

Co-funded by the
Erasmus+ Programme
of the European Union



Block 2 - Module 2

Sources of obtaining and financing investments in rural areas

Elaborated by VuS

LECTURE 4: FINANCIAL PLANNING AND FINANCIAL ANALYSIS

LEARNING OUTCOMES

- The participants will be able to define, calculate, and categorize the major financial ratios.
- Explain why financial statement analysis is important to the business, to the business partners, and to outside suppliers of capital.
- Use ratios to analyze a business's health.

LEARNING ACTIVITY CONTENT

The importance of financial analysis and planning

- Types of financial analysis
- Horizontal analysis
- Vertical analysis
- Ratio Analysis.

INTRODUCTION

- Financial analysis involves the use of data from various financial statements (the balance sheet, the profit and loss account i.e. income statement, etc.).
- Financial analysis transforms the data from financial statements into information that is useful for informed decision making.
- Businesses should periodically conduct a financial analysis to get information about the use of company's limited resources.
- Various indicators of financial analysis can be used to project the future financial position of the company. This activity is referred to as financial planning.

THE IMPORTANCE OF FINANCIAL ANALYSIS AND PLANNING

- Financial (statement) analysis precedes the management and planning process.
- The task of financial statement analysis is to recognize the good qualities of the company so that these advantages can be used, but also to recognize the weaknesses of the company so that corrective action can be taken.
- In order to ensure the financial stability of the company, it is necessary to plan future financial conditions, and this planning must begin with the analysis of financial statements.
- The financial analysis creates an information base for decision-making.

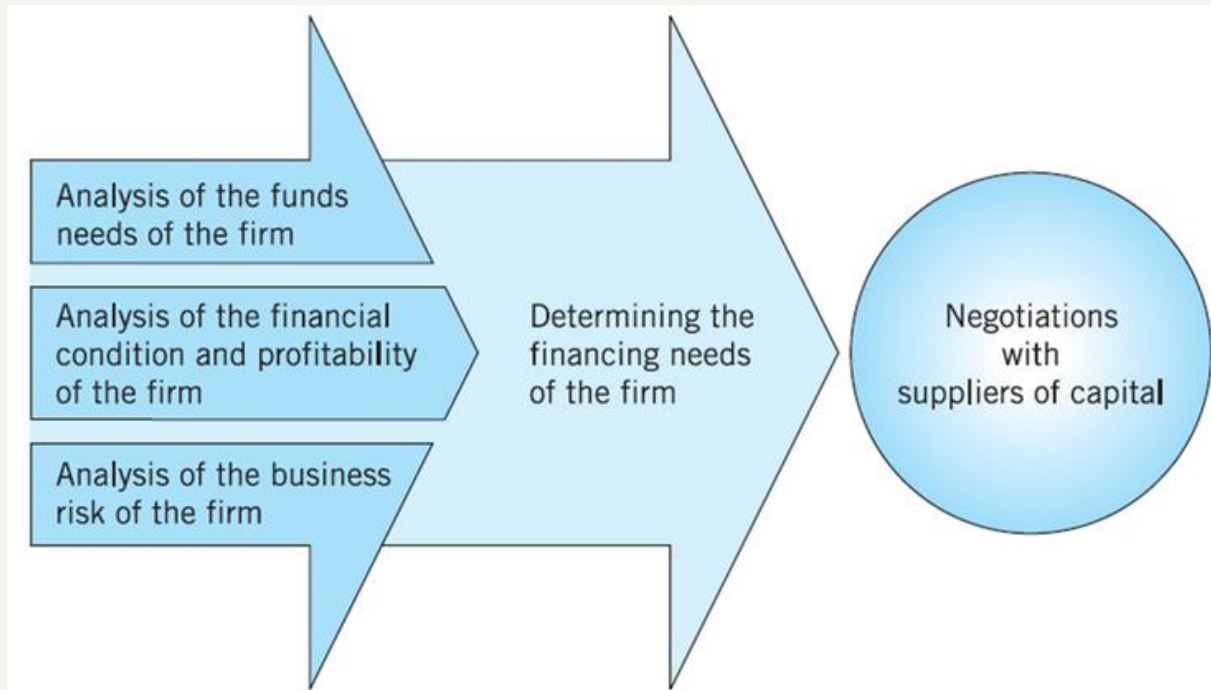
FINANCIAL ANALYSIS AND PLANNING



Financial planning and financial analysis help with:

- Setting company goals
- Choosing business and financing strategies
- Forecasting of business results
- Making plans for unexpected situations

FRAMEWORK FOR FINANCIAL ANALYSIS



Van horne, J.C., Wachowicz, J.M. (2009). Fundamentals of Financial Management. Prentice Hall.

The financial condition and performance of the firm also influence the type of financing that should be used.

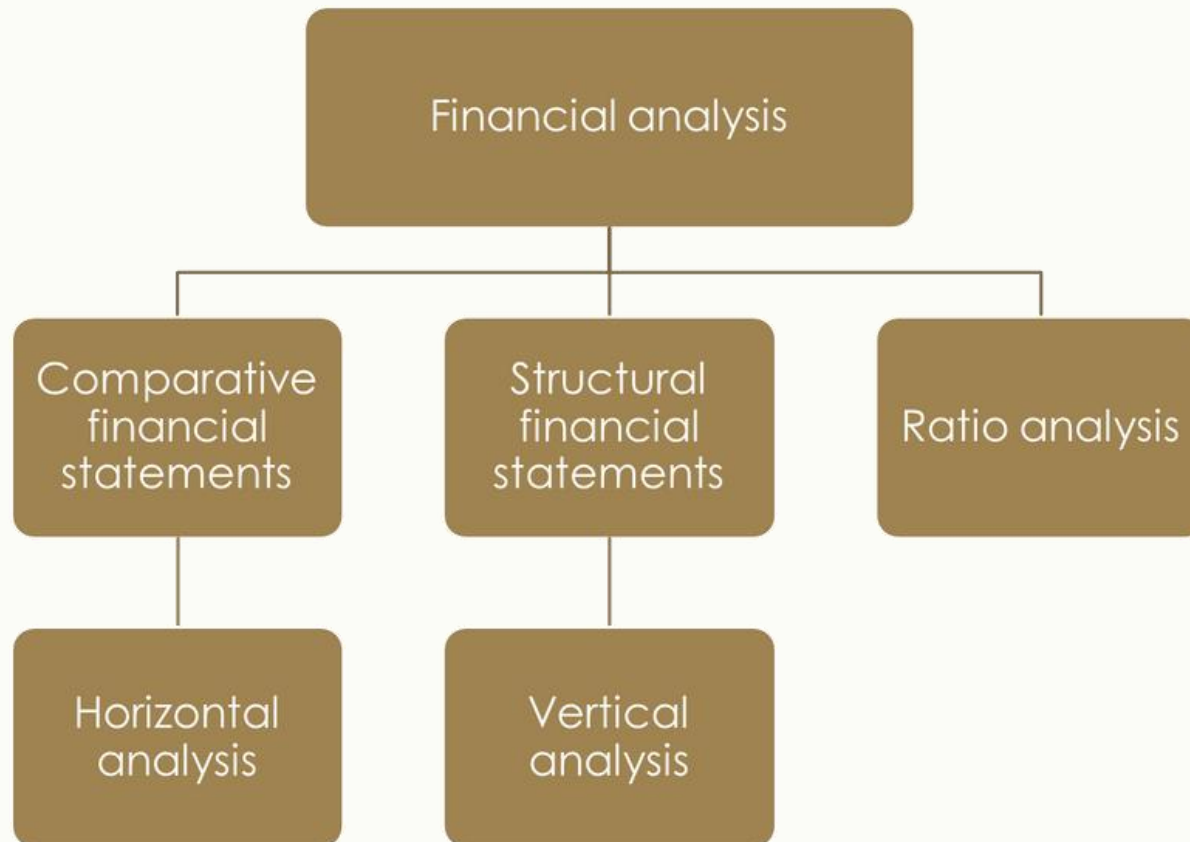
- The greater the firm's liquidity, the stronger the overall financial condition;
- and the greater the profitability of the firm, the more risky the type of financing that can be incurred.
- That is, debt financing becomes more attractive with improvements in liquidity, financial condition, and profitability.

SPECIFIC INTERESTS IN FINANCIAL ANALYSIS

Based on the particular interests of each party, different type of analysis is being used.

- Trade creditors are primarily interested in the liquidity of a firm.
- Investors usually focus on analysing profitability.
- Internally, the firm will use financial analysis to plan and control effectively; to assess the firm's current financial position and evaluate opportunities.

TYPES OF FINANCIAL ANALYSIS/TOOLS



HORIZONTAL ANALYSIS

- Horizontal analysis, also known as trend analysis, makes it possible to compare data over a longer period in order to determine trends and dynamics of changes.
- Horizontal analysis can be used with a profit and loss account or a balance sheet.
- A valid comparison requires at least two periods, but it's preferable to include three or more periods in order to identify real patterns.
- When conducting horizontal analysis you can use direct comparison or percentage method.

HORIZONTAL ANALYSIS - EXAMPLE

Description	2020	2021	Increase or decrease	
			Amount	Percentage
P&L				
OPERATING INCOME	260.377 €	244.442 €	-15.935 €	-6,12%
Sales income	133.946 €	120.243 €	-13.703 €	-10,23%
Other operating income	126.431 €	124.198 €	-2.233 €	-1,77%
OPERATING EXPENSES	154.033 €	165.337 €	11.304 €	7,34%
FINANCIAL INCOME	0 €	0 €	0 €	0,00%
FINANCIAL EXPENSES	3.219 €	19.967 €	16.748 €	520,37%
TOTAL INCOME	260.377 €	244.442 €	-15.935 €	-6,12%
TOTAL EXPENSES	157.252 €	185.303 €	28.052 €	17,84%
PROFIT OR LOSS BEFORE TAXES	103.126 €	59.138 €	-43.987 €	-42,65%
CORPORATE INCOME TAX	12.950 €	5.825 €	-7.125 €	-55,02%
PROFIT OR LOSS FOR THE YEAR	90.176 €	53.313 €	-36.862 €	-40,88%

Direct comparison

Amount of change in operating income in 2021 compared to 2020:
 $244.442 - 260.377 = -15.935$

Percentage method

$(15.935 \div 260.377) \times 100 = 6,12\%$
 Decrease of 6,12%.

Data source: <https://infobiz.fina.hr/>

VERTICAL ANALYSIS

- Vertical analysis provides an insight into the structure of financial statements, i.e. enables comparison of financial data in one year.
- By looking at the structure of the financial statements, the percentage share of each item of the financial statement is determined in relation to the corresponding sum. The analysis is carried out in the following way:
 - in the balance sheet - individual elements of the asset structure are observed in the percentage share of total assets, that is, individual elements of the liability structure in the percentage share of total liabilities;
 - in the profit and loss account - the structure of income and expenses is observed in relation to total income (total income is expressed as 100%; other positions as a percentage of total income), or else in relation to income from regular operations.

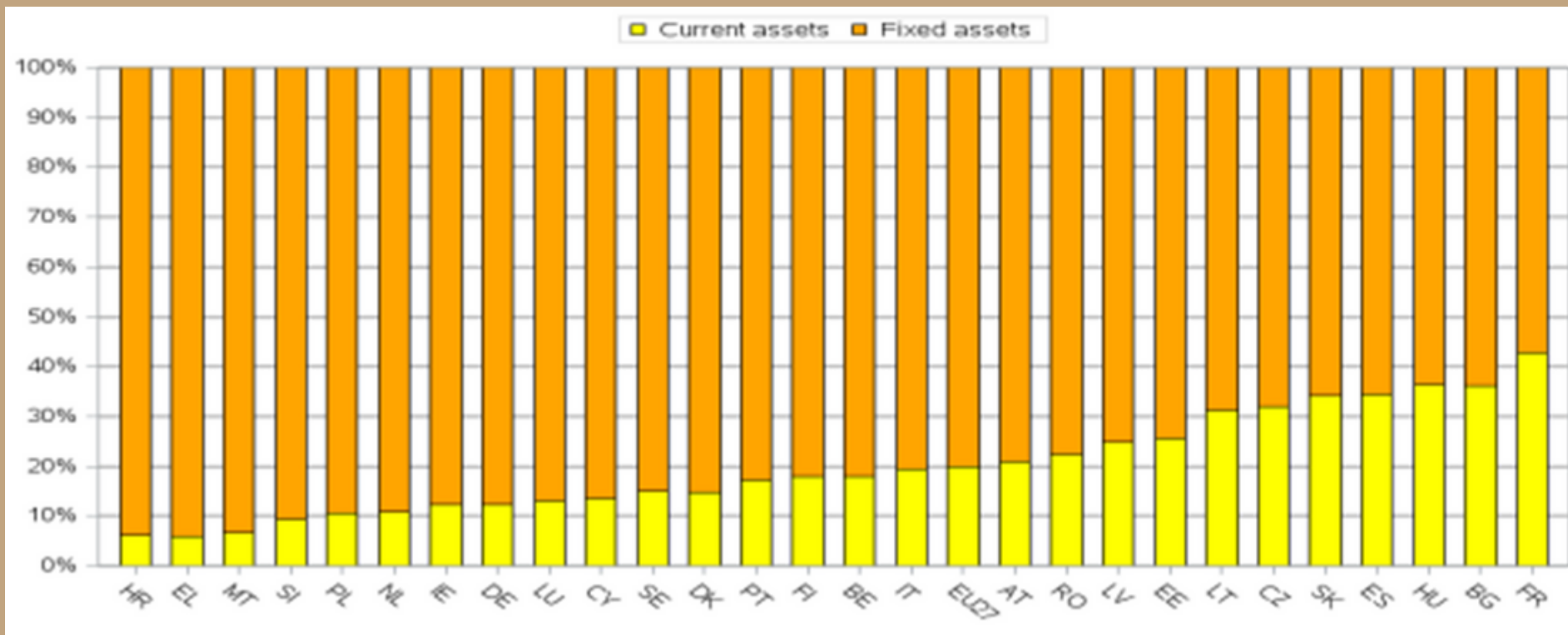
VERTICAL ANALYSIS - EXAMPLE

Description Balance sheet	2020	2021	2020	2021
	FIXED ASSETS	1.034.958 €	1.553.516 €	57,55%
INTANGIBLE ASSETS	0 €	0 €	0,00%	0,00%
TANGIBLE ASSETS	1.034.958 €	1.553.516 €	57,55%	85,36%
FIXED FINANCIAL ASSETS	0 €	0 €	0,00%	0,00%
LONG TERM RECEIVABLE	0 €	0 €	0,00%	0,00%
CURRENT ASSETS	762.720 €	258.152 €	42,41%	14,18%
INVENTORIES	105.035 €	124.554 €	5,84%	6,84%
SHORT - TERM RECEIVABLES	617.521 €	104.149 €	34,34%	5,72%
CURRENT FINANCIAL ASSETS	0 €	0 €	0,00%	0,00%
CASH IN THE BANK AND PETTY CASH	40.163 €	29.448 €	2,23%	1,62%
FUTURE PERIOD PREPAID EXPENSES AND ACCRUED INCOME	798 €	8.289 €	0,04%	0,46%
TOTAL ASSETS	1.798.476 €	1.819.956 €	100,00%	100,00%
CAPITAL AND RESERVES	359.015 €	412.328 €	19,96%	22,66%
PROVISIONS	0 €	0 €	0,00%	0,00%
LONG TERM LIABILITIES	1.115.709 €	1.068.408 €	62,04%	58,71%
CURRENT LIABILITIES	89.014 €	104.481 €	4,95%	5,74%
DEFERRED PAYMENT OF COSTS AND INCOME FROM FUTURE PERIOD	234.738 €	234.738 €	13,05%	12,90%
TOTAL - LIABILITIES	1.798.476 €	1.819.956 €	100,00%	100,00%

Data source: <https://infobiz.fina.hr/>



Composition of assets by Member State (average per farm in %)

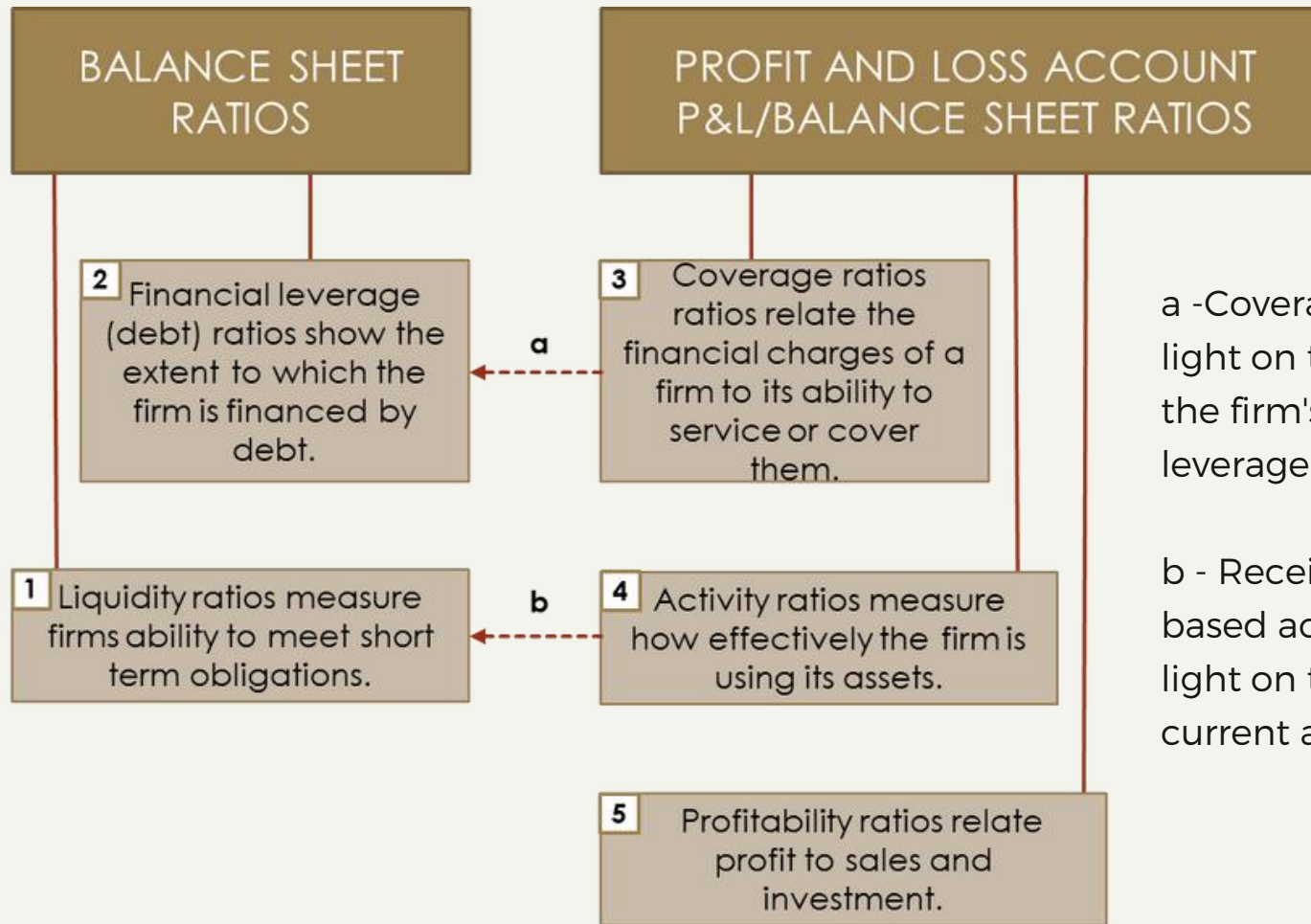


Source: EUROPEAN COMMISSION (2021) EU FARM ECONOMICS OVERVIEW FADN 2018

RATIO ANALYSIS

- Ratio analysis is used to measure the quantitative performance of a business.
- Ratios provide essential quantitative analysis, identifying positive and negative financial trends which allow businesses to create and implement financial plans and, if necessary, course-correct in the short term. Trends are studied to evaluate where the business is headed. It is also used to benchmark and study efficiency, liquidity, profitability, and solvency.
- A financial ratio is an index that relates two numbers and is obtained by dividing one number by the other.

TYPES OF RATIOS



a -Coverage ratios also shed light on the significance of the firm's use of financial leverage (debt).

b - Receivable and inventory-based activity ratio also shed light on the liquidity of these current assets.

Van horne, J.C., Wachowicz, J.M. (2009). Fundamentals of Financial Management. Prentice Hall.



FINANCIAL RATIOS - A TOOL FOR COMPARISONS

Financial ratios are used to compare a company's results to various performance benchmarks, such as:

- the firm's own historical financial ratios to detect improving and declining trends,
- comparable ratios from other companies in the same sector,
- or a comparison of current ratios to an earlier financial plan.

LIQUIDITY RATIOS

- Liquidity ratios are used to measure a firm's ability to meet short-term obligations.
- They compare short-term obligations with short-term (or current) resources (assets) available to meet these obligations.
 - Current assets – facilitate day-to-day operational expenses and investments. These types of assets are 'liquid', meaning that they can be readily converted into cash.
- From these ratios, much insight can be obtained into the present cash solvency of the firm and the firm's ability to remain solvent in the event of difficulty.

LIQUIDITY RATIOS

CURRENT RATIO

$$\frac{\text{current assets}}{\text{current liabilities}}$$

Measures a company's ability to pay due short-term obligations from its current assets.

Greater than 2 (indicative value).

QUICK RATIO

$$\frac{\text{current assets} - \text{inventories}}{\text{current liabilities}}$$

Shows the amount of current liabilities which the company can settle with quickly available assets.

1 or greater than 1 (indicative value).

CASH RATIO

$$\frac{\text{cash in the bank and petty cash}}{\text{current liabilities}}$$

Measures the ability of the company to settle its current liabilities with cash available on the day on which the balance sheet was compiled.

Minimum value 0,1.

WORKING CAPITAL

Net working capital = current assets – current liabilities

Gross working capital = current assets

Working capital is a measure of a company's liquidity and short-term financial health.

DEBT RATIOS

To assess the extent to which the firm is using borrowed money, we may use several different debt ratios.

Debt ratio

Shows the amount of the assets financed from debt capital.

$$\frac{\text{long term liabilities} + \text{current liabilities}}{\text{total assets}}$$

0.5 or less

Equity ratio

Shows the amount of assets financed from equity.

$$\frac{\text{capital and reserves} + \text{provisions}}{\text{total assets}}$$

greater than 0.5.

Leverage ratio

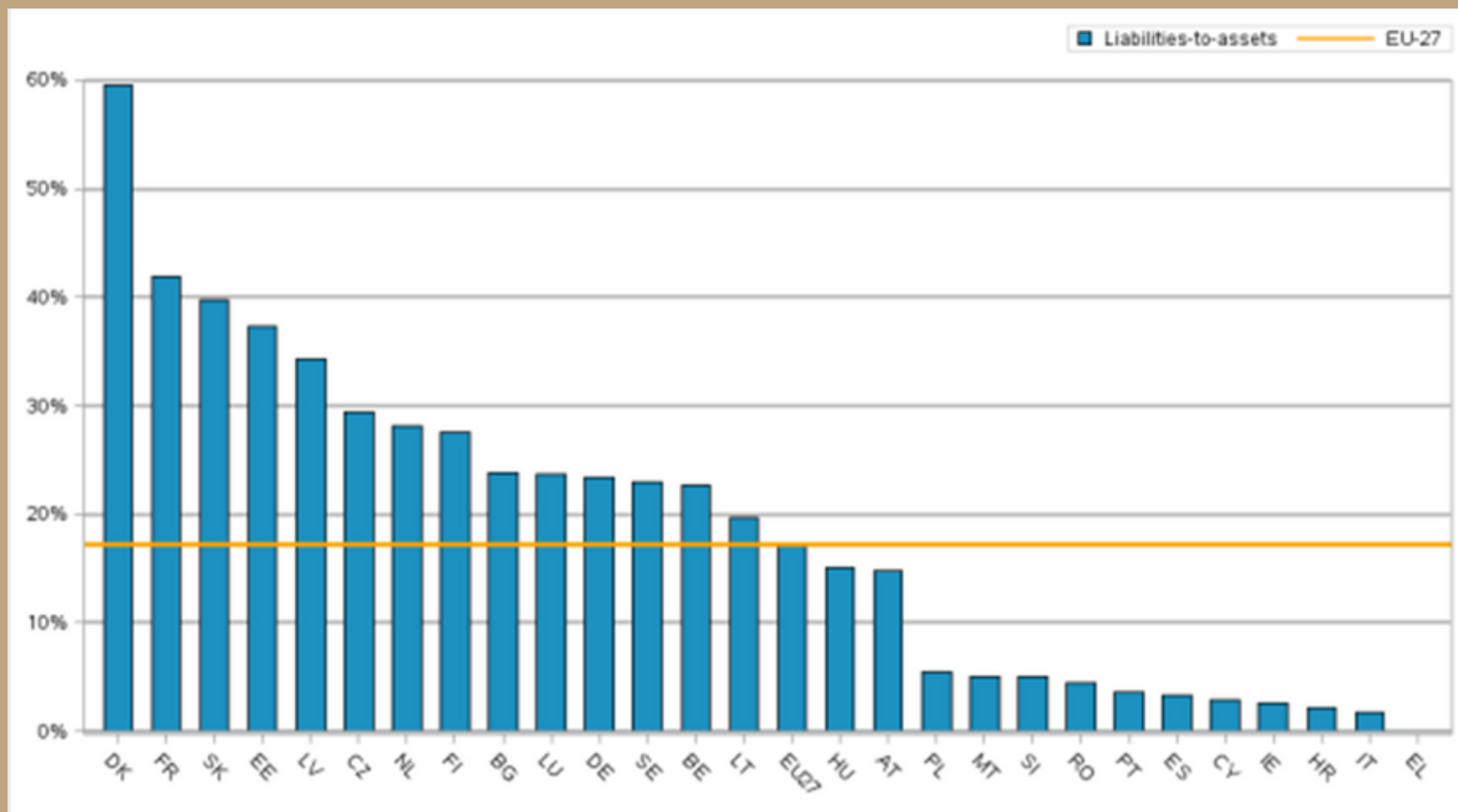
Measures the debt level of the company i.e. it shows the ratio of debt and own capital.

$$\frac{\text{long term liabilities} + \text{current liabilities}}{\text{capital and reserves} + \text{provisions}}$$

max. 1.



Farm debt ratio by Member state (average per farm in %)



Source: EUROPEAN COMMISSION (2021) EU FARM ECONOMICS OVERVIEW FADN



COVERAGE RATIOS

- Ratios that relate the financial charges of a firm to its ability to service, or cover them.
- One of the most traditional of the coverage ratios is the **interest coverage ratio** or **times interest earned**. This ratio is simply the ratio of earnings before interest and taxes for a particular reporting period to the amount of interest charges for the period; that is,

Earnings before interest and taxes (EBIT)* / Interest expense

- This ratio serves as one measure of the firm's ability to meet its interest payments and thus avoid bankruptcy. In general, the higher the ratio, the greater the likelihood that the company could cover its interest payments without difficulty. It also provides some insight into the company's ability to take on further debt.

ACTIVITY RATIOS

Activity ratios, also known as efficiency or turnover ratios, measure how effectively the firm is using its assets. Preferably, the value turnover ratio should be as large as possible.

Total asset turnover
= total income / total assets

- It shows how many times per year the company made a turnover of their total assets i.e. how much of total income it earned on one money unit of total assets.

Current asset turnover ratio
= total income / current assets

- It shows how many times per the year the company made a turnover its non-current assets. Preferably, the value of all turnover ratio should be as large as possible.

Time needed for collection of current receivables
= (short-term receivables / operating income) * 365

- It shows the average time necessary for the collection of current receivables. It is preferable that the number of days is as small as possible, i.e. that it takes less time to collect.

Days needed for trade payables =
(accounts payables / total expenses - financial expenses) * 365

- It indicates number of day company on average needs to settle liabilities towards the suppliers. Smaller number of days is indicative of quicker settlement of liabilities.

PROFITABILITY RATIOS

Provide data on how much profit the company makes in relation to total income, and in relation to investment. It is desirable that they are as high as possible.

$$\text{Return on Sales} = \frac{\text{profit or loss for the year}}{\text{total income}} * 100$$

- Represents the ratio of company's net profit and total revenues i.e. it shows the percentage of achieved revenues retained by the company's owners.

$$\text{Return on Assets} = \frac{\text{profit or loss for the year}}{\text{total assets}} * 100$$

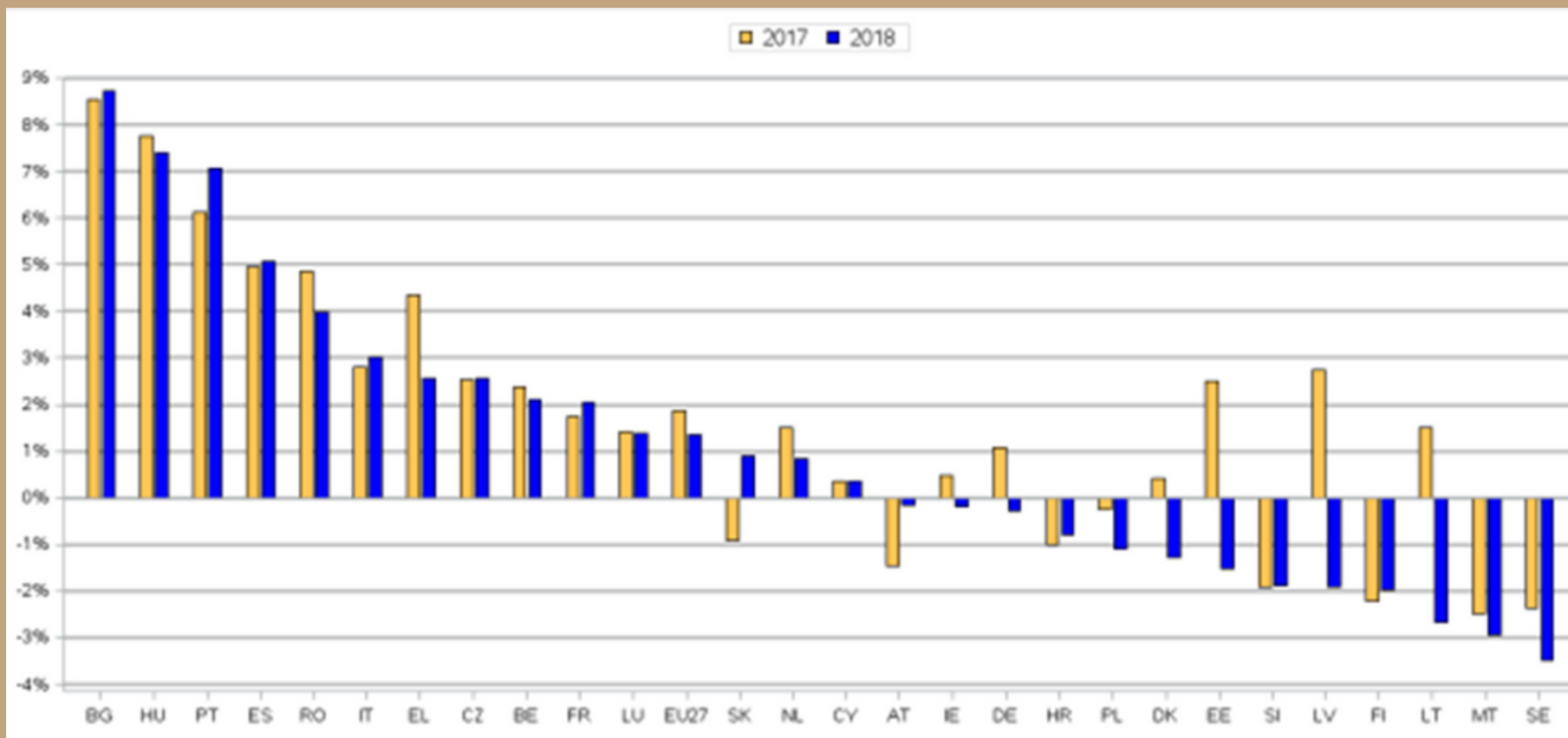
- Measures the effectiveness of a company's assets in generating income. It is interpreted as a rate of return the company managed to achieve on the total assets.

$$\text{Return on Equity} = \frac{\text{profit or loss for the year}}{\text{capital and reserves}} * 100$$

- Evaluates the ability of the company to generate returns (yield) for the equity owners.



Rate of return on assets by Member State in 2017 and 2018 (average per farm in %)?



Source: EUROPEAN COMMISSION (2021) EU FARM ECONOMICS OVERVIEW FADN 2018

RATIO ANALYSIS - EXAMPLE

INDICATOR	2021	INDUSTRY	INDICATIVE VALUE
LIQUIDITY RATIOS			
Cash ratio	0,28	0,19	> 0,1
Quick Ratio	1,28	0,81	≥ 1
Current Ratio	2,47	1,39	min 1; >2
DEBT RATIOS			
Debt ratio	0,64	0,57	≤ 0,5
Equity Ratio	0,23	0,47	> 0,5
Leverage ratio	2,84	1,03	max. 1
ACTIVITY (TURNOVER) RATIOS			
Total Asset Turnover Ratio	0,13	0,74	as large as possible
Current Asset Turnover Ratio	0,95	1,75	as large as possible
Time needed for collection of current receivables, in days	155,52	73,30	as small as possible
Time needed for collection of trade receivables, in days	48,70	48,27	as small as possible
Days needed for trade payables	46,49	54,61	as small as possible
PROFITABILITY			
Return on sales net, in %	21,81%	3,79%	as large as possible
Return on assets, net, in %	2,93%	2,81%	as large as possible
Return on equity (ROE), in %	12,93%	10,79%	as large as possible

<https://infobiz.fina.hr/>

- The performance and general success of your business depend on a variety of variables, including the sector in which you operate, your country's economic situation, your managerial abilities, your workforce, etc.
- The size of the business is one of these elements, and as a SME you must do a comprehensive study to find out all the characteristics of your company to better manage resources and compete with larger companies.
- Financial analysis will provide you with information on the basis of which it is possible to reflect and judge the business for the purpose of making decisions.



CONCLUSION

SOURCES

- Van horne, J.C., Wachowicz, J.M. (2009). Fundamentals of Financial Management. Prentice Hall.
- Žager. K. et al. (2008). Analiza financijskih izvještaja. Zagreb: Masmedia d.o.o.
- https://agriculture.ec.europa.eu/data-and-analysis/farm-structures-and-economics/fadn_en
- <https://infobiz.fina.hr/>
- <https://www.investopedia.com/>



PROJECT WOBIS

Enhancement of
Rural Women's
Associations as
a Chance for
Growth of Women
Entrepreneurship

WEB PAGE:

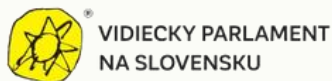
www.wobis2022.eu

FACEBOOK PAGE:

WOBIS



INFO



Co-funded by the
Erasmus+ Programme
of the European Union

