

Investment Project Analysis of New Business Opportunity in Gasoline Distribution Sector for Small and Medium Enterprise

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Abstract - In 2019, the Indonesian state-owned enterprises launched a program in gasoline distribution sector. Besides aiming to support national energy sustainability policies, this program also has a goal to provide business opportunity for Small and Medium Enterprise (SME) activists. This is because the scale of gasoline distribution station is affordable to small company. However, due to the relatively new business opportunity for SMEs, the comprehensive financial analysis available for reference is very limited. Therefore, many SMEs are still worried about whether this business will be profitable for them or not. This study aims to provide a feasibility analysis of the gasoline distribution business for SMEs, especially for a small company called CV XYZ. The feasibility analysis consists of several analyzes such as analysis of the business situation using Porter's Five Force Analysis and the VRIN method, SMART analysis - for the selection of potential locations, and financial feasibility analysis consisting of capital budgeting analysis, sustainability analysis (ratio), scenario analysis, and simulation Monte Carlo. From the feasibility analysis, the researcher concludes that this business is very prospective for SMEs. In addition, several variables must be monitored and mitigated due to their large impact on the business. The author also suggests immediately build a small-scale gas station in the selected location to strengthen its existence as a pioneer and market leader in that location.

Keywords - SME, Gasoline, Investment, Feasibility, Analysis

I. INTRODUCTION

The potential of the gasoline market in Indonesia, especially in the transportation sector, has always been an attractive market. It's proved by the gasoline consumption that tends to increase every year as shown in Fig. 1. Although gasoline consumption in 2020 is slightly decreasing due to the Covid-19 pandemic crisis, from 205.8 million barrels in 2019 to 192.6 million, the estimated gasoline sales in 2021 predicted to be increasing again to 210.2 million barrels. The optimistic trend also influenced by the gasoline consumption indicator that has started to increase since October 2020 and the crude oil price indicator that continues to increase this year due to demand increase.



Fig. 1 - Indonesia Gasoline Consumption [1]
Source: <https://www.esdm.go.id/id/publikasi/handbook-of-energy-economic-statistics-of-indonesia>

In 2019, one of the Indonesian state-owned enterprises launched a program that provides a business opportunity in the gasoline distribution sector especially for the small company. This program enables a small company with a small budget to own an official small-scale gasoline station that distributes non-subsidized gasoline such as Pertamina and Dexlite. This program is also one of the government's efforts to provide sustainable energy all over Indonesia country. Therefore, the service locations for the gasoline station prioritized in villages or cities that have a minimum distance of 2 km from the official gas station like SPBU.

This new business opportunity certainly attracts many SME activists, including CV XYZ, the small company that was established in 2017. They started their business in the retail industry. CV XYZ is interested in joining this program because it sells gasoline, which is categorized as a basic need that always consumed by the people, this is aligned with their strategy that focuses on the daily needs. CV XYZ also identifies this business has full support from the government. Therefore, access to permitting and financing will be easier.

With all the reason above, there is one problem that makes CV XYZ still hesitate to enter this business, it is because there no comprehensive feasibility analysis to justify whether this business will be profitable or not. Therefore, this research tries to provide the analysis to help them succeed in this business.

II. METHODOLOGY

II.1 Conceptual Framework

In the Journal of Social Sciences chapter 38:2, 185-195: Sitwalda Imenda offers a definition of conceptual framework “*Conceptual framework may be defined as an end result of bringing together a number of related concepts to explain or predict a given event, or give a broader understanding of the phenomenon of interest – or simply, of a research problem*” (2014: 189) [2].



Fig. 2 - Investment Analysis Framework

The investment analysis framework as shown in Fig. 2, begins by identifying the problems faced by CV XYZ. The required data relates to the problem is gathered from several sources such as interviews with BoD, public surveys, the Central Statistics Agency (BPS), and other public data sources.

The first analysis in this investment analysis is business situation analysis which consists of external and internal analysis. The external analysis uses Porter's five forces method to identify the external factors that impacted the business while the internal analysis uses the VRIN method to know whether the CV XYZ has competitive advantage in this industry.

The second analysis is SMART analysis to select a business location based on attribute that determined by BoD. This location will determine the capital budget required for the project and the market size projection.

The third analysis is the financial feasibility analysis of this investment which is the main target of this research. This analysis consists of capital budgeting analysis, sustainability (ratio) analysis, and scenario analysis. In capital budgeting analysis, several indicators such as discounted payback period, Net Present Value (NPV), Profitability Index (PI), and Internal Rate Return (IRR) are observed. In sustainability analysis, financial ratio obtained by this business is compared with the financial ratios of the company benchmark. The financial ratio such as liquidity ratios, debt ratios, activity ratios, and profitability ratios. The scenario analysis consists of sensitivity analysis to identify the variables that have significant impact to project NPV, this variable will be analyzed in worst-case, base-case and best-case scenario. In the final analysis, the Monte Carlo simulation also

conducted with 1000 sample and several simulation trial to evaluate the probability of business to success. Last, the risk response and recommendation are proposed based on the analysis result.

Beside the analysis to evaluate the feasibility of the investment, this research also used several methodologies to calculate market size projection. The market size projection calculates using multiple regression which have three independent variables that estimated will influence the market size such as GDP which has positive impact to the market size, where higher GDP will increase the market size, Pertamina's Price which has negative impact to the market size, where higher Pertamina's price will decrease the market size and Population that also has positive impact to the market size.

II.2 Business Situational Analysis

A. Porter Five Force

Porter's Five Forces Analysis preferred for external business environment analysis because it can identify where the influence or the power lies in the competitive Industry. By using Porter's five force, company can have better advantage of strength, overcome weakness, and avoid making mistakes that would provide someone else a competitive edge. This will lead company to maximize the profit from every industry stakeholder. Moreover, Porter's five force is suitable to evaluate the new business opportunity before company enter the industry [3].

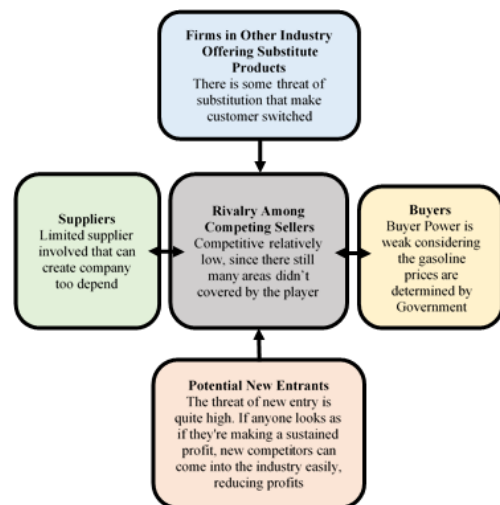


Fig. 3 - Porter's Five Forces Framework

Table 1 – Overall Force Level

Five Forces	Level
Force for new entrants	Low
Bargaining power of suppliers	Moderate
Threats of substitutes	High
Bargaining power of buyers	Low
Intensity of rivalry among competitors	Low

Porter's five forces analysis concluded that the small gasoline retail industry is quite attractive and has the potential to give high profits to SME companies. The highest force comes from the substitutes' factor because many of the substitutes offer more varied products. On the other hand, the force that comes from the buyer is relatively low because the price set by the government and will be similar to near SPBU. From CV XYZ's perspective, the new entrant force is relatively low because this program has strong support from the government, therefore, it will be easier to enter this industry. The bargain of supplier is moderate because it bounded by an agreement that regulates the margin price and supply commitment.

B. Internal Analysis – VRIN Analysis

VRIN method preferred for internal analysis because it can identify the competitive advantage of the company that can help them to sustain in the business. If the company have the resource and capability (R&C) that superior compare to their competitor (competitive advantage), they can maximize that R&C and generate more return in the business. The R&C that become competitive advantage must pass 4 (four) criteria, it has to be valuable, it must rare, it must hard to be imitated and can't be substitutable. By passing the criteria, the R&C of the company can have superiority in the long period to its competitor.

Table 2 - VRIN Test to R&C

Resource and Capabilities	Is it Valuable?	Is it Rare?	Is it Costly to Imitate?	Is it Non-substitutable?	Competitive Consequences	Performance Implications
One of BoD experience background in Oil and Gas Industry that having valuable knowledge in safety and compliance	Yes	Yes	Yes	Yes	Competitive Advantage	Average returns to above-average returns
Familiar with Oil and gas standard for installation and maintenance	Yes	Yes	Yes	No	Temporary Competitive Advantage	Average returns to above-average returns

Based on internal analysis including the VRIN test, CV XYZ has several resources and capabilities that can help them to succeed in this new business. However, only two of R&C that can become competitive advantages that generate average to above-average returns as shown in Table-2. One of the competitive advantages is the experience and knowledge of the BoD in the oil & gas industry. This capability can help them manage their gasoline station with a safe and reliable approach. This will give confidence to the customer to buy gasoline in their outlet and prevent losses due to incident.

II.3 SMART Analysis – Select Business Location [4]

In the gasoline distribution business, selecting the right location is very decisive to determine the market size as well as revenue for the company. Screening process is

conducted based on criteria that required to build the gasoline station and the survey result. Fig. 4 show the criteria to generate location alternatives.

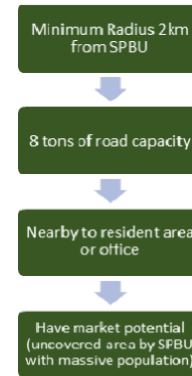


Fig. 4 – Gasoline Station's Location Screening

The potential location obtained by mapping 59 SPBU locations in Bandung regency to the google map with a radius of 2km. The area that is not covered by the SPBU coverage and located on the main road is preferred as the potential location. Fig. 5 show the plotting of the location alternatives in google earth.

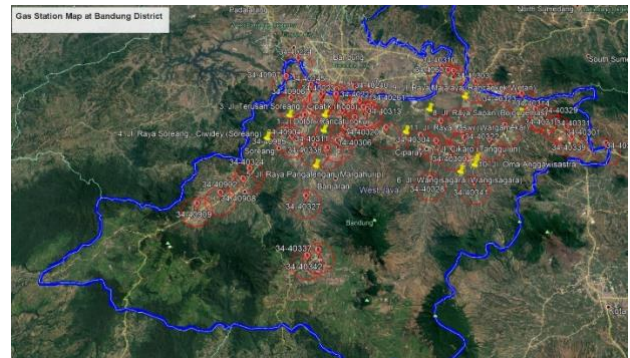


Fig. 5 - SPBU Map at Bandung Regency

Five locations in Bandung regency with the greatest market potential based on population density are obtained. Table 3 show the generated location based on criteria.

Table 3 - Generated Alternative Location [5]

No	Location	Sub-district	Population /km2
1	Jl. Ketapang Andir	Sangkanhurip	10,023
2	Jl. Raya Soreang - Ciwidey	Soreang	8,848
3	Jl Raya Pangalengan - Astaraja	Margahurip	7,790
4	Jl. Cikaro (Paseh-Kamojang)	Tanggulun	10,421
5	Jl. Raya Majalaya - Rancaekek	Rancaekek wetan	10,757

Decision criteria (attributes) and their weight to choose the best location from these alternative locations are obtained from FGD. The value tree is then created based on the attributes defined for each alternative are shown in Fig. 6.

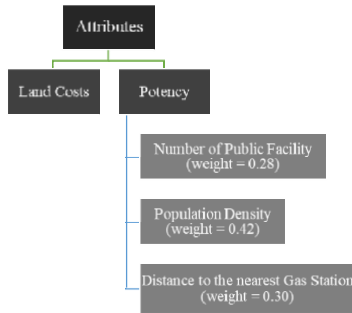


Fig. 6 - Decision Making Value Tree

Based on these criteria, each alternative's location is assessed. The highest aggregate weighted value is location alternative-5 at Jl. Raya Majalaya-Rancaekek as shown in Table-4. This location has the highest score in Number of public facility and the population density.

Table 4 - Aggregate of Weighted Value

Location	Public Facility	Population Density	Distance to the Nearest Gas Station	Aggregate of Weighted Value
Jl. Ketapang Andir	12.6	39.9	30	82.5
Jl. Raya Soreang - Ciwidey	8.4	33.6	24	66.0
Jl Raya Pangalengan - Astaraja	16.8	29.4	18	64.2
Jl. Cikaro (Paseh-Kamojang)	12.6	39.9	21	73.5
Jl. Raya Majalaya - Rancaekek	28	42	18	88.0

The aggregate scores for these potential attributes then combined with the land cost attribute. Where the land cost data is obtained from the marketplace.

In the cost perspective, location alternative -5 which is the highest aggregate weighted potency value is also has the most expensive land price. This trading condition needs to be assessed by plotting the aggregated potency value to the land cost in the graph. It will give a clear understanding about what is the most efficient location alternatives. Table-5 give an axis and ordinate of the attribute, where the graph obtained from this data are shown in Fig. 7.

Table 5 - Efficient Frontier Coordinate

Location	Label	Aggregate of Weighted Value (Y-axis)	Land Price/m2 (Thousand Rupiah) (X-axis)
Jl. Ketapang Andir	A	82.5	Rp 1,150.00
Jl. Raya Soreang - Ciwidey	B	66	Rp 1,100.00
Jl Raya Pangalengan - Astaraja	C	64.2	Rp 700.00
Jl. Cikaro (Paseh-Kamojang)	D	73.5	Rp 800.00
Jl. Raya Majalaya - Rancaekek	E	88	Rp 1,500.00

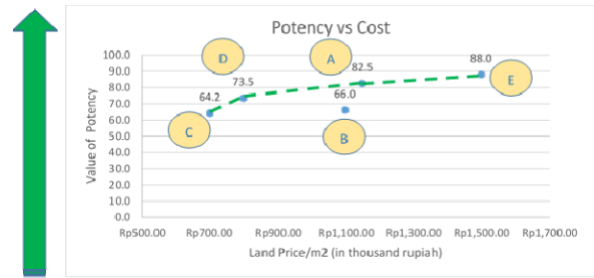
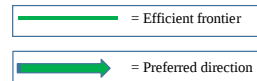


Fig. 7 - Trading Potency vs Cost

Where:



The selected location will be based on the company capability and target. According to FGD with BoD, the location alternative-5 with the highest potency value is selected even the land price is high. Based on the selected location, the required capital budget to build this small-scale gasoline station is Rp 950,000,000 which considerably still at an affordable level for the company.

III. RESULTS

III.1 Market Size Calculation

It is difficult to calculate market size for small-scale businesses due to lack of the available data. In this case, the market size coverage area is not only for the Rancaekek wetan sub-district but also for all Rancaekek districts, it is because the location will be on the main road that enables to cover one district Area. The market size in the selected location is calculated based on the combination of survey results and government data.

This gasoline station only sells non-subsidized gasoline; therefore, the market size will be represented by non-subsidized gasoline consumption in Rancaekek District. It is calculated by multiplying vehicle population multiplied with the gasoline consumption per vehicle type. Equation (1) shows the market size calculation.

$$\text{Market Size} = \sum (\text{Number of Vehicle} \times \text{Non-subsidized Gasoline consumption per day})_{\text{type}} \times 365 \text{ days} \quad (1)$$

The average gasoline consumption of motorcycles and cars was obtained from the survey to 618 respondents in March 2021. The result of market size will be conservative because it represents the market size during a pandemic where gasoline consumption is decreasing due to several mobilization restrictions. From the survey, the average gasoline consumption for cars is 1.747 lt/day and for motorcycles is 0.403 lt/day.

The vehicle to population ratio in Rancaekek district obtained from bps and bapenda data, the car ratio is 5.71%, while the motorcycle ratio is 33.47%. This vehicle ratio will be used to estimate the vehicle number in the last 10 years. The record of the non-subsidized gasoline

ratio for the last 10 years was obtained from the ESDM energy handbook.

Based on above data, the historical market size in the last 10 years can be obtained as shown in Table-6.

Table 6 – Estimated Market Size Record in Rancaekek District

Years	Car	Motorcycle	Overall Gasoline Market size Rancaekek	Non-Subsidized Gasoline Ratio	Market size in Rancaekek
2011	9,135.00	53,545.00	13,708,670.00	2.9%	393,473.13
2012	9,762.00	57,217.00	14,648,910.00	3.4%	498,898.20
2013	9,695.00	56,827.00	14,548,900.00	4.1%	589,828.13
2014	10,164.00	59,576.00	15,252,620.00	11.1%	1,699,947.30
2015	10,329.00	60,542.00	15,500,090.00	34.2%	5,307,367.19
2016	10,530.00	61,721.00	15,801,945.00	63.5%	10,028,855.29
2017	10,730.00	62,892.00	16,101,975.00	69.5%	11,185,060.55
2018	10,774.00	63,153.00	16,168,405.00	67.9%	10,980,156.96
2019	11,075.00	64,914.00	16,619,545.00	72.3%	12,018,098.50
2020	10,592.00	62,087.00	15,895,385.00	77.3%	12,289,910.99

This historical market size will be used to estimate market size projection for the next 10 year using multiple regression formula.

III.2 Market Size Projection

Market size projection assumed to be depending on three variables, first is GDP that will impact to power of buyer to buy non-subsidized gasoline, second is Population in Rancaekek district that will impact to number of customer and third is non-subsidized gasoline price that will impact to attractiveness of non-subsidized gasoline to customer.

The relation between variables will obtained from the record of each variable in the last 10 years and follow multiple regression formula as shown in equation (2)

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \beta_3 x_{i3} + \epsilon \quad (2)$$

Where;

y_i = dependent variable – Market size in Rancaekek district

x_{i1} = Price of Non-subsidized gasoline (Pertamax) in January

x_{i2} = Indonesia Gross Domestic Product (GDP)

x_{i3} = Population in Rancaekek

β_0 = y-intercept at time zero

β_1 = Coefficient that measures a unit change of the dependent variable (y_i) when x_{i1} changes - the change in market size when Price of Pertamax change

β_2 = Coefficient that measures a unit change of the dependent variable (y_i) when x_{i2} changes - the change in market size when GDP change

β_3 = Coefficient that measures a unit change of the dependent variable (y_i) when x_{i3} changes - the change in market size when Population change

Table 7 - Dependent and Independent Variables for Multiple Linear Regression Analysis

Year	Market size in Rancaekek - y_i	Price of Pertamax (January price) - x_{i1}	GDP (in trillion) - x_{i2}	Population in Rancaekek - x_{i3}
2011	393,474	7,500.0	7,427.1	159,977
2012	498,899	8,700.0	8,241.9	170,949
2013	589,829	9,200.0	9,084.0	169,784
2014	1,699,948	11,500.0	10,542.7	177,998
2015	5,307,368	8,800.0	11,540.8	180,884
2016	10,028,856	8,500.0	12,406.8	184,406
2017	11,185,061	8,050.0	13,588.8	187,904
2018	10,980,157	8,600.0	14,837.4	188,683
2019	12,018,099	10,200.0	15,833.9	193,944
2020	12,289,911	9,200.0	15,434.2	185,499

From the multiple regression analysis, obtained intercept and coefficient for every independent variable to calculate market size projection as follow.

Variable	Coefficients
Intercept	-18016408.03
Price of Pertamax (January price) - x_{i1}	-1250.885269
GDP (in trillion) - x_{i2}	1414.596414
Population in Rancaekek - x_{i3}	105.4424573

Using equation (2) and independent variables coefficient from multiple regression analysis, the market size projection for next 10 year are shown as Table-8:

Table 8 Market Size Projection in Rancaekek District

Period	Year	Projected Population in Rancaekek	Projected GDP (in trillion)	Projected Price of Pertamax	Projected Market size in Rancaekek
n-5	2016	184,406	12,406.80	8,500	10,028,856
n-4	2017	187,904	13,588.80	8,050	11,185,061
n-3	2018	188,683	14,837.40	8,600	10,980,157
n-2	2019	193,944	15,833.90	10,200	12,018,099
n-1	2020	185,499	15,434.20	9,200	12,289,911
n	2021	188,652	16,198.19	9,333	13,114,550
n+1	2022	191,860	17,000.00	9,578	14,281,180
n+2	2023	195,121	17,841.50	9,370	16,074,918
n+3	2024	198,438	18,724.66	9,427	17,602,946
n+4	2025	201,812	19,651.53	9,458	19,230,677
n+5	2026	205,242	20,624.28	9,419	21,018,239
n+6	2027	208,732	21,645.18	9,435	22,810,172
n+7	2028	212,280	22,716.62	9,437	24,696,813
n+8	2029	215,889	23,841.09	9,430	26,676,825
n+9	2030	219,559	25,021.22	9,434	28,728,398
n+10	2031	223,291	26,259.77	9,434	30,874,289

From the market size projection, company can determine market size target based on their assumption. The initial market size target for CV XYZ is the vehicle in radius 1km that using Pertamax, this obtained by the population within the radius in Rancaekek Wetan sub-district to the total population in Rancaekek district. The initial market size target is 1.91% from overall market size and will grow according to population growth in Rancaekek district (1.70%).

The formula for market size target projection shows in equation (3)

$$(\text{Market Size Target})_{n+1} = (\text{Market Size Target})_n + (1+g_p) \quad (3)$$

Where;

(M.S Target)_{n+1} = Market size target for the next year (%)
 (M.S Target)_n = Current market size target (%)
 g_p = Population growth in Rancaekek (%)

This market size target projection will determine company's revenue projection.

III.3 Capital Budgeting Analysis [6]

To finance the investment in the gasoline distribution business, CV XYZ use 50% of long-term debt and 50% of equity from own pocket that considered as common stock. The cost of debt is 8%, while cost of equity obtained from CAPM calculation shown in equation (4) [7].

$$\text{Cost of Equity} = \text{Risk Free Rate} + (\beta + \text{Equity Risk Premium}) \quad (4)$$

Where;

Risk-free rate = 6.67% (10 Years Government Bond Yield on April 2021)
 β industry = 1.35 (Damodaran)
 Equity Risk Premium [8] = 6.56%(Damodaran)

$$\begin{aligned} \text{Cost of Equity} &= 6.67\% + (1.35 \times 6.56\%) \\ &= 15.56\% \end{aligned}$$

WACC for this investment is calculated by using cost of debt and cost of equity above, then obtained 11.73%.

Table 9 PV of Cash Flow Projection

Year	PV of Cash Flow
0	Rp (969,495,427)
1	Rp 59,665,590
2	Rp 138,904,213
3	Rp 105,593,884
4	Rp 94,079,912
5	Rp 97,570,272
6	Rp 99,264,314
7	Rp 100,564,441
8	Rp 92,897,933
9	Rp 93,254,847
10	Rp 996,074,674

The present value of cash flow projection then developed based on several assumption:

- Tax rate = 20% (PP No.30/2020)
- G&A Expense = 100,000,000 and will increase annually as much as inflation rate
- Terminal growth rate = 1.23%

- COGS projection
- Depreciation schedule
- WACC

Several capital budgeting indicators calculated based on the cash flow projection. The Project NPV is Rp 908,374,655, the discounted payback period is 9.09 year, the profitability index (PI) is 1.94 and Internal rate of return (IRR) is 22.49%.

III.4 Sustainability analysis

Sustainability analysis conducted to know whether the business will achieve sustainable results for the long period or not. Sustainability analysis was conducted by comparing several ratios obtained from the calculation with the company's benchmark [9]. The ratio comparison shown in Table-10.

Table 10 - The Ratio Comparison

Ratio	CV. XYZ	Benchmark
LIQUIDITY RATIOS		
Current Ratio	1.18	1.07
Quick (Acid-Test) Ratio	0.94	0.98
ACTIVITY RATIOS		
Average Age of Inventory	2.26	2.26
Total Asset Turnover	5.22	5.92
DEBT RATIOS		
Debt Ratio	34.4%	45.8%
Times Interest Earned Ratio	11.64	119.95
PROFITABILITY RATIOS		
Gross Profit Margin	8.3%	2.2%
Operating Profit Margin	4.5%	1.1%
Net Profit Margin	2.9%	0.9%
Return on Assets	16.8%	4.7%
Return on Equity	23.8%	9.4%

From Table-10, obtained that financial ratio of this business is better than its benchmark especially for profitability ratio. This means that business expected will be sustained for the long period.

III.5 Sensitivity Analysis

Sensitivity analysis conducted by changing several variables within a certain range and see the change of the target variable (Project NPV). The change of variable value that amplifies the Project NPV value is considered as the sensitive variable, whereas the change of variable value that gives less changing in the Project NPV consider as the non-sensitive variable.

There are 12 (twelve) variables tested in this analysis. The variable's value is swinging +/- 20% from its base value and observed its impact on Project NPV. From the calculation, obtained the tornado chart shown in Figure-8.

From sensitivity analysis obtained 4 (four) variables that have the highest significant impact on Project NPV with an absolute range of more than 40% such as quantity sold realization, equity risk premium, GDP growth, and beta industry. These variables have both negative or positive impact to Project NPV. The tornado chart then developed as shown in Fig. 8.

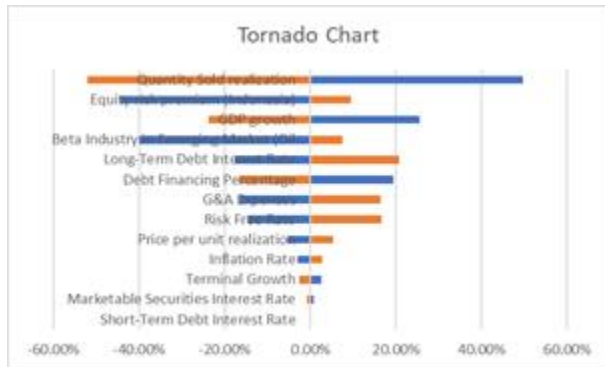


Fig. 8 - Sensitivity Analysis

From the tornado chart, obtained that quantity sold realization is variable that has most significant impact to project NPV (swinging about -51.98% to +49.77%), followed by equity risk premium (-44.29% to 9.42%), GDP growth (23.82% to +25.45%) and beta industry (-39.98% to 7.50%).

III.6 Scenario Analysis

Based on four variables that obtained from sensitivity analysis, investment scenario is developed in worst-case, base-case and best-case condition. Each variable value in every scenario condition determined based on historical data, then project NPV calculated based on this scenario variable. Table-11 shows project NPV in every scenario condition.

Table 11 - Scenario Analysis

Variables	Scenario		
	Worst Case	Base Case	Best Case
Quantity Sold realization	88.75%	100.00%	108.76%
Equity risk premium (Indonesia)	7.75%	6.56%	4.60%
GDP growth	-2.07%	4.95%	6.49%
Beta Industry in Emerging Market (Oil distribution)	1.64	1.35	1.16
Project NPV	Rp (532,221,432)	Rp 908,374,655	Rp 2,165,965,845
	Range	2,698,187,277	

In the worst-case scenario, when all the variables have a negative impact on the project, the NPV of the project will be (loss) Rp (532,221,432). On the other hand, in the best scenario when all variables have a positive impact on the project, the NPV of the project will be Rp 2,165,965,845. Therefore, the project's NPV range is IDR 2,698,187,277.

III.7 Monte Carlo Simulation

This investment definitely will run under certain risks that are affected by random variable values. The variable obtained from sensitivity analysis will have a significant impact that can create opportunities or risks to the project NPV. Therefore, the Monte Carlo simulation is performed based on these variables to develop probabilistic distribution.

One of Monte Carlo simulation result to project NPV are shown in Fig. 9 and Table-12.

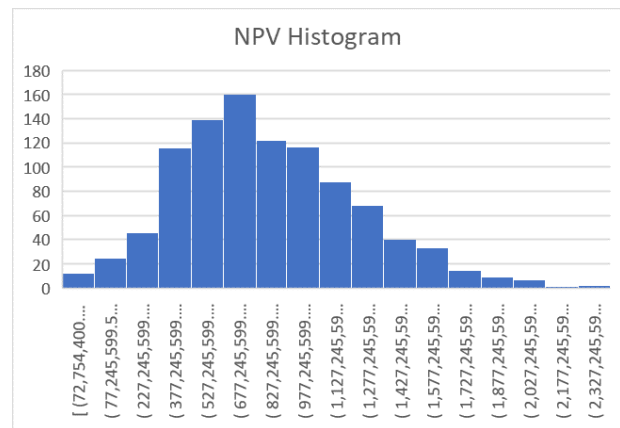


Fig. 9 – Monte Carlo Simulation

Table 12 - Statistic Description

Descriptive Statistics	
Min	(72,754,400.49)
Max	2,420,676,891.98
Mean	883,589,659.85
Standard Deviation	418,123,270.12
Median	828,043,146.73
Kurtosis	0.19
Skewness	0.52
Prob NPV<0	1.73%

From one of Monte Carlo simulation result, the probability of this project will incurs losses is only 1.73%. This means that project have high probability to success.

IV. FINDING AND DISCUSSION

In this research, the variables that can be an investment risk already identified by using sensitivity analysis. The variable is quantity sold realization, equity risk premium, GDP growth, and beta industry. The impact of the variable on the project's NPV has also been estimated through scenario analysis (worst and best scenarios). Three variables such as equity risk premium, GDP growth, and industry beta are categorized as systematic risk (market risk) [10] that is beyond the company's control. On the other hand, the quantity sold

realization variable is categorized as the operational risk that refers to how much a company can achieve its target market, so it is relatively within the company's control.

V. CONCLUSION

Based on the feasibility analysis result that conducted for CV XYZ, this gasoline distribution business is very prospective and profitable. This is proved by the financial indicator obtained from capital budgeting analysis, such as:

- The NPV obtained from this investment is Rp 908,374,655 using a discount rate (WACC) of 11.73%. The NPV value is greater than 0 (zero), which indicates that the total future cash flows that have been discounted by WACC to the present value will be greater than the initial investment that has been spent.
- The discounted payback period is 9.09 which indicates that this investment is safe because it is still within the 10 years of projection period.
- The profitability index is 1.94. This value is greater than 1 (one), which indicates that the business will derive the present value of future cash inflows more than the initial investment.
- The internal rate of return (IRR) was 22.49% that more than the discount rate (WACC = 11.73%), this indicates that the expected return from the business is more than the cost of capital to fund the project.

Financial ratio of this business also better than its benchmark especially for profitability ratio. This means that business expected will be sustained for the long period. The probability of success for this business is also quite high based on Monte Carlo analysis.

The quantity sold realization is the variable that has most significant impact to the project. Therefore, selecting the potential location is very important in this business that can determine whether this business will be profitable or not. The selecting process for gasoline station location and market size calculation in other district can follow the framework that explained in this research.

Based on all the analysis conducted in this research, BoD of CV XYZ confidence to enter the gasoline distribution business since all analysis give positive result about this business. They also recognize that determining the location is the most crucial part in this business that can determine the success of this business.

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