

# FINANCIAL RATIO ANALYSIS AND BUDGET PREPARATION

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# PROFITABILITY RATIOS 盈利能力比率

- How management is doing at controlling costs (成本控制), so that a large proportion of the goods sold dollar is converted into profit
  - Gross profit ratio 毛利率
  - Net profit ratio 淨利率
  - Return on capital employed (ROCE) 運用資金報酬率
  - Return on assets (ROA) 總資產回報率
  - Return on equity (ROE) 股本回報率

# Gross Profit Ratio 毛利率

= Gross profit / Sales  
毛利 / 銷貨

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Gross profit 毛利	70,000	50,000
Sales 銷貨	450,000	300,000
<b>Gross Profit Margin 毛利率 ↓</b>	<b>15.56%</b>	<b>16.67%</b>

- Profit earned for each one dollar of goods sold before operating expenses

# Net Profit Ratio 淨利率

= Net profit before tax / Sales  
稅前淨利 / 銷貨

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Profit for the year 全年盈利	31,500	22,500
Sales 銷貨	450,000	300,000
<b>Net Profit Margin 淨利率 ↓</b>	<b>7.00%</b>	<b>7.50%</b>

- Profit earned for each one dollar of goods sold after all operating expenses

# Return on Capital Employed (ROCE)

## 運用資金報酬率

= Profit before interest and tax / Capital employed  
利息及稅前淨利 / 運用資金

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Operating profit 營運盈利	33,000	24,000
Equity 股本	68,000	41,500
Borrowings 借款	<u>12,000</u>	<u>18,000</u>
Capital employed 運用資金	80,000	59,500
<b>ROCE 運用資金報酬率 ↑</b>	<b>41.25%</b>	<b>40.34%</b>

- Rate of return based on the book value of long term capital investment made in the business

# Return on Assets (ROA) 總資產回報率

= Profit before interest and tax / Total assets  
利息及稅前淨利 / 總資產

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Operating profit 營運盈利	33,000	24,000
Non-Current assets 非流動資產	39,000	28,400
Current assets 流動資產	<u>151,000</u>	<u>116,100</u>
Total assets 總資產	190,000	144,500
<b>ROA 總資產回報率 ↑</b>	<b>13.95%</b>	<b>13.49%</b>

- Rate of return based on the book value of assets

# Return on Equity (ROE) 股本回報率

= Profits before interest and tax / Equity

利息及稅前淨利 / 股本

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Operating profit 營運盈利	33,000	24,000
Equity 股本	68,000	41,500
<b>ROE 股本回報率 ↓</b>	<b>38.97%</b>	<b>46.99%</b>

- Rate of return based on the book value of equity

# Equity Multiplier 權益乘數

= Total assets / Total equity  
總資產 / 總股本

	2015 (\$)	2014 (\$)
Non-Current assets 非流動資產	39,000	28,400
Current assets 流動資產	<u>151,000</u>	<u>116,100</u>
Total assets 總資產	190,000	144,500
Equity 股本	68,000	41,500
<b>Equity Multiplier 權益乘數 ↓</b>	<b>2.79</b>	<b>3.48</b>

- A lower equity multiplier means the company is relying less on debt to finance its assets



# Return on Equity (ROE) 股本回報率

= Return on assets (ROA) 資產回報率

x Equity Multiplier 權益乘數

- Good ROE(高股本回報率) could be achieved with either a high ROA (高資產回報率), or by employing more assets in the company's operations
- In our example, despite the improved ROA (高資產回報率), the ROE has declined (低股本回報率) due to reduced usage of assets by the company

# ASSET UTILIZATION RATIOS

## 資產使用比率

- How effective is a firm using its total asset base to produce goods sold
  - Inventory turnover period 存貨周轉期限
  - Trade receivables collection period 賒銷期限
  - Trade payables repayment period 賒購期限
  - Total assets turnover 總資產周轉率

# Inventory Turnover Period 存貨周轉期限

= Inventory / Cost of goods sold x 365

存貨 / 銷貨成本 x 365

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Inventories 存貨	50,000	30,000
Cost of goods sold 銷貨成本	380,000	250,000
<b>Inventory Turnover Period</b> 存貨周轉期限 ↑	<b>48 days</b>	<b>44 days</b>

- Measures the number of days' worth of inventories that a company has on hand at any given time

# Trade Receivables Collection Period 賒銷期限

= Trade receivables / Credit sales x 365

應收貨款 / 賒銷 x 365

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Trade receivables 應收貨款	100,000	85,000
Sales 銷貨	450,000	300,000
<b>Trade Receivable Collection Period 賒銷期限 ↓</b>	<b>81 days</b>	<b>103 days</b>

- Indicates average length of time in days that a company must wait to collect a credit sale (賒銷)

# Trade Payables Repayment Period 賒購期限

= Trade payables / Credit purchases x 365

應付貨款 / 賒購 x 365

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Trade payables 應付貨款	80,000	70,000
Purchases 購貨	380,000	250,000
<b>Trade Payables Repayment Period 賒購期限 ↓</b>	<b>77 days</b>	<b>102 days</b>

- Indicates average length of time in days within which a company must pay for its credit purchases (賒購)

# Total Assets Turnover 總資產周轉率

= Sales / Total assets

銷貨 / 總資產

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Sales 銷貨	450,000	300,000
Non-Current assets 非流動資產	39,000	28,400
Current assets 流動資產	<u>151,000</u>	<u>116,100</u>
Total assets 總資產	190,000	144,500
<b>Total Assets Turnover 總資產周轉率↑</b>	<b>2.37</b>	<b>2.08</b>

# Total Assets Turnover 總資產周轉率

= Net Profit Ratio 淨利潤率

x Return on Assets (ROA) 資產回報率

- Good ROA (高資產回報率) could be achieved with either a high Net profit ratio (高淨利潤率), or by making its assets work hard
- In our example, the Total Assets Turnover (高總資產周轉率) has been improved significantly to offset the fall in Net profit ratio (低淨利潤率)

# Asset Utilization Ratios 資產使用比率

- Whether these days are good or bad depends on the company goals
- A company may have long trade receivables period (長賒銷期限) by granting customers long credit period in order to gain market share



# LIQUIDITY RATIOS 流動資金比率

- Ability to meet future short-term financial obligations (短期債務)
  - Current Ratio 流動比率
  - Quick Ratio 速動比率
  - Cash Ratio 現金比率

# Current Ratio 流動比率

= Current Assets / Current Liabilities

流動資產 / 流動負債

- Current ratio (流動比率) vary widely according to the type of business
- While a high current ratio (高流動比率) indicates good liquidity (良好流動性), it may be a symptom of poor working capital (低營運資金)

# Current Ratio 流動比率

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Current assets 流動資產	151,000	116,100
Current liabilities 流動負債	110,000	85,000
<b>Current Ratio 流動比率 —</b>	<b>1.37</b>	<b>1.37</b>

# Quick Ratio 速動比率

$$= (\text{Current Assets} - \text{Inventories}) / \text{Current Liabilities}$$

(流動資產 - 存貨) / 流動負債

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Trade receivables 應收貨款	100,000	85,000
Cash and cash equivalents 現金	<u>1,000</u>	<u>1,100</u>
	101,000	86,100
Current liabilities 流動負債	110,000	85,000
<b>Quick Ratio 速動比率 ↓</b>	<b>0.92</b>	<b>1.01</b>

# Cash Ratio 現金比率

= Cash and cash equivalents / Current Liabilities

現金 / 流動負債

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Cash and cash equivalents 現金	1,000	1,100
Current liabilities 流動負債	110,000	85,000
<b>Cash Ratio 現金比率 ↓</b>	<b>0.91%</b>	<b>1.29%</b>

- Cash ratio (現金比率) is generally a more conservative look at a company's ability to cover its liabilities, as both inventory (存貨) and trade receivable (應收貨款) are left out of the equation

# SOLVENCY RATIOS 償債能力比率

- Long Term Solvency Ratios (長期償債能力比率)
  - Gearing ratio (槓桿比率)
  - Debt to equity ratio (債務股本比率)
  - Time interest earned (利息保障倍數)

# Gearing 槓桿比率 / Leverage 債務股本比率

- Gearing 槓桿比率  
= Debt / Equity 負債 / 股東資本
- Debt to equity ratio 債務股本比率  
= Debt / (Debt + Equity) 負債 / (負債 + 股東資本)
- Debt is generally cheaper than equity, because it is less risky and lenders require a lower rate of return
- But too much debts creates financial risk

# Gearing 槓桿比率 / Leverage 債務股本比率

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Borrowings 借款	12,000	18,000
Equity 股本	<u>68,000</u>	<u>41,500</u>
	80,000	59,500
<b>Gearing 槓桿比率 ↓</b>	<b>17.65%</b>	<b>43.38%</b>
<b>Leverage 債務股本比率 ↓</b>	<b>15%</b>	<b>30.25%</b>



# Time Interest Earned 利息保障倍數

= Operating profit / Finance costs

營運盈利 / 財務成本

- How easily is the company able to make its interest payments from this year's profits
- Lowest acceptable figure is clearly a matter of judgment
- Volatility (波動幅度) of profits and interest rates need to be considered

## Time Interest Earned 利息保障倍數

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Operating profit 營運盈利	33,000	24,000
Finance costs 財務成本	1,500	1,500
<b><i>Time Interest Earned</i> 利息保障倍數 ↑</b>	<b><i>22 times</i></b>	<b><i>16 times</i></b>

- The number of times earnings plus other expenses are above the interest expenses

# INVESTMENT RATIOS 市盈率

- Investment ratios 市盈率
  - Dividend cover 股息保障倍數
  - Price earnings ratio 市盈率

# Dividend Cover 股息保障倍數

= (Net profit after tax - Preference dividend) / Ordinary dividend paid

(稅後盈利 - 優先股息) / 普通股息

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Profit for the year 全年盈利	26,500	19,500
Ordinary dividend paid 普通股息 (\$0.1 per share)	2,200	2,200
<b>Dividend Cover 股息保障倍數 ↑</b>	<b>12 times</b>	<b>8.86 times</b>

- Dividend Cover (股息保障倍數) indicates the capacity of an organization to pay dividends out of profit attributable to the shareholders

# Price Earning Ratio 市盈率

= Current price per ordinary share / Earnings per share  
現時每股市價 / 每股收益

	<u>2015 (\$)</u>	<u>2014 (\$)</u>
Share price 現時股價	14.50	12.00
Earnings per share 每股收益	1.20	0.89
<b>Price Earning Ratio 市盈率 ↓</b>	<b>12.08 times</b>	<b>13.48 times</b>

- Price earnings ratio (市盈率) shows how much the market is willing to pay for the share based on the company's current earnings

# Importance of Relative Financial Ratios

- In order to make sense of a ratio, we must compare it with some appropriate benchmarks (合適基準)
- Examine a firm's performance relative to:
  - Aggregate economy (經濟情況)
  - Its industry (行業)
  - Its major competitors (競爭對手) within the industry
  - Its own past performance (過往表現)

# Importance of Relative Financial Ratios

- More importantly the focus is not on individual ratio, but rather to allow for trade off of one ratio against another:
  - A fall in sales (銷貨) may be compensated by a higher profitability ratio (盈利能力比率)
  - A high gearing (槓桿比率) may not be a great concern in light of good profitability (良好盈利能力)
  - Poor profitability (疲弱盈利能力) could be remedied (補救) by improved cash flows (提高現金流)

grant date of each award. This cost is recognised over the period during which an employee is required to provide service in exchange for the award or the requisite service period, usually the vesting period, and is adjusted for actual forfeitures that occur before vesting. In order to assess the fair value of share-based compensation, the Group is required to use certain assumptions, including the probability of reaching the market performance, if any, and financial results targets, the forfeitures and the service period of each employee. The use of different assumptions and estimates could produce materially different estimated fair values for the share-based compensation awards and related expenses.

## 5 SEGMENT INFORMATION

The chief operating decision-maker has been identified as the executive directors of the Group. The executive directors review the Group's internal reporting in order to assess performance and allocate resources and has determined the operating segments based on these reports.

The executive directors considered the nature of the Group's business and determined that the Group has three reportable operating segments as follows:

- (i) Retail\*
- (ii) Wholesales
- (iii) Licencing and others

The executive directors assess the performance of the operating segments based on revenue and gross profit percentage of each segment. As the Group's resources are integrated and there are no discrete operating segment assets and liabilities for the retail and wholesales business segments, accordingly, no operating segment assets and liabilities are presented.

\* Including consignment sales commission income.



# SEGMENT INFORMATION 分部分析



- Companies frequently operate in more than one line of business, where results of operations of the individual segments may vary
- An entity shall report a measure of total assets (資產) and liabilities (負債) for each reportable segment:
  - Analysis of segment data can be done in terms of ratios relating profits to sales or identifiable assets
  - Trend analysis (趨勢分析) can be carried out in terms of vertical and horizontal common size statements

# MARKETING EXPENSES BUDGET

## 營銷預算

- Media 媒體: TV, newspaper, radio, direct mail
- Production 製作: TV, newspaper, radio, direct mail
- Merchandising 採購: signage, displays
- Selling costs 分銷費用: sales incentives
- Research expenses 研究開支: market research

# Sample Marketing Expenses Budget

## 營銷預算範例

Objectives of this marketing budget:

- Increasing store sales (門市銷售) by 15% over the previous year
- Increasing the current customer purchase rate (顧客採購次數) from 1.2 to 2 purchases per year
- Increasing the customer base (客戶群體) by 20% above the current level of 5,000 active customers per store

# Sample Marketing Expenses Budget

## 營銷預算範例

<b>Media 媒體</b>	<u>\$'000</u>	<u>% of Budget</u>
Television 電視 (2 TV channels)	350	31.80%
Newspapers 報紙 (1/4 page per issue)	202	18.30%
Direct mail 郵遞直銷 (10,000 copies by post)	<u>120</u>	<u>10.90%</u>
	672	61.00%
<b>Production 製作</b>		
Television 電視 (2.30 minutes)	100	9.10%
Newspapers 報紙 (type and photos)	18	1.60%
Direct mail 郵遞直銷 (type and printing)	<u>100</u>	<u>9.10%</u>
	218	19.80%

# Sample Marketing Expenses Budget

## 營銷預算範例

<b><i>Merchandising</i></b> 採購	<u>\$'000</u>	<u>% of Budget</u>
5% off Coupon 優惠券	120	10.90%
Internet media 網上媒體	5	0.50%
Store signage 展示牌 (20 signs per store)	25	2.20%
Point of purchase display 購買點廣告顯示 (2 displays per store)	<u>10</u>	<u>0.90%</u>
	160	14.50%
<b><i>Selling costs</i></b> 分銷費用		
Sales incentive programme 銷售獎勵方案計劃	<u>20</u>	<u>1.80%</u>
	20	1.80%

# Sample Marketing Expenses Budget

## 營銷預算範例

<b><i>Research Expenses</i></b> 研究開支	<u>\$'000</u>	<u>% of Budget</u>
Market research 市場研究	<u>32</u>	<u>2.90%</u>
	32	2.90%
Total marketing estimate 總營銷預算	1,102	100.00%
Total sales estimate 總銷售預算	24,000	

# Sample Marketing Expenses Budget

## 營銷預算範例

	<u>\$'000</u>	<u>% of Budget</u>
Marketing budget as a percentage of sales per plan 本年營銷與銷售之百份比		4.6%
Marketing budget as a percentage of sales per industry average 業界營銷與銷售之百份比		4.0%
Marketing budget percentage to industry average 本年與業界營銷預算之百份比		115%
Marketing budget percentage to previous year 本年與上年營銷預算之百份比	1,000	110%

THANK YOU  
*for listening!*

