



FUNDAMENTALS OF FINANCE

*Finance for decision-making in a strategic
perspective*

Customized for

**“World-class Business Simulations
for Decision-Makers”**

EXAMPLE OF SCHEDULE OVERVIEW

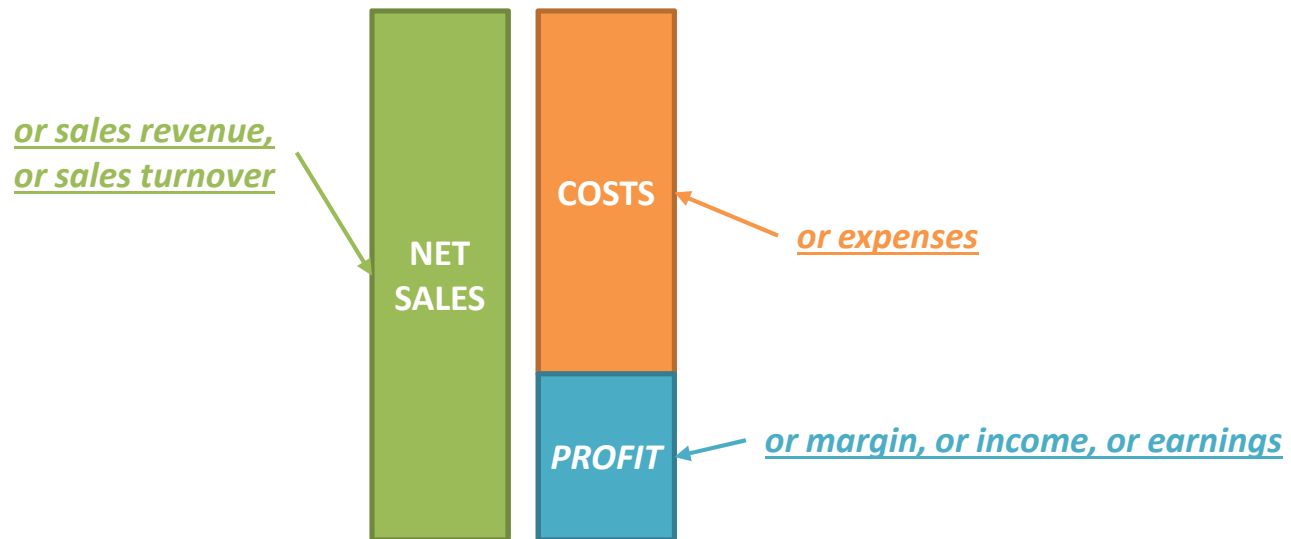
(all times are CET)



FINANCE INSIGHTS: The Income Statement

What does an Income Statement represent?

➔ The Income Statement (or Profit & Loss Statement, or P&L) shows the profits made by a company during a period of time, by computing the difference between the sales revenue and the costs incurred to support sales.



➔ A profit represents an increase in shareholders' wealth.

➔ Several levels of profitability are usually considered (profit from operations, before tax, after tax...)

The Income Statement tells a story

INCOME STATEMENT (PERIOD 5)	
OPERATIONS	NET SALES _____ → From the sales the company realised during the period ...
	- Cost of sales
	- Depreciation
	- Inventory charges
	- Cost of non quality
	= GROSS PROFIT
	- Administrative & Selling expenses
	- R&D costs
	- HR & Quality costs
	- Non operating results
TAXES FINANCE	= OPERATING MARGIN _____ → ... How much margin was generated by the operations, i.e. the everyday business ...
	- Interest
	= INCOME (LOSS) BEFORE TAX _____ → ... How much income was left after paying the cost of the debt borrowed to banks ...
	- Income taxes
	= NET INCOME (LOSS) _____ → ... How much income was left after paying the taxes, i.e. by how much shareholders' wealth has increased during the period.

Financial costs

INCOME STATEMENT PERIOD 5		
OPERATIONS	NET SALES	5 950
	- Cost of sales	- 2 486
	- Depreciation	- 543
	- Inventory charges	- 4
	- Cost of non quality	- 230
	= GROSS PROFIT	2 687
	- Administrative & Selling expenses	- 1 460
	- R&D costs	- 315
	- HR & Quality costs	- 100
	- Non operating results	0
TAXES FINANCE	= OPERATING MARGIN	812
	- Interest	- 190
	= INCOME (LOSS) BEFORE TAX	622
	- Income taxes	0
	= NET INCOME (LOSS)	622

Cost of debt,
i.e. interest expense incurred during the period

Example:

Long-term loan: 4 750\$ borrowed @ 4% (*) = 190 \$
+ Short-term loan: 0\$ borrowed @ 12% = 0\$

(*) the debt/equity ratio is comprised between 40% and 60%



Tax computation

INCOME STATEMENT PERIOD 5		
OPERATIONS	NET SALES	5 950
	- Cost of sales	- 2 486
	- Depreciation	- 543
	- Inventory charges	- 4
	- Cost of non quality	- 230
	= GROSS PROFIT	2 687
	- Administrative & Selling expenses	- 1 460
	- R&D costs	- 315
	- HR & Quality costs	- 100
	- Non operating results	0
	= OPERATING MARGIN	812
TAXES FINANCE	- Interest	- 190
	= INCOME (LOSS) BEFORE TAX	622
	- Income taxes	0
	= NET INCOME (LOSS)	622

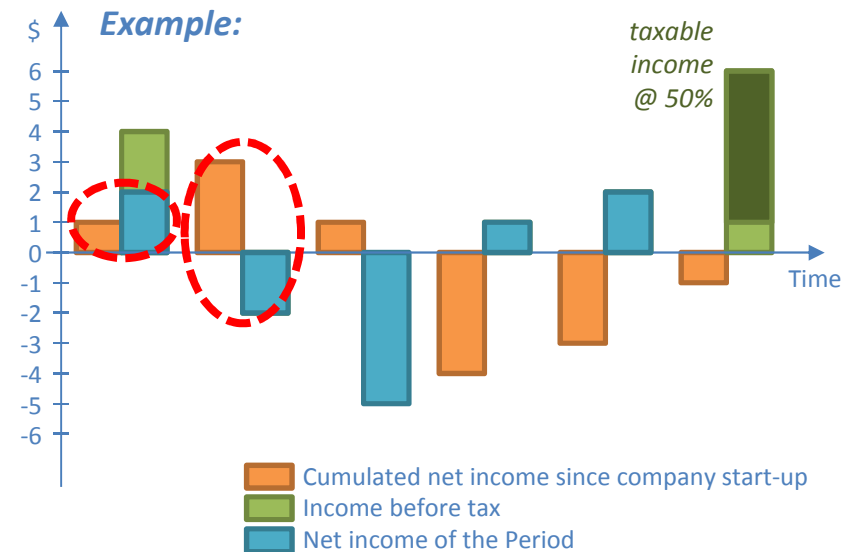
The tax rate is 50%.

The Income before tax is positive: 622\$.

We would expect income taxes: $50\% * 622\$ = 312\$$.

How come no tax is due?

Because past losses can be carried forward.



From the Net Sales to the OM

INCOME STATEMENT PERIOD 5		
OPERATIONS	NET SALES	???
	- Cost of sales	
	- Depreciation	
	- Inventory charges	
	- Cost of non quality	
	= GROSS PROFIT	
	- Administrative & Selling expenses	
	- R&D costs	
	- HR & Quality costs	
	- Non operating results	
TAXES FINANCE	= OPERATING MARGIN	
	- Interest	- 190
	= INCOME (LOSS) BEFORE TAX	
	- Income taxes	0
	= NET INCOME (LOSS)	

Please send me your answer in the chat window

DATA:

- Quantity sold: 119 units
- Price: 50 \$/unit
- Production cost: 20.89 \$/unit
- Customer payment terms: 30 days

QUIZ: HOW MUCH ARE THE NET SALES?

- 119 units * 20.89 \$ = 2 486 \$
- 119 units * 50 \$ = 5 950 \$
- 119 units * 50 \$ * 30 days / 360 days = 496 \$



From the Net Sales to the OM

INCOME STATEMENT PERIOD 5	
NET SALES	5 950
- Cost of sales	
- Depreciation	
- Inventory charges	
- Cost of non quality	
= GROSS PROFIT	
- Administrative & Selling	
- R&D costs	
- HR & Quality costs	
- Non operating results	
= OPERATING MARGIN	
- Interest	- 190
= INCOME (LOSS) BEFORE TAX	
- Income taxes	0
= NET INCOME (LOSS)	

Accounting Principle 1: Realisation of sales

When might a sale be recognised and recorded in the Income Statement?

Delivery time is the generally accepted principle and the accounting definition of sales as delivery entails a legal right to receive payment.

From the Net Sales to the OM

INCOME STATEMENT PERIOD 5	
NET SALES	5 950
- Cost of sales	???
- Depreciation	
- Inventory charges	
- Cost of non quality	
= GROSS PROFIT	
- Administrative & Selling expenses	
- R&D costs	
- HR & Quality costs	
- Non operating results	
= OPERATING MARGIN	
- Interest	- 190
= INCOME (LOSS) BEFORE TAX	
- Income taxes	0
= NET INCOME (LOSS)	

OPERATIONS

TAXES FINANCE

Please send me your answer in the chat window

DATA:

- Quantity produced: 116 units
- Production cost: 20.89 \$/unit
- Inventory available for sale: 23 units @ 20.89 \$/unit
- Quantity sold: 119 units

QUIZ: HOW MUCH IS THE COST OF SALES?

- ✗ 116 units * 20.89 \$ = 2 904 \$
- ✗ (116 + 23 units) * 20.89 \$ = 2 423 \$
- ✓ 119 units * 20.89 \$ = 2 486 \$



From the Net Sales to the OM

INCOME STATEMENT PERIOD 5	
NET SALES	5 950
- Cost of sales	- 2 486
- Depreciation	
- Inventory charges	
- Cost of non quality	
= GROSS PROFIT	
- Administrative & Selling	
- R&D costs	
- HR & Quality costs	
- Non operating results	
= OPERATING MARGIN	
- Interest	- 190
= INCOME (LOSS) BEFORE TAX	
- Income taxes	0
= NET INCOME (LOSS)	

119 units sold

Should be the cost of 119 units so as to match the quantity sold

Accounting Principle 2: Matching principle
 A cost is recognised in the Income Statement only when the corresponding sales are also recognised.

OPERATIONS

TAXES FINANCE

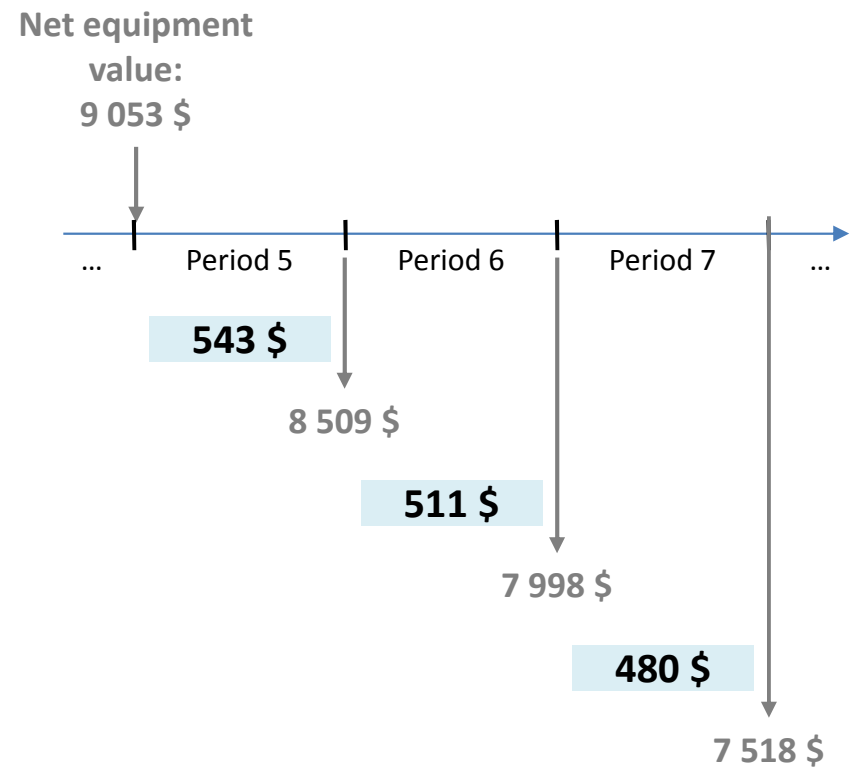
From the Net Sales to the OM

INCOME STATEMENT PERIOD 5	
NET SALES	5 950
- Cost of sales	- 2 486
- Depreciation More...	???
- Inventory charges	
- Cost of non quality	
= GROSS PROFIT	
- Administrative & Selling expenses	
- R&D costs	
- HR & Quality costs	
- Non operating results	
= OPERATING MARGIN	
- Interest	-190
= INCOME (LOSS) BEFORE TAX	
- Income taxes	0
= NET INCOME (LOSS)	

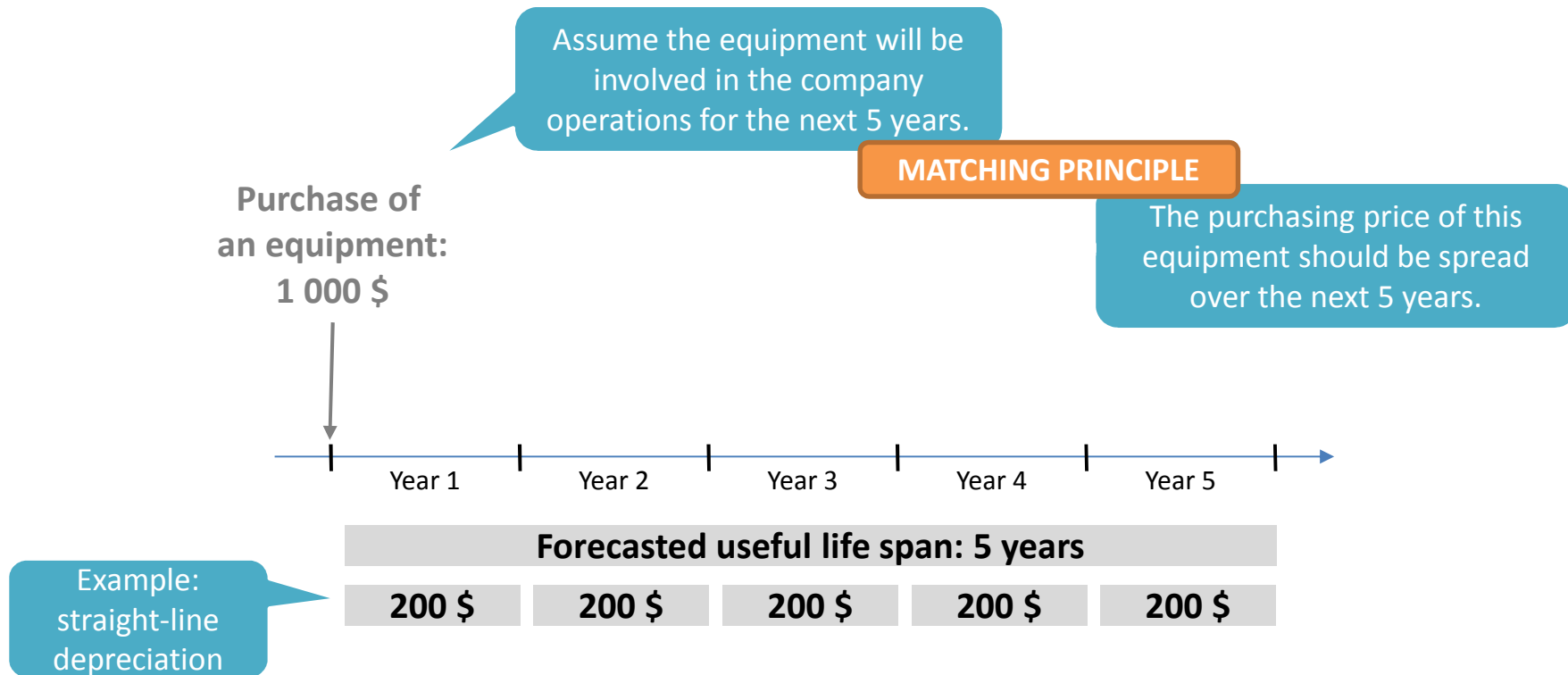
OPERATIONS

TAXES FINANCE

In the simulation:
Depreciation rule: 6% per period



More about depreciation



Depreciation represents the spread of the purchasing price of an equipment throughout its forecasted useful life span. Depreciation should be recorded in the Income Statement as an operating cost.



A rule must be defined to stipulate how to compute depreciation (straight-line, % residual value...) and one should stick to it further on.

Accounting Principle 3: Consistency principle



The Gross Profit

INCOME STATEMENT PERIOD 5		
OPERATIONS	NET SALES	5 950
	- Cost of sales	- 2 486
	- Depreciation	- 543
	- Inventory charges	- 4
	- Cost of non quality	- 230
	= GROSS PROFIT	2 687
	- Administrative & Selling expenses	
	- R&D costs	
	- HR & Quality costs	
	- Non operating results	
TAXES FINANCE	= OPERATING MARGIN	
	- Interest	- 190
	= INCOME (LOSS) BEFORE TAX	
	- Income taxes	0
	= NET INCOME (LOSS)	

- Basic profitability of the product or service
- If that part of the business is not profitable, the company will not survive long
- Must be sufficient to cover further operating costs, financial costs and taxes and leave a net income to shareholders
- **Not standard** from a company to another

2 687 **45.2%** (of Net Sales)

How much is enough?
 That varies substantially by industry, and it's likely to vary from one company to another even in the same industry (trader or manufacturer, old or new equipment...)

The Gross Profit

INCOME STATEMENT PERIOD 5		
OPERATIONS	NET SALES	5 950
	- Cost of sales	- 2 486
	- Depreciation	- 543
	- Inventory charges	- 4
	- Cost of non quality	- 230
	= GROSS PROFIT	2 687
		45.2% (of Net Sales)
TAXES FINANCE	- Administrative & Selling expenses	
	- R&D costs	
	- HR & Quality costs	
	- Non operating results	
	= OPERATING MARGIN	
	- Interest	- 190
	= INCOME (LOSS) BEFORE TAX	
	- Income taxes	0
	= NET INCOME (LOSS)	

Please send me your answers in the chat window

QUIZ: WHICH OF THE FOLLOWING FACTORS CAN IMPACT THE GROSS PROFIT % ?

- Raw material cost fluctuations
- Additional long-term loans
- Under-utilisation of production capacity
- Customer payment terms
- Supplier payment terms
- HR & Quality policy
- Price changes
- Dividend policy
- Quantity sold



The Operating Margin (OM)

INCOME STATEMENT PERIOD 5		
OPERATIONS	NET SALES	5 950
	- Cost of sales	- 2 486
	- Depreciation	- 543
	- Inventory charges	- 4
	- Cost of non quality	- 230
	= GROSS PROFIT	2 687
	- Administrative & Selling expenses	- 1 460
	- R&D costs	- 315
	- HR & Quality costs	- 100
	- Non operating results	0
TAXES FINANCE	= OPERATING MARGIN	812
	- Interest	- 190
	= INCOME (LOSS) BEFORE TAX	622
	- Income taxes	0
	= NET INCOME (LOSS)	622

- A comprehensive measure of the profit generated by the company's operations, i.e. its everyday business
- A *standard* level of profitability
- Also called: *Operating income* or *EBIT* (Earnings Before Interest and Tax)
- To be monitored year-on-year
- To be benchmarked against competitors

812 **13.6%** (of Net Sales)