### **Questions**

- Να δώσετε τρεις λόγους γιατί είναι σημαντικό να υπολογίζεται η απόδοση μιας επιχείρησης
- 2. Να εξηγήσετε γιατί μια επιχείρηση μπορεί να επιθυμεί τη μείωση της μέσης Περιόδου είσπραξης των χρεωστών της
- **3. (a)** The average inventory of a business is €60.000 and its Cost of Sales is €480.000. Calculate the Inventory Turnover ratio of the business. (Answer 8 times)

Inventory Turnover ratio:

(b) A sole trader's Capital employed was €800.000 and his Net profit for the year was €240.000.

Calculate his Return on Capital employed (Answer 30%)

Return on Capital employed:

(c) The sales of sole trader were €300.000, his gross profit was €80.000 and his Net profit €30.000.

Calculate the (i) Gross profit percentage and (ii) Net profit percentage (In two decimal places) Answer (i) 26,67 %( ii) 10%

(i) Gross profit percentage (margin):

(ii) Net profit percentage (margin):

- 4. (a) A business has Current Assets of €70.000, Current Liabilities of €40.000 and Closing Inventory of €22.000.
  Calculate the (i) Current ratio (ii) Acid Test ratio Answer (i) 1,75:1(ii) 1,2:1
  - (i) Current ratio:
  - (ii) Acid Test ratio

(b) A sole trader has Trade receivables of €24.000, Trade payables of €30.000, credit purchases of €150.000 and credit sales of €140.000 Calculate the (i) Average collection days (ii) Average payment days Answer (i) 62,57 days (ii) 73 days

(i) Average collection days:

(ii) Average payment days:

## EXERCISES

**1.** Christina buys and sells goods on credit. The following balances were available at 31 March 2014:

	€
Capital	50.000
Inventory	37.000
Trade payables	35.000
Trade receivables	13.000
Non-current assets	45.000
Bank overdraft	5.000

## REQUIRED:

(a) Calculate the:

(i) Current ratio

(ii) Liquid (acid test) ratio.

(b) Comment upon the ratios in (a) above.

## ANSWER 1:

a) (i) Current ratio 
$$\frac{50.000}{40.000} = 1,25:1$$
  
(ii) Liquid acid test ratio  $\frac{13.000}{40.000} = 0,325:1$ 

b) Both ratios are low

2. The following information is given for Brown & Pink plc for the year ended 31 May 2017:

Statement of Profit or Loss (extract)	€
Operating profit	313.000
Debenture interest	(70.000)
Profit before taxation	243.000
Taxation	(93.000)
Profit after taxation	150.000

#### Note

Dividends paid: Preference €14.000 Ordinary €80.000

## **Statement of Financial Position (extract)**

Equity & Liabilities	€
Ordinary shares €1	250.000
7% preference shares	200.000
Share premium	62.000
Revaluation reserve	120.000
Retained earnings	95.000
	727.000
Non-Current Liabilities	
7% Debentures	1.000.000
	1.727.000
Market price per ordinary share	€6,80

### **REQUIRED**:

Calculate the following investment ratios for Brown & Pink plc at 31 May 2017:

- i) EPS
- ii) Ordinary dividend cover
- iii) Dividend yield
- iv) P/E ratio

- v) Dividend paid per share
- vi) Gearing ratio

Note: Give the answers above in two decimal places

#### **ANSWER 2**

(a) (i) Earnings per Share (EPS) =  $\frac{Profit after tax-preference share dividend}{Number of ordinary shares}$ 

$$= \frac{\text{(}150.000 - \text{(}14.000)}{250.000 \text{ shares}} = \text{(}0,54$$

(ii) Ordinary dividend cover= $\frac{Net Profit after tax-preference share dividend}{ordinary share dividend}$  $=\frac{\pounds 150.000 - \pounds 14.000}{\pounds 80.000} = 1,7 \text{ times}$ 

(iii) Dividend yield =  $\frac{dividend \ per \ share^*}{market \ price \ of \ a \ share} x100 = \cdots \%$ 

\*Total dividend/no of shares=€80.000/250.000 shares = €0,32

$$=\frac{\text{€0,32}}{\text{€6,8}}x100 = 4,71\%$$

(iv) Price/Earnings (P/E ratio) =  $\frac{Market Price}{Earning per Share} = \cdots times$ 

$$=\frac{\text{€6,8}}{\text{€0,54}} = 12,6 \text{ times}$$

(v) Gearing ratio= Gearing ratio =  $\frac{Fixed Return Funding}{Total Capital Employed*} \times 100 = \cdots ?\%$ 

$$=_{\underbrace{\emptyset = 1.000 + \emptyset = 200}{\emptyset = 1.727*}} \times 100 = 69,48\%$$

\*€1.000 + €727

3. The following information is given for Exterior plc for the year ended 31 December 2017

#### Statement of Profit or Loss (extract)

€

Operating profit	630.000
Debenture interest	
Profit before taxation	630.000
Taxation	(250.000)
Profit after taxation	380.000

#### Note

Dividends paid Preference €42.000 Ordinary €100.000

## Statement of Financial Position (extract)

Equity & Liabilities	
Ordinary shares €0,50	250.000
7% preference shares	600.000
Retained earnings	1.077.000
	1.927.000
Market price per ordinary share	€4,10

## **REQUIRED**:

Calculate the following investment ratios for Exterior plc at 31 December 2017:

- i) EPS
- ii) Ordinary dividend cover
- iii) Dividend yield
- iv) P/E ratio
- v) Gearing ratio

(Answers above in two decimal places)

#### **ANSWER 3**

((i) Earnings per Share (EPS) = 
$$\frac{Profit after tax-preference share dividend}{Number of ordinary shares}$$
$$= \frac{\underbrace{380.000 - \underbrace{42.000}}{500.000 shares} = \textcircled{0,68}$$

(ii) Ordinary dividend cover= $\frac{Net Profit after tax-preference share dividend}{ordinary share dividend}$  $=\frac{\underbrace{380.000-\underbrace{42.000}_{\underbrace{100.000}}=3,38 \text{ times}}{\underbrace{100.000}}=3,38 \text{ times}$ (iii) Dividend yield= $\frac{dividend per share*}{market price of a share} x100 = \cdots \%$ 

\*Total dividend/no of shares=€100.000/500.000 shares

$$= \frac{\mathbf{0.2}}{\mathbf{0.4}} x100 = \mathbf{4.88\%}$$

(iv) **P/E ratio**=
$$\frac{Market Price}{Earning per Share} = \cdots times$$

$$=\frac{\epsilon_{4,1}}{\epsilon_{0,68}}=6,03$$
 times

(v) Gearing ratio =  $\frac{Fixed Return Funding}{Total Capital Employed*} \times 100 = \cdots ?\%$ 

$$= \frac{\text{€600}}{\text{€1.927}} \times 100 = 31,14\%$$

**4.** The following information is given for Honey Bee Gardens plc for the financial year ended 31 December 2017 is as follows:

Net profit after interest and tax	€560.000
Total ordinary dividend paid for year	€480.000
Issued share capital	€8.000.000 Ordinary shares of €1 each
Capital employed	€12.000.000
market price per share	€0,84 per Share

### **REQUIRED:**

- (a) Calculate the following ratios, clearly stating the formula used:
  - i. Return on Capital employed
  - ii. Earnings per ordinary share
  - iii. Dividend paid per share
  - iv. Dividend cover
  - v. Price/earnings ratio
  - vi. Dividend yield.

Figures for the industry average are as follows:

Return on capital employed	6,5%
Earnings per ordinary share	€0,08 per share
Dividend per share	0,05 per share
Dividend cover	2,5 times
Price/earnings ratio	9 times
Dividend yield	4%

(b) Evaluate the performance of Honey Bee Gardens plc compared to the industry average, for the financial year ended 31 December 2017

# ANSWER 4

(a)(i)					
Return on Capital employed = <u>Net profit after interest and tax</u> x 100					
	Capita	l employed	000 x 100 -		
		= <u>€300</u> €12.0	000.000 – 000.000	4,67%	
(ii)					
Earnings per ordinary share =	= <u>Net profit after ir</u>	nterest and ta	<u>x</u>		
	Issued oi = €560.000	rdinary shares	5 =	€0,07 per	
	8.000.000			share	
(iii)					
Dividend paid per share = $\underline{T}$	otal ordinary divid	l <u>end </u> = € <u>480</u> shares 8.00	<u>).000  </u> =	€0,06 per	
	issued ordinary .	5110105 0.00	0.000	share	
(iv)					
Dividend cover = <u>Net profit a</u>	fter interest and ta	<u>ax</u> = <u>€560.00</u>	<u>0</u> =	1 17 times	
Total	ordinary dividend	€480.00	0		
(11)					
(v) Prico/corpings ratio –	Market price of s	haro – <i>E</i> 0	81 -	12 timos	
Flice/earnings failo –	Price/earnings ratio = <u>Market price of snare</u> = $\underbrace{\neq 0,84}_{\equiv}$ = 12 times Earnings per share $\underbrace{\neq 0,07}_{\equiv}$				
(vi) Dividend vield – Divi	dond por oboro v	100- <i>E</i> 0.06 v	100 -	7 1 40/	
Dividend yield = Dividend per share $x_100 = \underbrace{0,06}_{x_100} x_100 = 7,14\%$ Market price of share 0,84					
	Industry	Honey Bee	(b) Comments	on	
	average	Gardens	the busine	SS	
			performar	nce	
Return on capital employed	6,5%	4,67%	Worse by 1,83	3%	
Earnings per ordinary share	€0,08 per share	€0,07 per share	Worse by €0,	01	
Dividend per share	0,05 per share	€0,06 per	It's better from	the	
		share	shareholders p	point of	
Dividend cover	0 E times	4 47 4	view by €0,01	22.00.75	
Dividend cover	∠,ວ times	1,17 times	funds retained	,33 so no in the	
			business but b	etter for the	
			shareholders p	point of	
			view as nigher		

			percentage of dividend is paid out by 1,33
Price/earnings ratio	9 times	12 times	Better than industry by 3 times
Dividend yield	4%	7,14%	It's better from the shareholders point of view by 3,14%

### **QUESTION 5:**

### The following information is provided for Apollo plc as at 31 March 2017:

	€000
Ordinary share of €1 each	3.486
6% Preference shares of €10 each	1.400
7% Debenture stock 2025/2026	1.000
Reserves	2.114
Operating profit before tax	1.250
Corporation tax	380
Dividend cover	6 times
Market price of ordinary shares	€5,50

	Formula	31 March	31 March	31 March
	Formula	2015	2016	2017
EPS		17,8 cents	18,74 cents	
Ordinary dividend paid per share		3,1 cents	3,3 cents	
P/E ratio		24,5	25,7	
Dividend yield		0,6%	0,6%	
Gearing		2,3%	18,62%	

#### **REQUIRED:**

- a) Calculate the ratios shown as at 31 March 2017.
- b) Complete the table and comment on the trends shown over the three years.

## **ANSWER 5**

	31 March 2015	31 March 2016	31 March 2017	(b)COMMENTS ON TREND
EPS	17,8 cents	18,74 cents	22,55 cents	Improving due to increase in profitability
Ordinary dividend paid per share	3,1 cents	3,3 cents	3,76 cents	Improving rather slowing
P/E ratio	24,5	25,7	24,39	Remained the same
Dividend yield	0,6%	0,6%	0,68%	Remains very low
Gearing	2,3%	18,62%	30%	Had a significant increase which is not good but is still at a low level

# Workings:

Γ

Earnings per ordinary share = ( <u>Net profit after interest and tax-PS div.)*</u> Issued ordinary shares * Profit available for dividend to ordinary				
= <u>€1.250.000-€380.000-€84.000</u> = <u>€786.000</u> 3.486.000 shares 3.486.000 shares *1.400.000 x 6%	22,55 cent per share			
Dividend paid per share = <u>Total ordinary dividend</u> = € <u>131.000*</u> = Issued ordinary shares 3.486.000 shares	3,76 cent per share			
* <u>€1.250.000-€380.000-€84.000</u> = <u>€786.000</u> 6 6				
P/E ratio = $\frac{Market \ Price}{Earning \ per \ Share} = \frac{5,5}{0,2255} = 24,39$				
Dividend yield = <u>Dividend per share x</u> 100= € <u>0,037</u> x 100 = Market price of share €5.5	0,67%			

Gearing =	<u>Fixed return funding</u> x 100 = Total Capital employed		
	€1.400.000+€1.000.000	$x 100 = \frac{2.400.000}{8.000.000} \times 100 =$	30%
€3.486.000	0+€1.400.000+ €1.000.000+€2.114.0	00	