## (3) محاضرة

* Components of Financial Analysis مكونات التحليل الملاي

The first step toward improving financial literacy is to conduct a financial analysis of your business. A proper analysis consists of five key areas, each containing its own set of data points and ratios.

1. Revenues الإيرادات

Revenues are probably your business's main source of cash. The quantity, quality and timing of revenues can determine long-term success.

- Revenue growth (revenue this period - revenue last period) $\div$ revenue last period. When calculating revenue growth, don't include one-time revenues, which can distort the analysis.
- Revenue concentration (revenue from client $\div$ total revenue). If a single customer generates a high percentage of your revenues, you could face financial difficulty if that customer stops buying. No client should represent more than 10 percent of your total revenues.
- Revenue per employee (revenue $\div$ average number of employees). This ratio measures your business's productivity. The higher the ratio, the better. Many highly successful companies achieve over one million Dinar in annual revenue per employee.

2. Profits الأرباح

If you can't produce quality profits consistently, your business may not survive in the long run.

- Gross profit margin (revenues - cost of goods sold) $\div$ revenues. $A$ healthy gross profit margin allows you to absorb shocks to revenues or cost of goods sold without losing the ability to pay for ongoing expenses.
- Operating profit margin (revenues - cost of goods sold - operating expenses) $\div$ revenues. Operating expenses don't include interest or taxes. This determines your company's ability to make a profit regardless of how you finance operations (debt or equity). The higher, the better.
- Net profit margin (revenues - cost of goods sold - operating expenses all other expenses) $\div$ revenues. This is what remains for reinvestment into your business and for distribution to owners in the form of dividends.


## 3. Operational Efficiency

(الكفاعة التشثغيلية

Operational efficiency measures how well you're using the company's resources. A lack of operational efficiency leads to smaller profits and weaker growth.

- Accounts receivables turnover (net credit sales $\div$ average accounts receivable). This measures how efficiently you manage the credit you extend to customers. A higher number means your company is managing credit well; a lower number is a warning sign you should improve how you collect from customers.
- Inventory turnover (cost of goods sold $\div$ average inventory). This measures how efficiently you manage inventory. A higher number is a good sign; a lower number means you either aren't selling well or are producing too much for your current level of sales.


## 4. Capital Efficiency and Solvency كفاءة راس المال والملاءة المالية

Capital efficiency and solvency are of interest to lenders and investors.

- Return on equity (net income $\div$ shareholder's equity). This represents the return investors are generating from your business.
- Debt to equity (debt $\div$ equity). The definitions of debt and equity can vary, but generally this indicates how much leverage you're using to operate. Leverage should not exceed what's reasonable for your business.


## 5. Liquidity السيولة

Liquidity analysis addresses your ability to generate sufficient cash to cover cash expenses. No amount of revenue growth or profits can compensate for poor liquidity.

- Current ratio (current assets $\div$ current liabilities). This measures your ability to pay off short-term obligations from cash and other current assets. A value less than 1 means your company doesn't have sufficient liquid resources to do this. A ratio above 2 is best.
- Interest coverage (earnings before interest and taxes $\div$ interest expense). This measures your ability to pay interest expense from the cash you generate. A value less than 1.5 is cause for concern to lenders.


## Exercise

The following information abstracted from a company books for the financial year ended 31/12/2019. (Amounts in thousands)
1 - The profit and loss account for the year ended 31/12/2019

| particulars | amount |
| :--- | :---: |
| Total revenues | $2,500,000$ |
| $(-)$ Cost of goods sold | $(1,500,000)$ |
| $=$ Gross Profit | $1,000,000$ |
| Operating expenses | $(450,000)$ |
| $=$ Profit before extraordinary items | 550,000 |
| + Net capital gains and losses(100,000 - 130,000 | $(30,000)$ |
| capital gains capital losses) |  |
| = Profit before interest and taxes | 520,000 |
| $(-)$ Interest | $(120,000)$ |
| = Profit before tax | 400,000 |
| $(-)$ Taxes | $(132,000)$ |
| $=$ Net profit after tax | 268,000 |

2 - The Balance sheet as it is in 31/12/2019

| amount | Liabilities and Equity | amount | assets |
| :---: | :--- | :---: | :--- |
| $5,000,000$ | Equity | $3,000,000$ | Fixed Assets |
| $1,200,000$ | Reserves are not subject to tax | $\underline{(400,000})$ | $(-)$ depreciation Accum. |
| $1,500,000$ | Long-term loans (8\%) | $2,600,000$ | Net fixed assets |
| 750,000 | Current liabilities | 640,000 | Prepaid expenses |
| 190,000 | Revenue received in advance | $3,300,000$ | Stock |
|  |  | $1,200,000$ | Accounts receivable |
|  |  | 900,000 | Cash |
| $8,640,000$ | total | $8,640,000$ | Total |

## Additional information

- Revenue last period 2,000,000
- Revenue from client 1,500,000
- Average number of employees 1,500

Required: - calculate the following:

1. Revenue growth
2. Revenue concentration
3. Revenue per employee
4. Gross profit margin
5. Operating profit margin
6. Net profit margin
7. Accounts receivable turnover
8. Inventory turnover
9. Rate of return on equity
10. Total Debt to equity Ratio
11. Current ratio
12. Interest coverage

فيما يلي المعلومات المستخرجة من سجلات إحدى الشركات عن السنة المالية المنتية في 2019/12/31م. (المبالغ بالألاف)

| البيـة المنتهية في 2019/12/31م |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $\begin{gathered} 2500000 \\ (1500000) \end{gathered}$ | (-) |  |  |  |
| $\begin{aligned} & 1000000 \\ & (450000) \end{aligned}$ | ( ) مجمل الربح <br> (-) المصاريف النشغيلية |  |  |  |
| $\begin{aligned} & 550000 \\ & (30000) \end{aligned}$ | + صـافي المكاسب و الخسائر الرأسمالية (100000 مكاسب رأسمالية - 130000 خسائر رأسمالية) |  |  |  |
| $\begin{gathered} 520000 \\ (120000) \\ \hline \end{gathered}$ | = الربح قبل الضرائب والفو ائد <br> (-) الفو ائد |  |  |  |
| $\begin{gathered} 400000 \\ (132000) \\ \hline \end{gathered}$ |  |  |  |  |
| 268000 | $\underbrace{\text { 2019 }}$ = |  |  |  |
| 2- الهيزانية كما هي في 2019/12/31م |  |  |  |  |
| حقوق المككية والمطلوبات | المبالغ | الأصول | الجزئي | المبلغ الكلي |
| حقوق الملكية <br> احتياطيات غير خاضعة للضريبة إيرادات مستلمة مقدما <br> فروض طويلة الأجل (8) المطلوبات المتداولة | 5000000 | الأصول الثابتة (-) مجمع الاندثار صافي الآصول الثابتة مصاريف مدفوعة مقاما الـخزون الذمم المدينة النقاية | 3000000 |  |
|  | 1200000 |  | $\begin{array}{c\|c} \text { (40000) } & \\ & 2600000 \\ & 640000 \\ & 3300000 \\ & 1200000 \\ & 900000 \end{array}$ |  |
|  | 190000 |  |  |  |
|  | 1500000 |  |  |  |
|  | 750000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | 8640000 |  | 8640000 |  |
| اللمطلب:- استخراج كا |  |  |  |  |
|  |  |  | 1. |  |
|  |  |  | 2. |  |
|  |  |  | العائد لكل موظف |  |
|  |  |  | 4. |  |
|  |  |  | 5. |  |
|  |  |  | 6. هامش صـافي الربح |  |
|  |  |  | 7. |  |
|  |  |  | 8. |  |
|  |  | إساهمين | على حقوق الـ | و. |

10. نسبة مجموع الديون إلى حقوق الملكية
11. النسبة التداول
12. نسبة تغطية الفائدة

## Solution

1. 

Revenue growth $=($ revenue this period - revenue last period $) \div$ revenue last period

$$
2,500,000-2,000,000 \div 2,000,000=0.25=25 \%
$$

2. Revenue concentration $=$ (revenue from client $\div$ total revenue)

$$
1,500,000 \div 2,500,000=0.6=60 \%
$$

3. Revenue per employee $=$ (total revenue $\div$ average number of employees $)$

$$
2,500,000 \div 1500=1667
$$

4. Gross profit margin $=($ total revenues - cost of goods sold) $\div$ revenues

$$
2,500,000-1,500,000 \div 2,500,000=0.40=40 \%
$$

5. Operating profit margin (total revenues - cost of goods sold - operating expenses) $\div$ total revenues.

$$
(2,500,000-1,500,000-450,000) \div 2,500,000=0.22=22 \%
$$

6. Net profit margin (revenues - cost of goods sold - operating expenses - all other expenses) $\div$ revenues.

$$
(2,500,000-1,500,000-450,000-252,000) \div 2,500,000=0.12=12 \%
$$

7. Accounts receivables turnover $=$ (net credit sales $\div$ average accounts receivable).

$$
1,000,000 \div 1,200,000=0.83
$$

8. Inventory turnover $=$ (cost of goods sold $\div$ average inventory)

$$
1,500,000 \div 3,300,000=0.45=45 \%
$$

9. Return on equity $=$ (net income $\div$ shareholder's equity)

$$
268,000 \div 6,200,000=0.043=4,3 \%
$$

10. Debt to equity (debt $\div$ equity).

$$
2,440,000 \div 6,200,000=0.3935=39.35 \%
$$

11. Current ratio (current assets $\div$ current liabilities).

$$
6,040,000 \div 940,000=6.425
$$

12. Interest coverage (earnings before interest and taxes $\div$ interest expense).
$520,000 \div 120,000=4.333 .13$
