

# BASIC FINANCIAL RATIO ANALYSIS AND IMPLICATION

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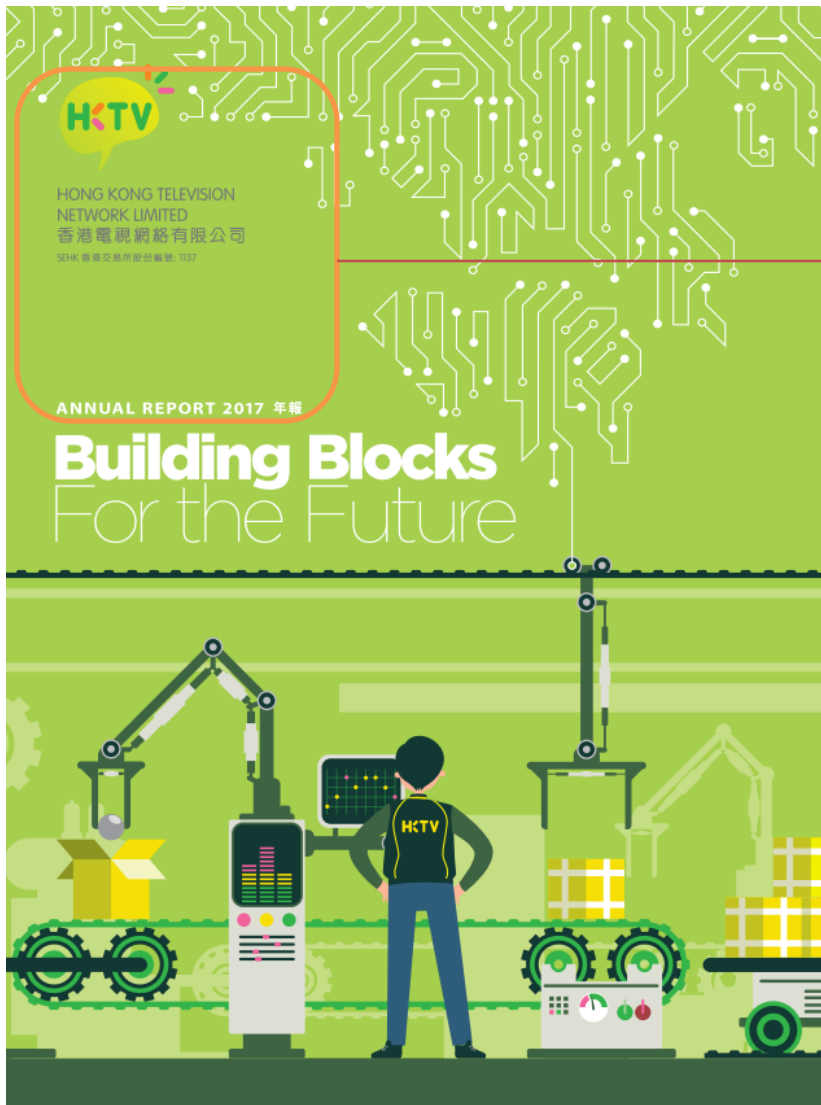


# Companies as separate legal & economic entity



- Annual reports are the top sources of information for shareholders, lenders etc.
- Annual reports provide information about the company from visions, goals, and strategies to financial information.
- Substance over form(實質重於形式) – Information users should make his / her financial decisions based on the substance of the annual reports, i.e. audited **financial statements**.
- Annual reports can be easily found on the [internet](#).

# Annual report



# Typical Structures of Annual Reports

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# AUTONOMY

Nowadays, e-commerce is one of the growth momentum of the global economy. Hong Kong, praised as Shoppers' Paradise, however, is lagging behind in this aspect compared to neighbourhood areas. HKTVMall endeavors to be the engine of local e-commerce development. By keeping evolve to create value for customers, and encouraging them to learn and try, we hope to become an indispensable part of lives, and remain the competitiveness of Hong Kong.

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# Typical Structures of Annual Reports

## 1. Corporate Information

- Operating statistics
- Financial highlights
- A short history of the company;
- Members of the board of directors and key management personnel

## 目錄

3	經營摘要
5	財務摘要
6	重要里程碑及事項簡介
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# Typical Structures of Annual Reports

## 2. Analyses and Commentaries

Explanations from the management to the shareholders regarding how the company has performed during the year.

- Chairman's Report
  - Performance in key activities
  - Special items of interest
  - Company strategies and plans
- Management Discussion and Analysis
  - Discussion of past performance
  - How successful leadership has been at achieving the corporate strategies
  - Future strategic focus

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# Typical Structures of Annual Reports

## 3. Other statements and disclosures

Different companies may wish to include different disclosures.

- Environment, Social and Governance (ESG)
  - Environmental and Social impact of the company.
- Corporate Governance
  - Principles and practices adopted by the entity in order to ensure a clear corporate direction and key management's responsibility and accountability

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# Typical Structures of Annual Reports

## 4. Financial Statements

- usually begins with the **acknowledgment (確認) by directors and management** that they are responsible for the financial statements.
- followed by the **auditor's report (審計報告)**
- **Full set of financial statements.**
  - **an Income Statement (Profit & Loss)**
  - **a Statement of Comprehensive Income**
  - **a Statement of Financial Position (Balance Sheet)**
  - **a Statement of Changes in Equity**
  - **a Cash Flow Statement, and**
  - **Notes to Financial Statements.**

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# INDEPENDENT AUDITOR'S REPORT

## 獨立核數師報告

- New Companies Ordinance (新公司條例) Section 406
- Confirmation of Management Responsibility
- Declaration (聲明) of Process and Procedures
- Announcement of Audit Opinions (核數評價)
  - Clean/ Unqualified Report (無保留意見)
  - Qualified Report (保留意見)
  - Adverse Opinion (否定意見)
  - Disclaimer of Opinion (不發表意見)

### Independent Auditor's Report



Independent auditor's report to the members of Hong Kong Television Network Limited  
(Incorporated in Hong Kong with limited liability)

#### OPINION

We have audited the consolidated financial statements of Hong Kong Television Network Limited ("the Company") and its subsidiaries ("the Group") set out on pages 57 to 114, which comprise the consolidated statement of financial position as at 31 December 2017, the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2017 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

#### BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSA") issued by the HKICPA. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the HKICPA's *Code of Ethics for Professional Accountants* ("the Code") and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

give a true and fair view

# CONSOLIDATED FINANCIAL STATEMENTS

GROUP	A <u>parent company</u> (母公司)	E.g. Cathay Pacific 國泰
	Its <u>subsidiaries</u> (子公司/附屬機構)	E.g. Dragonair 港龍



Consolidated financial statements aggregate the financial statements of a parent and its subsidiaries

→ **Reveal the overall health** of an **entire group** (集團) as opposed to each company's standalone (獨立) position.

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# CONSOLIDATED INCOME STATEMENT (PROFIT & LOSS) 綜合損益表

## INCOME

**Revenue Recognition (收入確認) Principle:**

**Companies recognize revenue when the performance obligation (delivery of goods) is satisfied.**

## Expenses

**Expense Recognition (支出確認) Principle:**

**Companies recognize expense when outflows or “using up” of resources as a result of delivery goods (+Sales/Turnover).**

# CONSOLIDATED INCOME STATEMENT

## (PROFIT & LOSS) 綜合損益表

### Consolidated Income Statement

For the year ended 31 December 2017 (Expressed in Hong Kong dollars)

	Note	Year ended 31 December 2017 HK\$'000	Year ended 31 December 2016 HK\$'000
<b>Turnover</b>	2	487,257	187,071
<b>Cost of inventories</b>		(295,178)	(140,289)
<b>Valuation gains on investment properties</b>	12	80,500	6,700
<b>Other operating expenses</b>	4(a)	(568,555)	(380,454)
<b>Other income, net</b>	3	94,230	70,947
<b>Finance costs</b>	4(b)	(2,011)	(1,017)
<b>Loss before taxation</b>		(203,757)	(257,042)
<b>Income tax expense</b>	5	(1,163)	(74)
<b>Loss for the year</b>		(204,920)	(257,116)
<b>Basic and diluted loss per ordinary share</b>	8	HK\$(0.25)	HK\$(0.32)

**INCOME**

**EXPENSE**

Turnover

Cost of inventories

Valuation gains on investment properties

Other operating expenses

Other income, net

Finance costs

Loss before taxation

Income tax expense

Loss for the year

Basic and diluted loss per ordinary share

# CONSOLIDATED INCOME STATEMENT

## (PROFIT & LOSS) 綜合損益表

### Consolidated Income Statement

For the year ended 31 December 2017 (Expressed in Hong Kong dollars)

	Year ended 31 December 2017 HK\$'000	Year ended 31 December 2016 HK\$'000
<div style="border: 1px solid black; padding: 5px; display: inline-block;">                     Turnover                      - Cost of Inventories                      = <b>Gross Profit 毛利</b> </div>		
Turnover Cost of inventories Valuation gains on investment properties Other operating expenses Other income, net Finance costs	487,257 (295,178) 80,500 (568,555) 94,230 (2,011)	187,071 (140,289) 6,700 (380,454) 70,947 (1,017)
<div style="border: 1px solid black; padding: 5px; display: inline-block;">                     Gross Profit                      - Operating Expense                      +/- Others                      = <b>Operating Profit 營運盈利</b> </div>		
Loss before taxation Income tax expense	(203,757) (1,163)	(257,042) (74)
<div style="border: 1px solid black; padding: 5px; display: inline-block;">                     Profit/Loss Before Tax 稅前盈利/虧損                 </div>		
Loss for the year	(204,920)	(257,116)
<div style="border: 1px solid black; padding: 5px; display: inline-block;">                     Profit/Loss For the Year 全年盈利/虧損                 </div>		
Basic and diluted loss per ordinary share	HK\$(0.25)	HK\$(0.32)

# Consolidated Statement of Financial Position

As at 31 December 2017 (Expressed in Hong Kong dollars)

	Note	31 December 2017 HK\$'000	31 December 2016 HK\$'000
<b>Non-current assets</b>			
Property, plant and equipment	12	1,152,387	917,048
Intangible assets	13	99,828	112,248
Goodwill	27	897	–
Long term receivables, deposits and prepayments		11,912	8,209
Other financial assets	16	675,161	828,019
		<b>1,940,185</b>	<b>1,865,524</b>
<b>Current assets</b>			
Other receivables, deposits and prepayments	17	63,276	39,201
Tax recoverable		1,007	–
Inventories	15	26,912	17,833
Other current financial assets	16	201,004	355,406
Pledged bank deposit	29	3,905	–
Cash at bank and in hand	18	100,199	44,397
		<b>396,303</b>	<b>456,837</b>
<b>Current liabilities</b>			
Accounts payable	19	92,951	22,714
Other payables and accrued charges	19	154,840	115,942
Deposits received		4,286	1,905
Bank loans	20	219,623	184,144
		<b>471,700</b>	<b>324,705</b>
<b>Net current (liabilities)/assets</b>		<b>(75,397)</b>	<b>132,132</b>
<b>Total assets less current liabilities</b>		<b>1,864,788</b>	<b>1,997,656</b>
<b>Non-current liabilities</b>			
Deferred tax liabilities	22	2,156	993
		<b>2,156</b>	<b>993</b>
<b>NET ASSETS</b>		<b>1,862,632</b>	<b>1,996,663</b>
<b>CAPITAL AND RESERVES</b>			
Share capital	21(b)	1,268,914	1,268,914
Reserves		593,718	727,749
<b>TOTAL EQUITY</b>		<b>1,862,632</b>	<b>1,996,663</b>

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION (BALANCE SHEET)

## 綜合資產負債表



# Assets 資產:

Economic resources owned by the reporting entity

## Non-Current Assets

### 非流動資產:

- Property, plant & equipment 房產, 廠房及機器
  - Currently used in operations (營運)
  - Long useful life

## Current Assets

### 流動資產

- Assets that a company expects to **convert (轉換) to cash or use up within one year** or the operating cycle, whichever is longer
- Operating cycle (營運週期) is the average time it takes from the purchase of inventories to the collection of cash from customers

<b>Consolidated Statement of Financial Position</b>			
As at 31 December 2017 (Expressed in Hong Kong dollars)			
	Note	31 December 2017 HK\$'000	31 December 2016 HK\$'000
<b>Non-current assets</b>			
Property, plant and equipment	12	1,152,387	917,048
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		<b>396,303</b>	<b>456,837</b>

# Liabilities 負債

## Current Liabilities

### 流動負債

- **Obligations (負債)** a company is to pay within the coming year or its operating cycle, whichever is longer
- **Liquidity (流動性)** - ability to pay obligations expected to be due within the next year

## Non-Current Liabilities

### 非流動負債

- Obligations a company expects to pay after one year.

## Consolidated Statement of Financial Position

As at 31 December 2017 (Expressed in Hong Kong dollars)

	Note	31 December 2017 HK\$'000	31 December 2016 HK\$'000
<b>Current liabilities</b>			
Accounts payable	19	92,951	22,714
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Deposits received		4,286	1,905
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<b>Non-current liabilities</b>			
Deferred tax liabilities	22	2,156	993
		<b>2,156</b>	<b>993</b>



# Equity 權益

## Consolidated Statement of Financial Position

As at 31 December 2017 (Expressed in Hong Kong dollars)

	Note	31 December 2017 HK\$'000	31 December 2016 HK\$'000
<b>CAPITAL AND RESERVES</b>			
Share capital	21(b)	1,268,914	1,268,914
Reserves		593,718	727,749
<b>TOTAL EQUITY</b>		<b>1,862,632</b>	<b>1,996,663</b>

- Share Capital (股本)
- Reserves (保留盈利)
- Non-Controlling Interest (非控股權益) - equity in a subsidiary not attributable, directly or indirectly, to the parent (母公司)

## 1 SIGNIFICANT ACCOUNTING POLICIES

### (a) Statement of compliance

These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ("HKFRSs"), which collective term includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards ("HKASs") and Interpretations issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"), accounting principles generally accepted in Hong Kong and the requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. Significant accounting policies adopted by the Group are disclosed below.

The HKICPA has issued certain new and revised HKFRSs that are first effective or available for early adoption for the current accounting period of the Group and the Company.

Note 1(c) provides information on any changes in accounting policies resulting from initial application of those developments to the extent that they are relevant to the Group for the current and prior accounting periods reflected in these financial statements.

### (b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2017 comprise the Company and its subsidiaries (together referred to as the "Group").

The measurement basis used in the preparation of the financial statements is the historical cost basis except that investments in available-for-sale securities, investment properties and certain financial assets and liabilities are stated at their fair values or amortised costs as explained in the accounting policies set out below (see notes 1(f), 1(g), 1(m), 1(r) and 1(s)).

The preparation of financial statements in conformity with HKFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances but are inherently uncertain and unpredictable, the results of which form the basis of making the judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of HKFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in notes 11, 12, 16, 24 and 28.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## 綜合財務報告附註

- Specified by the ***New Companies Ordinance*** (新公司條例)
- Supplemented by the ***Hong Kong Financial Reporting Standards*** (香港財務報告準則) and the ***Listing Rules*** (上市條例)
- Significant Accounting Policies
- Schedule of breakdown of items on accounts
- Explanation and elaboration of details (詳細闡述)

# *Ratio Analysis*

**Ratio analysis** expresses the relationship among selected items of financial statement data.

## **Five Financial Ratio Classifications**

**Profitability**

**Management Efficiency**

**Liquidity**

**Solvency**

**Investment Appraisal**

# Ratio Analysis - Illustration

Notes:

1. All sales were on account.
2. At 1 January 2016, inventories were \$20,000.

## ABM Limited

Consolidated Income Statement 綜合損益表

For the Year Ended December 31

	2017	2016
Turnover 銷貨	\$ 450,000	\$ 300,000
Cost of sales 銷貨成本	380,000	250,000
Gross profit 毛利	70,000	50,000
Selling and distribution 分銷費用	7,000	6,000
Administrative expenses 行政開支	30,000	20,000
Operating Profit 營運盈利	33,000	24,000
Other expenses and losses:		
Finance costs 財務成本	1,500	1,500
Profit before tax 稅前盈利	31,500	22,500
Income tax expense 稅金	5,000	3,000
Profit for the year 全年盈利	\$ 26,500	\$ 19,500

# Ratio Analysis - Illustration

## ABM Limited

### Consolidated Balance Sheets 綜合資產負債表

December 31

<b>Assets</b>	<b>2017</b>	<b>2016</b>
<b>NON-CURRENT ASSETS 非流動資產</b>		
Property, plant and equipment (net) 房產, 廠房及機器 (淨值)	39,000	28,500
<b>Total non-current assets</b>	<b>39,000</b>	<b>28,500</b>
<b>CURRENT ASSETS 流動資產</b>		
Inventory 存貨	\$ 50,000	\$ 30,000
Trade receivable (net) 應收帳款 (淨值)	100,000	85,000
Cash 現金	1,000	1,000
<b>Total current assets</b>	<b>151,000</b>	<b>116,000</b>
<b>Total assets</b>	<b>\$ 190,000</b>	<b>\$ 144,500</b>

# Ratio Analysis - Illustration

<b>Liabilities and Stockholders' Equity</b>	<b>2017</b>	<b>2016</b>
<b>NON-CURRENT LIABILITIES 非流動負債</b>		
Bonds payable 應付債券	12,000	18,000
<b>Total non-current liabilities</b>	<b>12,000</b>	<b>18,000</b>
<b>CURRENT LIANBILITIES 流動負債</b>		
Trade payable 應付帳款	\$ 80,000	\$ 70,000
Income taxes payable 利得稅應付款項	30,000	15,000
<b>Total current liabilities</b>	<b>110,000</b>	<b>85,000</b>
<b>Total liabilities</b>	<b>122,000</b>	<b>103,000</b>
<b>SHAREHOLDERS' EQUITY 股東權益</b>		
Share capital 股本 (\$2 par 面值)	22,000	22,000
Other reserves 其他儲備	6,000	4,500
Retained earnings 保留利潤	40,000	15,000
<b>Total shareholders' fund</b>	<b>68,000</b>	<b>41,500</b>
<b>Total liabilities and equity</b>	<b>\$ 190,000</b>	<b>\$ 144,500</b>

# Profitability Ratios 盈利能力比率

Measure the **income or operating success** of a company for a given period of time.

- 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
- Income, or the **lack** of it, affects the company's ability to obtain debt and equity financing, liquidity position, and the ability to grow.

Profitability Ratios:	
• Mark-up	加成
• Gross profit ratio	毛利率
• Net profit ratio	淨利率
• Return on capital employed (ROCE)	運用資金報酬率

## Profitability Ratios 盈利能力比率

Compute the **Mark Up** for 2016.

$$\frac{\text{Gross Profit 毛利}}{\text{Cost of goods sold 銷貨成本}} = \text{Mark Up 加成}$$

$$\frac{\$50,000}{\$250,000} = 20.00\%$$

Measures the profit earned for each one dollar of cost of goods sold.

For every \$100 cost of a product sold, \$20 is generated to gross profit.




# Profitability Ratios 盈利能力比率

Compute the **Mark-Up** for 2017.

$$\frac{\text{Gross Profit 毛利}}{\text{Cost of goods sold 銷貨成本}} = \text{Mark Up 加成}$$

$$\frac{\$70,000}{\$380,000} = 18.42\%$$

	2017 (\$)	2016 (\$)
Mark Up 加成 	18.42%	20.00%

Less gross profit is generated in 2017 than in 2015.

## Profitability Ratios 盈利能力比率

Compute the **Gross Profit Margin** for 2016.

$$\frac{\text{Gross Profit 毛利}}{\text{Sales 銷貨}} = \text{Gross Profit Margin 毛利率}$$

$$\frac{\$50,000}{\$300,000} = 16.67\%$$

Measures the percentage of each dollar of sales that results in gross profit.


For every \$100 of sales, \$16.67 is generated to gross profit. The \$16.67 is used to cover operating and non-operating expenses, and the remainder is net profit.

## Profitability Ratios 盈利能力比率

Compute the **Gross Profit Margin** for **2017**.

$$\frac{\text{Gross Profit 毛利}}{\text{Sales 銷貨}} = \text{Gross Profit Margin 毛利率}$$

$$\frac{\$70,000}{\$450,000} = 15.56\%$$

	2017 (\$)	2016 (\$)
Gross Profit Margin 毛利率 	15.56%	16.67%

The company has less amount to cover operating and non-operating expenses than last year.

## Profitability Ratios 盈利能力比率

Compute the **Net Profit Margin** for **2016**.

$$\frac{\text{Net Profit before tax 稅前淨利}}{\text{Sales 銷貨}} = \text{Net Profit Margin 淨利率}$$

$$\frac{\$22,500}{\$300,000} = 7.50\%$$

Measures the percentage of each dollar of sales that results in net income.


For every \$100 of sales, \$7.50 is generated to operating profit.

## Profitability Ratios 盈利能力比率

Compute the **Net Profit Margin** for **2017**.

$$\frac{\text{Net Profit before tax 稅前淨利}}{\text{Sales 銷貨}} = \text{Net Profit Margin 淨利率}$$

$$\frac{\$31,500}{\$450,000} = 7.00\%$$

	2017 (\$)	2016 (\$)
Net Profit Margin 淨利率 	7.00%	7.50%

Although the company achieved a lower gross profit margin in 2017, its net profit margin was in line with that of 2016. This meant that the company was more efficient in minimizing its operating expenses in 2017.

## Profitability Ratios 盈利能力比率

Compute the **Return on Capital Employed (ROCE)** for **2016**.

$$\frac{\text{Profit before interest and tax 利息及稅前淨利} \\ \text{(Operating Profit 營運盈利)}}{\text{Capital Employed 運用資金} \\ \text{(Equity 股本 + Non-current Liabilities 非流動負債)}} = \text{Return on Capital Employed} \\ \text{運用資金報酬率}$$

$$\frac{\$24,000}{(\$41,500 + \$18,000)} = 40.34\%$$

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

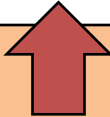
For every \$100 of long term capital investment made in the business, \$40.34 is operating profit generated for the year.

# Profitability Ratios 盈利能力比率

Compute the **Return on Capital Employed (ROCE)** for **2017**.

$$\frac{\text{Profit before interest and tax (Operating Profit)}}{\text{Capital Employed (Equity + Non-current Liabilities)}} = \text{Return on Capital Employed (運用資金報酬率)}$$

$$\frac{\$33,000}{(\$68,000 + \$12,000)} = 41.25\%$$

	2017 (\$)	2016 (\$)
ROCE 運用資金報酬率 	41.25%	40.34%

Much more income is earned in 2017 base on the book value of long term capital investment made in the business.

# Management Efficiency Ratios 管理效率

Measures a company's ability to use its assets to generate income.

- Evaluates the levels of output generated by the assets (input) used by a company.
- Ratios include:

Management Efficiency Ratios:	
• Inventory turnover	存貨周轉
• Inventory turnover period	存貨周轉期限
• Trade receivables turnover	應收貨款周轉
• Trade receivables collection period	賒銷期限
• Trade payables turnover	應付貨款周轉
• Trade payables repayment period	賒購期限
• Total assets turnover	總資產周轉



## Management Efficiency Ratios 管理效率

Compute the **Inventory Turnover** for **2016**.

$$\frac{\text{Cost of Good Sold 銷貨成本}}{\text{Inventory 存貨}} = \text{Inventory Turnover 存貨周轉}$$

$$\frac{\$250,000}{\$30,000} = 8.33 \text{ times}$$


Inventory turnover measures the number of times, on average, the inventory is sold during the period.

## Management Efficiency Ratios 管理效率

Compute the **Inventory Turnover** for **2017**.

$$\frac{\text{Cost of Good Sold 銷貨成本}}{\text{Inventory 存貨}} = \text{Inventory Turnover 存貨周轉}$$

$$\frac{\$380,000}{\$50,000} = 7.60 \text{ times}$$

	2017 (\$)	2016 (\$)
Inventory Turnover 存貨周轉率 	7.60 times	8.33 times

A **higher** ratio indicates that the inventory “turn over” rapidly as it moves **quickly** from the time of acquisition to sales.

Inventory Turnover **declined** slightly in 2017. Inventory is moving **slower** in 2017 than it did in 2016 from the time of acquisition to sales.

## Management Efficiency Ratios 管理效率

Compute the **Inventory Turnover Period** for 2016.

$$\frac{\text{Inventory 存貨}}{\text{Cost of Good Sold 銷貨成本}} \times 365 \text{ days} = \text{Inventory Turnover Period 存貨周轉期限}$$

$$\frac{\$30,000 \times 365 \text{ days}}{\$250,000} = 43.80 \text{ days}$$

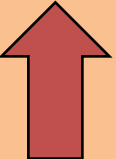
Measures the average number of days the company holds its inventory before selling it.

## Management Efficiency Ratios 管理效率

Compute the **Inventory Turnover Period** for **2017**.

$$\frac{\text{Inventory 存貨}}{\text{Cost of Good Sold 銷貨成本}} \times 365 \text{ days} = \text{Inventory Turnover Period 存貨周轉期限}$$

$$\frac{\$50,000 \times 365 \text{ days}}{\$380,000} = 48.03 \text{ days}$$

	2017 (\$)	2016 (\$)
Inventory Turnover Period 存貨周轉期限 	48.03 days	43.80 days

The average selling time of 48.03 days in 2017 is **longer** as compared with that in 2016.

## Management Efficiency Ratios 管理效率

Compute the **Trade Receivables Turnover** for **2016**.

$$\frac{\text{Credit Sales 賒銷}}{\text{Trade Receivables 應收貨款}} = \text{Trade Receivables Turnover 應收貨款周轉}$$

$$\frac{\$300,000}{\$85,000} = 3.53 \text{ times}$$

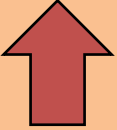
It measures the number of times, on average, the company collects receivables during the period.

## Management Efficiency Ratios 管理效率

Compute the **Trade Receivables Turnover** for **2017**.

$$\frac{\text{Credit Sales 賒銷}}{\text{Trade Receivables 應收貨款}} = \text{Trade Receivables Turnover 應收貨款周轉}$$

$$\frac{\$450,000}{\$100,000} = 4.50 \text{ times}$$

	<u>2017 (\$)</u>	<u>2016 (\$)</u>
Trade Receivables Ratio 應收貨款周轉 	4.50 times	3.53 times

Trade Receivables Turnover improved in 2016.

## Management Efficiency Ratios 管理效率

Compute the **Trade Receivables Collection Period** for **2016**.

$$\frac{\text{Trade Receivables 應收貨款}}{\text{Credit Sales 賒銷}} \times 365 \text{ days} = \text{Trade Receivables Collection Period 賒銷期限}$$

$$\frac{\$85,000 \times 365 \text{ days}}{\$300,000} = 103.42 \text{ days}$$

It assesses the effectiveness of a company's credit and collection policies.

This ratio means that receivables are collected on average every 103.42 days.

## Management Efficiency Ratios 管理效率

Compute the **Trade Receivables Collection Period** for **2017**.

$$\frac{\text{Trade Receivables 應收貨款}}{\text{Credit Sales 賒銷}} \times 365 \text{ days} = \text{Collection Period 賒銷期限}$$

$$\frac{\$100,000 \times 365 \text{ days}}{\$450,000} = \mathbf{81.11 \text{ days}}$$

	2017 (\$)	2016 (\$)
Trade Receivable Collection Period 賒銷期限	<b>81.11days</b>	103.42days

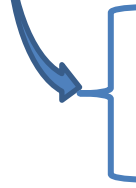
The company has **decreased** the average collection period by 22.31 days. The company can convert its receivables into cash **faster** than last year.



## Management Efficiency Ratios 管理效率

Compute the **Trade Payables Turnover** for **2016**.

$$\frac{\text{Credit Purchases 賒購}}{\text{Trade Payables 應付貨款}} = \text{Trade Payables Turnover 應付貨款周轉}$$


$$\begin{aligned} & \text{Cost of Goods Sold 銷貨成本} \\ & - \text{Opening Inventories 期初存貨} \\ & + \text{Closing Inventories 期末存貨} \end{aligned}$$

$$\frac{(\$250,000 - \$20,000 + \$30,000)}{\$70,000} = 3.71 \text{ times}$$

It measures the number of times, on average, the company settles payables during the period.

## Management Efficiency Ratios 管理效率

Compute the **Trade Payables Turnover** for **2017**.

$$\frac{\text{Credit Purchases 賒購}}{\text{Trade Payables 應付貨款}} = \text{Trade Payables Turnover 應付貨款周轉}$$

$$\frac{(\$380,000 - \$30,000 + \$50,000)}{\$80,000} = 5.00 \text{ times}$$

	2017 (\$)	2016 (\$)
Trade Payables Ratio 應付貨款周轉	5.00 times	3.71 times

Trade Payables Turnover **increased** in 2017.

## Management Efficiency Ratios 管理效率

Compute the **Trade Payables Repayment Period for 2016.**

$$\frac{\text{Trade Payables 應付貨款}}{\text{Credit Purchases 賒購}} \times 365 \text{ days} = \text{Trade Payables Repayment Period 賒購期限}$$

$$\frac{\$70,000 \times 365 \text{ days}}{\$250,000 - \$20,000 + \$30,000} = 98.27 \text{ days}$$

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

This means that payables are settled on average every 98.27 days.

## Management Efficiency Ratios 管理效率

Compute the **Trade Payables Repayment Period** for **2017**.

$$\frac{\text{Trade Payables 應付貨款}}{\text{Credit Purchases 賒購}} \times 365 \text{ days} = \text{Trade Payables Repayment Period 賒購期限}$$

$$\frac{\$80,000 \times 365 \text{ days}}{\$380,000 - \$30,000 + \$50,000} = 73.00 \text{ days}$$

	2017 (\$)	2016 (\$)
Trade Payables Repayment Period 賒購期限	73.00 days	98.27 days

The company settles its payables for credit purchases (賒購) on average every 73 days in 2017, which means the company have to settle the payables 25.27days **earlier** on average.

## Management Efficiency Ratios 管理效率

- ✓ Whether these days are good or bad depend on the company goals.
- ✓ A company may have long trade receivables period by granting customers long credit period in order to gain market share.
- ✓ Credit period enjoyed by the company enables more liquid funds for operations;

## Management Efficiency Ratios 管理效率

Compute the **total Asset Turnover** for **2016**.

$$\frac{\text{Sales 銷售}}{\text{Total Assets 總資產}} = \text{Asset Turnover 總資產周轉}$$

$$\frac{\$300,000}{\$144,500} = 2.08 \text{ times}$$

Measures how efficiently a company uses its assets to generate sales.

## Management Efficiency Ratios 管理效率

Compute the **total Asset Turnover** for **2017**.

$$\frac{\text{Sales 銷售}}{\text{Total Assets 總資產}} = \text{Asset Turnover 總資產周轉}$$

$$\frac{\$450,000}{\$190,000} = 2.37 \text{ times}$$

	2017 (\$)	2016 (\$)
Total Assets Turnover 總資產周轉	2.37 times	2.08 times

The company has efficiently used its assets, much more sales revenue is generated in 2017 than last year.

## Liquidity Ratios 流動資金比率

Measures the short-term ability of the company to pay its maturing obligations and to meet unexpected needs for cash.

- Short-term creditors such as bankers and suppliers are particularly interested in assessing liquidity.
- Ratios include:

• Current ratio	流動比率
• Acid-test ratio	速動比率



## Liquidity Ratios 流動資金比率

Compute the **Current Ratio** for **2016**.

$$\frac{\text{Current Assets 流動資產}}{\text{Current Liabilities 流動負債}} = \text{Current Ratio 流動比率}$$

$$\frac{\$116,000}{\$85,000} = 1.36 : 1$$

The ratio of 1.36:1 means that for every dollar of current liabilities, the company has \$1.36 of current assets.

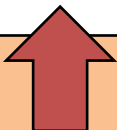
An exceptionally high current ratio indicates good liquidity, it may be a symptom of poor working capital (營運資金).

## Liquidity Ratios 流動資金比率

Compute the **Current Ratio** for **2017**.

$$\frac{\text{Current Assets 流動資產}}{\text{Current Liabilities 流動負債}} = \text{Current Ratio 流動比率}$$

$$\frac{\$151,000}{\$110,000} = 1.37 : 1$$

	2017 (\$)	2016 (\$)
Current Ratio 流動比率 	1.37 : 1	1.36:1

The company does not have short term debt-paying problem.

## Liquidity Ratios 流動資金比率

Compute the **Quick Ratio** for 2016.

$$\frac{\text{Current Assets 流動資產} - \text{Inventories 存貨}}{\text{Current Liabilities 流動負債}} = \text{Quick Ratio 速動比率}$$

$$\frac{\$ 116,000 - \$30,000}{\$85,000} = 1.01: 1$$

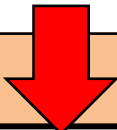
The acid-test ratio measures immediate liquidity.

## Liquidity Ratios 流動資金比率

Compute the **Quick Ratio** for 2017.

$$\frac{\text{Current Assets 流動資產} - \text{Inventories 存貨}}{\text{Current Liabilities 流動負債}} = \text{Quick Ratio 速動比率}$$

$$\frac{\$ 151,000 - \$50,000}{\$110,000} = 0.92:1$$

	2017 (\$)	2016 (\$)
Quick Ratio 速動比率 	0.92:1	1.01:1

The company may have immediate debt-paying liquidity problem.

## Solvency Ratios 償債能力比率

Solvency ratios measure the ability of a company to survive over a long period of time.

➤ Ratio includes:

- **Gearing ratio** | 槓桿比率

- This ratio indicates the capital structure of company.
- High Gearing ratio indicates the company is debt-financing (mainly financed by outside debts). High-g geared companies will have difficulties to obtain further borrowings. Bankruptcy may occur when the financiers demand repayments;
- Low Gearing ratio indicates the company is equity-financing.

## Solvency Ratios 償債能力比率

Compute the **Gearing Ratio** for 2016.

$$\frac{\text{Non-current Liabilities 非流動負債} + \text{Preferences Share Capital 優先股本}}{\text{Non-current Liabilities 非流動負債} + \text{Shareholders' Fund 股東資本}} = \text{Gearing Ratio 槓桿比率}$$

$$\frac{\$18,000}{\$18,000 + \$41,500} = 30.25\%$$

**HIGH** in this ratio indicates the company may have **difficulties** in repaying debts from its equity funds, and obtain further loans from Banks or other lenders.

## Solvency Ratios 償債能力比率

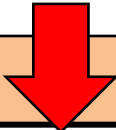
Compute the **Gearing Ratio** for **2017**.

Non-current Liabilities 非流動負債  
+ Preferences Share Capital 優先股本

Non-current Liabilities 非流動負債  
+ Shareholders' Fund 股東資本

= Gearing Ratio 槓桿比率

$$\frac{\$12,000}{\$12,000 + \$68,000} = 15.00\%$$

	2017 (\$)	2016 (\$)
Gearing 槓桿比率 	15.00%	30.25%

Decline in Gearing ratio indicates the company is less debt-financing.

# Investment Appraisal 投資評估

- To show the management preference in dividends and retention of reserve.
- Measures the amount of **return on an investment**.
- Ratio includes:

• Earning per Share (EPS)	每股盈利
------------------------------	------

- A measure of the net income earned on each share of ordinary share.



# Investment Appraisal 投資評估

Compute the **Earning per Share (EPS)** for **2016**.

$$\frac{\begin{array}{l} \text{Net Profit after tax 稅後淨利} \\ - \text{Preferences Dividend 優先股息} \end{array}}{\begin{array}{l} \text{No. of Ordinary Shares issued 已} \\ \text{發行的普通股數量} \end{array}} = \text{Earning per Share 每股盈利}$$

$$\frac{\$19,500}{\$22,000/\$2} = \$1.77/\text{share}$$

Earnings Per Share (每股盈利) measures the amount of money each shareholder would receive, if all profits were distributed at the end of the year.

# Investment Appraisal 投資評估

Compute the **Earning per Share (EPS)** for **2017**.

Net Profit after tax 稅後淨利  
- Preferences Dividend 優先股息

—————  
No. of Ordinary Shares issued  
已發行的普通股數量

= Earning per Share 每股盈利

$$\frac{\$26,500}{\$22,000/\$2} = \$2.41/\text{share}$$



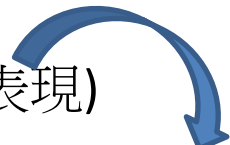
	2017 (\$)	2016 (\$)
Earnings Per Share 每股盈利	\$2.41/share	\$1.77/share

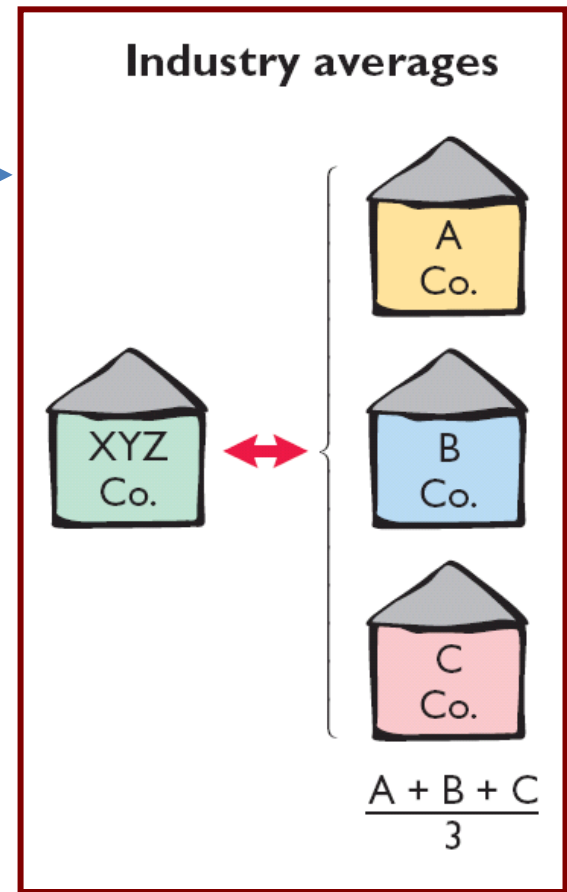
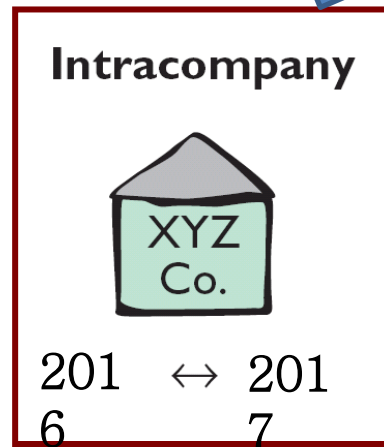
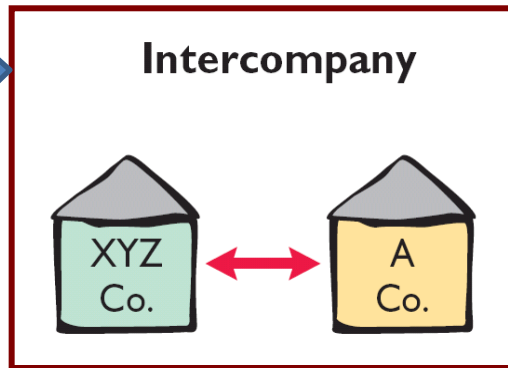
Much more net income is generated from each issued ordinary share in 2017 than last year.

# 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 company'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 ratios, 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)

**THANKS  
FOR  
LISTENING**

