#### **MODULE 03: FINANCIAL ANALYSIS**

Lecture Title 04: ACCOUNTING RATIOS



Lecturer: Antoine P. Portelli

**Date: 22 January 2025** 

**Undergraduate Diploma in Business Administration** 

#### 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



# 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







Profitability represents the main measure of success within an organisation





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







**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
Sales - Silves	20,043
TOTAL REVENUE	82,045
TOTAL NEVEROL	02,043
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
<u>EXPENSES</u>	
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
TOTAL EXPENSES  NET PROFIT / (LOSS)	19,218

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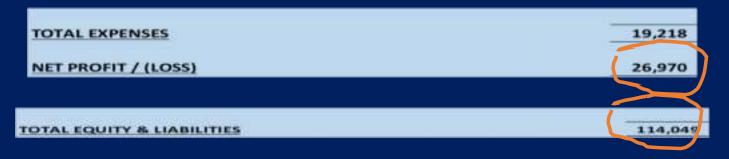
NAXXAR RETAIL COMPANY LIMITED  BALANCE SHEET AS AT 31 DECEMBER 2022	
	€
FIXED ASSETS	50.000
Buildings	58,000
Shop Fixtures Motor Vans	3,960
Motor vans	3,500
TOTAL FIXED ASSETS	65,460
INVESTMENTS	
Investments in Shares of Other Companies	15,000
CURRENT ASSETS	
Stock at End of Year	19,445
Debtors	11,810
Prepayments	1,200
Bank Balances	1,134
TOTAL CURRENT ASSETS	33,589
TOTAL ASSETS	114,049
- CTAL ASSETS	114,045
REPRESENTED BY:	
EQUITY	
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	
Creditors	3,250
Accruals	2,306
TOTAL CURRENT LIABILITIES	5,556
TOTAL EQUITY & LIABILITIES	114,049



# Return on Capital Employed

RETURN ON CAPITAL EMPLOYED		
Net Profit for the year	V 100	
Equity + Liabilities	X 100	

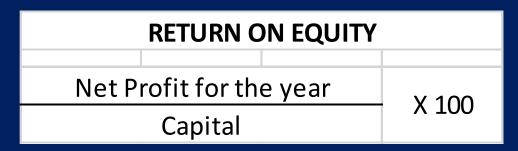
23.65%



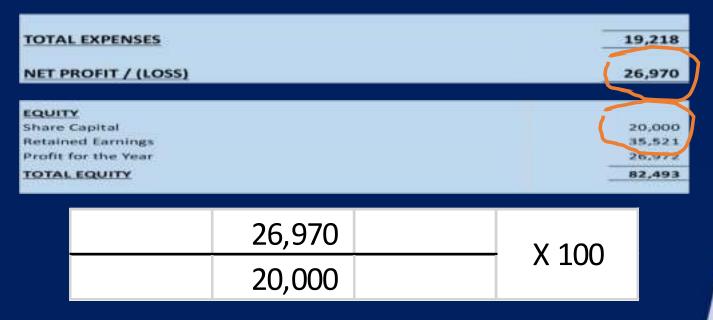
26,970	X 100
114,049	V 100



# **Return on Equity**



134.85%





### **Gross Profit Margin**

Measure of profitability ....

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

**Gross Profit** 

Sales Revenue

X 100



### **Gross Profit Margin**

**Gross Profit** 

Sales Revenue

X 100

46,188

82,045

X 100



56.3%



### **Gross Mark-Up**

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

Gross Profit

Cost of Sales

X 100



### **Gross Profit Mark-Up**

**Gross Profit** 

Cost of Sales

X 100

82,045

24,331 14,420

16,551

19,445

35,857

46,188

46,188

35,857

X 100

FOR THE YEAR ENDED 31 DECEMBER 202			TATEMEN	
LOU THE LESSY EMPED 21 DECEMBER 505	FOR THE	YEAR ENDE	D 31 DECE	MBER 2022

REVENUE

Sales - Clothing & Accessories 55,400 26,645 Sales - Shoes

TOTAL REVENUE

COST OF SALES

Opening Stock Purchases - Foreign Purchases - Local

Closing Stock

COST OF GOODS SOLD

**GROSS PROFIT** 

128.8%



## 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** 

82,045
114,049 - 26,000 - 5,556

82,045	
82,493	

99.5%

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



#### **Fixed Asset Turnover**

Sales

**Fixed Assets** 

82,045

65,460

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

NAXXAR RETAIL COMPANY LIMITED INCOME STATEMENT	
FOR THE YEAR ENDED 31 DECEMBER 2022	
	c
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GROSS PROFIT	46,188



## **Average Inventories Turnover Period**

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

> (24,331 + 19,445) / 2 35,857 / 365

> > **222.8** days



 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



#### Average trade receivables

Credit Sales revenue

X 365

- 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 trade receivables

Credit Sales revenue

X 365

Opening Trade Receivables + Closing Trade Receivables

2

#### Assumption 1

Opening Receivables = € 13,500

(13,500 + 11,810)

2

12,655



Average trade receivables

Credit Sales revenue

X 365

12,655

82,045

X 365

56.3 days



Average trade receivables

X 365

Credit Sales revenue

Opening Trade Receivables + Closing Trade Receivables

2

#### Assumption 2

• Opening Receivables = € 6,500

$$(6,500 + 11,810)$$

9,155

2



Average trade receivables

Credit Sales revenue

X 365

9,155

82,045

X 365

40.7 days



### **Average Receivables Settlement Period**

Average trade receivables

Credit Sales revenue

X 365

Assumption 1: Op Receivables €13,500

12,655 X 365 82,045 Assumption 2: Op Receivables €6,500

9,155 82,045 X 365

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

Cost of Sales

X 365

 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



# **Average Payables Settlement Period**

Average trade payables

Cost of Sales

X 365

Opening Trade Payables + Closing Trade Payables

2

#### Assumption 3

• Opening Payables = € 5,000

(5,000 + 3,250)

2

4,125



## **Average Payables Settlement Period**

Average trade payables

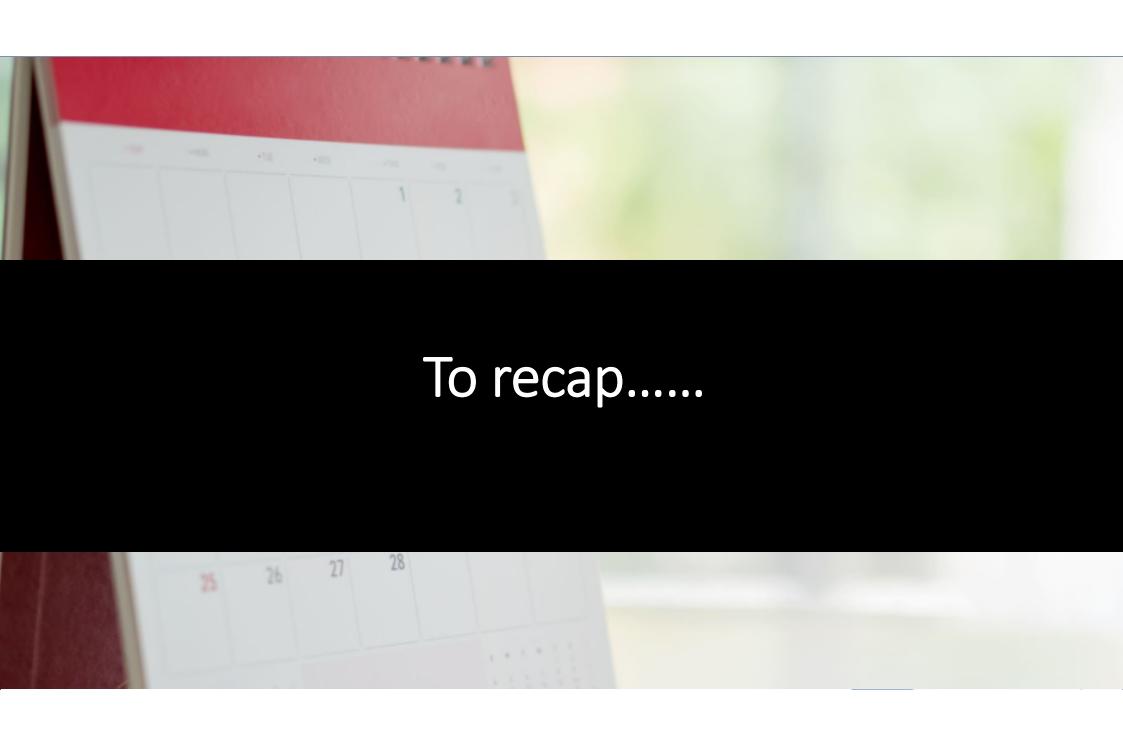
Cost of Sales

X 365

4,125 35,857 X 365

42 days





# **Profitability Ratios**

RETURN ON CAPITAL EMP	LOYED
Net Profit for the year	V 100
Equity + Liabilities	– X 100

RETURN ON EQUITY	
Net Profit for the year	V 100
Capital	- X 100

Gross Profit X 100
Sales Revenue

Gross Profit X 100
Cost of Sales



## **Efficiency Ratios**

Sales

**Net Assets** 

Sales

**Fixed Assets** 

(Opening Stock + Closing Stock) / 2

(Cost of Sales) / 365

Average trade receivables

Credit Sales revenue

X 365

Average trade payables

Cost of Sales

X 365



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