EUROPEAN INTERNATIONAL UNIVERSITY

COVER PAGE AND DECLARATION

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I confirm that this assignment is my own work, is not copied from any other person's work (published/unpublished), and has not been previously submitted for assessment elsewhere.

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DATE: 27/3/23

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Requirement no. 1:

The below past four years' financial statements data for XYZ food industry company:

4 Years Financial Statements' Information – Review (Data In MEGP)				
Income Statement				
	2022	2021	2020	2019
Sales	88,785	91,612	92,158	89,721
Cost of Sales	63,032	59,770	64,840	62,770
as % of sales	71.0%	65.2%	70.4%	70.0%
Growth Profit	25,753	31,842	27,318	26,951
Selling, general and administrative expenses	12,405	13,011	13,033	12,477
as % of sales	14.0%	14.2%	14.1%	13.9%
Operating Income	12,371	17,823	13,271	13,487
Interest Expenses	977	1,008	1,014	987
Income before Income Taxes	11,394	16,815	12,257	12,500
Taxes	3,305	3,367	3,256	3,259
as % of sales	3.7%	3.7%	3.5%	3.6%
Net profit	9,066	14,456	10,015	10,228
as % of sales (Profit Margin)	10.2%	15.8%	10.9%	11.4%
Balance sheet and Cash flow statement				
	2022	2021	2020	2019
Current assets	29 434	33 961	30,066	34,020
Fixed assets	72 810	76 607	69 590	70 730
Non-current assets	94 558	99 489	90,376	91,857
Total assets	123 992	133 450	120,442	125,877
Current liabilities	33 321	32 895	32,917	38,597
Non-current liabilities	26 685	28 671	23,386	24,616
Net Working Capital	-3 887	1 066	-2 851	-4 577
Total Equity	62 338	70 130	62,575	61,007
Non-controlling interests	1 648	1 754	1,564	1,657
Net financial debt	15 425	12 325	14,690	18,120
Operating cash flow	14 302	14 700	14,992	15,668
as % of net financial debt	92.7%	119.3%	102.1%	86.5%
Free cash flow	9 945	14 137	10,486	9,905
Capital expenditure	3 872	3 914	4,928	5,273
as % of sales	4.4%	4.3%	5.3%	5.9%
Owners' Equity				
	2022	2021	2020	2019
The weighted average number of shares outstanding	3 129	3 188	3,191	3,186
Earnings per share	2.90	4.54	3.14	3.21
Dividend	2.25	2.20	2.15	2.05
Stock price	71.00	68.50	64.50	57.50
Financial Ratios				
Return of Assets (ROA)	10.0%	9.7%	10.8%	9.9%
Fixed asset turnover	82.0%	83.6%	75.5%	78.8%
Total asset turnover	71.6%	68.6%	76.5%	71.3%
Current Ratio	88.3%	103.2%	91.3%	88.1%
Net working Capital to total assets	-3.1%	0.8%	-2.4%	-3.6%
The ratio of Debt to Equity	24.7%	17.6%	23.5%	29.7%
Equity Multiplier	199%	190%	192%	206%
Pay-out ratio based on basic earnings per share	77.6%	48.5%	68.5%	63.9%
Price-to-Earnings Ratio	24.48	15.09	20.54	17.91

A. Profitability:

A. 1. margin of profit Ratio:

Profit margin is the measure and indicator of an entity, business, product, or service's profitability and price to existing by generating money and cash for the stakeholders. And it's always expressed and defined as a percentage. The upper and therefore the percentage calculated, the more and high profit the business makes and creates relative to its costs and expenses and is more attractive for investment and growth.

(Net Profit / Net Sales) x 100 = Net Income Margin for 2022
9066 / 88785 = 10.2 %

Comment:

The Percent 10.2 % is within the health ratio average for the food industry, which suggests that the business is doing well and is profitable.

A. 2. Return Of Assets Ratio:

Return on assets may be a profitability ratio that gives and evaluates what proportion of profit an organization can generate cash and money from its assets. In otherwise to be understood, the return on assets (ROA) ratio evaluates how efficient a company's management is in earning a benefit from its economic resources or assets on its record.

Net Profit / Total Assets = Return of Assets (ROA) for 2022
9066 / 123992 = 7.3 %

Comment:

The Percent 7.3 which there is within the healthy Return of Assets (ROA) average for the food industry, which implies that the business is doing well and is profitable.

B. Efficiency:

B. 1. Fixed Asset Turnover (FAT) Ratio:

The Fixed Asset Turnover (FAT) ratio is an efficiency ratio that evaluates how well or efficiently a business uses fixed assets to get sales. This ratio divides income by net fixed assets, calculated over an annual period. the online fixed assets include the quantity of property, plant, and equipment, less the accumulated depreciation. Generally, the next fixed asset ratio implies simpler utilization of investments in fixed assets to come up with revenue. This ratio is commonly analyzed alongside leverage and profitability ratios.

Net Sales / Fixed Assets = Fixed Asset Turnover for 2022
88785 / 72810 = 82.0 %

Comment:

The Percent 82.0 which there is within the Fixed Asset Turnover (FAT) average for the food industry, which suggests that the business is doing well and is profitable.

B. 2. Total Assets Turnover Ratio:

The total asset turnover ratio compares the revenue of a corporation to its asset base. The ratio evaluates the flexibility of a corporation to efficiently produce sales and is commonly utilized by third parties to judge the operations of a business. Ideally, an organization with a high total asset turnover ratio can operate with less in assets than a less efficient competitor and then requires less debt and equity to work. The result should be a relatively greater return to its shareholders.

Net Sales / XYZ Total assets = XYZ Total asset turnover for 2022
88785 / 123992 = 71.6 %

Comment:

The Percent 71.6 % is within the healthy Total Assets Turnover average for the food industry, which suggests that the business is doing well and is profitable.

C. Short-Term Solvency

C. 1. Current Ratio:

The current ratio evaluates how a business's current assets, like cash, cash equivalents, assets, and inventories, are wont to settle current liabilities like accounts payable.

Current Assets / Current Liabilities = Current Ratio for 2022
29434 / 33321 = 88.0 %

Comment:

The Percent 88.0 you look after Current Ratio is below the healthy average for the food industry which preferable to be 100% and above, which suggests that the business performance is need improvement and there is a chance to boost business performance, it implies that the business has insufficient capital to pay off its short-term debt because it is a bigger proportion of liabilities relative to the worth of its current assets.

C. 2. Net Working Capital to Total Assets Ratio:

The total working capital to total assets ratio is employed to check the company's net quick assets to the company's total assets, where the assets are the difference between total current assets and total current liabilities, therefore the capital to Total Assets ratio determines the short-term company's solvency.

Net Working Capital / Total Assets = Net Working Capital to Total Assets Ratio for 2022
-3887 / 123992 = -3.0 %

Comment:

The Percent -3.0 you look after Net capital to Total Assets Ratio is below the healthy average for the food industry which is preferable to be 0% and above, which suggests that the business performance is need improvement and there's a chance to reinforce business performance, it means the business has insufficient capital to pay off its short-term debt because it's a bigger proportion of liabilities relative to the worth of its current assets.

D. Long-term Solvency:

D. 1. The debt-to-equity ratio (D/E ratio)

Where It shows what quantity of debt a firm has compared to its total assets, is employed to gauge a company's financial leverage, and is calculated by dividing a company's total liabilities by its shareholder equity. The D/E ratio is a crucial metric in finance. it's a measure of the degree to which a corporation is financing its operations with debt instead of its resources. The debt-to -equity ratio could be a particular variety of gearing ratios.

Total Dept / Total Equity = The debt-to-equity ratio (D/E ratio) for 2022
15425 / 62338 = 24.7%

Comment:

The ratio of 24.7 which there is within the healthy debt-to-equity ratio average for the food industry companies, which suggests that the business is doing well where a better D/E ratio means the corporate may have a harder time covering its liabilities, and a lower debt-to-equity ratio value is considered favorable because it indicates a lower risk.

D. 2. The equity multiplier ratio:

The equity multiplier could be a ratio that evaluates a company's leverage financing, which is the amount of money the corporate has borrowed to finance the purchasing assets.

Total Assets / Total Equity = The equity multiplier ratio for 2022
123 992 / 62 338 = 199 %

Comment:

With a ratio of 199.0 which there's within the healthy equity multiplier ratio, XYZ uses equity to finance 50% of its assets and therefore the remaining half is financed by debt. In general, it's better to possess an occasional equity multiplier because meaning XYZ isn't incurring excessive debt to finance its assets.

E. Market-Based Ratio:

E. 1. Price-to-Earnings Ratio:

P/E Ratio or Price to Earnings Ratio is the ratio of the present price of a company's share to its earnings per share (EPS). Analysts and investors can consider earnings from different periods for the calculation of this ratio; however, the foremost used variable is the earnings of an organization from the last 12 months or one year. it's also remarked because of the price multiple of earnings multiple.

Stock Price / Earnings Per Share = P/E ratio for 2022
71.00 / 2.90 = 24.48

Comment:

The Percent 24.48 which there is within the healthy ratio average for the food industry, implies that the business is doing well and is profitable.

Requirement no. 2:

based on the above financial analysis and also the above research for selective financial ratios, we'll detect that XYZ encompasses plenty of challenges and areas for improvement in its short-term solvency and liquidity, and accordingly i prefer to recommend engaged on the below areas to spice up the short-term financial performance:

1. Control XYZ's overhead expenses: There are many sorts of overhead that XYZ could also be ready to reduce — like rent, utilities, and insurance — by negotiating or shopping around. XYZ can even study where XYZ expend time and energy. One example: If XYZ company contains a written record, going digital can save XYZ time and money that's now spent submitting and accepting paper checks.

2. Sell XYZ's unnecessary assets: Eliminating items like surplus business equipment can provide a tiny low sum of capital and reduce the common cost of old and unused equipment and devices.

3. Change XYZ's payment cycle: cope with XYZ vendors about opportunities for discounts if XYZ pays early, which may save XYZ hundreds to thousands of EGPs. On the flip side, XYZ can consider offering XYZ customers discounts for submitting payments prior schedule.

4. Revisit XYZ's debt obligations: If XYZ has short-term debt, switching to long-term debt can require smaller monthly payments and provides XYZ longer to pay off the sum. On the flip side, switching long-term debt to short-term debt may mean higher monthly payments, but it can even mean that XYZ's debt are going to be paid off more quickly. Also consider options like debt consolidation and loan refinancing, which can help lower monthly payments now, while also saving XYZ money within the future.

5. Increase XYZ profits: Increasing XYZ profits increases equity. Increasing profits may sound easier said than done, yet there are some things XYZ can do to extend XYZ's profits within the short term. as an example, take a critical take a look at costs, subscriptions, fixed charges, and other expenses. Is there room to chop these? Then XYZ will automatically keep more profit.

6. Reduce XYZ's working capital: assets is that the money XYZ has to pay its daily financial obligations. This capital is betrothed within the company, including stocks, materials, but also outstanding invoices. capital is extremely important for a business. Without sufficient capital, XYZ can run into problems paying daily expenses. However, too much-working capital is additionally not desirable, because it is fixed within the company and XYZ as an entrepreneur can do nothing with this excess. Is there room within the assets to cut back it? Then this includes a positive effect on solvency.

7. Optimize XYZ's stock: The third tip is an extension of improving capital. As mentioned, XYZ company stock is a component of the capital. Therefore, confirm XYZ stock is often in balance. Are XYZ often curst large quantities? Then it would be smart to begin working with a smaller stock.

Here, not only XYZ company's solvency but also XYZ's assets will improve.

8. XYZ's assets management: When improving XYZ's solvency, it's also going to be an honest idea to require a decent view at XYZ's debtor management. Having XYZ's debtor management in good order will help XYZ get invoices paid on time. Where this also will play a very important role when XYZ wants to reinforce its solvency because as soon as invoices are paid faster and quicker, debt will decrease sooner and faster. However, enhancing receivables management will help when XYZ incorporates a lot of outstanding invoices but does not guarantee and make sure that invoices are going to be paid sooner and on time.

Requirement no. 3:

3.A. Recommend one new investment project to the company. The company wants to expand its business through an investment project; however, it can only capitalize 40% through own capital. by using NPV and WACC.

Based on the potential demand in the market for marshmallow products in the Egyptian market, I recommend building and creating a new marshmallow production line, which needs investment with 10 MEGP, where XYZ can capitalize with 4 MEGP and we will finance the rest of the required 6 MEGP.

To evaluate the feasibility of the project, we will use the below two measures:

1. **The Weighted Average Cost of Capital (WACC):**

It is a financial measure that shows the total cost of capital to a company. Rather than being dictated by the company's management, the WACC is determined by external market participants and indicates the minimum return a company can obtain from its existing asset base.

Weighted Average Cost of Capital (WACC) =
((Equity)/ (Equity + Debt) * Cost of Equity) + ((Debt/ (Equity + Debt) * Cost of Debt) *(1-Tax rate)

Since,
Equity = 4 MEGP
Debt = 6 MEGP
Cost of Equity = 17%
Cost of Debt = 15%
Tax rate = 30%

Then,
Weighted Average Cost of Capital (WACC) =
((4)/ (10) * 0.17) + ((6/ (10) * 0.15) *(1-0.3) = 0.131
= 13.1 %

2. The Net Present Value:

It is the difference between the current present value of the cash inflows and the expected present value of the cash outflows over a period. Net Present Value is used in the capital budgeting process and the investment planning process, where is used to analyze the profitability and the worth of an investment or a projected project to the organization, where it is the result of calculations that find the present value of the future flow of payments, using an appropriate estimated discount rate. In general, projects that calculated by a positive Net Present Value (NPV) are worth and feasible and expected doing well than those which calculated by a negative Net Present Value (NPV).

Present Value formula = Future Value / (1 + Discount Rate) ^ Number of periods

Net Present Value formula = Future Cash Flow / (1 + Discount Rate) ^ Number of periods – Initial investment.

Then,

Scenario One:

The Estimated discount rate for the coming 11 years will be 13.1% based on WACC calculations for XYZ's capitalization for 40% of the project.

Interest Rate	13.1%										
Time Periods	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Cash Flows in MEGP	-10	1.2	1.5	1.9	2.3	2.9	3.3	3.7	4.2	4.4	4.7
Present Value	-10	1.061	1.173	1.313	1.406	1.567	1.577	1.563	1.569	1.453	1.372
NPV	4.05										

Comment:

A positive Net Present Value (NPV) = +4.05, indicates that the proposed project or investment is profitable and worth it when the cash flows are discounted at an average 13.1% discount rate for the coming 10 years.

Proposing,

Scenario Two:

If we calculate for more conservative Estimated discount rate for the coming 11 years with more +2% (15.1%) to WACC calculations for XYZ's capitalization for 40% of the project.

Interest Rate	15.1%										
Time Periods	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Cash Flows in MEGP	-10	1.2	1.5	1.9	2.3	2.9	3.3	3.7	4.2	4.4	4.7
Present Value	-10	1.0426	1.132	1.246	1.31	1.436	1.419	1.383	1.363	1.241	1.152
NPV	2.72										

Comment:

A positive Net Present Value (NPV) = +2.72, indicates that the proposed project or investment is profitable and worth even it after we add +2% for more conservative scenario when the cash flows are discounted at an average 15.1% discount rate for the coming 10 years.

3.B. Based on the challenges that XYZ facing for its short-term solvency where the current ratio of 2022 was 88% and Net Working Capital to Total Assets Ratio for 2022 was -3.1, I do recommend that XYZ should use retained earnings to minimize any financial risk for its short-term liabilities, where it will be more benefit for several advantages:

- It is cheaper source of cash, as unlike loans, there are no negative interest payments or fees that eating net profit.
- Using retained earnings is faster and more flexible, where There is no waiting and no wasted time for a lender to process your request, plus no conditions on how XYZ will spend the money.

Requirement no. 4:

Based on the below several factors, should be taken into consideration before XYZ decides whether should it pay return earnings or not, including:

1. XYZ Financial health: The financial health is in a strong financial position and has enough cash, which is more likely to approve a dividend payout.

2. No clear XYZ's Future growth plans would be more beneficial for the company's long-term growth.

3. XYZ's Shareholder preferences especially if there is pressure from them to receive a dividend payout.

4. XYZ must comply with legal requirements set by regulators, which may limit or regulate dividend payouts.

So overall, based on XYZ good and stable financial performance, I do recommend that XYZ should decide to pay return earnings for 2022.

References:

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