

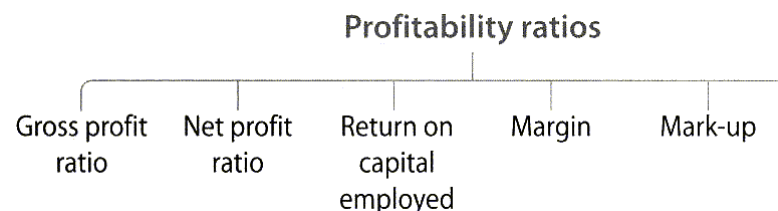
Chapter 16 Financial analysis (財務報表分析)

16.2 Accounting ratios (會計比率)

Accounting ratios (會計比率) express (表達) meaningful relationships (有意義的關係) between different figures (項數字之間) in the financial statements (財務報表內).

16.2.1 Profitability (盈利能力)

Profitability (盈利能力) refers (是指) to the ability (能力) of a business to generate profits (賺取利潤). The most commonly used ratios (最常用比率) are given below:



$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{\text{Net Sales}} \times 100\% \quad \text{毛利率} = \frac{\text{毛利}}{\text{銷貨}} \times 100\%$$

$$\text{Net profit ratio} = \frac{\text{Net profit}}{\text{Net Sales}} \times 100\% \quad \text{淨利率} = \frac{\text{稅前淨利}}{\text{銷貨}} \times 100\%$$

$$\text{ROCE} = \frac{\text{Net profit}}{\text{Capital employed}} \times 100\% \quad \text{運用資金報酬率} = \frac{\text{利息及稅前淨利}}{\text{平均運用資金}} \times 100\%$$

Gross profit ratio/Margin (毛利率/邊際)

$$\text{Margin} = \text{Gross profit ratio} = \frac{\text{Gross profit}}{\text{Net Sales}} \times 100\% \quad \text{邊際} = \text{毛利率} = \frac{\text{毛利}}{\text{銷貨}} \times 100\%$$

Mark-up (加成)

$$\text{Mark-up} = \frac{\text{Gross profit}}{\text{Cost of goods sold}} \times 100\% \quad \text{加成} = \frac{\text{毛利}}{\text{銷貨成本}} \times 100\%$$

When a business sets prices (定價) for its goods, it is a common practice (一般) to apply (應用) the following formula (下列公式):

$$\text{Gross profit} = \text{Selling price} \times \text{Margin} \quad \text{毛利} = \text{售價} \times \text{邊際}$$

$$\text{Gross profit} = \text{Cost} \times \text{Mark-up} \quad \text{毛利} = \text{成本} \times \text{加成}$$

$$\text{Selling price} = \text{Cost} \times (1 + \text{Mark-up}) \quad \text{售價} = \text{成本} \times (1 + \text{加成})$$

$$\text{Selling price} = \text{Cost} \times (1 + \text{Mark-up}) \quad \text{售價} = \text{毛利} / \text{邊際}$$

Classwork 1

1. If an item costs \$20 and is sold for \$25, what is the (a) mark-up and (b) margin?

- (a) _____
- (b) _____

2. If an item costs \$60 and is sold for \$90, what is the (a) mark-up and (b) margin?

- (a) _____
- (b) _____

3. If a commodity costs \$100 and is sold at a mark-up of 25%, what is the selling price of the commodity.

5. Given that the cost of goods sold and the mark-up of a business for a certain year are \$180,000 and 50%, respectively. Calculate the margin for the year in two ways:

(a) Find the sales and the gross profit first, then calculate the margin.

- (a) _____
- _____
- _____

6. It is given the price of the goods is at 25% above cost and the following information for the year ended 31 March 2010:

	\$
Inventory as at 1 April 2009	4,936
Inventory as at 31 March 2010	6,310
Sales for the year	30,000

(a) What is the mark-up of the goods.

(b) Calculate the cost of goods sold, gross profit and the purchases for the year ended 31 March 2010.

- (a) _____
- (b) _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Return on capital employed (ROCE) (運用資金報酬率)

$\text{ROCE} = \frac{\text{interest and profit before tax}}{\text{average capital employed}} \times 100\% \quad \text{運用資金報酬率} = \frac{\text{利息及稅前淨利}}{\text{平均運用資金}} \times 100\%$

Capital employed =

1. **Sole proprietorships (獨資企業):** capital balance (資本帳餘額)
2. **Partnerships (合夥):** capital account balances + current account balances (if any) (資本帳戶 + 往來帳戶(如有))
3. **Limited companies (有限公司):** non-current liabilities (非流動負債) + shareholders' fund (股東資本)

Sole proprietorships (獨資企業)

Capital balance = (opening capital + closing capital) / 2 (期初及期末平均值). If the opening balances are not given, the end-of-period balances would have to be used instead.

Limited companies (有限公司)

Shareholders' fund = Share capital and reserves. (股本及儲備)

= Ordinary and preference share (普通和優先股) + Reserve (儲備) + Share premium (股本溢價)
+ Retained profits (留存利潤)

Homework 16.5

The following figures were extracted from Global Trading Ltd's financial statements:

Income Statement for the year ended 31 March 2010 (extract)

	\$	\$
Finance costs		80,000
Profit before tax		2,770,000
Less income tax expense		415,000
Profit after tax		2,355,000
Add Retained earnings brought forward		346,000
		2,701,000
Less Appropriations:		
Ordinary dividend paid	1,600,000	
Transfer to general reserve	200,000	1,800,000
		901,000

Statement of Financial Position as at 31 March 2016 (extract)

	\$
Equity	
Ordinary share capital (\$1 per share)	8,000,000
General reserve	300,000
Retained earnings	901,000
	9,201,000
Non-current liabilities	
4% debentures	2,000,000

Additional information:

The closing share price on 31 March 2016 was \$2.35 per share.

Required:

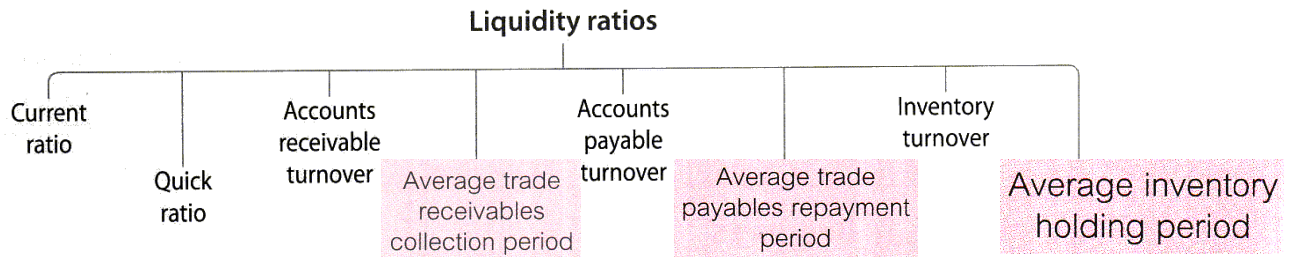
Calculate (to two decimal places) the following ratios for Global Trading Ltd:

- (a) Return on capital employed (based on closing balances)

(a) _____

16.2.2 Liquidity (變現能力)

Liquidity refers to the ability of a business to meet its short-term obligations (變現能力是指企業償還短期債項的能力).



$$\text{Current ratio/working capital} = \frac{\text{Current Assets}}{\text{Current liabilities}} : 1$$

$$\text{營運資金 / 流動比率} = \frac{\text{流動資產}}{\text{流動負債}} : 1$$

$$\text{Quick /liquid ratio/acid test} = \frac{\text{Current assets} - \text{Inventories}}{\text{Current liabilities}} : 1$$

$$\text{速動比率 / 酸性測驗} = \frac{\text{流動資產} - \text{存貨}}{\text{流動負債}} : 1$$

Trade receivable turnover (應收貨款周轉率)

$$\text{Trade receivable turnover (times)} = \frac{\text{Net credit sales}}{\text{Average account receivables}}$$

$$\text{應收貨款周轉率 (次)} = \frac{\text{賒銷}}{\text{平均應收貨款}}$$

Trade receivable turnover (應收貨款周轉率) measure (量度) the size (比例) of **accounts receivable (應收貨款)** relative to (相對) sales (銷貨額). When **this ratio increases (比率越高)**, it means that the **accounts receivable (應收貨款)** are being **collected (收回)** more **quickly (較快)** by the business. The **liquidity (變現能力)** to the business has improved (改善). If the ratio is **too low (比率太低)**, this may indicate that the company has been **too generous (太過寬鬆)** in **granting credit (提供信貸)**.

Average trade receivable collection period (賒銷期限)

$$\text{average trade receivable collection period} = \frac{\text{Average account receivable}}{\text{Net credit sales}} \times 365 \text{ days} / 12 \text{ months}$$

$$\text{賒銷期限} = \frac{\text{平均應收貨款}}{\text{賒銷}} \times 365 \text{ 日} / 12 \text{ 月}$$

average trade receivable collection period (credit period allowed to trade debtors) (賒銷期限) measures (量度) the **average time (平均所需的時間)** a business takes to collect accounts receivable (收回應收貨款). This is the indicators of the **effectiveness of credit control (信貸控制的有效性)**. The **lower the ratio (比率越低)**, the **faster (速度越快)** the business is in **collecting its accounts receivable (收回應收貨款)**. If the ratio is **too high (比率太高)**, this may indicate that the company has **difficulty (困難)** in **collecting its accounts receivable (收回應收貨款)**. The management should always ensure all accounts receivable are collected on time. Otherwise, the liquidity of the business will be **adversely affected (不良影響)**.

This ratio can also be expressed in weeks:

$$\text{average trade receivable collection period} = \frac{\text{Average account receivable}}{\text{Net credit sales}} \times 52 \text{ weeks}$$

$$\text{賒銷期限} = \frac{\text{平均應收貨款}}{\text{賒銷}} \times 52 \text{ 星期}$$

Homework 16.6X

The following figures were extracted from Hope Co's financial statements:

Income Statement for the year ended 31 March 2015 (extract)

	\$	\$
Sales (all credit)		1,260,000
Less Cost of sales:		
Opening inventory	82,000	
Add Purchases (all credit)	660,000	
	742,000	
Less Closing inventory	96,000	646,000
Gross profit		<u>614,000</u>

Statement of Financial Position as at 31 March 2016 (extract)

	2015	2014
	\$	\$
Current assets		
Inventory	96,000	82,000
Trade receivables	185,000	161,000
Bank and cash	73,000	89,000
	<u>354,000</u>	<u>332,000</u>
Current liabilities		
Trade payables	84,000	72,000

Required:

Calculate (to two decimal places) the following ratios for Good Hope Co in 2015:

- (a) Current ratio
- (b) Quick ratio
- (c) Trade receivables turnover
- (d) Average trade receivables collection period (days)

(a) _____

(b) _____

(c) _____

(d) _____

Classwork 4

Given the net sales and the average accounts receivable of a business for the year are \$270,000 and \$60,000, respectively.

- (a) Calculate the accounts receivable turnover and day's sales in accounts receivable for the year.
- (b) Did the business have effective credit control? Assume that the normal credit period granted by the business was 60 days while the average days' sales in accounts receivable of other businesses in the same industry was 75 days.

(a) _____

(b) _____

Accounts payable turnover (應付帳款周轉率)

$$\text{Accounts payable turnover (times)} = \frac{\text{Net credit purchases}}{\text{Average account payable}} \quad \text{應付貨款周轉率(次)} = \frac{\text{賒購}}{\text{平均應付貨款}}$$

Accounts payable turnover (應付帳款周轉率) measures (量度) the relative to (相對比例) purchases size (購貨額) of accounts payable (應付帳款). When this ratio increases (比率越高), it means that the accounts payable (應付帳款) are being paid (支付) more quickly (較快) by the business. The liquidity (變現能力) of the business has improved (改善) but a high accounts payable turnover (太高的應付帳款周轉率) might also mean that the business is not receiving (未能取得) very favourable payment terms (優惠的付款條件) from its suppliers (供應商).

Average trade payables repayment period (賒購期限)

$$\text{average trade payables repayment period} = \frac{\text{Average account payable}}{\text{Net credit purchases}} \times 365 \text{ days / 12 months}$$
$$\text{賒購期限} = \frac{\text{平均應付貨款}}{\text{賒購}} \times 365 \text{ 日 / 12 月}$$

Average trade payables repayment period (credit period received from trade creditors, days' purchases unpaid) (賒購期限) measures (量度) the average time (平均所需的時間) a business takes to settle accounts payable (支付應付帳款). This is the indicators of the effectiveness of credit control (信貸控制的有效性). The lower the ratio (比率越低), the faster (速度越快) the business is in settling its accounts payable (支付應付帳款). The ratio should be in reasonable value. This means the management should always ensure all accounts payable are settled on time (按時支付). Otherwise, its supplier may stop supplying goods or services and the operations of the business would be disrupted (打亂). However, the ratio should not be too low (比率太低). This is because credit periods (信貸期) are interest-free (免息) and therefore a customer can keep more cash on hand by not paying before due dates (到期日).

This ratio can also be expressed in weeks or months:

$$\text{average trade payables repayment period} = \frac{\text{Average account payable}}{\text{Net credit purchases}} \times 52 \text{ weeks}$$
$$\text{賒購期限} = \frac{\text{平均應付貨款}}{\text{賒購}} \times 52 \text{ 星期}$$

Classwork 5

Given the net purchases and the year-end accounts payable of a business for the year are \$220,000 and \$20,000, respectively.

- (a) Calculate the accounts payable turnover and day's purchases in accounts payable for the year.
- (b) Did the business have effective credit control? Assume that the normal credit period received by the business was 60 days while the average days' purchases in accounts payable of other businesses in the same industry was 70 days.

- (a) _____
- _____
- (b) _____
- _____
- _____
- _____
- _____
- _____

Inventory turnover (存貨周轉率)

$$\text{Inventory turnover (times)} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

$$\text{存貨周轉率(次)} = \frac{\text{銷貨成本}}{\text{平均存貨}}$$

Inventory turnover (存貨周轉率) measures (量度) the size of inventory (存貨量) relative to (相對) the cost of goods sold (銷貨成本). When this ratio increases (比率上升), it means (代表) that inventory is being sold more quickly (出售存貨的速度增加) by the business. As a result, the liquidity (變現能力) of the business has improved (得到改善) as inventory can be turned into (轉變成) cash (現金) at a faster rate (速度加快).

Classwork 6

1. The account balances of Rocky Company Limited as at 31 December 2016 and 31 December 2017 are given below:

	2016	2017
	\$	\$
Inventory (31 December)	136,500	364,000

Additional information:

- (ii) Total purchases for the year 2017 amounted to \$778,050, of which 80% were credit purchases and 20% cash purchases.

- (a) Calculate (to two decimal places) the inventory turnover (in times) for 2017

(a) _____

2. The following balances of the company as at 31 December 2011 were extracted.

	\$
Purchases	7,294,500
Inventory – as at 1 January 2011	878,000
– as at 31 December 2011	990,000

- (a) Calculate (to one decimal place) the inventory turnover for 2011

(a) _____

3. Given the following figures of a business for a certain year:

	\$
Cost of goods sold	125,000
Opening inventory	9,000
Closing inventory	11,000

- (a) Calculate the inventory turnover for the year.
(b) Did the business have effective inventory control? Assume that inventory turnover of other businesses in the same industry was 10 times.

(a) _____

(b) _____

4. You are given the following information about a firm for the year ended 31 March 2011:

- (i) Purchases for the year amounted to \$180,000
 - (ii) Inventory as at 31 March 2010 was valued at \$30,000.
 - (iii) Gross profit for the year was \$40,000.
 - (iv) Mark-up was 25%
 - (v) There were two types of operating expenses: wages and salaries at 10% of sales; generate expenses at 5% of sales.
-
- (a) Prepare an income statement for the year ended 31 March 2011.
 - (b) Calculate the inventory turnover rate for the year.

(a)

[illegible]

(b) _____

5. A business has an inventory turnover rate of seven times a year. The average inventory amounts to \$4,200. Margin is 20%. Expenses are maintained at 70% of gross profit. Calculate:

- (a) Cost of goods sold
- (b) Gross profit
- (c) Sales
- (d) Total expenses
- (e) Net profit

(a) _____

(c)

(d)

(e)

16.2.3 Solvency (償債能力)

Solvency refers to the ability of a business to meet its obligations (償債能力是指企業償還債項的能力), both short-term and long-term, when due (包括短期債項(即流動負債)和長期債項(例如長期貸款)). This ability affects the survival of a business (這項能力決定企業能否持續經營). If a business is **insolvent**, it is likely to go into liquidation (如果企業無力償債的話, 便很有可能被迫清盤). The higher the capital gearing ratio (資本負債比率越高), the riskier the business is considered to be (企業所承受的風險便越大). Generally speaking (一般而言), if the ratio is greater than 0.5 or 50% (如果比率超過 0.5 或 50%), the business is considered highly geared (企業的負債比重便屬過高).

Gearing ratio (資本負債比率)

$$\text{Gearing ratio} = \frac{\text{non-current liabilities} + \text{preference share capital}}{\text{non-current liabilities} + \text{shareholders' fund}} \times 100\%$$
$$\text{槓桿比率} = \frac{\text{非流動負債} + \text{優先股本}}{\text{非流動負債} + \text{股東資本}} \times 100\%$$

Non-current liabilities (非流動負債) = Debentures (債券) + Long-term loans (長期貸款)

Shareholders' fund (股東資本)

= Capital and reserves (資本及儲備)

= Ordinary and preference share capital (普通和優先股本) + Reserves (儲備) + Retained profits (留存利潤)

Retained profits (留存利潤) = Retained profits brought forward + Profit after tax – Transfer to reserve
– Ordinary and preference share dividend

Homework 16.3

The following figures are extracted from Excellence Co Ltd's statement of financial position as at 31 December 2015:

Equity	\$
Preference share capital	2,000,000
Ordinary share capital	8,000,000
General reserve	1,200,000
Retained profits	644,000
	<u>11,844,400</u>
Non-current liabilities	
5% debentures	1,000,000
Bank loan	800,000
	<u>1,800,000</u>
Current liabilities	
Trade payables	103,000

Required: Calculate (to two decimal places) the gearing ratio for Excellence Co Ltd.

16.2.4 Management efficiency (管理效能)

Management efficiency refers to the ability of a business to utilize its assets efficiently.

Total Assets turnover (總資產周轉率)

$\text{Total Assets turnover (times)} = \frac{\text{Net sales}}{\text{Total assets}}$	$\text{總資產周轉率 (次)} = \frac{\text{銷貨}}{\text{資產總額}}$
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Asset turnover measures how efficiently assets are being used to generate sales. The higher the asset turnover, the more efficiently are the assets of the business being used to generate sales revenue.

Classwork 8

Given the following figures of a business

	\$
Net sales	240,000
Profit after tax	60,000
Total assets	600,000
Total liabilities	120,000

Calculate the total assets turnover

Homework 16.6X

The following figures were extracted from Hope Co's financial statements:

Income Statement for the year ended 31 March 2015 (extract)

	\$	\$
Sales		1,260,000
Less Cost of sales:		
Opening inventory	82,000	
Add Purchases (all credit)	660,000	
	742,000	
Less Closing inventory	96,000	646,000
Gross profit		614,000

Statement of Financial Position as at 31 March 2016 (extract)

	\$
Non-current assets	
Building	100,000
Current assets	
Inventory	96,000
Trade receivables	185,000
Bank and cash	73,000
	354,000
Current liabilities	
Trade payables	84,000

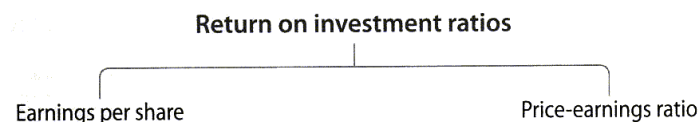
Required:

Calculate (to two decimal places) the following ratios for Good Hope Co in 2015:

(a) Total assets turnover

(a) _____

16.2.5 Return on investment (投資回報率)



Earnings per share (EPS) (每股盈利)

$\text{Earnings per share} = \frac{\text{Profit after tax}}{\text{Number of shares issued}}$	$\text{每股盈利} = \frac{\text{稅後利潤}}{\text{已發行股數}}$
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Earnings per share measures (量度) the amount of profit (利潤) earned per issued share (每股已發行股份). The higher the earnings per share, the higher the potential return in holding the shares of the company.

Price-earnings ratio (P/E) (市盈率)

$\text{Price-earnings ratio} = \frac{\text{Market price per share}}{\text{Earnings per share}}$	$\text{市盈率} = \frac{\text{每股普通股市價}}{\text{每股盈利}}$
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Price-earnings ratio measures the size of a **earnings per share** (每股盈利) relative to its **market price** (每股市價). A high P/E ratio usually **signals** (訊號) that investors have a **high degree of confidence** (普遍看好) in the **company's prospects** (公司前景). However, this also means that **the shares are not cheap** (股票並不便宜).

Classwork 9

Given the following figures of a company for two consecutive years:

	2010	2011
Profit after tax	\$180,000	\$200,000
Ordinary dividend paid and proposed	\$20,000	\$20,000
Number of ordinary shares issued	500,000	500,000
Year-end market price per share	\$4.32	\$5.60

- Calculate the earnings per share, dividend cover and price-earnings ratio for the two years.
- How did the above ratios change over the years?
- Briefly comment on the investment potential of the company's shares.

(a) _____

(b) _____

(c) _____

Homework 16.5

The following figures were extracted from Global Trading Ltd's financial statements:

Income Statement for the year ended 31 March 2010 (extract)

	\$	\$
Finance costs		80,000
Profit before tax		2,770,000
Less income tax expense		415,000
Profit after tax		2,355,000
Add Retained earnings brought forward		346,000
		2,701,000
Less Appropriations:		
Ordinary dividend paid	1,600,000	
Transfer to general reserve	200,000	1,800,000
		901,000

Statement of Financial Position as at 31 March 2016 (extract)

	\$
Equity	
Ordinary share capital (\$1 per share)	8,000,000
General reserve	300,000
Retained earnings	901,000
	9,201,000
Non-current liabilities	
4% debentures	2,000,000

Additional information:

The closing share price on 31 March 2016 was \$2.35 per share.

Required: Calculate (to two decimal places) the following ratios for Global Trading Ltd:

- (a) Return on capital employed (based on closing balances)
- (b) Earnings per share
- (c) Dividend cover
- (d) Price-earnings ratio

(a) _____

(b) _____

(c) _____

(d) _____

16.3 Ratio analysis (比率分析)

The published financial statements of a garment trading company, Joyce Ltd, for the year ended 31 March 2010 are as follows:

Statement of Comprehensive income for the year ended 31 March 2010

	\$000
Turnover	2,500
Cost of sales	(1,900)
Gross profit	600
Administrative expenses	(140)
Selling and distribution expenses	(100)
Operating profit	360
Finance costs	(110)
Profit before tax	250
Taxation	(60)
Profit after tax	190

Statement of Financial Position as at 31 March 2010

	\$000
ASSETS	
<i>Non-current assets</i>	
Property, plant and equipment	2,000
<i>Current assets</i>	
Inventory	100
Accounts receivable	220
Bank	80
	400
Total assets	2,400
EQUITY AND LIABILITIES	
<i>Capital and reserves</i>	
Share capital	1,000
Reserves	500
Total equity	1,500
<i>Non-current liabilities</i>	
6% debentures (repayable in 2015)	600
<i>Current liabilities</i>	
Accounts payable	190
Accrued expenses	50
Tax payable	60
	300
Total liabilities	900
Total equity and liabilities	2,400

The following information was extracted from the notes to the financial statements:

- 1 All sales were made on credit and the turnover figure represented net sales.
- 2 Net purchases for the year amounted to \$1,600,000. All purchases were made on credit.
- 3 Only ordinary shares had been issued. Each share had a nominal value of \$1.
- 4 An interim dividend of \$50,000 was paid during the year.
- 5 The closing market price per share on 31 March 2010 was \$2.25.

Calculation of ratios

Different types of accounting ratios are calculated for Joyce Ltd as follows:

1 Profitability ratios

Gross profit ratio Gross profit ÷ Net sales	
Net profit ratio Profit before tax ÷ Net sales	
Return on capital employed interest and profit before tax ÷ (Shareholders' fund + Non-current liabilities)	

2 Liquidity ratios

Current ratio Current assets ÷ Current liabilities	
Quick ratio (Current assets – Inventories) ÷ Current liabilities	
Accounts receivable turnover Net sales ÷ Average accounts receivable	
Days' sales in accounts receivable (average trade receivables ÷ credit sales) x 365 days	
Accounts payable turnover Net purchases ÷ Average accounts payable	
Days' purchases in accounts payable (average trade payables ÷ credit purchases) x 365 days	
Inventory turnover Cost of goods sold ÷ Average inventory	

3 Solvency ratios

Gearing ratio (non-current liabilities) ÷ (non-current liabilities + shareholders' equity)	
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4 Management efficiency ratio

Asset turnover Net sales ÷ Total assets	
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5 Return on investment ratios

Earnings per share (EPS) Profit after tax ÷ Number of shares issued	
Price-earnings (P/E) ratio Market price per share ÷ Earnings per share	

Interpretation of ratios

Accounting ratio	Industry average	Joyce Ltd
Gross profit ratio	28.33%	
Net profit ratio	11.56%	
Return on capital employed	16.2%	
Current ratio	2 times	
Quick ratio	1.25 times	
Accounts receivable turnover	12.78 times	
Days' sales in accounts receivable	28.56 days	
Accounts payable turnover	9.56 times	
Days' purchases in accounts payable	38.18 days	
Inventory turnover	14.08 times	
Gearing ratio	18.3%	
Asset turnover	0.81 times	
Earnings per share (EPS)	\$0.16	
Price-earnings (P/E) ratio	14.14 times	

1 Profitability ratios

2 Liquidity ratios

3 Solvency ratios

4 Management efficiency ratio

5 Return on investment ratios

16.4 Functions and limitations of ratio analysis (比率分析的功能和限制)

Functions (功能)

With the aid of accounting ratios, people can gain a better understanding of the financial performance and position of a business.

1. Express meaningful relationship between different figures in the financial statements (表達財務報表內的各項數字之間有意義的關係)

For example, knowing the profit figure is not as meaningful as knowing the size of the profit relative to total sales or total assets.

2. Eliminate differences in size (消除企業規模的差異)

For example, it is difficult to say which company was more profitable if we only compare their profit figures of the companies.

Limitations (限制)

1. Show only quantitative information about a business (只展示企業的數量信息)

Ratio analysis cannot tell the whole picture of a business because it fails to take into account useful **qualitative information** such as the quality of **corporate governance**, the **morale of employees** and the external **business environment**.

2. The preparation is largely determined by the accounting policies and methods used by a business (企業採用的會計政策和方法會大大影響財務報表的編製)

The adoption of different accounting policies and method will lead to different financial results. Therefore, it is not fair or useful to compare the ratios of different companies that have adopted vastly different accounting policies and methods.

3. Report only the past results of a business (只匯報企業過往的業績)

Past results may already be outdated by the time they are published. Ratio analysis based on past results may not be useful for estimating the future results of a business.

4. Assets are usually valued at historical cost in the balance sheet (資產負債表內的資產通常以歷史成本計價)

Accounting ratios based on these asset figures may not be as useful as those using current market value for the valuation of a business or decision-making purposes.

5. There are no norms for most of the accounting ratios (絕大部分的會計比率都沒有準則)

It is hard to say whether a particular ratio is too high or too low as the level of acceptable ratio will vary between industries or situations. To overcome this problem, one should compare the ratios of different companies in the same industry or the ratios for different periods.

6. Ratios cannot tell what the problem is or how to solve it (比率無法說明問題所在或提供解決方法)

For example, when the current ratio of a business drops, we only know there is a liquidity problem. But we do not know why the current ratio fell and how to improve liquidity without analyzing the individual figures in the financial statements and other relevant information.

Classwork 10

1.

Speed Ltd
Statement of Comprehensive Income for the year ended 30 April 2010

	\$
Sales	2,860,000
Cost of sales	(1,966,250)
Gross profit	893,750
Administrative expenses	(440,700)
Other operating expenses	(9,230)
Operating profit	443,820
Finance expenses	(23,400)
Profit before tax	420,420
Taxation	(67,000)
Profit after tax	<u>353,420</u>

Speed Ltd
Statement of Financial Position as at 30 April 2010

	\$
ASSETS	
<i>Non-current assets</i>	
Property, plant and equipment	533,000
<i>Current assets</i>	
Inventory	347,750
Accounts receivable	208,000
Prepayments	2,600
Bank	65,000
	<u>623,350</u>
Total assets	<u>1,156,350</u>
EQUITY AND LIABILITIES	
<i>Capital and reserves</i>	
Share capital	260,000
Reserves	597,300
Total equity	<u>857,300</u>
<i>Non-current liabilities</i>	
15% debentures	156,000
<i>Current liabilities</i>	
Accounts payable	62,400
Accrued expenses	13,650
Tax payable	67,000
	<u>143,050</u>
Total liabilities	<u>299,050</u>
Total equity and liabilities	<u>1,156,350</u>

(a) Complete the following table and comment on the profitability, management efficiency, liquidity and solvency of Speed Ltd.

	Industry ratios	Speed Ltd's ratios
Net profit ratio	36%	
Return on shareholders' equity	28%	
Asset turnover	1.45 times	
Current ratio	3.2 : 1	
Quick ratio	2.3 : 1	
Gearing ratio	40%	

Profitability

Management efficiency

Liquidity

Solvency

- (b) Suppose the market price per ordinary share is \$5.6 while the price-earnings ratio of another company in the same industry is three times. Which company's shares would you prefer to buy? Explain your answer.

HKCEE (2004, 2)

(A) Selected financial data for Vera Limited is presented below:

Profit and Loss Account Data for the year ended 31 March 2004

	\$
Sales	248,600
Returns inwards	15,200
Cost of goods sold	155,750
Operating expenses	43,390
Net profit	34,260

Balance Sheet Data as at March

	2003	2004
	\$	\$
Furniture and fixtures (net)		18,420
Office equipment (net)		32,480
Stock	28,750	26,400
Trade debtors	29,260	30,340
Bank		660
		<u>108,300</u>
Ordinary share capital		50,000
Share premium		12,890
Retained profits		15,500
Trade creditors		26,900
Accruals		3,010
		<u>108,300</u>

You are required to:

Calculate (to two decimal places) for Vera Limited the following ratios for the year ended 31 March 2004:

- (a) Quick ratio
- (b) Stock turnover rate
- (c) Debtors' collection period (in months)
- (d) Gross profit ratio
- (e) Return on capital employed

(B) What do the following two types of ratios measure?

- (a) Liquidity ratios
- (b) Profitability ratios

- (A) (a) _____
- _____
- (b) _____
- _____
- (c) _____
- _____
- (d) _____
- _____
- (e) _____
- _____

(B) (a) _____

(b) _____

