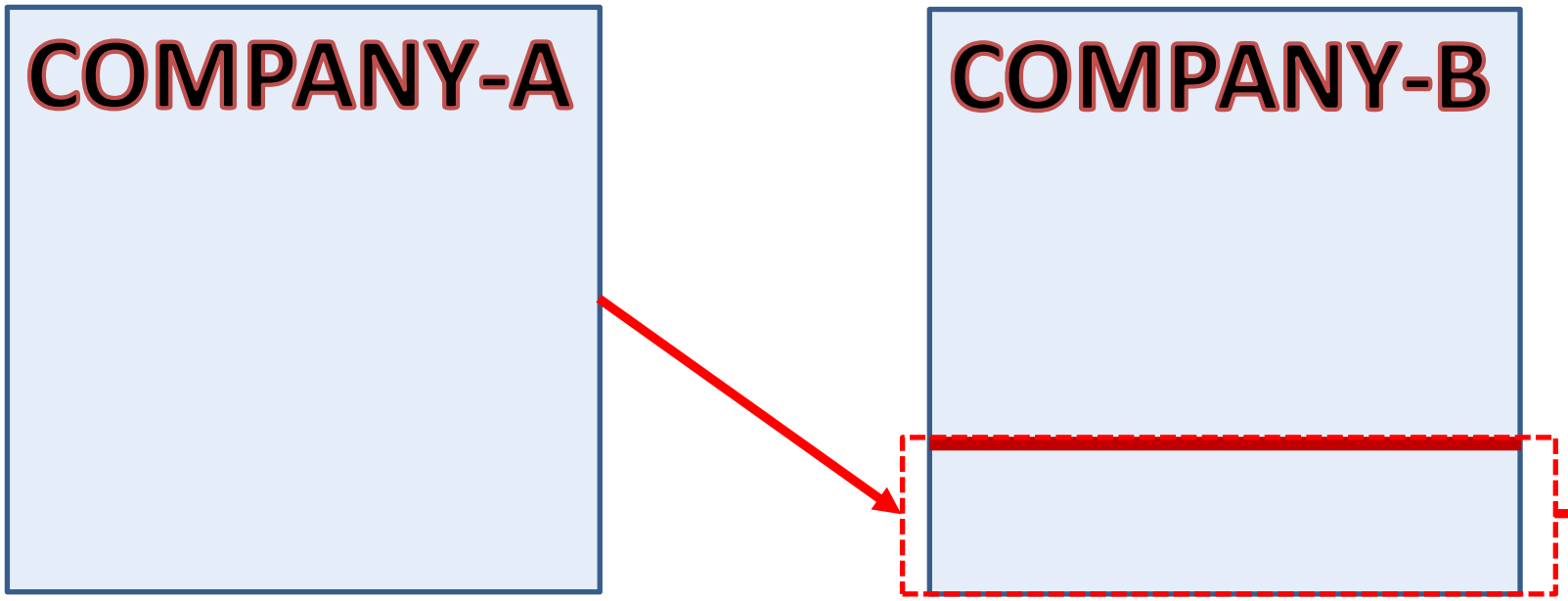
INTERCORPORATE INVESTMENTS- WTF?



¿CÓMO REFLEJO EL VALOR DE ESA INVERSIÓN?

¿CÓMO REFLEJO LOS CAMBIOS EN EL VALOR DE ESA INVERSIÓN?

EXAMPLE FOR DUMMIES FINANCIAL ASSETS



	YEAR-1	YEAR-2
VALUE	10	15

EXAMPLE FOR DUMMIES FINANCIAL ASSETS

CLASSIFIED AS FVTPL

COMPANY-A. Balance Sheet

Year-1	Year-2
10	15

COMPANY-A. P&L

Year-2
+5

COMPANY-B

	YEAR-1	YEAR-2
VALUE	10	15

EXAMPLE FOR DUMMIES FINANCIAL ASSETS

CLASSIFIED AS FVTOCI

COMPANY-A. Balance Sheet

Year-1	Year-2
10	15

OCI

+5

COMPANY-A. P&L

Year-2
+0

COMPANY-B

	YEAR-1	YEAR-2
VALUE	10	15

EXAMPLE FOR DUMMIES FINANCIAL ASSETS

CLASSIFIED AS AMORTIZED COST

COMPANY-A. Balance Sheet

Year-1	Year-2
10	10

OCI

+0

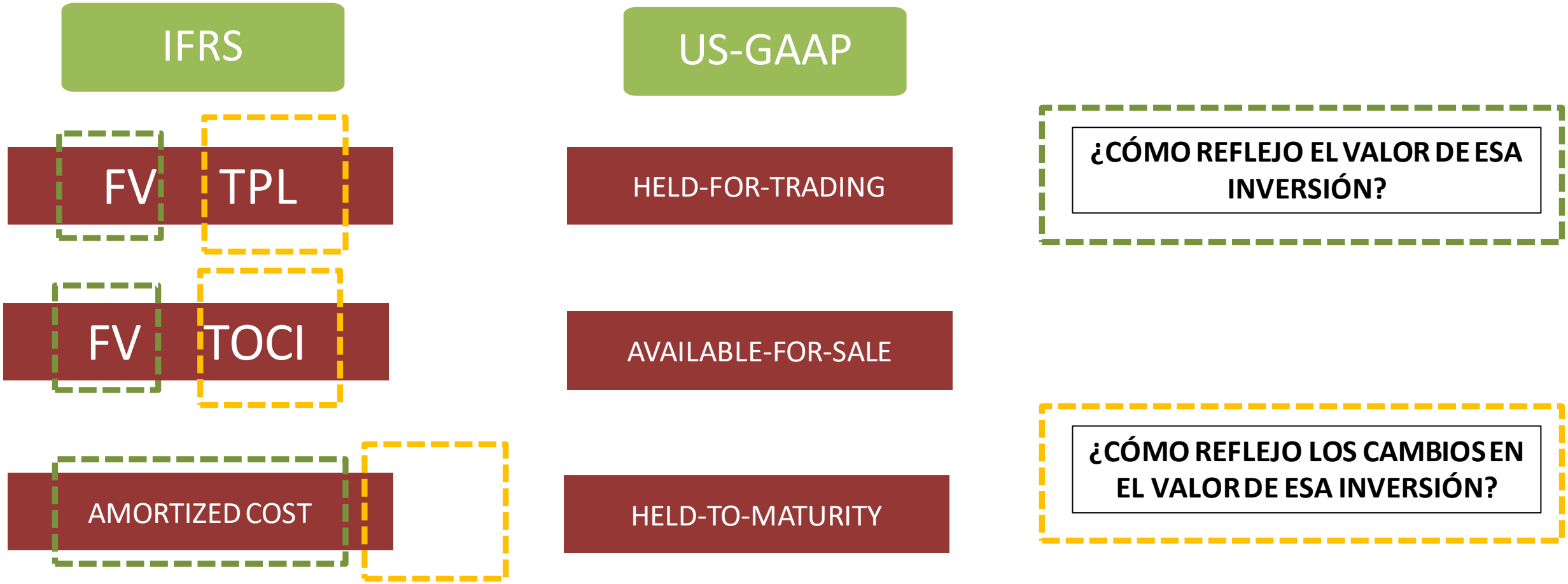
COMPANY-A. P&L

Year-2
+0

COMPANY-B

	YEAR-1	YEAR-2
VALUE	10	15

FINANCIAL ASSETS- LOGIC



FINANCIAL ASSETS- CURRENT CRITERIA FOR CLASSIFICATION

AMORTIZED COST IF

1. Business model test: Debt securities are being held to collect contractual cash flows
2. Cash flow characteristic test: The contractual cash flows are either principal, or interest on principal, only.

FVTPL IF

Debt & Equity securities are being held for trading

FVTOCI REST

VOLUNTARILY COMPANIES CAN DECIDE TO CLASSIFY AS FVTPL TO AVOID MISMATCHES

Non-Current Liabilities

Long-term financial liabilities

- Include bank loans, notes payable, bonds payable, and derivatives.
- Reported in the balance sheet at **Amortized Cost**

$$\text{Amortized Cost} = \text{Issue price} - \text{Principal payments} + \text{Amortized Discounts} - \text{Amortized Premium}$$

- Sometimes at Fair Value

Deferred tax liabilities

- Amounts of income taxes payable in the future due to taxable temporary differences
- Created when taxes payable are lower than the tax expense recognized in the income statement
- Accelerated depreciation for tax purposes while straight line in accounting.

Describe the components of shareholders equity

Owners Equity

Contributed Capital	Amount contributed by common shareholders
Preferred Stock	Shares with certain privileges over common shares
Non controlling interest	Prorrata of the net assets “not-owned” of controlled subsidiaries
Retained earnings	Since inception cumulative non distributed earnings
Treasury Stock	Shares of the Company reacquired by the Firm, but not yet retired.
	It reduces shareholders equity and has no voting rights and do not receive dividends
Accumulated Other Comprehensive Income	
	Includes all changes in stockholders equity not resulting from transactions recorded in Net Income and transactions with shareholders (reacquiring stock, issuing new stock, and paying dividends)

Statement of changes in stockholders equity

SUMMARY of all the transactions that impact the accounts within equity

Estados de cambios en el patrimonio neto consolidados de los ejercicios anuales terminados el 31 de diciembre

	Atribuible a la Sociedad dominante y a otros tenedores de instrumentos de patrimonio												
Millones de euros	Capital Social	Prima de emisión	Instrumentos de patrimonio propios	Otros instrumentos de patrimonio	Reserva legal	Ganancias acumuladas	Activos disponibles para la venta	Coberturas	Asociadas y otros	Diferencias de conversión	Total	Intereses minoritarios (Nota 12)	Total patrimonio neto
Saldo al 31 de diciembre de 2013	**4.551**	**460**	**(544)**	**2.466**	**984**	**22.517**	**94**	**(37)**	**(31)**	**(9.275)**	**21.185**	**6.297**	**27.482**
Resultado del periodo	-	-	-	-	-	3.001	-	-	-	-	3.001	251	3.252
Otro resultado global del periodo	-	-	-	-	-	(121)	(39)	(297)	55	(2.857)	(3.259)	65	(3.194)
Total resultado global del periodo	-	-	-	-	-	**2.880**	**(39)**	**(297)**	**55**	**(2.857)**	**(258)**	**316**	**58**
Distribución de dividendos (Nota 12)	106	-	-	-	-	(2.138)	-	-	-	-	(2.032)	(406)	(2.438)
Variación neta de instrumentos de patrimonio propio	-	-	(1.042)	-	-	(113)	-	-	-	-	(1.155)	-	(1.155)
Compras y ventas de participaciones minoritarias y combinaciones de negocio (Nota 5)	-	-	-	-	-	(307)	-	-	-	-	(307)	2.965	2.658
Emisiones de obligaciones perpetuas subordinadas y obligaciones convertibles (Nota 12)	-	-	-	3.885	-	(129)	-	-	-	-	3.756	-	3.756
Otros movimientos	-	-	-	-	-	(74)	-	-	-	-	(74)	2	(72)
Saldo al 31 de diciembre de 2014	**4.657**	**460**	**(1.586)**	**6.351**	**984**	**22.636**	**55**	**(334)**	**24**	**(12.132)**	**21.115**	**9.174**	**30.289**

Balance Sheet		
	2013	**2014**
Current Assets		
Cash	7%	32%
Accounts receivable	3%	7%
Inventory	2%	1%
Non current Assets		
Land	34%	24%
Gross plant and equipment	68%	53%
Accumulated depreciation	-17%	-21%
Net plant and equipment	51%	33%
Goodwill	**3%**	**2%**
Total Assets	**100%**	**100%**
Current Liabilities		
Accounts payable	34%	12%
Wages payable	23%	11%
Interest payable	2%	2%
Taxes payable	1%	8%
Dividends payable	1%	9%
Noncurrent Liabilities		
Bonds	5%	5%
Deferred taxes	7%	5%
Stockholders´ equity		
Common stock	10%	6%
Retained earnings	17%	43%
Total liabilities and Stockholders equity	**100%**	**100%**

Vertical **common-size balance sheet:** Each item is expressed as a percentage of Total Assets. Therefore, it eliminates the effects of size.

Hence, time series (assess the evolution of the firm) and cross-sectional analysis (compare at a given moment in time with other companies of the sector) can be done better

STUDIED IN READING FINANCIAL ANALYSIS TECHNIQUES