Sharia External Financing Alternatives for Business Expansion Study Case: PT. XYZ

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ABSTRACT: This study investigates sharia compliance external sources of financing for SME's business expansion. The object of this study is PT. XYZ that operates in the security service business entity of outsourcing industry. In the last five years until 2022 XYZ has declined in number of clients growth. Fortunately, in 2023 XYZ received an offer to supply 500 security personnel that will increase its sales growth to 134%. This growth is a lot higher than the internal and sustainable growth rate of the company, and hence it needs external financing of IDR 5.2 Billion to support the business expansion. The data collected in this research is through primary and secondary data from a semi-structured interview, five years of financial reports and desk research method.

This study examines three alternatives of external Sharia financing namely Islamic Bank financing, Sukuk Issuance and Stock Issuance. XYZ needs to choose one alternative that makes the financial performance of the company healthy and also provides the most worthy risk-return to the equity holders. According to the financial ratios, DCF company valuation and risk-return analysis, this study finds that Sukuk is the best alternative external source of financing for XYZ because it makes the financial performance of the company healthy and also provides a desirable returns for the shareholders with lower risks. XYZ and others SMEs could use this alternative source of external financing to support business expansion. Sukuk can be issued through a funding campaign within a specified period in an authorized and credible Islamic Securities Crowdfunding (I-SCF) platforms.

KEYWORDS: financial ratio, islamic securities crowd funding, risk-return analysis, sharia external financing, sukuk.

INTRODUCTION

PT. XYZ is currently operating as a security service outsourcing provider which plays a crucial role in recruiting security unit personnel for organizations and companies in need of security services. Recent legal changes and regulations have provided new growth opportunities for the industry, as recruitment of security personnel is now mandated to be done exclusively through security service outsourcing provider company. The government's proposal to discontinue the use of honorary workers in government agencies, except through outsourcing, further supports the outsourcing of human resources, including security personnel. In 2022, the Minister of State Apparatus Utilization and Bureaucratic Reform emphasized the importance of meeting worker needs, such as security officers and cleaners, through outsourcing. This favorable business environment is supported by Indonesia's positive economic indicators. The country's GDP growth in the third quarter of 2022 reached 5.72%, marking a consistent increase since the economic downturn in 2020. The service industry also experienced growth of 10.79% in the same period compared to the previous year.PT. XYZ has a significant advantage in the market with years of experience in procuring security personnel for private/business environments across Indonesia. XYZ serves a diversified client base, primarily consisting of listed companies. The diversification and credibility of clients are important to minimize company's risks, especially during economic downturns.

BUSINESS ISSUE

PT. XYZ has faced declining profitability and challenges in securing large-scale projects, leading to limited sales opportunities. Insufficient capital has hindered the company's expansion efforts. However, a potential opportunity has arisen in 2023 with an offer from the Education Agency to provide 500 security officers for state schools. Fulfilling the agency's demand is crucial to capitalize on this opportunity and prevent the offer from going to a competitor.

Table 1. Total Investment, Historical Sales, and Projected Sales

No	Name of Projects	Sales in 2022	Investment in 2023	Projection Sales in 2023
1	Security for Restaurants	5,529,607,637	4,956,813,731	5,529,607,637
2	Security for Factories	1,399,057,354	1,254,133,595	1,399,057,354
3	Security for Warehouses	6,395,690,761	5,733,182,147	6,395,690,761
4	Security for Minimarts	5,129,876,964	4,598,489,847	5,129,876,964
5	Security for Fish Mining	266,487,115	238,882,589	266,487,115
6	Security Project for State Schools	-	21,525,943,317	25,080,000,000
7	Total OPEX		1,674,620,647	
Total		**18,720,719,830**	**39,268,393,069**	**43,800,719,830**
Sales Growth				**134%**

Table 1 presents 5 existing projects and 1 new project, requiring a total investment of 43 billion Rupiahs in 2023. Internal financing alone is insufficient to fund these projects. The new project represents an opportunity for PT. XYZ to expand its business and achieve a sales growth of 134%. Not pursuing the project would result in both a loss of sales and further financial challenges for XYZ. To support this business expansion, XYZ has decided to seek external financing that ensures the company's financial health, profitability for equity holders, and adherence to sharia principles.

LITERATURE REVIEW

Several of financial analyses are used to examine the alternatives of external financing. Islamic Bank and Islamic Securities Crowdfunding as channels of alternatives of Sharia external financing. As well as Sharia financial instruments and contracts will be explained in the following paragraphs.

Financial ratio analysis involves calculating and interpreting ratios to analyze and monitor a firm's performance[1]. This study will use four categories in financial ratios including liquidity ratios, activity ratios, debt ratios, and profitability ratios, which are used to assess a firm's ability to meet obligations, convert accounts into sales or cash, determine the level of debt financing, and evaluate returns relative to sales, assets, or equity. Benchmarking analysis involves comparing a firm's financial ratios to those of its competitors to assess performance within the industry[1].

There is a genuine relation between external financing needed and growth[2]. The growth rate assesses a firm's capacity to finance investments and expand, with higher sales growth requiring increased assets and external financing. The Internal Growth Rate (IGR) represents the maximum growth achievable without external financing, while the Sustainable Growth Rate (SGR) indicates the growth attainable while maintaining a constant debt-to-equity ratio and no external equity financing[2]. External Financing Needs (EFN) refers to the additional financing required by a firm to support its projected operations, which can be reduced if existing fixed assets are underutilized or not operating at full capacity[2].

Islamic banks provide external financing based on Shariah-compliant principles, emphasizing profit loss sharing and avoiding interest[34]. This research focuses on the application of *Musharakah Mutanaqisah*, a diminishing ownership contract, for working capital financing, where ownership is transferred from the bank to the customer with predetermined installment payments[5].

Crowdfunding is a method of obtaining external financing by pooling small amounts of money from numerous investors through online platforms. It involves investors, entrepreneurs (borrowers), and operators who manage repayment and act as intermediaries[6]. In Securities Crowdfunding debt or equity issuance can be utilized[7]. Islamic Securities Crowdfunding (I-SCF) employs stock or Sukuk as financial instruments. Stock issuance involves joint ventures and ownership allocation based on contribution percentages[8]. While Sukuk are non-interest-bearing instruments that generate returns from underlying assets or projects[9].

In stock issuance, a company's valuation is conducted using DCF valuation, which involves discounting future cash flows after taxes using an appropriate cost of capital[10]. The components include FCF, WACC, and terminal value. FCF estimation determines the cash available for investors by subtracting net operating income after tax from net investment in current and fixed assets[1]. Enterprise value represents the present value of scheduled free cash flow using WACC[11]. Equity value is derived by combining enterprise value with outstanding debt and can also be calculated using residual cash flows discounted at the cost of equity[11]. The number of new shares to be issued is determined by dividing the funds needed to be raised by the price per share[2].

A risk-return analysis is conducted to help investors understand the relationship between risk and expected return. It involves examining the trade-off between these two factors [12]. The mean of expected return is commonly used as a measure of return [12]. CV or coefficient of variation, is a ratio of the sample standard deviation to the sample mean, used to assess the level of dispersion relative to the mean [13]

METHODOLOGY

The research utilizes both primary and secondary data sources. Primary data was collected through semi-structured interviews with the CEO and Finance Manager, while secondary data includes five years of financial reports and desk research. Various financial tools, such as financial ratio analysis, external financing needs and growth analysis, discounted cash flow valuation model, and risk-return analysis, were employed for data analysis. The formulas for each tools are provided below:

Financial Ratios

Liquidity Ratio

- Current Ratio

    Equation1. $Current\ Ratio = \dfrac{Current\ Assets}{Current\ Liabilities}$

Activity Ratio

- Average Collection Period (ACP)

    Equation2. $ACP = \dfrac{Account\ Payable}{(Annual\ Purchases/_{365})}$

- Total Asset Turnover

    Equation3. $Equation\ 3. Total\ Asset\ Turnover = \dfrac{Sales}{Total\ Assets}$

Debt Ratio

- Debt Ratio

    Equation4. $Debt\ Ratio = \dfrac{Total\ Liabilities}{Total\ Assets}$

- Debt to Equity Ratio

    Equation5. $Debt\ to\ Equity\ Ratio = \dfrac{Total\ Liabilities}{Common\ stock\ equity}$

Profitability Ratio

- Gross Profit Margin

    Equation6. $Gross\ Profit\ Margin = \dfrac{Gross\ Profit}{Sales}$

- Operating Profit Margin

    Equation7. $Operating\ Profit\ Margin = \dfrac{Operating\ Profits}{Sales}$

- NPM

    Equation8. $NPM = \dfrac{Earnings\ Available\ for\ Common\ Shareholders}{Sales}$

- ROA

    Equation9. $ROA = \dfrac{Earnings\ Available\ for\ Common\ Shareholders}{Total\ Assets}$

- ROE

    Equation10. $ROE = \dfrac{Earnings\ Available\ for\ Common\ Shareholders}{Common\ Stock\ Equity}$

External Financing Needs and Growth

- Internal Growth Rate (IGR)

    Equation11. $IGR = \dfrac{ROA\ x\ b^{*}}{1 - ROA\ x\ b^{*}}$

- Sustainable Growth Rate (SGR)

  Equation12. $SGR = \frac{ROE \times b^*}{1 - ROE \times b^*}$

- External Financing Needs (EFN)

  Equation13. $EFN = \frac{A^*}{S} \Delta S - \frac{L^*}{S} - MS_1(1-d)$

- EFN and Capacity Usage

  Equation14. $Full - capacity\ Sales = Current\ Sales/Current\ Capacity$

  Equation15. $Ratio\ of\ Fixed\ Assets\ to\ Sales = Fixed\ Assets/Full - capacity\ Sales$

DCF valuation

- Free Cash Flow

  Equation16. $FCF = OCF - Net\ Fixed\ Asset\ Investment\ (NFAI) - Net\ Current\ Asset\ Investment\ (NCAI)$

- Weighted Average Cost of Capital

  Equation17. $WACC = w_d k_d\ (1-T) + w_e k_e$

  - Cost of Debt (COD)

    Equation18. $k_d = i \times (1-T)$

  - Cost of Equity (COE)

    Equation19. $k_e = R_f + \beta\left(R_m - R_f\right)$

- Terminal Value

  Equation20. $Terminal\ Value = \frac{FCF_t\ (1+g)}{WACC-g}$

- Enterprise Value

  Equation21. $Enterprise\ Value = PV_{WACC} \times (FCF + Terminal\ Value)$

- Equity Value

  Equation22. $Equity\ Value = Company\ Value - Outstanding\ Debt$

- Number of New Shares

  Equation23. $Number\ of\ New\ Shares = \frac{Funds\ to\ be\ raised}{Share\ Price}$

Risk-Return Analysis

- Return to Equity Holders by using Islamic Bank Financing

  Equation24. $R_{DF} = \left[\left[(V_O + V_N)\left(1 + R_{pi}\right) - \theta\right] - V_{FI}\right] \times \frac{1}{V_{FI}}$

- Return to Equity Holders by using Sukuk Issuance

  Equation27. $R_{MF} = \left[\left(\left(V_O \times (1 + R_{pi}) + (\delta \times (1 + R_{pi})\right) + \left[\left(\lambda \times (1 + R_{pi}) - \lambda\right) \times \pi\right] - V_{FI}\right] \times \frac{1}{V_{FI}}$

- Return to Equity Holders by using Stocks (Equity) Issuance

  Equation26. $R_{EF} = \frac{(V_O + V_N)}{V_F} \times R_{pi}$

- Coefficient of Variation (CV)

  Equation27. $CV = \frac{\sigma}{\bar{x}}$

RESULT AND DISCUSSION

Benchmarking Financial Ratios Analysis

To assess XYZ's financial performance relative to its key competitors in the outsourcing services industry, the researcher conducted a financial ratios analysis of two listed companies on the Indonesia Stock Exchange: SOS and Persada. This benchmarking analysis aims to determine whether the financial ratios resulting from each external financing alternative are favorable compared to those of the key competitors.

Table 2. Benchmarking Financial Ratio Analysis

Financial Ratios	SOS 31-Dec-22	PERSADA 31-Dec-22	AVERAGE 31-Dec-22	XYZ 31-Dec-22
Liquidity				
Current Ratio	243%	158%	200%	4556%
Activity				
Average Collection Period	49	59	54	24
Total Asset Turnover	443%	195%	319%	358%
Debt				
Total Liabilities to Assets Ratio	38.4%	61%	49.6%	1.9%
Total Liabilities to Equity Ratio	62.3%	155%	108.5%	1.96%
Profitability				
Gross Profit Margin	10.7%	65.9%	8.3%	10.4%
Operating Profit Margin	2.6%	2,1%	2.4%	5.3%
Net Profit Margin	1.9%	0.7%	1.3%	4.3%
Return on Asset (ROA)	8,3%	1.3%	4.8%	15.5%
Return on Equity (ROE)	13.5%	3.2%	8.4%	15.8%

According to the table 2 above, in comparison to the key competitors' average, XYZ demonstrates a significantly higher current ratio, indicating excess liquidity in the company's current condition. The ACP for XYZ is shorter than the competitors' average, implying a more efficient bill collection process. The total asset turnover ratio for XYZ is higher than the competitors' average, indicating greater effectiveness in generating sales from its assets. On the other hand, the competitors' average exhibits higher debt ratios. This suggests that the competitors' capital structure is more reliant on debt compared to XYZ. In contrast, XYZ has much lower debt ratios, indicating a suboptimal capital structure relative to the competitors' average. In terms of profitability ratios, including gross, operating, and net profit margin, as well as return on assets (ROA) and return on equity (ROE), XYZ outperforms the competitors' average. This indicates that XYZ is more successful in generating profits from its operations and providing returns to its investors. Overall, XYZ shows a higher liquidity position, shorter average collection period, better total asset turnover, lower debt ratios, and stronger profitability ratios compared to the key competitors' average.

Growth Rate and EFN

The ROA for XYZ in 2022 is 15.53%, b %, b is the net income divided by retained earnings or plowback is 0.6. Therefore the IGR is as follows:

$$\text{Equation 13. } Internal\ growth\ Rate\ = \frac{(15.53\% \times 0.6)}{1 - (15.53\% \times 0.6)} = \frac{0.093}{0.9068} = 0.10275\ or\ 10.275\%$$

According to the IGR calculation it can be determined that XYZ's sales growth in 2023 is 134% is bigger than its internal growth rate of 10,275%. Therefore, XYZ will need external funding to support its sales growth, because the required increase in assets will surpass the additional equity from retained earnings and existing debt (liabilities).

The ROE for XYZ in 2022 is 15.83%, b is the net income divided by retained earnings or plowback is 0.6. Therefore the SGR is as follows:

$$\text{Equation 14. } Sustainable\ Growth\ Rate\ = \frac{(15.83\% \times 0.6)}{1 - (15.83\% \times 0.6)} = \frac{0.0945}{0.905} = 0.10496\ or\ 10.5\%$$

Based on the calculated SGR, it is determined that XYZ's sales growth of 134% exceeds its sustainable growth rate of 10.5%. This indicates that in order to support its growth, XYZ will require additional external financing beyond its maximum growth rate, without increasing its financial leverage or seeking external equity financing. The company has the option to either sell equity or increase its debt and debt-to-equity ratio.

XYZ has received a project offer that requires external funding to support its sales growth. The total investment for both existing and new projects amounts to IDR 39,268,393,069 and is projected to generate sales of IDR 43,800,719,830. This projection represents a significant 134% increase in sales growth compared to the current level. The researcher will calculate the exact External Financing Needed (EFN) to determine the precise amount of external funds required to support this sales growth as follows:

Equation 15. EFN

$$= \frac{5{,}257{,}829{,}846}{18{,}720{,}719{,}831} \; x \; (\, 43{,}800{,}719{,}830 - 18{,}720{,}719{,}831) - \frac{100{,}427{,}092}{18{,}720{,}719{,}831} \; x \; (43{,}800{,}719{,}830$$
$$- 18{,}720{,}719{,}831 - 5.27\% \; x \; 43{,}800{,}719{,}830 \; x \; (1-0.4) = \; 5{,}523{,}338{,}621 \; \text{Rupiahs}$$

The EFN calculation takes into account the assumption that XYZ's fixed assets are operating at full capacity. However, the company is currently operating at 80% capacity with its fixed assets. To calculate the full-capacity sales, the current sales are divided by the current capacity used, which results in a projected sales figure of IDR 23,400,899,788 (Equation16) or a 25% increase from the current sales level of IDR 18,720,719,830.

The ratio of fixed assets to full-capacity sales indicates that for every rupiah of sales, the company will require 0.028 rupiahs (Equation 17) in fixed assets once it reaches full capacity. Multiplying this ratio by the projected sales of IDR 43,800,719,830 gives an estimated fixed asset requirement of IDR 1,231,549,869. Since the projected fixed assets amount to IDR 1,539,437,336, there is a gap of IDR 307,887,467 between the projection and the estimated fixed asset requirement. Therefore, the final External Financing Needed (EFN) is calculated as IDR 5,523,338,621 minus IDR 307,887,467, resulting in an EFN of IDR 5,215,451,154.

PROPOSED BUSINESS SOLUTION

Comparison of Pro Forma Financial Ratios in Each Alternatives and Key Competitors
The table 7 below consists of a comparison on the pro forma financial ratios for each alternatives. These comparisons will be used for the analysis in the business solution along with the benchmarking and the risk-return analysis for the equity-holders.

Table 3. Comparison on Financial Ratio from the current year and using all of the three alternatives financing

Financial Ratios	Alternative 1 Islamic Bank	Alternative 2 Sukuk	Alternative 3 Stock	Key Competitors' Benchmarking
Liquidity				
Current Ratio	184%	190%	4583%	200%
Activity				
Average Collection Period	23,86	23.86	23.86	54
Total Asset Turnover	365%	365%	364%	318.7%
Debt				
Total Liabilities to Assets Ratio	48.65%	47.25%	1.95%	49.6%
Total Liabilities to Equity Ratio	94.72%	89.57%	1.99%	108.5%
Profitability				
Gross Profit Margin	10.36%	10.36%	10.36%	8.3%
Operating Profit Margin	7.52%	7.52%	7.52%	2.4%
Net Profit Margin (NPM)	3.81%	4.51%	5.25%	1.3%
Return on Asset (ROA)	13.92%	16.49%	19.11%	4.8%
Return on Equity (ROE)	27.11%	31.25%	19.49%	8.4%

The table 3 above consists of a comparison summary on the pro forma financial ratios for each alternatives. These comparisons will be used for the analysis in the business solution along with the benchmarking and the risk-return analysis for the equity-holders. The first alternative financing option results in the lowest liquidity ratio for XYZ, indicating a lower ability to meet short-term obligations compared to key competitors. The total asset turnover is slightly below the industry average but higher than the second alternative. The debt ratios are the highest among the alternatives but closest to the industry average. Net profit margin and return on assets (ROA) are the lowest among the alternatives, while return on equity (ROE) is the second highest and above the key competitors' average.

The second alternative financing option has a liquidity ratio similar to the first alternative but marginally higher than the industry average. Debt ratios are lower than the first alternative but higher than the third alternative, making it the second closest to the industry average. Total asset turnover is comparable to the first alternative and slightly below the industry average. Net profit margin and ROA are higher than the first alternative and the industry average but lower than the third alternative. ROE is the highest among

the alternatives, nearly three times the industry average, indicating increased shareholder value and efficient utilization of assets to generate profits.

The third alternative financing option leads to the highest liquidity ratio among the alternatives but is significantly higher than the key competitors' average, suggesting an excess of liquidity in the short term. Total asset turnover is slightly lower than the other alternatives. Debt ratios are the lowest but fall well below the industry average, indicating an suboptimal capital structure. Net profit margin and ROA are the highest among the alternatives and above the industry average. However, ROE is the lowest, although still higher than the key competitors' average, implying lower shareholder value and less efficient use of equity.

Discounted Cash Flow Company Valuation

To determine the company's worth and the number of shares to be issued in the stock offering, a company valuation using the DCF (Discounted Cash Flow) method is conducted. The valuation process involves forecasting future cash flows and calculating the terminal value. The company value is derived from the present value of cash flows for each year of the forecast period, plus the present value of the terminal value. The terminal value is determined using a terminal growth rate, which is estimated as the 5-year average of GDP growth in the service company industry, amounting to 2.9%.

Three FCF (Free Cash Flow) scenarios are estimated to compare the company's worth under different conditions: without aggressive growth (constant growth), with aggressive growth before the new stock offering, and with aggressive growth after the new stock offering. To estimate FCF, an appropriate WACC (Weighted Average Cost of Capital) needs to be calculated as the discount rate for future FCF estimation. The WACC calculation requires the components of COD (Cost of Debt), COE (Cost of Equity), the percentage proportion of debt and equity in the capital structure, and the tax rate in Indonesia.

The COD is determined using the risk-free rate and default spread. The risk-free rate is taken as the IBPA 10 Years Government Bond Yield, which is 6.77%. The country default spread is obtained from Damodaran data, with a value of 2.33%. The Indonesia real tax rate is 22%. Applying the formula, the after-tax cost of debt is calculated as (6.77% + 2.33%) × (1 - 22%) = 7.1%.

The COE is calculated using the CAPM (Capital Asset Pricing Model), which requires beta, risk-free rate, and risk premium. The levered beta is determined through regression analysis using the monthly market returns of the Jakarta Stock Exchange (JKSE) and a similar outsourcing company over a three-year period. The un-levered beta is then calculated as 0.27 and levered again using the company's leverage, resulting in a levered beta of 0.28. The Indonesia equity risk premium from Damodaran data is 9.23%. Applying the formula, the COE is calculated as 6.77% + 0.28(9.23%) = 9.32%.

The percentage proportion of debt in XYZ's capital structure is 1.9%, while the proportion of equity is 98.1%. Applying the formula, the WACC for XYZ is (1.9% × 7.1%) + (98.1% × 9.32%) = 9.28%.

Table 4. Comparison of Value of Stock using Constant Growth and Aggressive Growth (Before and After Offering)

Description	Constant Growth	Before Stock Offering (Aggressive Growth)	After Stock Offering (Aggressive Growth)
Funds Needed	5.2 Billion	5.2 Billion	5.2 Billion
Number of new shares	-	-	10,537,458
Total Shares Outstanding	510,000	510,000	65,214,284
Value of equity per share	30,887	53,605	419

The company value can be determined by using the WACC as the discount rate. According to the table 4 above, under aggressive sales growth, XYZ's equity value per share is 53,605 Rupiahs, which is higher than the equity value per share using constant growth (30,887 Rupiahs). The number of new stocks to be issued is calculated by dividing the funds needed by the price per share. The board of directors determines the market price per share based on market willingness during the initial stock offering. The agreed price per share is 500 Rupiahs, compared to the equity book value per share of 53,605 Rupiahs. Using Equation 23, the number of new shares issued is calculated as 10,537,458. Since the share price drops from the book value, the existing shares outstanding (510,000) will experience a stock split. After the stock split, the new existing shares outstanding for existing shareholders will be 54,676,826 shares. Adding the newly issued shares, the total number of shares outstanding will be 65,214,284 shares, with a price per share of 419 Rupiahs. This issuance of new stocks dilutes the shareholders' ownership from 100% to 84%.

Islamic Bank, Stock (Equity), and Sukuk – A Risk-Return Analysis

In the risk-return analysis, to calculate the expected returns for the projects, there are several values that will be needed, namely the value of existing projects which is 16,783,573,139 Rupiahs, the new project total cost is 22,484,819,929 Rupiahs, of which the company has invested 17,269,368,775 Rupiahs, the company's existing projects plus the investment in the new project amount to 34,052,941,915 Rupiahs ,and the remaining 5,215,451,154 Rupiahs is financed externally through three options: Islamic Bank financing, stock (equity) issuance, and Sukuk issuance.

To determine the payoffs from each alternative, a one-year economic life of the projects and three possible economic performance scenarios (best, base, worst) are considered. The economic performance is influenced by the length of payment period from clients to the company, which is determined by historical data and global economic conditions. Table 5 presents the probabilities for each scenario.

Table 5. Scenarios of Expected Returns to Equity Holders in Existing and New Projects

Scenario	Probability (%)	Expected Returns (%) of Existing Projects (Value IDR 16.78 Billion)	Expected Returns (%) of New Project (Value IDR 17.27Billion)
1	50	11.56	11.56
2	30	4.81	4.81
3	20	1.43	1.43

The table 5 above presents the best, base, and worst scenarios for the project, which correspond to on-time payment, a 6-month payment delay, and a 1-year payment delay by the client. If the client fails to pay on time, the company will incur financial losses due to additional financing costs for working capital. These costs include monthly wages and direct expenses, which will decrease expected returns for equity holders. The probability of occurrence is highest for the best scenario (30%), followed by the base and worst scenarios (20% each). This information is derived from historical financial reports and semi-structured interviews, supported by the OECD's interim report of March 2023, which projects global growth at 2.6% in 2023. For Indonesia, an emerging G20 economy, growth is projected at 4.7% in 2023 and is expected to continue at 5.1% in 2024. The risk-return analysis for equity holders in each alternative of external financing under each scenario is summarized in Table 9.

Table 6. The Comparison of Expected Returns to Equity Holders

Scenario	Probability	Islamic Bank	Sukuk	Stock
		Alternative 1	Alternative 2	Alternative 3
1	50%	5.63%	6.31%	5.78%
2	30%	1.04%	1.57%	1.44%
3	20%	-0.08%	0.31%	0.29%
	Weighted Mean	**2.2%**	**2.73%**	**2.5%**
	σ	**3.03%**	**3.16%**	**2.9%**
	CV	**137.8%**	**115.72%**	**115.72%**

As seen in the table 6 above, in alternative 1 or Islamic Bank financing is using a *Musharakah Mutanaqisah* contract requires fixed monthly payments regardless of project outcomes. It offers the lowest weighted mean returns to equity holders, highest standard deviation, and highest CV, indicating lower returns with higher volatility and less worthiness in the risk-return framework. In alternative 2, Sukuk issuance involves a profit sharing proportion of 40% to Sukuk holders and 60% to XYZ. It offers the highest weighted mean returns to equity holders, second lowest standard deviation, and lowest CV. This implies higher but more volatile returns and the most worthiness in the risk-return framework. Considering these factors, stock issuance and Sukuk issuance emerge as the preferable alternatives, with stock issuance providing lower but stable returns and Sukuk issuance offering higher but more volatile returns. In alternative 3, stock issuance provides the same returns to both existing and new equity holders, aligned with

project returns. It has the second highest weighted mean returns, lowest standard deviation, and lowest CV, offering lower but more stable returns and greater worthiness in the risk-return framework.

Analysis on Each of Alternatives

After obtaining the results from pro forma financial ratios and risk-return analysis, table 7 below provides lists of summarized characteristics of each alternatives to be used in determining the best alternative external financing for XYZ sales growth. The advantages and disadvantages of each alternatives are as follows:

Table 7. Advantages and Disadvantages of Each Alternative.

Characteristics	Alternative 1	Alternative 2	Alternative 3
	Islamic Bank	Sukuk	Stock
Advantages	Second closest current ratio to key competitors' average (lower)	Closest current ratio to key competitors' average (higher)	Highest NPM
	Closest debt ratios to key competitors' average (higher)	Second closest debt ratios to key competitors' average (lower)	Highest ROA
	Highest total asset turnover	Highest total asset turnover	Lowest standard deviation
	Higher equity value per share	Highest ROE	Lowest CV
		Higher equity value per share	
		Highest average returns	
		Lowest CV	
Disadvantages	Lowest NPM	Needs underlying assets (Not collateral)	Highest current ratio (too liquid)
	Lowest ROA		Lowest debt ratios (too low)
	Lowest average returns		Lowest ROE
	Highest standard deviation		Lower equity value per share
	Highest CV		Ownership dilution
	Needs collateral 125%		

First alternative: Advantages - Second closest current ratio and closest debt ratios, indicating good management of current assets and capital structure. Highest total asset turnover and higher equity value per share. Disadvantages - Lowest NPM and ROA in profitability ratios, lowest average returns in risk-return analysis due to fixed financing costs, higher volatility (standard deviation), least worthiness of risk (highest CV), collateral requirement using owner's fixed asset. The second alternative for financing XYZ's project expansion has several advantages. It has the closest current ratio and debt ratios to key competitors, indicating good management of current assets and an ideal capital structure. Additionally, it boasts the highest total asset turnover and ROE, leading to increased shareholder value and higher equity value per share resulted from no issuance of new stock. It offers the highest weighted mean returns to equity holders and has the lowest CV, providing favorable returns relative to the risks involved. The only drawback is the requirement for an underlying asset valued at 100% of the funding needs, which can be fulfilled using the owner's or director's own asset. Third alternative: Advantages - Highest NPM and ROA, generating the highest net profit and efficient asset returns. Lowest standard deviation and CV, providing stable and worthy returns based on risks. Disadvantages - Excessive liquidity indicated by high current ratio, low debt ratio considered suboptimal for capital structure. Lowest ROE, decreased shareholder value efficiency. Drawbacks include lower equity value per share and dilution of ownership by 16% due to new stock issuance.

Considering these factors, issuing Sukuk in the I-SCF Platform emerges as the best financing option for XYZ's project expansion. Sukuk issuance offers more efficient asset and equity utilization, higher equity value per share, and increased profitability for equity holders with lower risks. The management of XYZ is advised to initiate the necessary preparations for Sukuk issuance, including selecting an authorized an credible I-SCF platform. The timeline for the Sukuk issuance and project completion is estimated to be around 15 months, divided into three phases: Preparation and Deployment, Funding Campaign and Project Execution. The specific timeline will depend on internal conditions, the I-SCF platform, and the campaign duration.

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