MODULE 03: FINANCIAL ANALYSIS

Lecture Title 04: ACCOUNTING RATIOS

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Undergraduate Diploma in Business Administration

ACADEMY

What we covered in Lecture 03

- International Accounting Standards
- Statutory Financial Statements
- The Income Statement
- The Balance Sheet
- Cash vs Profitability
- The Cashflow Statement



Financial Accounts

The financial accounts are:

- Legally required
- Focused on history (reports on the prior period)
- Are reported in a specific format
- Their rules are prescribed by standards
- Are defined to be reported annually, semi-annually, quarterly or even monthly
- Are mostly of monetary nature



Income statement ... or profit & loss a/c ?

- Provides information on the results of the business activity for the particular period
- Revenue: Turnover; Sales of Goods; Provision of Services; Other Income
- Cost of Sales: Opening/Closing Stock; Purchases; Manufacturing Costs
- GROSS PROFIT
- Expenses: Marketing; Administration; Financial
- Depreciation
- NET PROFIT before TAX



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Balance sheet... or statement of financial position !

- Provides a SNAP SHOT of the status and position of the Business Organisation at a PARTICULAR moment in time, e.g. 31 December 2021
- 3 main sections:
 - ASSETS
 - LIABILITIES
 - EQUITY / RETAINED EARNINGS



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Profitability represents the main measure of success within an organisation

Importance of Profitability



Hence owners or shareholders will decide whether the business is sufficiently profitable for them to retain their investment



This decision is based upon the owners' cost of capital

Cash Flow Statement Format

Cash flows from OPERATING activities PLUS or MINUS Cash flows from INVESTING activities PLUS or MINUS

Cash flows from **FINANCING** activities

EQUALS

NET increase (or decrease) in **cash equivalents** over the period



Today's Agenda







Financial Ratios

Profitability Ratios

Efficiency Ratios

Ratio Analysis

Ratio Analysis

- Many people associate this with interpretation
- Calculation of ratios and statistics
- No agreed definition of ratios
- Variation in terminology

• Areas of analysis (profitability, liquidity, efficiency and investment)



Interpreting Financial Information

- Ratios are used as a tool for interpreting financial information
- There is no generally accepted list of ratios to be applied to financial statements
- The ratios used depends on the needs of the user e.g. investor, employee, lenders
- There are various ways of calculating similar ratios
- Must be consistent in calculation of ratios for comparative purposes



Use of Ratio Analysis

- Ratios are useful because:
 - Provide a quick and simple means of interpreting a business' financial information
 - Provide a picture of a company's financial health
 - They enable comparisons between companies that may differ in size (direct comparison of figures may be misleading)
 - Highlight financial strengths and weaknesses of the business



Classifications of Ratios

Ratios may be grouped into the following categories:

- Profitability
- Efficiency
- Liquidity
- Financial gearing
- Investment



Profitability Ratios

How successful is the business at using resources to make profit?

Key ratios:

- Return on capital employed (ROCE)
- Return on Equity
- Gross profit margin
- Operating profit margin



Ratio Analysis and Profitability

- Profit before tax
- Compare to total capital employed
- Return on Capital Employed (ROCE)
- Return on Equity
- Basic calculation = profit/capital employed x 100



Return on Capital Employed

- Fundamental measure of business performance
- Primary measure of profitability comparing inputs (capital invested) with outputs (operating profit)



NAXXAR RETAIL COMPANY LIMITED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2022	
	€
REVENUE	
Sales - Clothing & Accessories	55,400
Sales - Shoes	26,645
TOTAL REVENUE	82,045
COST OF SALES	
Opening Stock	24,331
Purchases - Foreign	14,420
Purchases - Local	16,551
Closing Stock	- 19,445
COST OF GOODS SOLD	35,857
GROSS PROFIT	46,188
EXPENSES	
Accounting Fees	2,800
Bank Charges	921
Insurance	305
Legal Fees	5,500
Motor Expenses	1,960
Rent	1,560
Salaries and Wages	4,850
Sundry Expenses	806
Water & Electricity expenses	516
TOTAL EXPENSES	19,218
<u>NET PROFIT / (LOSS)</u>	26,970



NAXXAR RETAIL COMPANY LIMITED BALANCE SHEET		
AS AT 31 DECEMBER 2022		
	€	
FIXED ASSETS		
Buildings	58,000	
Shop Fixtures	3,960	
Motor Vans	3,500	
TOTAL FIXED ASSETS	65,460	
INVESTMENTS		
Investments in Shares of Other Companies	15,000	
CURRENT ASSETS	10 445	
Stock at End of Year Debtors	19,445	
	11,810 1,200	
Prepayments Bank Balances	1,134	
	1,134	
TOTAL CURRENT ASSETS	33,589	
TOTAL ASSETS	114,049	
REPRESENTED BY:		
EQUITY	22.222	
Share Capital	20,000	
Retained Earnings	35,521	
Profit for the Year	26,972	
TOTAL EQUITY	82,493	
LONG-TERM LIABILITIES		
Bank Loans (over 12 months repayments)	26,000	
CURRENT LIABILITIES	2.250	
Creditors Accruals	3,250	
	2,306	
TOTAL CURRENT LIABILITIES	5,556	
TOTAL EQUITY & LIABILITIES	114,049	

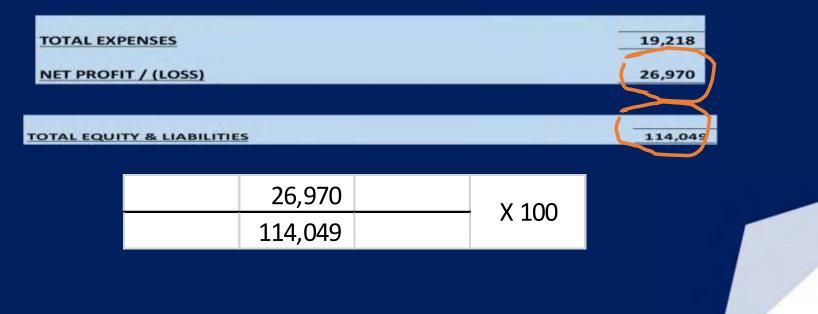


Return on Capital Employed

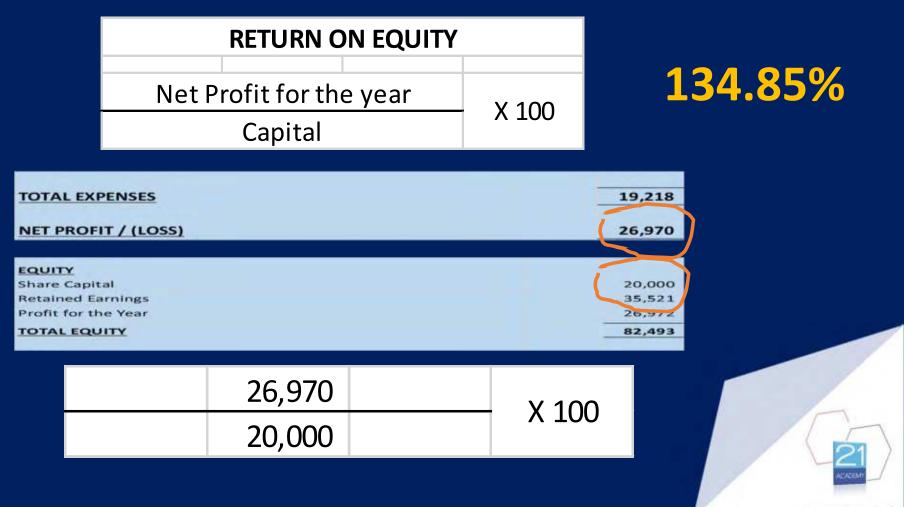
RETURN ON CAPITAL EMPLOYEDNet Profit for the yearX 100Equity + LiabilitiesX 100



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Return on Equity



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Gross Profit Margin

Measure of profitability

in buying or producing and selling goods or services before any other expenses are taken into account

X 100

Gross Profit

Sales Revenue



Gross Profit Margin

Gross Profit

Sales Revenue

X 100

46,188 X 100 82,045

<u>REVENUE</u> Sales - Clothing & Accessories

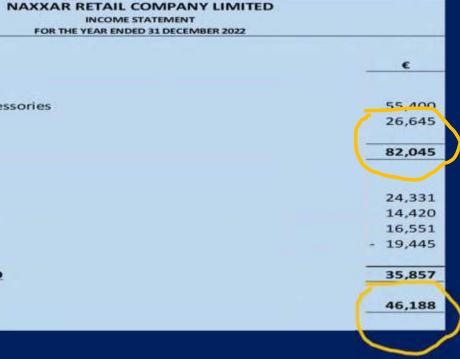
Sales - Clothing & Accesso Sales - Shoes

TOTAL REVENUE

COST OF SALES Opening Stock Purchases - Foreign Purchases - Local Closing Stock

COST OF GOODS SOLD

GROSS PROFIT



56.3%



Gross Mark-Up

Measure of profitability as a ratio over the **Cost of Sales** before any other expenses are taken into account

X 100

Gross Profit

Cost of Sales

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Gross Profit Mark-Up

Gross Profit

Cost of Sales

e
55,400
26,645
82,045
24,331
14,420
16,551
- 19,445
35,857
46,188

NAXXAR RETAIL COMPANY LIMITED

X 100

128.8%



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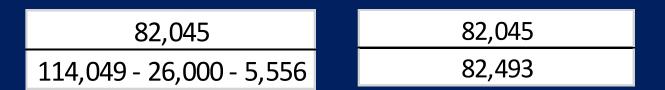
Ratio Analysis and Efficiency

- Efficient management of assets and liabilities
- Measuring productivity of assets by comparing asset values to sales revenue
- Measuring stock turnover/receivables collection/payables payment



Asset Turnover

Sales Net Assets



99.5%

Naxxar Retail Co. Ltd is just meeting its Net Assets Value at 99.5%. Efficient ??



Fixed Asset Turnover

Sales Fixed Assets

125.3%

Naxxar Retail Co. Ltd is generating revenue at 1.25 times.



Efficiency Ratios

Used to assess how successfully the various resources of the business are managed

Key ratios:

- Average inventories turnover period
- Average receivables settlement period
- Average **payables** settlement period



Average Inventories Turnover Period

• Measures the average period for which inventories are being held

(Opening Stock + Closing Stock) / 2 (Cost of Sales) / 365

• Average inventories held can be calculated as a simple average of opening and closing inventories for the year



Average Inventories Turnover Period

(Opening Stock + Closing Stock) / 2 (Cost of Sales) / 365

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Average Inventories Turnover Period

(Opening Stock + Closing Stock) / 2

(Cost of Sales) / 365

222.8 days



Average Receivables Settlement Period

 Calculates how long, on average, credit customers take to pay the amounts that they owe to the business

> Average trade receivables Credit Sales revenue

X 365

 Average trade receivables held can be calculated as a simple average of opening and closing trade receivables for the year

Opening Trade Receivables + Closing Trade Receivables

2



Average Receivables Settlement Period

X 365

Average trade receivables

Credit Sales revenue

- Opening Receivables = ?????
- Closing Receivables = € 11,810
- Credit Sales Revenue = € 82,045

Opening Trade Receivables + Closing Trade Receivables

2

Assumption 1

• Opening Receivables = € 13,500



Average Receivables Settlement Period

Average trade receivables

Credit Sales revenue

X 365

12,655

Opening Trade Receivables + Closing Trade Receivables

2

Assumption 1

• Opening Receivables = € 13,500



Average Receivables Settlement Period

X 365

Average trade receivables

Credit Sales revenue

56.3 days



Average Receivables Settlement Period

X 365

9,155

Average trade receivables

Credit Sales revenue

Opening Trade Receivables + Closing Trade Receivables

2

Assumption 2

• Opening Receivables = € 6,500



Average Receivables Settlement Period

Average trade receivables Credit Sales revenue

X 365

40.7 days



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Average Receivables Settlement Period

Average trade receivables X 365 Credit Sales revenue

Assumption 1: Op Receivables €13,500

Assumption 2: Op Receivables €6,500

56.3 days

40.7 days

The lower the Receivables The lower the Credit days

Average Payables Settlement Period

• Measures how long, on average, the business takes to pay those who have supplied goods and services on credit

Average trade payables	- X 365
Cost of Sales	

• Average trade payables held can be calculated as a simple average of opening and closing trade payables for the year

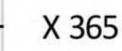
Opening Trade Payables + Closing Trade Payables

2



Average Payables Settlement Period

Average trade payables



Cost of Sales

Opening Trade Payables + Closing Trade Payables

2

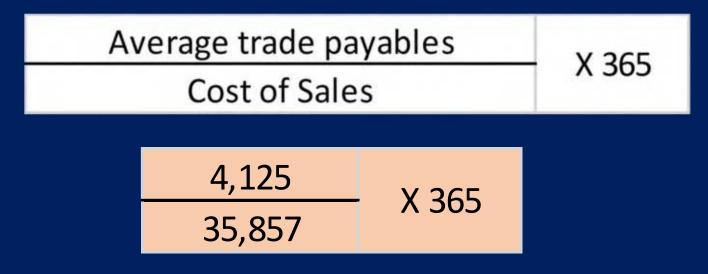
4,125

Assumption 3

• Opening Payables = € 5,000

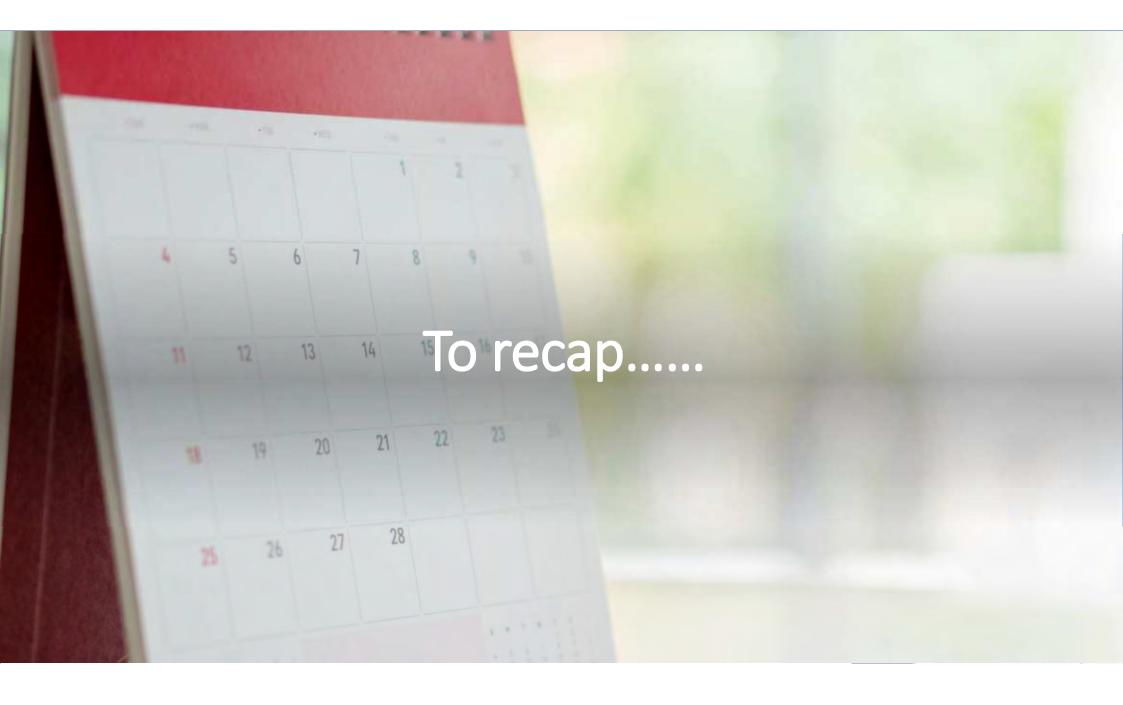


Average Payables Settlement Period

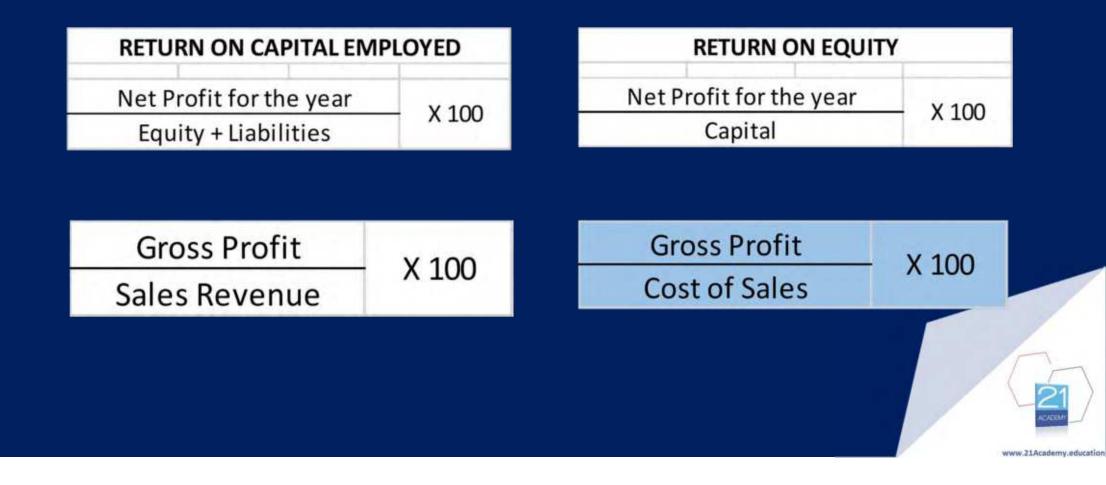


42 days





Profitability Ratios



Efficiency Ratios



X 365

Average trade payables

Cost of Sales





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