

Financial analysis

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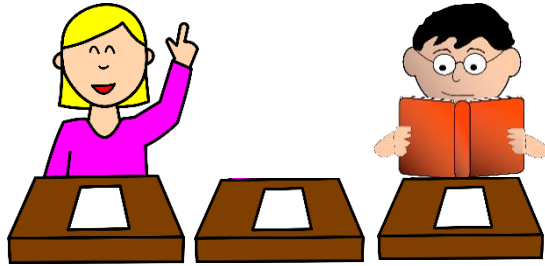
T O U L O U S E • P A R I S • B A R C E L O N A • C A S A B L A N C A



Students in class



Speak
loud to
the class



Keep
safety
distance

Students online



Connect on
zoom from
your agenda
link



Activate
your
camera



Mute your
microphone



Be connected
with a
headset/mic



Pin the screen
Use Side-by-
side mode

Analyze the different dimensions of the performance of a company in all sectors of activities (services, production or projects)

Balance sheet analysis

Profit and Loss analysis

Performance ratios

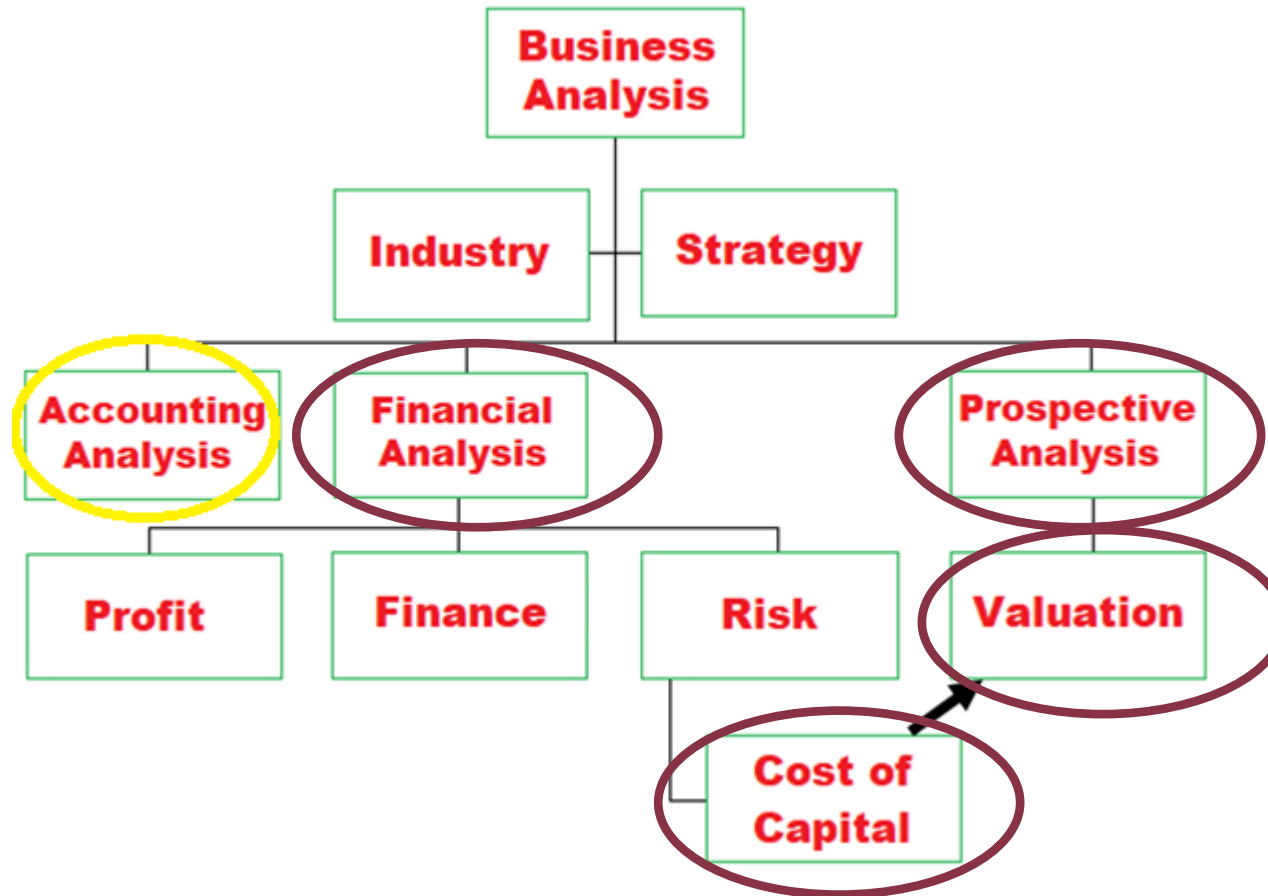
Present in writing and orally the results of a performance study and recommendations for decision-making.

Develop a first approach of valuation methods

Case NameVa	Time in class	reminder	Areas of financial analysis
Balance sheet detective	3 hrs	Balance sheet structure	Common size balance sheet matching
Financial Analysis Identifying the industry	3 hrs with time to search for industry information online	P&I structure Main Financial ratio	Common size + ratios industry wise matching
What value for ThermoCompact?	6 hrs (initial time to elaborate valuation methods)	Valuations method	Financial diagnosis; valuation method choice; value of firm
Yestudent	2 hrs	Context analysis	Valuation startup ; Seed financing ; Fundraising ; DCF Method ; Comparables Method

- Cases are released on C@mpus
- The final exam will last 1 hour at the end of the last session.
 - it will consist of 20 multiple-choice questionnaire.

Business analysis reminder



1. Historical data analysis

Analysis of available figures is a prerequisite of the initial work to be conducted before the valuation process begins. Indeed, the figures are the raw data that the assessments are based on.

Prepare (or review) a statement of financial position

Prepare (or review) a statement of profit or loss

Measure and analyze financial performance

Evaluate value creation

2. Add complementary information

Clearly identify ALL assets used in business (including intangible assets)

Estimate standardized working capital ratios and establish net financial debt on the day of valuation

Evaluate the environment

3. Validate financial forecasts by comparing them with past results (revenue, profit margin) and competitors

4. Develop a validation or modelling tool for future investments.



Case 1

Balance sheet detective

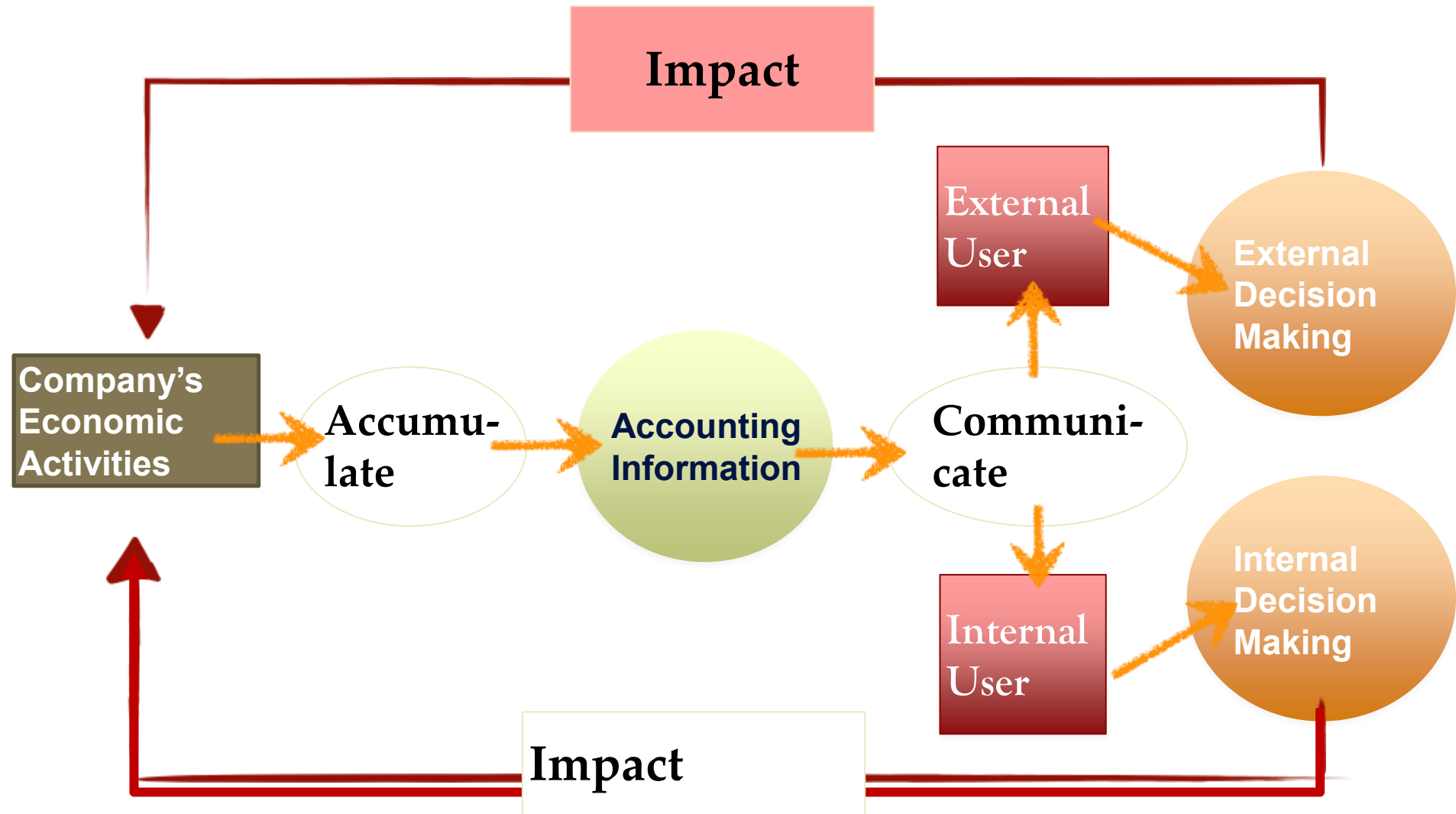
Financial statement Reminder

Financial statements are a structured representation of the financial position and financial performance of an entity.

The objective of financial statements is to provide information about

- the financial position
- financial performance and cash flows of an entity
- useful to a wide range of users in making economic decisions.
- the results of the management's stewardship of the resources entrusted to it

This information, along with other information in the notes, assists users of financial statements in predicting the entity's future cash flows and, in particular, their timing and certainty.



A complete set of financial statements

(a) a statement of financial position as at the end of the period

a photo of your business's net worth taken at the closing date :

For example 31 of December N



(b) a statement of profit or loss and other comprehensive income for the period

Explanation of how the entity performed during the last period : Revenues minus expenses = net income

(c) a statement of changes in equity for the period

Includes the net income + capital increase



(d) a statement of cash flows for the period

Explanation of how the entity managed “cash” during the last period :

Net cash provides by operating activities, capital expenditure, financing activities

(e) notes, comprising significant accounting policies and other explanatory information

Example Income statement– Orange June 30 2021

Consolidated income statement

(in millions of euros, except for per share data)	Note	June 30, 2021	June 30, 2020 ⁽¹⁾
Revenue		20,867	20,769
External purchases		(8,736)	(8,546)
Other operating income		322	271
Other operating expenses	5.1	(295)	(448)
Labor expenses		(4,421)	(4,376)
Operating taxes and levies		(1,219)	(1,232)
Gains (losses) on disposal of fixed assets, investments and activities	3.1	12	59
Restructuring costs	5.2	(245)	(13)
Depreciation and amortization of fixed assets		(3,499)	(3,549)
Depreciation and amortization of financed assets		(41)	(22)
Depreciation and amortization of right-of-use assets		(731)	(652)
Reclassification of translation adjustment from liquidated entities		(0)	-
Impairment of goodwill	6.1	(3,702)	-
Impairment of fixed assets		(4)	1
Impairment of right-of-use assets		(60)	(6)
Share of profits (losses) of associates and joint ventures		1	(6)
Operating income		(1,752)	2,250
Cost of gross financial debt excluding financed assets		(461)	(569)
Interests on debts related to financed assets		(1)	(1)
Gains (losses) on assets contributing to net financial debt		(5)	1
Foreign exchange gain (loss)		57	(115)
Interests on lease liabilities		(58)	(58)
Other net financial expenses		32	(3)
Finance costs, net	8	(436)	(744)
Income taxes	7	(417)	(491)
Consolidated net income		(2,605)	1,015
Net income attributable to owners of the parent company		(2,769)	927
Non-controlling interests		165	88
Earnings per share (in euros) attributable to parent company			
Net income			
- basic		(1.09)	0.30
- diluted		(1.09)	0.29

(1) The first semester 2020 figures have been restated of the IFRS IC decision on lease term (see Note 2.3).

Impairment of
goodwill

Consolidated statement of comprehensive income

(in millions of euros)	Note	June 30, 2021	June 30, 2020 ⁽¹⁾
Consolidated net income		(2,605)	1,015
Remeasurements of the net defined benefit liability		69	(16)
Assets at fair value		(9)	(33)
Income tax relating to items that will not be reclassified		(18)	(3)
Items that will not be reclassified to profit or loss (a)		43	(51)
Assets at fair value		(0)	(2)
Cash flow hedges	8.2	193	554
Translation adjustment gains and losses	11.5	102	(184)
Income tax relating to items that are or may be reclassified		(55)	(177)
Share of other comprehensive income in associates and joint ventures that are or may be reclassified		-	-
Items that are or may be reclassified subsequently to profit or loss (b)		239	191
Other consolidated comprehensive income (a) + (b)		282	140
Consolidated comprehensive income		(2,323)	1,155
Comprehensive income attributable to the owners of the parent company		(2,504)	1,100
Comprehensive income attributable to non-controlling interests		181	55

(1) The first semester 2020 figures have been restated of the IFRS IC decision on lease term (see Note 2.3).

Example balance sheet – Orange June 30 2021

Consolidated statement of financial position

(in millions of euros)	Note	June 30, 2021	December 31, 2020
Assets			
Goodwill	6.2	23,914	27,596
Other intangible assets		14,623	15,135
Property, plant and equipment		29,696	29,075
Right-of-use assets		7,613	7,009
Interests in associates and joint ventures		96	98
Non-current financial assets related to Mobile Financial Services activities	10.1	1,129	1,210
Non-current financial assets	8.1	978	1,516
Non-current derivatives assets	8.1	305	132
Other non-current assets		140	136
Deferred tax assets		739	731
Total non-current assets		79,234	82,639
Inventories		800	814
Trade receivables	4.1	5,461	5,620
Other customer contract assets		1,349	1,236
Current financial assets related to Mobile Financial Services activities	10.1	2,237	2,075
Current financial assets	8.1	2,361	3,259
Current derivatives assets	8.1	154	162
Other current assets		1,595	1,701
Operating taxes and levies receivables		1,039	1,104
Current taxes assets		127	128
Prepaid expenses		928	850
Cash and cash equivalents	8.1	6,791	8,145
Total current assets		22,843	25,094
Assets held for sale	3.2	790	-
Total assets		102,867	107,733

Decrease in Goodwill
High level of PPE

Very low level of
inventories

Example balance sheet – Orange June 30 2021

(in millions of euros)	Note	June 30, 2021	December 31, 2020
Equity and liabilities			
Share capital		10,640	10,640
Share premiums and statutory reserve		16,859	16,859
Subordinated notes	11.4	5,497	5,803
Retained earnings		(3,095)	1,092
Equity attributable to the owners of the parent company		29,902	34,395
Non-controlling interests	11.6	2,469	2,643
Total equity	11	32,370	37,038
Non-current financial liabilities	8.1	31,182	30,089
Non-current derivatives liabilities	8.1	384	844
Non-current lease liabilities		6,625	5,875
Non-current fixed assets payables		1,457	1,291
Non-current financial liabilities related to Mobile Financial Services activities	10.1	0	0
Non-current employee benefits		1,926	2,202
Non-current dismantling provisions		858	885
Non-current restructuring provisions		59	53
Other non-current liabilities		271	307
Deferred tax liabilities		1,168	855
Total non-current liabilities		43,930	42,401
Current financial liabilities	8.1	3,516	5,170
Current derivatives liabilities	8.1	133	35
Current lease liabilities		1,320	1,496
Current fixed assets payables		2,916	3,349
Trade payables		6,480	6,475
Customer contract liabilities		2,251	1,984
Current financial liabilities related to Mobile Financial Services activities	10.1	3,251	3,128
Current employee benefits		2,289	2,192
Current dismantling provisions		14	16
Current restructuring provisions		222	64
Other current liabilities		1,924	2,267
Operating taxes and levies payables		1,565	1,279
Current taxes payables		328	673
Deferred income		182	165
Total current liabilities		26,391	28,294
Liabilities related to assets held for sale	3.2	175	-
Total equity and liabilities		102,867	107,733

Net result not disclose
on a separate line

High level of debts

Example Change in equity – Orange June 30 2021

Balance as of December 31, 2020		2,660,056,599	10,640	16,859	5,803	1,852	(759)	34,395	2,484	159	2,643	37,038
Consolidated comprehensive income		-	-	-	-	(2,769)	265	(2,504)	165	17	181	(2,323)
Share-based compensation		-	-	-	-	4	-	4	1	-	1	5
Purchase of treasury shares	11.2	-	-	-	-	(3)	-	(3)	-	-	-	(3)
Dividends	11.3	-	-	-	-	(1,330)	-	(1,330)	(216)	-	(216)	(1,545)
Issues and purchases of subordinated notes	11.4	-	-	-	(306)	(6)	-	(311)	-	-	-	(311)
Subordinated notes remuneration	11.4	-	-	-	-	(163)	-	(163)	-	-	-	(163)
Changes in ownership interests with no gain/loss of control	3	-	-	-	-	(188)	-	(188)	(142)	-	(142)	(330)
Other movements		-	-	-	-	2	-	2	1	-	1	8
Balance as of June 30, 2021		2,660,056,599	10,640	16,859	5,497	(2,601)	(494)	29,902	2,292	176	2,469	32,371

(1) The first semester 2020 figures have been restated of the IFRS IC decision on lease term (see Note 2.3).

Example Statement of cash flow – Orange June 30 2021

Consolidated statement of cash flows

(in millions of euros)	Note	June 30, 2021	June 30, 2020 ⁽¹⁾
Operating activities			
Consolidated net income		(2,605)	1,015
Non-monetary items and reclassified items for presentation		9,817	6,355
Operating taxes and levies		1,219	1,232
Gains (losses) on disposal of fixed assets, investments and activities	3.1	(12)	(59)
Other gains and losses		(16)	(4)
Depreciation and amortization of fixed assets		3,499	3,549
Depreciation and amortization of financed assets		41	22
Depreciation and amortization of right-of-use assets		731	652
Changes in provisions		(275)	(288)
Reclassification of cumulative translation adjustment from liquidated entities		0	-
Impairment of goodwill	6	3,702	-
Impairment of fixed assets		4	(1)
Impairment of right-of-use assets		60	6
Share of profits (losses) of associates and joint ventures		(1)	6
Operational net foreign exchange and derivatives		7	(4)
Finance costs, net		436	744
Income taxes	7	417	491
Share-based compensation		5	9
Changes in working capital and operating banking activities ⁽²⁾		276	(1,013)
Decrease (increase) in inventories, gross		9	24
Decrease (increase) in trade receivables, gross		136	(699)
Increase (decrease) in trade payables		22	(248)
Changes in other customer contract assets and liabilities		164	41
Changes in other assets and liabilities ⁽³⁾		(54)	(131)
Other net cash out		(2,129)	(2,021)
Operating taxes and levies paid		(985)	(871)
Dividends received		7	3
Interest paid and interest rates effects on derivatives, net ⁽⁴⁾		(651)	(625)
Income taxes paid		(500)	(527)
Net cash provided by operating activities (a)		5,360	4,336

Income taxes paid		(500)	(527)
Net cash provided by operating activities (a)		5,360	4,336
Investing activities			
Purchases and sales of property, plant and equipment and intangible assets		(4,258)	(3,629)
Purchases of property, plant and equipment and intangible assets ⁽⁵⁾		(4,186)	(3,395)
Increase (decrease) in fixed assets payables		(227)	(441)
Investing donations received in advance		20	7
Sales of property, plant and equipment and intangible assets		135	201
Cash paid for investment securities, net of cash acquired		0	(0)
Investments in associates and joint ventures		(2)	(2)
Purchases of equity securities measured at fair value		(42)	(29)
Sales of investment securities, net of cash transferred		0	0
Sales of investment securities at fair value		90	15
Decrease (increase) in securities and other financial assets		954	301
Investments at fair value, excluding cash equivalents		899	436
Others		55	(135)
Net cash used in investing activities (b)		(3,258)	(3,344)
Financing activities			
Medium and long-term debt issuances	8.5	1,526	2,028
Medium and long-term debt redemptions and repayments ⁽⁶⁾	8.5	(3,072)	(1,575)
Repayments of lease liabilities		(882)	(644)
Increase (decrease) of bank overdrafts and short-term borrowings		655	(219)
including redemption of subordinated notes reclassified in 2019 as short-term borrowings		-	(500)
Decrease (increase) of cash collateral deposits		574	132
Exchange rates effects on derivatives, net		50	72
Subordinated notes issuances (purchases) and other related fees	11.4	(311)	-
Coupon on subordinated notes	11.4	(163)	(186)
Proceeds (purchases) from treasury shares		(3)	(0)
Capital increase (decrease) - owners of the parent company		-	-
Capital increase (decrease) - non-controlling interests		3	1
Changes in ownership interests with no gain / loss of control		(333)	(2)
Dividends paid to owners of the parent company	11.3	(1,330)	(532)
Dividends paid to non-controlling interests	11.6	(190)	(164)
Net cash used in financing activities (c)		(3,477)	(1,090)
Net change in cash and cash equivalents (a) + (b) + (c)		(1,375)	(98)
Net change in cash and cash equivalents			
Cash and cash equivalents in the opening balance		8,145	6,481
Cash change in cash and cash equivalents		(1,375)	(98)
Non-cash change in cash and cash equivalents		21	(19)
o/w effect of exchange rates changes and other non-monetary effects		21	(19)
Cash and cash equivalents in the closing balance		6,791	6,364

Financial statement Reminder Zoom on Balance Sheet



Question

A statement of financial position (balance sheet) provides:

- A. Flow analysis of net cash provides by operating activities, capital expenditure, financing activities
- B. A photo of your business's net worth taken at the closing date
- C. Information on the level of liabilities and owner's equity
- D. The net value of fixed assets at the end of the year

Balance Sheet states the **assets, liabilities**, and **owners' equity** at a particular **point in time** and illustrates your business's net worth.

This net worth may change at any moment according to the way the business is managed and to economic conditions

To evaluate the “worth” of the company, the balance sheet disclose a complete inventory of :




Positive values such as : cash, receivable from costumers, building, industrial equipment ...**called assets**

Negatives values such as : Bank debts, payable to suppliers**called liabilities**

The difference between assets and liabilities, disclosed as net assets or equity corresponds to the worth that shareholders could share when they “sell the assets and pay the debt”

Balance sheet at the end of Y N

In the Balance sheet detective case, balance sheets are disclosed from more liquid assets (cash) to less liquid assets (PPE net)

Assets		Assets - Liabilities = owner's capital Capital + performance (accumulated results- dividends paid)
Intangible assets		Liabilities Non current liability as bank debts Current liability as Working Capital Payable
Tangible assets		
Working capital inventories		
Working capital receivable		
Cash and deposit		

Equity and enterprise value are effectively linked by the way the organization is financed (the use of financial debt).

Actionnaires	Nombre de titres	En %
Blue Capital*	75 326 258	11,09%
Colony Blue Investor**	15 166 770	2,23%
Groupe Arnault SAS***	5 000 000	0,74%
Salariés	7 085 137	1,04%
Autodétention	3 657 589	0,54%
Autocontrôle	0	0,00%
Public	573 100 246	84,36%
Total	679 336 000	100,00%



Total enterprise value

=

Value of equity

+

Value of net financial debt



Enterprise value / Equity value :

Simple example : purchase of an apartment

Value of the apartment : 100 000 €

evaluated according different criteria –size-place- market....

The actual owner of the apartment (the seller) has financed through debt financing .

40 000 € remain to be paid at the date when you purchase the apartment.

His bank demands you to reimburse directly his debt

What is the value of the apartment : « enterprise value »

100 000

What amount will you pay to the actual owner : « equity value »

60 000 (100 000-40 000)

Asset.

An item owned by the company. Reported as:

owned for more than year (non – current)

and converted to cash within one year (current)

Inventories (stock).

Goods held for resale in the normal course of business

Receivables (debtors).

Amounts owed to the company for goods and services sold on credit.

Non-current operating assets (fixed assets).

Assets owned by the company (including via finance leases) and used over a number of years to support the operating activities of the company. It may include

- intangible assets such as goodwill, patents etc.
- Tangible assets such as plants, computers, planes...

Liability.

An amount owed by the company. Reported as either payable within one year (current) or payable after more than one year (non-current).

Debt.

A source of long term finance.

Generally interest bearing

but sometimes used to represent all long term liabilities of a company.

Payables (creditors).

Amounts owed by the company for goods and services supplied on credit

Equity.

The ordinary shares of the company.
Represents legal ownership. Most often what valuation is trying to find.

Long Term Capital Employed.

The total assets less current liabilities of the company.



Balance sheet detective

Specific items

Intangible assets

An intangible asset is an identifiable non-monetary asset without physical substance.

Examples

- patented technology, computer software, databases and trade secrets
- trademarks, trade dress, newspaper mastheads, internet domains
- video and audiovisual material (e.g. motion pictures, television programs)
- customer lists
- franchise agreements
- customer and supplier relationships (including customer lists)
- marketing rights

An intangible asset, whether purchased or self-created, will be recognize if, and only if: [IAS 38.21]

it is probable that the future economic benefits that are attributable to the asset will flow to the entity; and

the cost of the asset can be measured reliably.

IAS 38 includes additional recognition criteria for internally generated intangible assets (see below) as Research and development or software

- Charge all research cost to expense
- Development costs are capitalized only after technical and commercial feasibility of the asset for sale or use have been established

If an intangible item does not meet both the definition of and the criteria for recognition as an intangible asset, IAS 38 requires the expenditure on this item to be recognized as an expense when it is incurred. [IAS 38.68]

Brands, mastheads, publishing titles, customer lists and items similar in substance that **are internally generated should not be recognized as assets. [IAS 38.63]**

The following items must be charged to expenses when incurred:

- internally generated goodwill
- start-up, pre-opening, and pre-operating costs
- training cost
- advertising and promotional cost, including mail order catalogues
- relocation costs [IAS 38.69]



Balance sheet detective
specific items
Other long term liabilities

This item include **liabilities that do not currently require interest payments, but will require payments in the future for a period of longer than one year.**

Common examples of other long-term liabilities include :

- Provisions
- Differed taxes
- Future employee benefits, such as pensions for employees currently working
- and lease payments

An essential characteristic of a liability is that the entity has a present obligation : a duty or responsibility to act or perform in a certain way.

Obligations may be legally enforceable as a consequence of a binding contract or statutory requirement.

Obligations also arise, however, from normal business practice, for example :

- an entity decides to rectify faults in its products even when these become apparent after the warranty period has expired,
- the amounts that are expected to be expended in respect of goods already sold are liabilities.



Balance sheet detective

Suggested approach

30-45 minutes for break-out group preparation

Start with easier firms to detect

Each group will present one or two companies discovered and the indices used

Suggested approach

Use your knowledge of the industries' financial characteristics and financial ratio.

- To organize the 12 companies in several groups with similar attributes
- To determine the detailed financial characteristics of those group (ie high technology-retail- ...)
- To match the firms to the specific industry

And guess who is who ?

It is up to you Balance sheet detective



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