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# **1FP571**

# **Special seminar – Advanced Corporate Finance**



EVROPSKÁ UNIE  
Evropské strukturální a investiční fondy  
Operační program Výzkum, vývoj a vzdělávání



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# Profitability

## Accounts Receivable Turnover

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Measures how soon sales will become cash:

$$\text{Accounts Receivable (A/R) Turnover} = \frac{\text{Net Sales on Account}}{\text{Avg Accounts Receivable}}$$

An alternative measure of the rate at which A/R are being collected

$$\text{Days Receivable Outstanding} = \frac{365}{\text{Accounts Receivable Turnover}}$$

# Profitability

## Inventory Turnover Ratio

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Measures how quickly inventory is being sold:

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold (COGS)}}{\text{Average Inventory}}$$

An alternative measure of the rate at which inventory is being sold

$$\text{Days Receivable Outstanding} = \frac{365}{\text{Accounts Receivable Turnover}}$$

# Profitability

## Fixed Asset Turnover

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Measures the relation between sales and the investment in property, plant and equipment (PP&E), i.e. how efficiently is the firm using its fixed assets to generate sales:

$$\text{Fixed asset Turnover} = \frac{\text{Sales}}{\text{Average Fixed Assets}}$$

# Profitability

## Return on Assets (ROA)

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Measures how profitable are company's asstes:

$$\begin{array}{lcl} \text{Return} & & [\text{Net Income} + (1 - \text{Tax Rate}) * (\text{Interest} \\ \text{on} & = & \text{Expense}) + \text{Minority Interest in} \\ \text{Assets (ROA)} & & \text{Earnings}] / \text{Average Inventory} \end{array}$$

# Profitability

## Profit Margin for ROA

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Measures how profitable are company's sales:

Profit Margin  
for  
ROA

$$\frac{[\text{Net Income} + (1 - \text{Tax Rate}) * (\text{Interest Expense}) + \text{Minority Interest in Earnings}]}{\text{Sales}}$$

# Profitability

## Com. Earnings Leverage Ratio

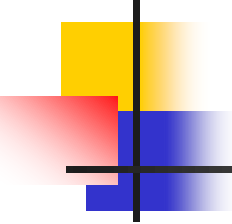
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$$\begin{array}{l} \text{Common} \\ \text{Earnings} \\ \text{Leverage} \\ \text{Ratio} \end{array} = \frac{(\text{Net Income} - \text{Preferred Dividends})}{[\text{Net Income} + (1 - \text{Tax Rate}) * (\text{Interest Expense}) + \text{Minority Interest in Earnings}]}$$

# Profitability

## Cap. Structure Leverage Ratio

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$$\begin{array}{l} \text{Capital} \\ \text{Structure} \\ \text{Leverage Ratio} \end{array} = \frac{\text{Average Total Assets}}{\text{Average Common Shareholders' Equity}}$$



# Profitability

## Cost of Goods Sold Percentage

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Costs of Goods  
Sold Percentage

=

Cost of Goods Sold /  
Sales

# Profitability

## Total Assets Turnover

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$$\begin{array}{l} \text{Total Assets} \\ \text{Turnover} \end{array} = \frac{\text{Sales}}{\text{Average Total Assets}}$$

# Profitability

## Selling and Administrative Expense %

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Selling and  
Administrative  
Expense Percentage

=

Selling and Administrative  
Expense Percentage /  
Sales

# Profitability

## Income Tax Expense %

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$$\begin{array}{l} \text{Income Tax} \\ \text{Expense Percentage} \\ \text{(on operating income)} \end{array} = \frac{[\text{Income Tax Expense} + (\text{Tax Rate}) * (\text{Interest Expense})]}{\text{Sales}}$$



# Profitability

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## REFERENCES

Wysocki, Peter. Business Analysis Using Financial Statements – Lecture Notes. MIT OpenCourseWare, <https://ocw.mit.edu/courses/15-535-business-analysis-using-financial-statements-spring-2003/pages/lecture-notes/>