POLITECNICO
MILANO 1863

Accounting Finance & Control

How to read financial statements

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Financial Analysis

external approach !?

1. Sources selection and data "triangulation"
2. **Segmental analysis**
3. Common size analysis
4. Reclassification and adjustments
5. Benchmmarking
6. Accounting based indicators (selection)
7. Interpretation
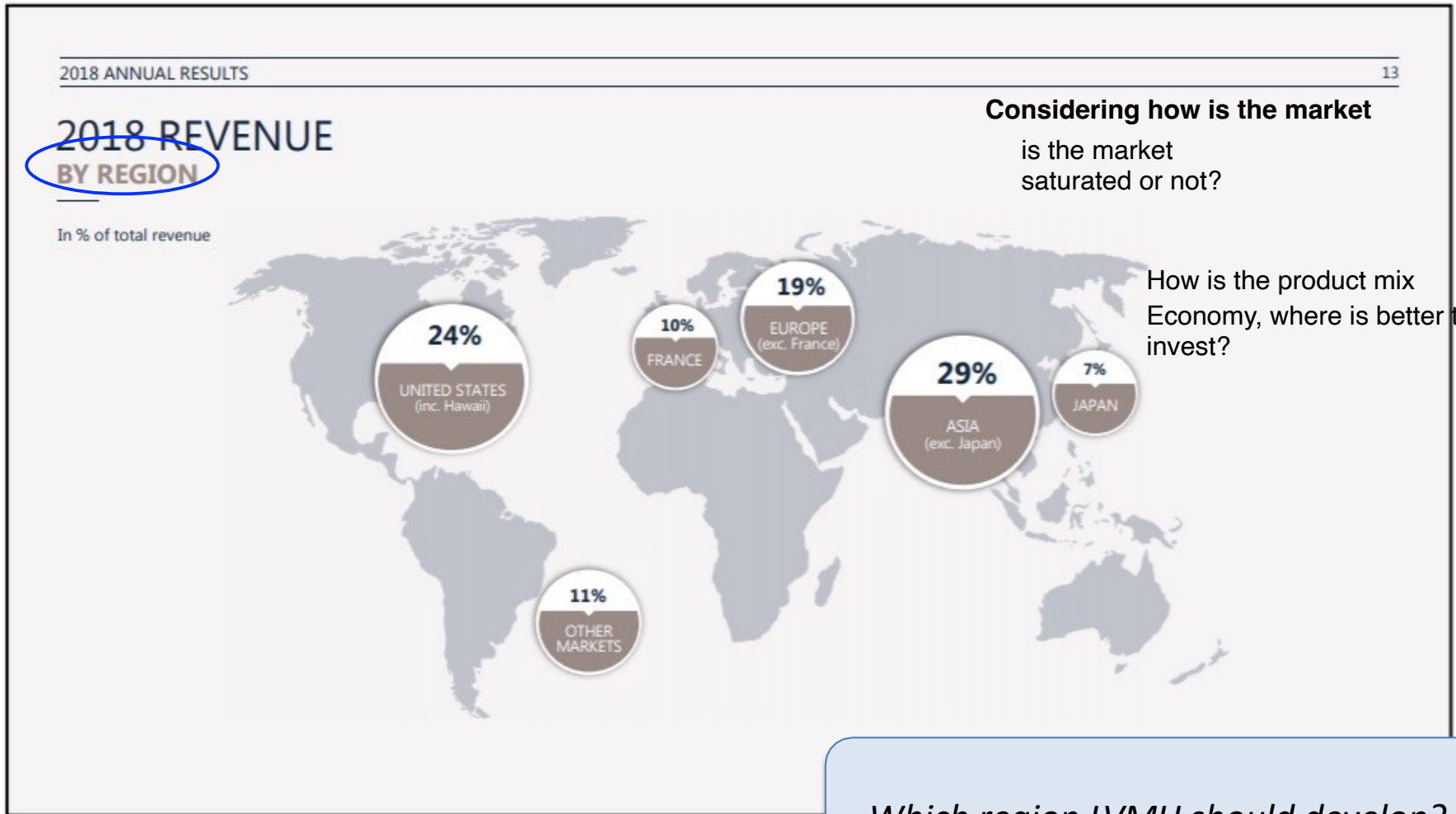
What is the company strategy !?
what are their major segments they would like to grow?

- Finding competitors
- competative advantage

2. Segmental analysis: LVMH (1)

based on geography interested in revenues (where selling more), the major producing factors (Cost), by Product

2018 REVENUE
BY REGION

In % of total revenue

10% FRANCE

19% EUROPE (exc. France)

24% UNITED STATES (inc. Hawaii)

29% ASIA (exc. Japan)

7% JAPAN

11% OTHER MARKETS

Considering how is the market

is the market saturated or not?

How is the product mix Economy, where is better to invest?

Which region LVMH should develop?

2. Segmental analysis: LVMH (2)

REVENUE
BY BUSINESS GROUP

More potential

In millions of euros	2017	2018	Reported growth	Organic growth*
WINES & SPIRITS	5 084	5 143	+ 1%	+ 5%
Champagne & Wines	2 406	2 369	- 2%	+ 3%
Cognac & Spirits	2 679	2 774	+ 4%	+ 7%
FASHION & LEATHER GOODS	15 472	18 455	+ 19%	+ 15%
PERFUMES & COSMETICS	5 560	6 092	+ 10%	+ 14%
WATCHES & JEWELRY	3 805	4 123	+ 8%	+ 12%
SELECTIVE RETAILING	13 311	13 646	+ 3%	+ 6%
OTHERS AND ELIMINATIONS	(596)	(633)	-	-
TOTAL LVMH	42 636	46 826	+ 10%	+ 11%

* With comparable structure and constant exchange rates.

Which BG LVMH should develop?

2. Segmental analysis: LVMH (3)

Selective Retailing

	2018	2017	2016
Revenue (EUR millions)	13,646	13,311	11,973
Profit from recurring operations (EUR millions)	1,382	1,075	919
Operating margin (%)	10.1	8.1	7.7

Profit from recurring operations for Selective Retailing was 1,382 million euros, up 29% from 2017. This improvement was driven by DFS, which benefited from its strong commercial performance and from the favorable impact of the termination of the Hong Kong airport concessions.

The business group's operating margin as a percentage of revenue grew by 2 points to 10.1%.

Outlook

In 2019, Sephora will continue to design and offer its customers the best omnichannel experience in the beauty world, while maintaining its focus on its core strengths: its dedicated, professional staff; the expansion and renovation of its store network; its rich, innovative range of products and services; and its desire to keep surprising its customers and give them an ever more personalized connection at its stores and throughout its digital ecosystem. DFS enters 2019 with confidence, while remaining vigilant to the key issues inherent in its business segment, such as currency fluctuations and potential changes in the sales environment. Work is underway to expand and enhance the flagship store on Canton Road in Hong Kong and to renovate the Four Seasons Hotel Macao store. The brand will expand its store network, particularly in Asia, and step up its digital initiatives to better serve travelers. Le Bon Marché will continue to cultivate its uniqueness, its creative and exclusive offerings, and its dual identity as both a trendsetting retail destination and a venue for art and culture. The opening of a VIP lounge will round out the range of perks available to its customers. La Grande Épicerie de Paris will keep working to enhance its appeal and build customer loyalty on both sides of the Seine.

شرکت ها در نوت ها میگن که میجر سگمنت براشون چیه

2. Segmental analysis: Volkswagen

Thousand vehicles/€ million	VEHICLE SALES		SALES REVENUE		SALES TO THIRD PARTIES		OPERATING RESULT	
	2016	2015	2016	2015	2016	2015	2016	2015
Volkswagen Passenger Cars	4,347	4,424	105,651	106,240	69,523	70,939	1,869	2,102
Audi	1,534	1,529	59,317	58,420	37,460	37,605	4,846	5,134
ŠKODA	814	800	13,705	12,486	6,606	6,128	1,197	915
SEAT	548	544	8,894	8,572	3,967	3,570	153	−10
Bentley	11	11	2,031	1,936	1,590	1,379	112	110
Porsche[2]	239	219	22,318	21,533	20,166	19,663	3,877	3,404
Volkswagen Commercial Vehicles	478	456	11,120	10,341	5,527	4,813	455	382
Scania[2]	83	78	11,303	10,479	11,291	10,479	1,072	1,027
MAN Commercial Vehicles	102	102	10,005	9,958	9,275	9,700	230	−4
MAN Power Engineering	–	–	3,593	3,775	3,590	3,769	194	283
VW China[3]	3,873	3,456	–	–	–	–	–	–
Other	−1,638	−1,608	−58,225	−56,349	23,646	21,922	−1,486[4]	−2,440[4]
Volkswagen Financial Services	–	–	27,554	25,901	24,625	23,326	2,105	1,921
Volkswagen Group before special items	–	–	–	–	–	–	14,623	12,824
Special items	–	–	–	–	–	–	−7,520	−16,893
Volkswagen Group	**10,391**	**10,010**	**217,267**	**213,292**	**217,267**	**213,292**	**7,103**	**−4,069**
Automotive Division[5]	10,391	10,010	186,016	183,936	189,384	186,869	4,668	−6,305
of which: Passenger Cars Business Area	9,729	9,374	150,343	149,716	160,409	158,716	4,167	−7,013
Commercial Vehicles Business Area	662	636	32,080	30,445	25,385	24,383	718	586
Power Engineering Business Area	–	–	3,593	3,775	3,590	3,769	−217	123
Financial Services Division	–	–	31,251	29,357	27,883	26,424	2,435	2,236

Financial Analysis

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3. Common-size analysis → **BS & IS mostly**

- Common-size analysis is the restatement of financial statement information in a standardized form.

- **Vertical common-size** analysis uses the aggregate value in a financial statement for a given year as the base, and each account's amount is restated as a percentage of the aggregate.
    - Balance sheet: Aggregate amount is total assets.
    - Income statement: Aggregate amount is revenues or sales.

- **Horizontal common-size** analysis uses the amounts in accounts in a specified year as the base, and subsequent years' amounts are stated as a percentage of the base value.
    - Useful when comparing growth of different accounts over time.

3 or 5 Years, 2018! (2 years of Covid & War)

3. Common-size analysis

- Vertical Common Size Analysis on Income Statement:

	2017	2016	2017	2016
Net sales	1.413.208	1.204.347	100%	100%
Cost of good sold	957.791	841.872	67,8%	69,9%
Gross profit	**455.417**	**362.475**	**32,2%**	**30,1%**
SGA	289.736	227.044	*20,5%*	*18,9%*
Other income, net	2.085	-	0,1%	0,0%
Income from operations	**167.766**	**135.431**	**11,9%**	**11,2%**
Interest income	7.064	3.670	0,5%	0,3%
Income before taxes	**174.830**	**139.101**	**12,4%**	**11,5%**
Taxes	68.183	55.147	4,8%	4,6%
Net Income	**106.647**	**83.954**	**7,5%**	**7,0%**

Function

Margin Ebit (?)

Profit Margin

Focusing on EBITDA Margin, Profit Margin, Cost (By Nature)

3. Common-size analysis

- Consider the CS Company, which reports the following financial information:
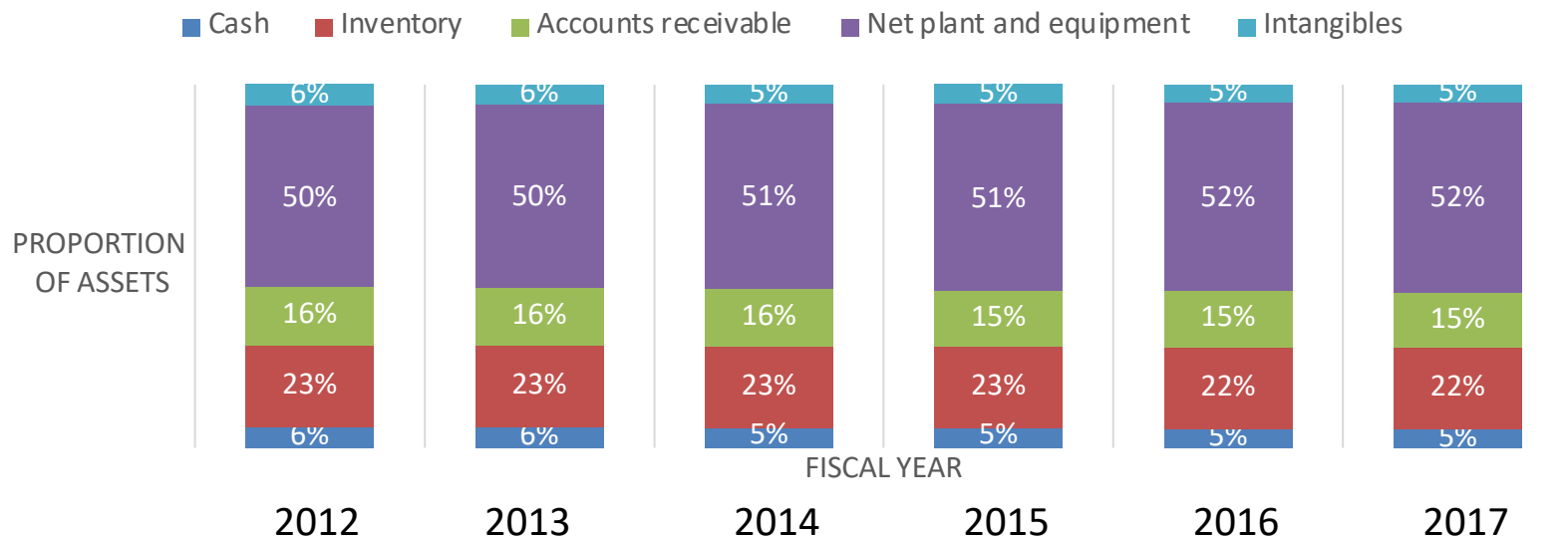
Year	2012	2013	2014	2015	2016	2017
Cash	400.00	404.00	408.04	412.12	416.24	420.40
Inventory	1,580.00	1,627.40	1,676.22	1,726.51	1,778.30	1,831.65
Accounts receivable	1,120.00	1,142.40	1,165.25	1,188.55	1,212.32	1,236.57
Net plant and equipment	3,500.00	3,640.00	3,785.60	3,937.02	4,094.50	4,258.29
Intangibles	400.00	402.00	404.01	406.03	408.06	410.10
Total assets	6,500.00	6,713.30	6,934.12	7,162.74	7,399.45	7,644.54

3. Common-size analysis

- Vertical Common-Size Analysis on BS:

Year	2012	2013	2014	2015	2016	2017
Cash	6%	6%	5%	5%	5%	5%
Inventory	23%	23%	23%	23%	22%	22%
Accounts receivable	16%	16%	16%	15%	15%	15%
Net plant and equipment	50%	50%	51%	51%	52%	52%
Intangibles	6%	6%	5%	5%	5%	5%
Total assets	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

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3. Common-size analysis

- Horizontal Common-Size Analysis (base year is 2012) on BS:

Year	2012	2013	2014	2015	2016	2017
Cash	100.00%	101.00%	102.01%	103.03%	104.06%	105.10%
Inventory	100.00%	103.00%	106.09%	109.27%	112.55%	115.93%
Accounts receivable	100.00%	102.00%	104.04%	106.12%	108.24%	110.41%
Net plant and equipment	100.00%	104.00%	108.16%	112.49%	116.99%	121.67%
Intangibles	100.00%	100.50%	101.00%	101.51%	102.02%	102.53%
Total assets	100.00%	103.08%	106.27%	109.57%	112.99%	116.53%
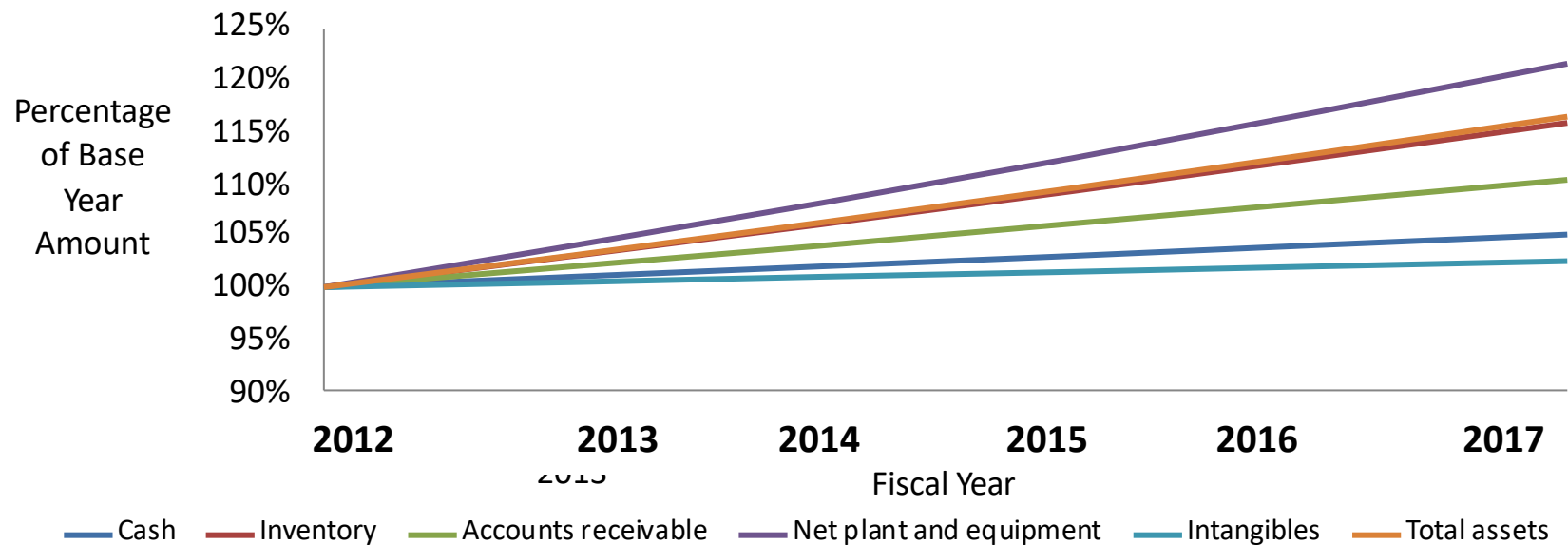
3. Common size Vertical analysis: the relevance of the industry
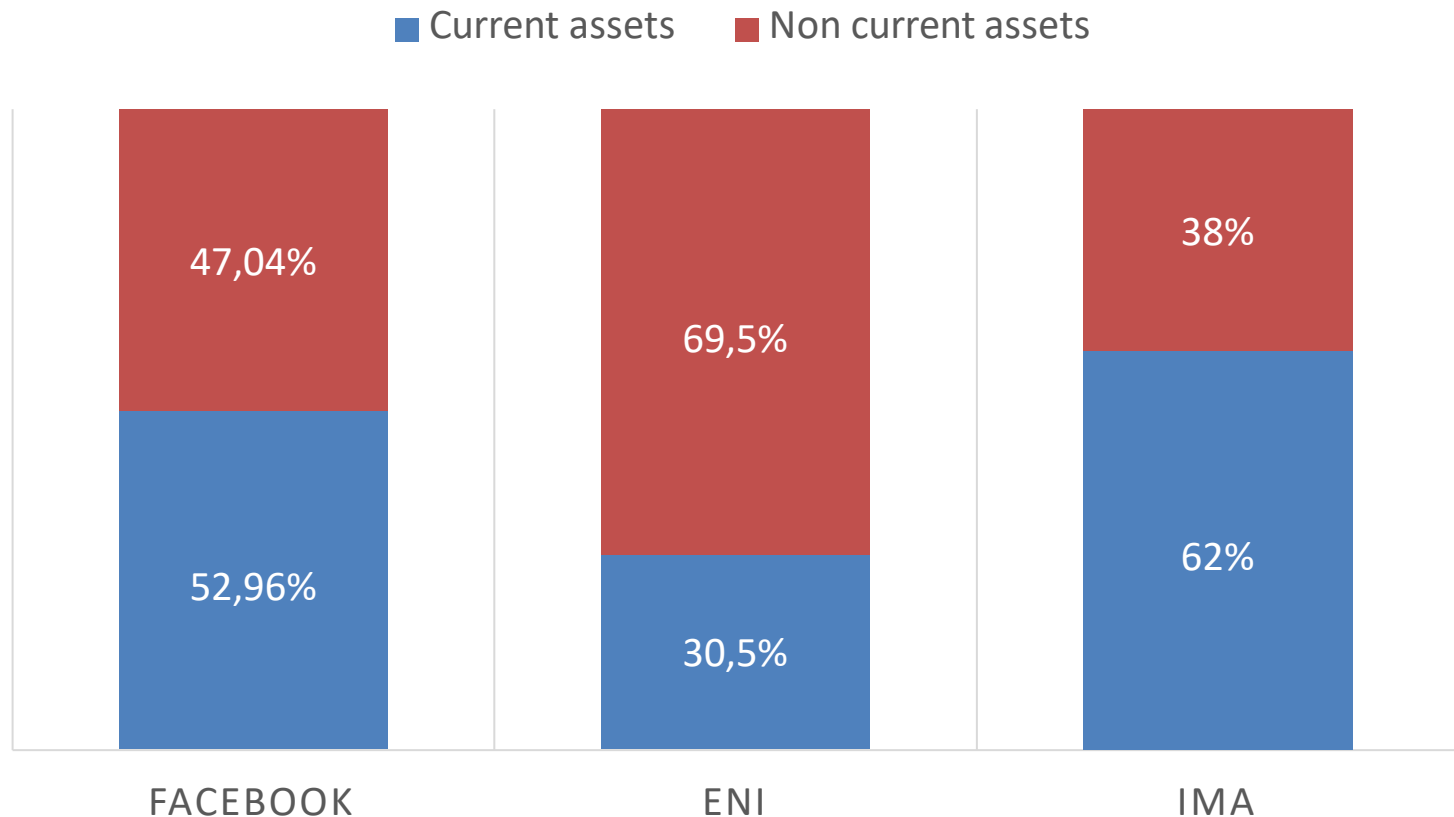
- Elasticity vs rigidity of the assets composition
- Connected to the operating cycle …looking deeply

3. Common size Vertical analysis: the relevance of the industry

how the product value is understandable from the assets

	Oil & Gas / Energy		**Machinary**
NON CURRENT ASSETS	**ENI**	**Facebook**	**IMA**
Property, plant and equipment	81,78%	28,1%	16,98%
Inventory - compulsory stock	1,37%		
Intangible assets	3,78%	8,3%	64,09%
Goodwill		59,3%	
Equity-accounted investments	4,67%		4,43%
Other investments	0,32%		14,50%
other non current assets	8,08%	4,3%	
	100,00%	**100,00%**	**100,00%**

3. Common size Vertical analysis: the relevance of the industry

- Income statement analysis – incidence of **operating costs**

FACEBOOK	2016
Cost of revenues	24,91%
Research and development	38,91%
Marketing and sales	24,80%
General and administrative	11,38%

IMA	2016
Raw material costs	42,3%
Service costs (including also SGA)	23,2%
Personnnel costs	30,2%
Depreciation and amortization	3,2%
Provision for risjs and charges	0,3%
Other operating costs	0,8%

ENI	2016
Purchases, services and other	80,91%
Payroll and related costs	5,49%
OTHER OPERATING (EXPENSE) INCOME	0,03%
DEPRECIATION, DEPLETION AND AMORTIZATION AND IMPAIRMENT	13,57%

3. Common size vertical analysis, quick exercise

	A	B
Net sales	$ 10,600	$ 18,600
Cost of goods sold	6,455	13,522
Other expenses	3,541	4,185
Net income	$ 604	$ 893

Which company earns more net income?

	A	B
Net sales	100 %	100 %
Cost of goods sold		
Other expenses		
Net income		

Which company's net income is a higher percentage of its net sales?