Topic 6:

Liquidity and solvency analysis

Ana Mª Arias Alvarez

University of Oviedo
Department of Accounting
amarias@uniovi.es

School of Business Administration
Course: Financial Statement Analysis and Management Control
Bachelor's Degree in Economics

6.1. Analysis of the equilibrium of financial structure.

6.2. Techniques and ratios for financial analysis.

6.2.1. Short-term financial analysis.

6.2.2. Long-term financial analysis.

WORKING CAPITAL

Current assets – Current liabilities =
(Equity +Non-current liabilities) – Non-current assets

Working capital is the portion of current assets which is financed with long-term funds.

6.2: TECHNIQUES AND RATIOS FOR FINANCIAL ANALYSIS.

Short-term

- Liquidity ratios
- Operating cash cycle (OCC)
- Other ratios

Long-term

- Ratios of structure
- Debt to equity ratios
- Total assets to debt ratio

6.2.1: SHORT-TERM FINANCIAL ANALYSIS.

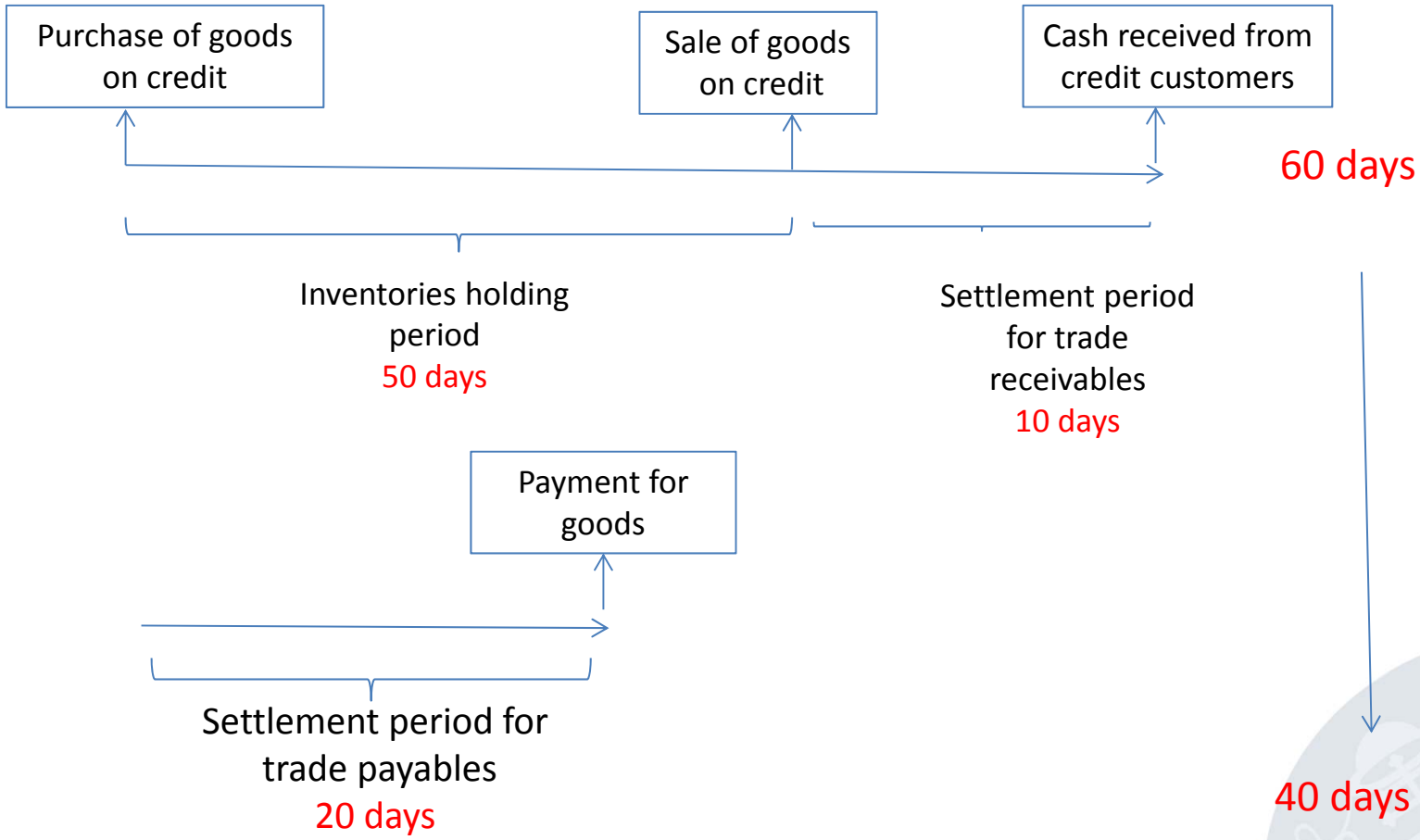
a) LIQUIDITY RATIOS:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilitie s}}$$

$$\text{Acid test ratio} = \frac{\text{Currents assets (excluding inventories)}}{\text{Current liabilities}}$$

$$\text{Cash ratio} = \frac{\text{Cash and cash equivalent s}}{\text{Current liabilitie s}}$$

b) OPERATING CASH CYCLE (OCC):

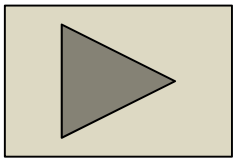


The OCC is important when assessing the liquidity of a business. In the case of a commercial company, it may be defined as the time period between the outlay of cash necessary for the purchase of goods and the ultimate receipt of cash form the credit customer.

CALCULATING THE OCC

$$\text{Average period (days)} = \frac{\text{Numerator}}{\text{Denominator}} \times 365$$

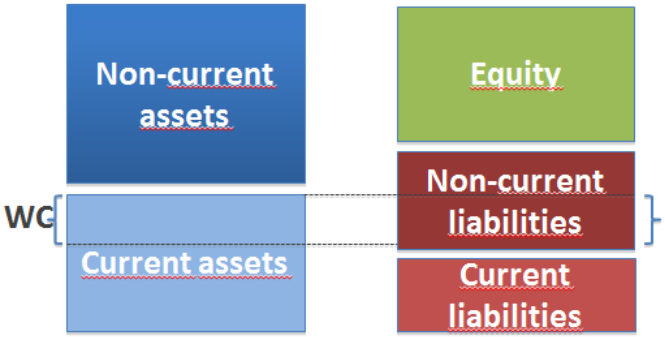
Average period	Numerator	Denominator
Inventories holding period	Average inventories held	Cost of sales
plus Settlement period for trade receivables	Average trade receivables	Net sales
minus Settlement period for trade payables	Average trade payables	Net purchases



Task: try to solve problem 6.1.

c) OTHER RATIOS:

$$\frac{\text{Equity} + \text{Non} - \text{current liabilities}}{\text{Non - current assets} + \text{Required Working Capital}}$$



» Equity + Non-current liabilities = Non-current assets + Existing Working Capital

$$\frac{\text{Equity+Non-current liabilities}}{\text{Non-current assets+Required Working capital}} = 1$$ » Existing Working Capital = Required Working Capital

$$\frac{\text{Equity+Non-current liabilities}}{\text{Non-current assets+Required Working capital}} > 1$$ » Existing Working Capital > Required Working Capital

$$\frac{\text{Equity+Non-current liabilities}}{\text{Non-current assets+Required Working capital}} < 1$$ » Existing Working Capital < Required Working Capital

6.2.2: LONG-TERM FINANCIAL ANALYSIS.

a) RATIOS OF STRUCTURE:

Asset structure

- Non-current assets/Total assets
- Current assets/Total assets
- Inventories/Total assets
- Trade receivables/Total assets
- etc.

Financial structure

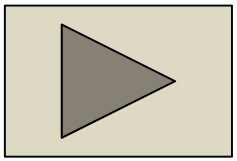
- Equity/(Equity + Liabilities)
- Liabilities/(Equity + Liabilities)
- Non-current liabilities/(Equity + Liabilities)
- Current liabilities/(Equity + Liabilities)

b) DEBT TO EQUITY RATIOS:

- Long-term → Non-current liabilites/Equity
- Debt to equity → Liabilities/Equity
- Short-term → Current liabilities/Equity

c) TOTAL ASSETS TO DEBT RATIO:

$$\frac{\text{Assets}}{\text{Liabilities}}$$



Task: try to solve problem 6.2.