# BUSINESS VALUATION JOINT OPERATION OF INTERNATIONAL FERRY TERMINAL BATAM CENTRE BETWEEN BIFZA AND PT SYNERGY THARADA (PTST) PERIOD 2021 – 2030 UNDER COVID-19 CONDITIONS

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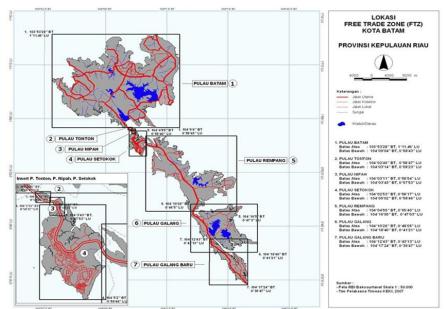
# **ABSTRACT**

Port Management of the International Ferry Terminal Batam Centre is very important in Batam, knowing that Batam is a city located in a strategic area and have a special geographical position because it borders with neighboring countries which are the gateways for cross-borders among Indonesia, Singapore, Malaysia, and Vietnam. During the Covid-19 outbreak, the passenger decreased significantly by 38.78% in number of passengers in 2019 to 2020. However, the joint operation agreement between Batam Indonesia Free Zone Authority (BIFZA) and PT Synergy Tharada (PTST) will be ended in 2024. The Objective of this study is to decide whether should be continued as it is or will be managed by BIFZA. This study will evaluate and analyze the valuation in joint operation with PT Synergy Tharada as evaluation to optimize Non-tax Revenue in BIFZA by using Discounted Cash Flow (DCF) method. The data is collected from company financial performance is secondary data period 2014-2020. The terminal value result with sensitivity analysis show Best Scenario IDR 411,612,997,947, Most Likely Scenario 303,189,553,145, and Worse Scenario 188,397,262,740 as reflects the value in business PTST in managing Batam Centre Seaport. The conclusion recommended to BIFZA to take over management of International Ferry Terminal Batam Centre after joint operation ended in 2024 to optimize Non-tax Revenue in BIFZA. This study is benefited for the government and practitioners. Author also recommend to The Management of BIFZA to improving service facilities to passengers of the International Ferry Terminal Batam Centre which will make it as an attraction for passengers and have an impact on increasing revenue.

Keywords: Business Valuation, Discounted Cash Flow, Port Management, Sensitivity Analysis, Non-tax Revenue

# INTRODUCTION

Initially according to Presidential Decree No. 65 of 1970 Batam Island was a logistical and operational base related to PN Pertamina's offshore oil exploration and exploitation. Based on Presidential Decree No. 74 of 1971 Batam has changed become as industrial area Furthermore, Batam Island was developed as an industrial, trade, transfer, and tourism area. The sustainable development of Batam is expected to increase competitiveness as an investment destination. Batam - Rempang - Galang area have a special geographical position because it borders with neighboring countries which are the gateways for cross-borders between Indonesia, Singapore, Malaysia, and Vietnam. This position is a strategic trajectory for the economy, trade, tourism, industry, and investment. In 2007, the area was designated as a Free Trade Zone (FTZ) by Government Regulation No. 46 of 2007 concerning Free Trade Areas and Free Ports Batam for a period of 70 years. The Batam area includes Batam Island, Tonton Island, Setokok Island, Nipah Island, Rempang Island, Galang Island, and New Galang Island. Based on The Government Regulation No. 46 of 2007, The Batam area is designated as a Free Trade Area and Free Port, the regulations also mark the birth of Batam Indonesia Free Zone Authority (BIFZA) as the agency who manages the Batam free zone area. Through government regulation 5/2011 Island "Janda Berias" and its clusters have been redefined as a Free Trade Area and Free Port of Batam.



LOKASI KAWASAN PERDAGANGAN BEBAS DAN PELABUHAN BEBAS KOTA BATAM

Figure 1 The Scope of KPBPB-Batam based on Government Regulation Number 46 Year 2007 and Government Regulation Number 5 Year 2011 (Source: Attachment to Government Regulation No. 5 of 2011)

BIFZA organization structure consist of 2 (two) parts:

a. Administrative Organization Structure According to Peraturan Kepala BP Batam No. 19 Tahun 2019, Organization Structure lead by Head, Deputy Head and four deputies. Illustrated in Figure 1.2.

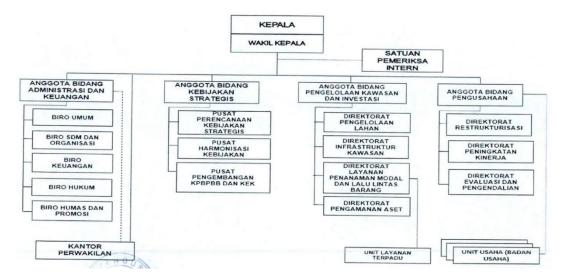


Figure 1.2. Administrative Organization Structure Chart of BIFZA Source: bpbatam.go.id (2019)

# b. Business Entity Unit Organization

As a follow up of the government regulation No. 6/2011 on Finance Management in Batam Free Trade Zone and Free Port to provide the flexibility in financial management with the legal framework of, BIFZA has declare regulation No. 20 Tahun 2019 to form business entity unit lead by Deputy Pengusahaan with 4 (four) business entity unit to optimize Non-tax Revenue as part of the objective organization mission to provide support and facilities for the development of export-oriented investment in order to support a productive economic structure, described in Figure 1.3.



Figure 1.3. Business Entity Unit Organization Chart of BIFZA Source: bpbatam.go.id (2019)

In order to provide infrastructure facility for the development Batam, BIFZA has supported by Non-tax Revenue from 4 (four) business entity units consists of Airport and Information Communication and Technology Business Entity, Seaport Business Entity, Hospital Business Entity, Facility and Environmental Business Entity

In 2020 total revenue BIFZA as Non-tax Revenue from all business entity IDR 647,456 Million, detailed in Figure 1.4.

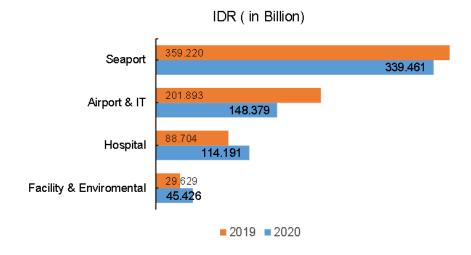


Figure 1.4. Non-tax Revenue in 2019 and 2020 Source: Audited Report BP Batam (2020

According to Figure 1.4 above, Seaport had 52.43% contribution for Non-tax Revenue in 2020 and 52.87% in 2019. Ferry Terminal International Batam Centre as part of seaport of business unit have a contribution to total revenue in 2020, which Joint operation business scheme and will ended in 2024. Profit sharing since 2014 shown in Figure 1.5.



Figure 1.5. Ferry Terminal Batam Centre Profit Sharing Source: Audited Report PTST (2024-2020)

In 2019 Profit sharing reach 43 billion Rupiah with 2,240,000 passengers, but decreased 41.35 % in profit sharing and 38.78% in number of passenger due to the Covid-19 outbreak in Indonesia, Singapore, and Malaysia lockdown period in March, 2020. As a part of optimization Non-tax Revenue in BIFZA, author will evaluate Joint operation agreement with PT Synergy Tharada that will be ended in 2024, with assume of growth passenger will be used data since 2014-2020 with pandemic situation, BIFZA will hand over and manage terminal ferry to optimize Non-tax Revenue.

BIFZA will hand over and managed Ferry Terminal International Batam Centre to optimize Non-tax Revenue in 2024 according to the historical financial report of PTST.

And questions related to this statement are:

- a. Should this project be continued as a joint operation or managed by BIFZA after the end of the contract of joint operation in 2024?
- b. Should BIFZA maintain as a joint operation or managed by BIFZA itself based on valuation accordingly to the historical reports and last the projection of 2022 to 2024?

The main objectives of this final project are to predict whether the port management project will give benefit BIFZA's cash flow after contract with PTST ended in 2024 according to the valuation and Propose suggestion to BIFZA management related to the contract with PTST as a port management based on external study, internal study, valuation method, and sensitivity analysis.

#### **LITERATUR**

#### **E REVIEW**

According to the book titled The Handbook of Financing Growth, value of the firm definition as follows: "value of firm is the value of all investor who have claims on the firm, thus, it includes lenders and debt holders, who have fixed claims, and equity investor, who have residual Revenue" (Kenneith & Robbins, 2005). There are several valuation technique to calculate the company valuation. In this research author used Discounted Cash Flow (DCF) valuation to calculate firm valuation independently PTST. This process intended to achieve the firm's goal of maximizing shareholder's wealth (Gitman, Lawrence, J Zutter, Chad J:2014).

# **External and Internal Business Environment**

To evaluate external analysis author, use PESTEL (Political, Economic, Social, Technological, Environmental and Legal) business analysis to evaluate the external environment of a business opportunities and risks factors. PESTEL Analysis can be an effective framework to use in Corporate Strategy Planning and for identifying the pros and cons of a Business Strategy (corporate finance institute, 2021).

# • Political

Government Regulation No. 6/2011 on Finance Management in Batam Free Trade Zone and Free Port to provide the flexibility in financial management with the legal framework. This regulation is very beneficial for BIFZA because this regulation provides flexibility for BIFZA itself in financial management based on economic principles and the application of sound business practices. Some of the advantages are:

- a. BIFZA can make its own financial budgeting directly
- b.BIFZA provides its own source of Revenue to fund its expenditures
- c. BIFZA performs treasury management including money management, debt management, and asset management.

# • Economic

#### a. Indonesia

Due to COVID-19 situation in Indonesia has decreased in negative economic growth -5.32% in quarter 2, 2020 and reached positive again 7.07% in quarter 2, 2021 (Badan Pusat Statistik, 2020). As shown in Figure 2.2, economic situation before Covid-19 condition is in negative percentage, but nowadays it's back to positive percentage.

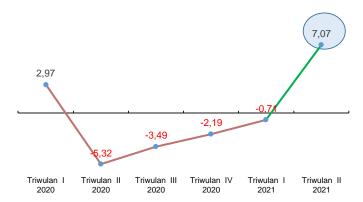


Figure 2.2. Indonesia Economic Growth Source: Badan Pusat Statistik Kepulauan Riau (2020)

#### b. Batam Economic Growth

As shown in Figure 2.3, Batam as special economic zone shows the increase of number export 6.84% and decrease import 2.74% per August 2021(https://kepri.bps.go.id), as indicated of economic growth in Batam. This figure still shows positive revenue so that it can still increase the country's foreign exchange.

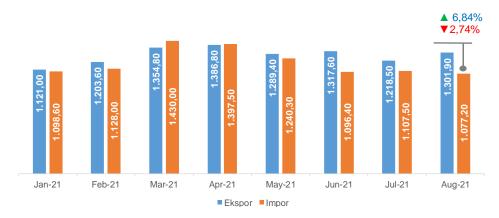


Figure 2.3. Export and Import Growth per August 2021 Source: Badan Pusat Statistik Kepulauan Riau (2021)

# Social

International Ferry Terminal Batam Centre is a facility needed by the community and immigrants to support smooth travel that borders Singapore and Malaysia. The number of foreign tourist visits or foreign tourists to Riau Islands Province during the month of June 2021 shown in Figure 2.4.

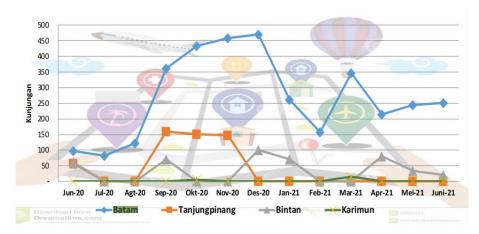


Figure 2.4. The Number of Foreign Tourist Visits or Foreign Tourists to Riau Islands Province during The Month of June 2021

Source: Badan Pusat Statistik Kepulauan Riau (2021)

From Figure 2.4 shows that the number of foreign tourist visits or foreign tourists to Riau Islands Province during the month of June 2021 recorded as many as 271 visits. This means increased 2.26 percent compared to the month previously, where in May 2021 there were 265 visits. Meanwhile, when compared to June 2020, there was an increase of 179.38 percent.

#### Technological

There is nothing technology to replace ferry terminal as passenger ship port.

#### • Environmental

There is no issues concern to environmental International Ferry Terminal Batam Centre, because they already have Wastewater Treatment Plant (WWTP) since 2002 and environmental hygiene system under their management control and Regulation of State Minister of Environment No. 05/2009 about Waste Management in Ports.

#### Legal

BIFZA has issued regulation No. 20 Tahun 2019 to form business entity unit lead by Deputy Pengusahaan with 4 (four) business entity unit to optimize Non-tax Revenue as part of the objective organization mission to provide support and facilities for the development of export-oriented investment to support a productive economic structure. BIFZA also have full authority to develop their business so that their revenue is also increasing and free from taxes.

Internal analysis divided in 2 (two) resources Tangible and Intangible resources. Tangible resources are assets that can be observed and quantified. Intangible resources include assets that are rooted deeply in the firm's history, accumulate over time, and are relatively difficult for competitors to analyze and imitate (Hitt, Ireland, Hoskisson, 2011).

#### • Literature Review

According to the book titled *The Handbook of Financing Growth*, value of the firm definition as follows: "value of firm is the value of all investor who have claims on the firm, thus, it includes lenders and debt holders, who have fixed claims, and equity investor, who have residual Revenue" (Kenneith & Robbins, 2005).

There are several valuation techniques to calculate the company valuation. In this research author used Discounted Cash Flow (DCF) valuation to calculate firm valuation independently PTST. This process intended to achieve the firm's goal of maximizing shareholder's wealth (Gitman, Lawrence, J Zutter, Chad J:2014).

# Net Present Value (NPV)

Net Present Value is the difference between the present value of cash inflows and the present value of cash outflows (including initial cost) over a period of time. The NPV analysis takes into the depreciation method and consideration between before and after cash flow used on the project. Based on Daryanto W.M (2021), NPV and Internal Rate of Return (IRR) parameters are effective and widely used of an investment analysis. Basic equation of NPV stated in formula:

$$NPV = \sum Discount \ Factor \ x \ Net \ Cash \ Flow$$

Source: Daryanto W.M (2021)

If the NPV shows non-negative result, the proposal value is acceptable. The NPV has calculated by multiple the cash inflow for each year by the present value of \$1 for that year at the appropriate rate of return (Daryanto W.M & Primadona: 2018). Based on Arshad (2012), NPV is superior to the other methods because of its consistency with shareholders' wealth maximization.

# • Discounted Cash Flow (DCF)

The DCF is the basis of the valuation method used as a reference in other valuations and is applied to make broad business judgments. DCF is the present value of expected future cash flow that can be generated on that asset (Damodaran, 2012). Basic equation of DCF stated in formula:

$$Value = \sum\nolimits_{t = 1}^{t = N} - \frac{CFt}{(1 + r)^t}$$

Where:

CFt = Cash flow to the firm at t period

 $egin{array}{lll} r & = & Discount\ rate \ N & = & Life\ of\ the\ firm \end{array}$ 

Source: Damodaran (2012)

To calculate the value of the firm, "it is obtained by discounting expected cash flow to the firm, at the weighted average cost of capital (WACC), which is the cost of different component of financing used by the firm, weighted by their market value proportions". (Damodaran, 2012).

To find the value of the firm, Damodaran set framework as shown in Figure 2.5.

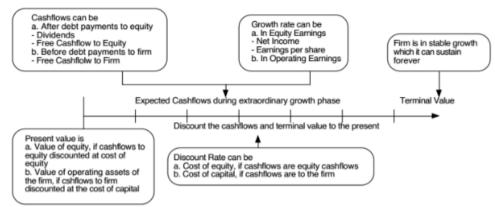


Figure 2.5. Damodaran Framework on Firm Valuation (2010) Source: Damodaran (2010)

In conducting the valuation, there are several valuation models that are commonly used, including the dividend valuation model, Free Cash Flow to Firm (FCFF) and Free Cash Flow to the Equity (FCFE). In this study, the FCFF model will be used as a valuation method because FCFF is the sum of the cash flows of all claim holders in the company, including general stakeholders, bondholders, and preferred shareholders. The formula for calculating the company's valuation based on the FCFF according to Damodaran (2010) is as follow:

$$\begin{aligned} \textit{Value of Firm} &= \sum\nolimits_{t=1}^{t=N} - \frac{\textit{FCFF}^t}{(1 + \textit{WACC})^t} + \frac{[\textit{FCFF}^{n+1}/(\textit{WACC} - \textit{g}^n)]}{(1 + \textit{WACC})^n} \\ \textit{FCFF} &= \textit{EBIT (1-tax rate)} + \textit{Depreciation} - \textit{Capital Expenditure} - \blacktriangle \textit{Working capital Source: Damodaran (2010)} \end{aligned}$$

Based on the statement above to make valuation on a company, there are several steps should be taken are:

- Forecasting growth of the company
- b. Forecasting change of working capital
- c. Forecasting net capital investment of the company
- d. Forecasting cash flow of the company
- e. Forecasting discount rate of the company (WACC)
- f. Forecasting terminal values

# • Revenue Growth

According to corporatefinanceinstitute.com, there are several types of techniques in making projections, including: Moving Average, Simple Linear Regression, Trend Analysis, and Multiple Linear Regression. In this research author use Multi linear regression with compare more than one independent variable with one dependent variable. Total passenger as Dependent variable, Real GDP as indicated of economic growth and population is independent variables.

# • Forecast COGS & Fixed and Variable Cost

COGS is direct cost which are attribute to the production service sold in the company. For port management service COGS is mostly Royalty Fee PTST to BIFZA according to agreement between BIFZA No.118/SPJ/KA/12/2011 with PT Synergy Tharada No. 014/BCP-KSO/Add.II/XII/2011, December 30, 2011, as in Table 2.2.

Table 2.2. Royalty Fee (%)

No.	Total Revenue(IDR)	% of Royalty Fee to BIFZA
1	<=15 Billion	10%
2	>15 Billion ,<=20 Billion	20%
3	>20 Billion	30%

Source: Agreement between BIFZA No.118/SPJ/KA/12/2011 with PT Synergy Tharada No. 014/BCP-KSO/Add.II/XII/2011 (2011)

Others additional cost to COGS is deprecation cost in investment PTST to the port of Batam Centre with total capex IDR 36.832.570.000,00 with lifetime asset it 20 years since 2002 (effective contract).

Fixed and Variable Cost consist of Administration, manpower, maintenance building cost assume 30% from total revenue as most likely scenario. Best case Fixed and Variable Cost assume 24% from total revenue and worse scenario is increase up to 36% from total revenue.

#### • Capital Investment Forecast

To support business growth, companies must invest in new investments continuously. According to Damodaran, in estimating capital expenditures to forecast future cash flows. There are 2 (two) methods that can be used, first by using the average net capital expenditure from the previous historical. Another way is to forecast capital expenditure with a percentage of input (Revenue or depreciation). In this research, capital investment forecast based in percentage of profit.

### Percentage capital investment

$$= \frac{cash\ out\ from\ invesment\ Activities - Depreciation}{EBIT\ (1 - tax\ rate)}$$

$$Source:\ Damodaran\ (2010)$$

#### Change of Working Capital Forecast

Net working capital is usually defined as the difference between current assets and current liabilities.

# • Weighted Average Cost of Capital (WACC)

WACC According to Gitman & Zutter, "...reflects the expected average future cost of capital over the long run. It is found by weighting the cost of specific type capital by its proportion in the firm capital structure." (2012). The expected return for equity investor name cost of equity, the expected that lenders hope to make on their investment named cost of debt. All financing that the company takes on, the composition of cost financing will be a weighted average of the cost of equity and debt, this weigh cost name Weight Average Cost Of Capital (Damodaran, 2012). WACC formula as follow:

debt, this weigh cost name Weight Average Cost Of Capital (Damodaran, 2012). WACC formula as follow: 
$$WACC = (cost\ of\ equity\ *\left(\frac{Equity}{Equity+Debt}\right) + (cost\ of\ debt\ *\left(\frac{Debt}{Equity+Debt}\right) \right)$$
 Source: Damodaran (2012)

In this research, cost of equity will be calculated based on CAPM (Capital Asset Pricing Model) (Damodaran, 2012) with formula as follow:

Where expected return here is the required return of cost of equity. Risk free rate is theoretical rate of return of an investment with zero risk. For this research risk free rate refers to LC government bond yield and beta coefficient for PTST in average of infrastructure sector.

According to Damodaran, "... risk premium is used to measures the extra return that would be demanded by investor for shifting their money from a risk less investment to the market portfolio or risky investment, on average." (2010). Equity Risk Premium formula as follow:

Cost of debt in WACC that is used to measure the cost to firm in borrowing money to fund its investment with formula as follow:

Based on Anthony, et.al, (2011), the require rate of return should be equal to the cost of capital where the cost of debt capital plus the cost of equity capital and weighted by the relative amount of each in the company's capital structure.

### • Terminal Value

Terminal value used to calculate the terminal value in the end of valuation. In this research, due to estimation for next 10 years, terminal value calculated as a residual value of the firm after next 10 years.

There are three approaches to calculate the terminal value of the firm. First is to estimate the liquidation of the firm asset, how much others would pay the accumulative asset of the firm. Second technique by calculate based on the book value of the firm, and the other estimate terminal value by assuming that firm will growth saturated and stable forever.

In this research, due to the firms are expected to operate forever, the terminal value is valuated on saturated and stable growth forever by formula in this formula:

Terminal value<sub>n</sub> = 
$$\frac{Cash\ flow\ to\ Firm\ n+1}{cost\ of\ capital\ n+1-g_n} = \frac{FCFF\ n+1}{WACC\ n+1-g_n}$$
Source: Damodaran (2012)

Where, FCFF is calculated free cash flow of the company, WACC is the Cost of Capital of The Company and  $g_n$  is stable growth of the company.

#### • Sensitivity Analysis

Sensitivity analysis is an analysis to see the effects that will occur due to changing circumstances and how sensitive model to the change in variable (Gittinger, 1986). In this final project, sensitivity analysis is used to identify how significant passenger realization, sea port tax and fix & variable cost impact to the enterprise valuation.

#### **METHODOLOGY**

To accomplish the study, the steps are: Based on the statement above to make valuation on a company, there are several steps should be taken are: 1) Business Situational Analysis, 2). Financial Projection 3. Standalone Valuation to be Managed by BIFZA Make decision what option is the most feasible among the existing alternatives. a. Should this project will be continued as a joint operation or managed by BIFZA after the end of the contract of joint operation in 2024? Or b. Should BIFZA maintain as a joint operation or managed by BIFZA itself based on valuation accordingly to the historical reports and last the projection of 2022 to 2024?, the primary data were collected in year 2014-2020.

# LIMITATION

The final project is focus on business valuation in joint operation agreement. The Joint operation evaluation is using Discounted Cash Flow (DCF) valuation method. The limitations as follows:

- a. Revenue and cost are only from this agreement, there are no others source.
- b. Sales and passenger projected use historical report in 2014 until 2020

#### RESULTS AND DISCUSSION

In this research, due to the firms are expected to operated forever, the terminal value is valuated on saturated and stable growth Where, FCFF is calculated free cash flow of the company, WACC 11,49% is the Cost of Capital of The Company and gn is stable growth of the company with cost of debt 6,28% and cost of equity 28,47%. Stable growth rate the company in this research-based assumption that 3.87%.

After defining several parameters for valuation above, the next step is to calculate company valuation. PTST initial values in this calculation are taken from data in 2020. Terminal value result has positive value with IDR 303.189.553.145 as most likely scenario shown in Table 3.13.

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Free Cash Flow to Firm Terminal Value		33.370.140.444	31.741.633.064	30.542.312.595	(20.624.569.054)	29.170.903.027	28 947 751 203	29.279.551.752	30.294.864.717	31.919.667.466	34.167.304.978 466.158.352.775
Year		1	2	3	4	5	6	7		9	10
Terminal Growth WACC	3,87% 11,49%	11,49%	11,49%	<del>-</del>	11,49%	11,49%	11,49%	11,49%	11,49%	11,49%	11,49%
Discount Factor		0,8970	0,8045	0,7216	0,6473	0,5806	0,5208	0,4871	0,4190	0,3758	0,3371
PV of Cash Flow		29.931.751.865	25.537.446.537	22.040.641.119	(13.350.000.747)	16.936.371.933	15.075.073.632	13.676.757.174	12.692.928.446	11.995.691.118	168.652.892.067
Firm Value   303.189.553.145   30.189.553.145   30.189.553.145   30.189.553.145   30.189.553.145   30.189.553.145   30.189.553.145   30.189.553.145											
Lack of Marketability Di Minority Discount Equity Value	0%	303.189.553.145									

# Table 3.13. Terminal Value PTST

- 1. Projection to find terminal value 10 (ten) years starting form 2021 and ended in 2030;
- 2. WACC calculation in this case is 11,49%;
- 3. Based on the above table, firm value has positive value with NPV IDR 303.189.553.145.

#### **Sensitivity Analysis**

Sensitivity analysis is the process of tweaking one key input or driver in a financial model and seeing how sensitive model is to the change in that variable. In this final project sensitivity analysis used to identify how significant each variable impact to Terminal Valuation. The main uncertainty factors in this project shown in this table 3.14 and output will be presented in tornado chart to evaluate sensitivity level:

**Table 3.14. Sensitivity Parameter Scenarios** 

No.	Sensitivity Focus	Worst	Most Likely	Best
1	Passenger Realization Rate (- +50%)	-50%	Base	+50%
2	Sea Port Tax - Fee (-+20%)	-20%	Base	+20%
3	Fix & Variable Cost (+-20%)	+20%	Base	-20%

Tornado chart to evaluate sensitivity level show in Figure 3.3



Figure 3.3 NPV Tornado Chart Sensitivity

- Based on Valuation method using DCF calculation all scenario show positive firm value Best Scenario IDR 411,612,997,947
  Most Likely Scenario 303,189,553,145, and Worse Scenario 188,644,580,624 as reflects the value in business PTST in
  managing International Ferry Terminal Batam Centre;
- According to agreement between BIFZA No.118/SPJ/KA/12/2011 with PT Synergy Tharada No. 014/BCP-KSO/Add.II/XII/2011, December 30, 2011 will be ended in 2024, refers to valuation calculation result recommended to BIFZA management to take over International Ferry Terminal Batam Centre to optimize Non-tax Revenue in BIFZA.

#### CONCLUSIONS AND RECOMMENDATION

- a. According to the valuation method using DCF calculation and sensitivity analysis all scenario shows positive firm value, as reflects the value in business PTST in managing Port of Batam Centre.
- b. Refers to valuation calculation result, BIFZA recommended to take over Port management of International Ferry Terminal Batam Centre to optimize Non- tax Revenue in BIFZA after 2024 ended. The benefit of management by BIFZA will get higher Revenue because BIFZA does not bear the tax burden.
- c. Authors recommend to The Management of BIFZA that can be capable of improving service facilities to passengers of the International Ferry Terminal Batam Center which will make it as an attraction for passengers and have an impact on increasing revenue and take over Port of International Ferry Terminal Batam Centre to optimize Non-tax Revenue in BIFZA after 2024 ended.
- d. With consideration of Covid-19 condition, the results of the business assessment calculation still show a positive value so that under normal circumstances the business value will definitely provide a much greater positive value and very feasible for BIFZA to manage the Port of International Ferry Terminal Batam Centre.
- e. To practitioners, Author recommend giving criticism and suggestions regarding improving the services needed by International Ferry Terminal Batam Centre service users.
- f. To the government, Author recommend being able to increase the mode of supporting transportation facilities from and to International Ferry Terminal Batam Centre in order to increase passenger's comfort.

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