FINANCIAL RATIO ANALYSIS AND BUDGET PREPARATION

財務報表比率分析及預算編制

Dr. Stacy Wang
Assistant Professor
Department of Accountancy
The Hang Seng University of Hong Kong





An Overview – For Level 2 Participants

Part 1 – A comprehensive analysis of **Tsit Wing Group**'s financial performance with interpretation 捷榮集團的財務表現及詮釋

Part 2 – Formulate a business plan for **Tsit Wing Group**'s beverage and

food operations in Hong Kong

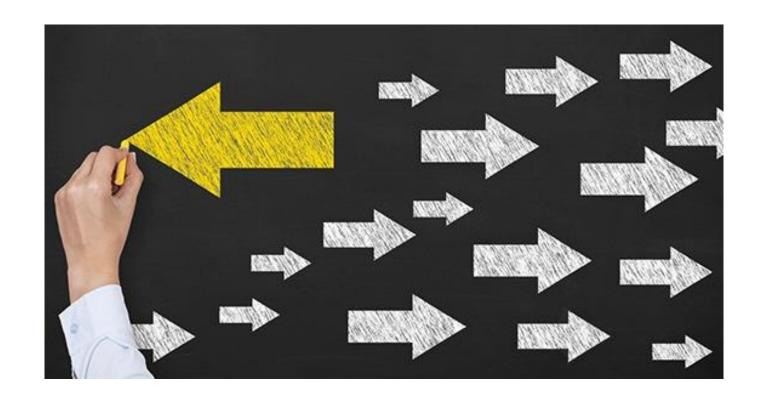
- (a) ...
- (b) ...
- (c) Business plan
 - Marketing expense budget 營銷費用預算



TWG 捷榮集團

Part 1:

Financial Ratios 財務比率分析



Instruction - 1

Apply the "**continuing operations** 持續經營業務" information, if available, on the Consolidated Statement of Profit or Loss 綜合損益表

Consolidated Statement of Profit or Loss 綜合損益表

Year ended 31 December 2019 截至2019年12月31日止年度

pply the results fro tinuing operation of		Notes 附註	2019 2019年 HK\$'000 千港元	2018年 2018年 HK\$'000 千港元
CONTINUING OPERATIONS	1+ cm 670 98 49 70	THE PARTY	- 8	
REVENUE	持續經營業務 收入	5	784,998	831,072
Cost of sales	銷售成本		(475,166)	(516,894
Gross profit	毛利		309,832	314,178
Other income	其他收入	5	5,127	2,968
Selling and distribution expenses	銷售及分銷開支		(115,863)	(117,147
Administrative expenses	行政開支		(79,204)	(91,770
Other expenses, net	其他開支淨額		(5,104)	(11,068
Finance costs	融資成本	6	(3,509)	(4,513
PROFIT BEFORE TAX FROM	持續經營業務除税前			
CONTINUING OPERATIONS	溢利	7	111,279	92,648
Income tax expense	所得税開支	10	(21,466)	(19,408
PROFIT FOR THE YEAR FROM CONTINUING OPERATIONS	持續經營業務所得年內 溢利		89,813	73,240
DISCONTINUED OPERATION	已終止業務			
(LOSS)/PROFIT FOR THE YEAR FROM A DISCONTINUED OPERATION	Please ignore the impact of the discontinued operation on the			
PROFIT FOR THE YEAR	*Group's profit or loss in both years. 480			



Instruction - 2 & 3

Apply Average figures 平均數:

 $2019 \text{ Avg} = \frac{1}{2} (31.12.2019 + 1.1.2019)$

 $2018 \text{ Avg} = \frac{1}{2} (31.12.\ 2018 + 1.1.2018)$

31.12.2019 & 1.1.2019 => 2019 Annual Report

1.1.2018 => 2018 Annual Report

Consolidated Statement of Financial Position

綜合財務狀況表

31 December 2019 2019年12月31日

31.12.2019

1.1.2019 31.12.2018

1.1.2018

31.12.2017



Annual

Report

		Notes 附註	2019 2019年 HK\$'000 千港元	2018年 HK\$'000 干港元
NON-CURRENT ASSETS	非流動資產			
Property, plant and equipment	物業、廠房及設備	14	147,405	102,683
Prepaid land lease payments	預付土地租賃付款	15	- (/)	10,920
Goodwill	商譽	16	- 17	15,447
Intangible assets	無形資產	17	419	2,873
Deposits paid for purchases of items of property, plant and equipment	已付購置物業、廠房及設備 項目按金 預付款項、按金及其他應收		10,324	3,602
Prepayments, deposits and other receivables	款項	20	5,024	3,819
Deferred tax assets	遞延税項資產	27	2,460	2,783
Total non-current assets	非流動資產總值		165,632	142,127

Avg. Inventory 2019

CURRENT ASSETS	流動資產		5.0	Avg. Inv
Inventories	存貨	18	125,748	205,795
Trade receivables	貿易應収款項	19	118,855	163,848
Prepaid land lease payments	預付土地租賃付款	15	200 E-201	393
Prepayments, deposits and other	預付款項、按金及其他應收			
receivables	款項	20	12,852	19,577
Tax recoverable	可收回税項		205	1,117
Cash and cash equivalents	現金及現金等價物	21	315,211	328,684
Total current assets	流動資產總值		572,871	719,414

Ratio Analysis - Illustration

Notes:

- Share price 31.12.2019: \$5
- Share price 31.12.2018: \$6.5

ABM Limited Consolidated Statement of Profit or Loss 綜合損益表				
For the Year Ended Decembe	r 31			
	2019	2018		
Revenue 收入	\$ 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 銷售及分銷開支	7,000	6,000		
Administrative expenses 行政開支	30,000	20,000		
Other income and expenses 其他收入及開支	0	0		
Finance costs 利息/融資成本	1,500	1,500		
Profit before tax 稅前淨利	31,500	22,500		
Income tax expense 所得稅開支	5,000	3,000		
Profit for the year 全年稅後淨利	\$ 26,500	\$ 19,500		

	Consolidated Statement of Financial Position 綜合財務狀況表			
	December 31			
		2019	2018	2017
	ASSETS 資	產		
	NON-CURRENT ASSETS 非流動資產			
	 Property, plant and equipment (net) 房產,廠房及機器 (淨值) 	\$ 39,000	\$ 28,500	\$20,000
Ratio	Total non-current assets	39,000	28,500	20,000
	CURRENT ASSETS 流動資產			
Analysis	● Inventory 存貨	\$ 50,000	\$ 30,000	20,000
- Illustration	● Trade receivable (net) 應收帳款 (淨值)	100,000	85,000	81,000
- Illustration	● Cash 現金	1,000	1,000	4,000
	Total current assets	151,000	116,000	105,000
	Total assets	\$ 190,000	\$ 144,500	\$ 125,000
	LIABILITIES AND EQUIT	Y負債及股東權	益	
	NON-CURRENT LIABILITIES 非流動負債			
	 Interest-bearing bank borrowings 計息銀行借款 	\$ 12,000	\$ 18,000	\$ 10,000
	Total non-current liabilities	12,000	18,000	10,000
	CURRENT LIANBILITIES 流動負債			
	● Trade payable 應付帳款	\$ 80,000	\$ 70,000	\$ 60,000
	● Income taxes payable 利得稅應付款項	30,000	15,000	12,000
	Total current liabilities	110,000	85,000	72,000
	Total liabilities	\$ 122,000	\$ 103,000	82,000
	SHAREHOLDERS' EQUITY 股東權益			
	● Share capital 股本 (\$2 par 面值)	\$ 22,000	\$ 22,000	20,000
9	● Reserves 儲備	46,000	19,500	23,000
	Total shareholders' equity	68,000	41,500	43,000

Total liabilities and equity

\$ 190,000

\$ 144,500

\$ 125,000

ABM Limited

Ratio Analysis

1. Profitability Ratios 盈利能力	Remark
(i) Gross profit margin 毛利率	Level 1
(ii) Net profit margin 淨利率	Level 1
(iii) Return on average capital employed (ROCE) 平均運用資金報酬率	Vs. Level 1
(iv) Return on average assets (ROA) 平均資產回報率	NEW

2. Management Efficiency Ratios 管理效率	Remark
(i) Average inventory turnover period 平均存貨周轉期限	NEW
(ii) Average trade payables repayment period 平均賒購期限	NEW
(iii) Average Total assets turnover 平均總資產周轉	Vs. Level 1

3. Liquidity Ratios 流動資金	Remark
(i) Current ratio 流動比率	Level 1
(ii) Quick ratio 速動比率	Level 1
(iii) Cash ratio 現金比率	NEW

4. Solvency Ratios 償債能力	Remark
(i) Gearing ratio 槓桿比率	Level 1
(ii) Debt to equity ratio 債務股本比率	NEW
(iii) Time interest earned 利息保障倍數	NEW
5. Investment Appraisal Ratios 投資評估	Remark
(i) Earning per Share (EPS) 每股盈利	Level 1
(ii) Price earning ratio (P/E ratio) 市盈率	NEW

Profitability Ratios 盈利能力比率

Gross Profit Margin 毛利率

Gross Profit 毛利 Revenue 銷貨

2019 2018

\$70,000/\$450,000 \$50,000/\$300,000

15.56% 16.67%

From each \$100 revenue made, less amount was generated to cover operating and non-operating expenses than last year.

Net Profit Margin 淨利率

Net Profit Before Tax 稅前淨利 Revenue 銷貨

2019	2018
\$31,500/\$450,000	\$22,500/\$300,000
7.00%	7.50%

A decrease of profit generated from revenue.

Profitability Ratios 盈利能力比率

Return on Average Capital Employed (ROCE) 平均運用資金報酬率

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

Formula:	Profit Before Interest and Tax 利息及稅前淨利 Average Capital Employed 平均運用資金, i.e., Non-current Liability非流動負債 + Equity 股東權益		
	2019 2018		
Working:	(\$31,500 + \$1,500) ½ (\$12,000 + \$68,000 + \$18,000 + \$41,500)	(\$22,500 + \$1,500) ½ (\$18,000 + \$41,500 + \$10,000 + \$43,000)	
Results:	47.31%	42.67%	
Comments:	For every \$100 of long-term capital investment made in the business, more operating profit in 2019.		



Profitability Ratios 盈利能力比率

Return on Average Assets 平均資產回報

- Rate of return based on the book value of assets.
- Measures how effectively a company uses its resources/asset (資產) to generate net income.

Formula:	Net profit after tax 稅後淨利 Average total assets 平均總資產		
	2019 2018		
Working:	\$26,500 % (\$144,500 + \$190,000)	\$19,500 ½ (\$125,000 + \$144,500)	
Results:	15.84%	14.47%	
Comments:	The company is earning more profit with the existing assets in 2019 than 2018.		

Management Efficiency Ratios 管理效率

Average Inventory Turnover Period 平均存貨周轉期限

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

Formula:

Average Inventory 平均存貨
Cost of Sales 銷售成本
* 365 days

	2019	2018	
Working:	$\frac{\frac{1}{2} (\$50,000 + \$30,000)}{\$380,000} * 365$	$\frac{\frac{1}{2}(\$20,000 + \$50,000)}{\$250,000} * 365$	
Results:	38.42 days	36.50 days	
Comments:	The average selling time of 38.42 days in 2019 is longer than that in 2018.		



Management Efficiency Ratios 管理效率

Average Trade Payables Repayment Period 平均賒購期限

 the average number of days which a company must pay for its credit purchases.

Formula:

Average Trade Payables 平均應付貨款 *365 days Credit Purchase 賒購

Cost of Sales + Closing Inventory - Opening Inventory 銷貨成本 + 期末存貨 - 期初存貨

	2019	2018	
Working:	$\frac{\frac{1}{2}(\$80,000 + \$70,000)}{\$380,00 + \$50,000 - \$30,000} *365$	$\frac{\frac{1}{2}(\$60,000 + \$70,000)}{\$250,000 + \$30,000 - \$20,000} *365$	
Results:	68.44 days	91.25 days	
Comments:	The average settlement time for credit purchase (赊購) is 68.44 days in 2019, being 22.81 days earlier than in 2018.		

Management Efficiency Ratios 管理效率

Average Total Assets Turnover 平均總資產周轉

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

Formula:	<u>Revenue 收入</u> Average Total Assets 平均總資產		
	2019 2018		
Working:	\$450,000 1/2 (\$190,000 + \$144,500)	\$300,000 <mark>1/2 (\$144,500 + \$125,000)</mark>	
Results:	2.69 times 2.23 times		
Comments:	The company has efficiently used its assets, much more revenue is generated in 2018 than last year.		

Liquidity Ratios 流動資金比率

Current Ratio 流動比率

Current Assets 流動資產 Current Liabilities 流動負債

2019	2018
\$151,000/\$110,000	\$116,000/\$85,000
1.37 : 1	1.36 : 1

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

Quick Ratio 速動比率

<u>Current Assets 流動資產 – Inventories 存貨 – Prepayments 預付款項</u>

<u>Current Liabilities 流動負債</u>

2019	2018
(\$151,000 - \$50,000 - \$0)/\$110,000	(\$116,000 - \$30,000 - \$0)/\$85,000
0.92 : 1	1.01 : 1

The company may have immediate debt-paying liquidity problem.



Liquidity Ratios 流動資金比率

Cash Ratio 現金比率

- for every dollar of current liabilities, the dollar amount of CASH the company has.
- the most conservative of all the liquidity measurement.

Formula:	Cash and Cash Equivalents 現金 Current Liabilities 流動負債		
	2019 2018		
Working:	<u>\$1,000</u> \$110,000	<u>\$1,000</u> \$85,000	
Results:	0.01:1 0.01:1		
Comments:	There is insufficient cash on hand to pay off short-term debt in both 2018 and 2019.		

Solvency Ratios 償債能力比率

Gearing Ratio 槓桿比率			
Formula:	Interest-bearing Bank Borrowings 計息銀行借款 Share Capital 股本 + Reserves 儲備		
	2019 2018		
Working:	<u>\$0 + \$12,000</u> \$22,000 + \$46,000	<u>\$0 + \$18,000</u> \$22,000 + \$19,500	
Results:	17.65% 43.37%		
Comments:	Decline in Gearing ratio indicates the company is less debt- financing. The company has less difficulties in repaying debts from its equity funds.		



Solvency Ratios 償債能力比率

Debt to Equity Ratio 債務股本比率

- how much debt a company is using to finance its assets relative to the amount of value represented in shareholders' equity.
- Debt to equity ratio (債務股本比率) of 100% would mean that investors and creditors have an equal stake in the business assets.

Fo	rm	ш	la•
ГО		u	a.

<u>Total Liabilities 總負債</u> Total Equity 總股東權益



	2019	2018	
Working:	<u>\$122,000</u> \$68,000	<u>\$103,000</u> \$41,500	
Results:	179.41%	248.19%	
Comments:	the company is less debt-financing in 2019.		



Solvency Ratios 償債能力比率

Time Interest Earned 利息保障倍數

 an indication of the company's ability to meet interest payments as they come due.

_			1	
$\mathbf{L}_{\mathbf{C}}$	r	m	ш	la:
ıv	,,		ш	ıa.

Profit Before Interest and Tax 利息及稅前淨利 Finance Costs 利息/融資成本

	2019	2018	
Working:	\$31,500 + \$1,500 \$1,500	\$22,500 + \$1,500 \$1,500	
Results:	22.00 times	16.00 times	
Comments:	The company's interest expense in 2019 is better covered at 22 times, compared with that in 2018 of 16 times.		

Investment Appraisal 投資評価

Earnings Per Share (EPS) 每股盈利			
Formula:	Profit for the year 全年稅後淨利 捷榮: Profit Attributable to Owners of the Parent 母公司擁有人應佔溢利 Weighted-average No. of Ordinary Shares 普通股加權平均數		
	2019 2018		
Working:	<u>\$26,500</u> 11,000 shares	<u>\$19,500</u> 11,000 shares	
Results:	\$2.41 /share \$1.77 /share		
Comments:	Much more net income is generated from each issued ordinary share in 2019 than 2018.		

(11,000 shares = \$22,000 Share Capital / \$2 par value per share)



Investment Appraisal 投資評估

Price-Earnings (P/E) Ratio 市盈率

an indicator of investors' confidence in the prospects of a company.

_				•	
E,		m		la:	•
	U		ıu	ıa.	ı

Current Price Per Ordinary Share 普通股每股市價 Earnings Per Share 每股盈利

	2019	2018				
Working:	\$5 / \$2.41 per share	\$6.5 / \$1.77 per share				
Results:	2.07 times	3.67 times				
Comments:	Investors have a lower degree company's prospects.	of confidence in the				

Part 2:

Marketing Budget 營銷預算

Budget Preparation

A **budget** is a <u>detailed quantitative plan</u> for acquiring and using financial and other resources over a specified <u>forthcoming time</u> <u>period</u>.



Marketing Categories

Marketing Budget Major Categories



Sample Marketing Expenses Budget 營銷預算範例

	2021			2022					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Total
Media 媒體	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000		\$ '000	\$ '000	\$ '000
Television 電視 (2 channels)									3,500
Newspapers 報紙 (1/4 page per issue)									1,100
Direct mail 郵遞直銷 (10,000 copies by post)									1,200
									5,800
Production 製作									
Television 電視 (10*2'30" advertisements)									1,000
Newspapers 報紙 (type and photos)									180
Direct mail 郵遞直銷 (type and printing)									1,000
									2,180
Merchandising 採購									
5% off Coupon 優惠券									1,200
Internet media 網上媒體									50
Store signage 展示牌 (20 signs per sales area)									250
									1,500
Selling costs 分銷費用									
Sales incentive programme 銷售獎勵方案計劃									200
									200
Research Expenses 研究開支									
Market research 市場研究									320
									320
Total marketing estimate 總營銷預算									10,000



THANK YOU!

