

An Analysis of The Highest and Best Use of Commercial Property Land of PT. Samudera Indonesia Tbk, Belawan

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Abstract: The company's policy to do an investment has to be based on a well thought consideration using the proper analysis. A company in doing the investment planning for an asset in the form of property can use the HBU analysis in determining the alternative options for land optimization. According to the master plan of Belawan Port of Indonesia of 2011 that has been made in accordance with the regional spatial plan (RSP) Medan 2015-2035, it is positioned as an international port, industrial areas, warehousing, center of Business District (CBD) and neighborhoods that support industrial activities. The growth of port activity and business growth in the port of Belawan resulted in the demand for land increased. To improve the efficiency of limited land it is necessary to optimize the use of land. The case study for this research was an area of 11.200M² of vacant land belonging to PT Samudera Indonesia Tbk. Medan branch located on Jalan Raya Pelabuhan, Belawan. The land was currently empty and the land owner planned to build a commercial property on it. The objective of Highest and Best Use (HBU) analysis was to identify the most profitable use of the property and competitive for the land. There are four criteria in HBU analysis that is, physically possible, legally permitted, financially feasible with the method of financial analysis of Payback Period, Net Present Value, Internal Rate of Return and Profitability Index, and has a maximum productivity. By using HBU analysis, it can be designed and considered the most profitable alternative property. The Selection of alternative land use was done by distributing HBU questionnaires to the stakeholders in the business of transport services and as a result there are three main options that is, full Container Yard, Container Depots, and Distribution Warehouses. The results of the study is a buildup of charge of containers or full container yard which is an alternative use that provides the increase of the highest value for vacant land with a value of maximum productivity of Rp. 1,694,234,-/M² become Rp. 3,940,321,-/M². The results of this study can be used as guidelines for landowners as a basis for decision making to the land optimization.

Keywords: Analysis of Highest and Best Use, Vacant Land, Full Container Yard, Value of Land

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I. Introduction

Belawan Port is the main port under the management of PT Pelabuhan Indonesia I where geographically the location is very strategic because it is only 13.5 KM away from the Malacca Strait international shipping line. The location of the port is on the mainland of the peninsula which is the mouth of the Belawan River and the Deli River, the administrative land is located in the area of the Medan City Government.

According to the Belawan Port Indonesia Master Plan 2011 has been prepared in line with the Medan City Spatial Plan (RTRW) where Belawan is positioned as an International Port, industrial estate, warehousing, Center of Business District (CBD) and settlements that support industrial activities. For this reason, many things need to be prepared, both concerning infrastructure and superstructure, in addition to transportation and trade networks.

In line with the Republic of Indonesia's Government Program in the field of sea transportation in order to reduce logistical costs which are still considered to be quite high and make the prices of basic necessities in some regions very high. The Government Program is the Marine Highway and Belawan Port Program as one of the 5 Main Ports in Indonesia. The function of the Belawan Port as a connecting port in northern Sumatra. In the near future, in the Belawan Port, there will be a 700 M dock development project in two stages of construction projects, increasing port capacity from 1,200,000 TEUs to 2,000,000 TEUs.

The growth of goods flow in Belawan Port also increased, namely for inter-island transportation on average 78.44% for loading activities and 14.73% for unloading activities. While for foreign transportation, the average is 69.93% for loading activities and 6.61% for unloading activities. Seeing the above conditions, it can be concluded that the activities of the Belawan Port will continue to increase in the future. Figure 1.1 shows the

role of the Belawan Port as a domestic shipping lane and the position of Belawan Port in the Sea Toll Program launched by the President of the Republic of Indonesia in 2015 yesterday.

When looking at market conditions in the transportation business at this time where the plan is planned to be built with several alternative facilities based on interviews with several prospective service users, namely:

1. Distribution warehouses for finished and semi-finished goods are good for export and import purposes. There are 7 (seven) voters.
2. Container depots or container stockpiles and storage containers, besides that, also places for repairing damaged containers and making containers made of offices. The number of voters is 3 (three) companies.
3. Full Container Yard to store goods and containers that contain cargo before the export goods or containers are sent to Belawan Port or vice versa a place to stack goods or containers containing imported cargo before being sent to the location of the goods owner. The number of voters is 3 (three) companies.

In addition to the three alternatives above, the author also conducted a direct survey of interested parties in the transportation business to see and decide which alternative business was chosen as the basis for selecting alternative businesses to be carried out.

Since 2009 until 2015 there is still land that has not been used by PT SI Tbk. Medan Branch. Though the value of the current market price of land in Belawan is very high at Rp. 1,694,234, - per M2 based on the results of an assessment from KJPP Desmar, Anis and colleagues on December 30, 2015. The conditions around Belawan Port are currently very difficult to find vacant land as a business activity because most of the land is owned by the Government with status The Port Management Right land that can be managed with a leasing system in collaboration with PT Pelindo I Belawan Branch.

This land use analysis can be done using the highest and best use method or better known as HBU. By calculating cash flow (discounted cash flow) for 25 years, it can be seen also which alternative use is the most optimal, namely by comparing the value of Net Present Value (NPV), Internal Rate of Return (IRR), Profitability Index (PI) and Payback Period (PP) for utilizing existing properties.

II. Theoretical Review

2.1 Highest and Best Use

According to Grissom (1983) quoting from The Society of Residential (SSA) the definition of Highest and Best Use is a concept of valuation that can be applied to land or buildings which are usually interpreted as land use which will maximize owner's wealth through land use. most profitable.

The Highest and Best Use can define as rational use possible and permitted on vacant land or property development, which is physically possible, fully supported, financially feasible and produces the highest value. HBU from a certain plot of land is not determined by the subjective analysis of the owner or developer or appraiser, but rather is formed by competitiveness between the markets where the property is located. Therefore, the analysis and interpretation of the Highest and Best Use is an economic study of market power that is focused on the subject matter of property.

2.2 Highest and Best Use Criteria

The Highest and Best Use criteria are as follows:

a. Physically Possible (Physically Possible)

The size of the soil shape, area, height and contour of the land affect the usability that can be built on it. For example, disproportionate or regular land forms will cause greater costs in building them than land that has a proportional or regular form.

b. Legally permitted (Legally Permissible)

Legal provisions regarding property development such as KDB (Building Base Coefficient), KLB (Building Floor Coefficient), KDH (Green Base Coefficient), Road boundary conditions, zoning, supervision of assets that have historical values and environmental regulations can affect the highest potential use and the best of a property.

c. Financially feasible (Financially Feasible)

After passing the two conditions above, then the possible uses are needed to be analyzed further in generating income, the rate of return (return) whether equal to or greater than operating costs. All uses that are expected to provide a positive return are considered financially feasible.

d. Produce maximum profit (Maximally Productive)

After analyzing the financial feasibility of each potential use, the utility that produces the highest price or value is the highest and best use.

2.3 Capital Budgeting

According to Suliyanto (2010) in the Business Feasibility Study there are several methods that can be used to assess the feasibility of an investment, namely:

a. Payback Period

Payback Period is a method used to calculate the period of time needed to return invested money from the annual cash inflows generated by the investment project. If the cash in amount is the same then the Payback Period of an investment can be calculated by dividing the amount of investment by the annual period.

b. Net Present Value

Net Present Value (NPV) is a method that is done by comparing the present value of net cash inflows with the present value of the cost of spending an investment. Therefore, to calculate the feasibility of investing with the NPV method, the initial cash outflow data, net cash inflows in the future, and the minimum rate of return are desired. If the positive NPV calculation means that the investment will provide higher results than the minimum desired rate of return. Conversely, if the negative NPV means that the investment will give a lower yield than the minimum desired rate of return, then the investment should be rejected.

c. Profitability Index (PI)

The method of Profitability Index (PI) or often called the Desirability Index (DI) is a method that calculates the ratio between the present value of net cash receipts in the future with the present value of investment.

d. Internal Rate of Return (IRR)

The Internal Rate of Return (IRR) method is basically a method for calculating the interest rate that can equalize the present value of all cash inflows with cash flow out of a project investment. So in principle this method is used to calculate the actual rate of return. Basically the Internal Rate of Return must be sought by trial and error.

2.4 Cost of Equity

According to Asnawi (2010) the cost of equity (r_e) is the expected rate of return $[e(r_i)]$. If we do business, of course we want a higher rate of return. According to Darmodaran (2012) the cost of equity is the rate of return expected by investors on the funds they invest in the company. One approach that is widely used is to estimate the cost of equity by using the CAPM (Capital Asset Pricing Model).

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2.6 Value Terminal

The calculation of terminal value according to Damodaran (2012) is based on the fact that cash flow estimation cannot be carried out every year forever, so closure is usually carried out in DCF valuation by stopping estimation of cash flow in a year (terminal year / final year estimate) to then calculate the value terminal that reflects the value of the company at that time. The use of terminal value in this valuation is based on the assumption that the company will go concern with a constant growth rate of cash flows after the terminal year.

III. Materials and Method

3.1 Types of Research

The type of research conducted is quantitative research where phenomena can be classified as relatively constant, concrete, observable, measurable and causal symptoms. The hypothesis is tested through data collection. The collected data was analyzed using statistics and econometrics so that it could be concluded that the formulated hypothesis was proven or not (Sugiyono, 2012).

The statistics used are inference statistics that learn how to draw conclusions about the entire population based on data taken in a sample. While econometrics is defined as quantitative analysis of economic phenomena in real terms based on the development of theories and observations that are connected with the inference method.

3.2 Population and Samples

According to Sekaran and Bougie (2013) the population refers to the whole group of people, events or things of interest that the researcher wants to know, while the sample is a subgroup or as a population. By examining samples, a researcher can draw generalized conclusions for the entire population. The population in this study are all business people who need sea and land transportation services through the Belawan Port, North Sumatra and all this time using existing facilities at the Ocean Logistics Center. The questionnaire samples used in this study are all populations which are business actors who are also the main customers of PT Masaji Kargosentra Tama Medan Branch.

3.2 Data Analysis Techniques

Data analysis in this study uses the principle of Highest and Best Use with four methods of analysis, namely:

1. Analysis of market value estimates without development using the Market Data Comparison Method.
2. Analysis of determining alternative types of land use by distributing questionnaires and conducting structured interviews.
3. Analysis of the estimated market value of land with development that involves criteria in the principle of the Highest and Best Use, which is legally permitted, physically possible, financially feasible and produces maximum profits.
4. Analysis of determining the best type of land use by comparing the market value of land without development and market value of land with the development that has been obtained. The highest value among all market values of land obtained is the highest and best use on the land.

IV. Results and Discussion

Financial Analysis

In the financial analysis, the investment costs, income and expenses of each alternative business activity that are available using the Capital Budgeting method are calculated as follows:

a. Investment Costs

Investment costs are needed to obtain an overview of the costs that will be incurred to make the building outline. PT Samudera Indonesia Tbk. has a subsidiary engaged in property, namely PT Samudera Rekso Asri, based in Jakarta. The author discussed with one of the Management of PT Samudera Rekso Asri in Jakarta and obtained the results of the calculation of investment costs calculated through the construction cost approach mechanism that had been built. PT Samudera Rekso Asri once built a container depot, distribution warehouse and container filled container in the Samudera Logistics Center, Belawan. The construction costs are adjusted to construction costs in 2016 using the assumption of an inflation rate of 5% per year. Special distribution warehouse to make it more efficient in the use of space, so to store goods is very necessary racking in accordance with the existing area in the warehouse.

Especially for Full Container Yard, land that has the ability to withstand a load of at least 30 Ton / M² is required with a CBR or California Bearing Ratio above 80% and a hardening layer thickness of 135 CM. This is needed because the container that is stored is a container containing cargo. For containers that contain a maximum size of 20 feet in weight, it is 24,000 kg or 20 tons, while for containers containing a 40 feet size load the maximum weight is 30,480 kg or 30.48 tons.

Especially for Container Depots, land that has the ability to withstand a load of at least 15 Ton / M² is required with a CBR or California Bearing Ratio above 80% and a hardening layer thickness of 60 CM. This is needed because the containers that are stored are empty containers. For empty containers the maximum weight size of 20 feet is 2,200 Kg or 2.2 Tons, while for empty containers the size of 40 feet maximum weight is 3,800 Kg or 3.8 Tons.

b. Income

The assumption used for the tariffs used in the three business activities that are alternatives to land use is the tariff that applies since January 1, 2016 and is applied by PT Masaji Kargosentra Tama Medan Branch. While the assumptions used in determining the occupancy rate in the three business activities for 10 (ten) years are 50% -75% where the annual increase is 2% -3% per year according to the current condition of the company. The distribution warehouse assumes a rate increase of 1.5% per year, while for a full container yard and container depo of 2.5%, the increase is based on the tariff data in the company. The revenues planned to be obtained from distribution warehouse business activities are:

- a. Storage income in storage.
- b. Handling Cargo revenue for goods coming out or entering the distribution warehouse.

The income planned to be obtained from Full Container Yard business activities is:

- a. Storage income in the stacking field
- b. Revenue of movement of mechanical devices, namely activities of lifting and lowering containers (Lift On - Lift Off)

The revenues planned to be obtained from the container depot business activities are:

- a. Storage income in the stacking field
- b. Revenue of movement of mechanical devices, namely activities of lifting and lowering containers (Lift On - Lift Off)

Maximum Productivity Analysis

All alternative land uses have been seen both from the physical aspects, legal aspects and financial aspects, then the highest land values will be sought through analysis of maximum productivity. This analysis determines alternative land uses which have the highest land value per M2. The property value used is the value of the Net Present Value produced by each business activity that will be carried out. For the value of the building is the value of the investment spent to run each business

Assuming that the land used is not purchased because it is owned by PT Samudera Indonesia Tbk. Medan Branch as the manager, then based on the results of the analysis of maximum productivity through the calculation of the land value / M2 above, the highest land value is obtained with an alternative land use, namely a Full Container Yard or container stockpile containing a charge of Rp. 3,940,321, - / M2. The value of land is much higher than that of the land, which is left empty by land owners who only have a value of Rp. 1,694,234, - / M2. For when the new Full Container Yard business is underway by PT Masaji Kargosentra Tama Medan Branch which is a subsidiary of PT SI Tbk. For Belawan Port, the competitor is PT Pelabuhan Indonesia I (Pelindo 1) with a much more expensive tariff and applies progressive tariffs after the storage period of containers containing more than 3 (three) days, so it is very burdensome for goods owners or import-export companies.

V. Conclusion and Suggestion

Conclusion

From the results of studies conducted by the author on vacant land owned by PT Samudera Indonesia Tbk. The Medan branch, which is located in the Samudera Logistics Center, Belawan Port Highway, Bagan Deli Village, Medan Belawan Sub-District is:

1. Based on Financial Analysis where for alternative distribution Warehouse utilization: Payback Period for 6 years 1 month, the Net Present Value value is Rp. 35,755,170,050, -, the value of the Internal Rate of Return is 21.1% and the value of the Profitability Index is 1.75, for alternative use of Full Container Yard: Payback Period for 3 years 10 months, the Net Present Value is Rp. 52,420,325,279, -, the value of the Internal Rate of Return is 31.0% and the value of the Profitability Index is 2.59 and for alternative utilization of the Container Depo: Payback Period for 4 years 6 months, the value of the Net Present Value is Rp. 27,425,647,156, -, the value of the Internal Rate of Return is 29.0% and the value of the Profitability Index is 2.52 where the best alternative land use is a Full Container Yard or container stockpile containing cargo.

2. Analysis with the Principles of the Highest and Best Use conducted shows that the best utilization of vacant land belongs to PT SI Tbk. with alternative land use as a container stacking place containing cargo or Full Container Yard the HBU criteria are as follows:

a. The location is in an Samudera Logistics Center, Belawan which has good potential and strategic location with easy accessibility, complete public utilities and allows it to be developed as commercial property.

b. Based on applicable regulations in the 2015-2035 Regional Plan and Spatial Planning of Medan City, 11,200 M2 of commercial land can be built in the form of container stockpiles containing cargo or Full Container Yard with an area of 7,840 M2. From the results of financial analysis, the value of property is obtained or the property value is Rp. 52,420,325,279, -.

c. Maximum productivity that will give an increase in land value of Rp. 1,694,234, - / M2 to be Rp. 3,940,321, - / M2.

3. Capital Budgeting analysis done gets results:

a. The calculation results of the Payback Period where the investment project period is for 3 years 10 months.

b. The result of calculating the Net Present Value is Rp. 52,420,325,279, -.

c. The results of the calculation of the Internal Rate of Return are 31.0%.

d. The calculation result of the Profitability Index is 2.59.

4. Questionnaire results regarding alternative utilization of vacant land owned by PT SI Tbk. The Medan branch to the respondents who are users of transportation service facilities in Belawan SLC obtained conclusions, namely the Full Container Yard or container container that contains the most chosen cargo, namely 16 respondents. From the results of research conducted by the author through HBU Analysis, the best alternative land use was Full Container Yard. This shows that the market conditions represented by the respondents are in line with the results of the research conducted.

5. The condition of the Belawan Port where PT Pelabuhan Indonesia I (Pelindo I) currently implements a very high container stacking rate at the port that opens up opportunities for Full Container Yard businesses because business owners or companies can offer lower or more competitive container stacking rates to owners of goods

to be exported abroad or exported from abroad. In general, the location of the factory or industry does not have container stockpiles that contain cargo because of limited land so that they need land to store Full Container. Seeing this condition, it can be concluded that the business of Full Container Yard has bright prospects in the future.

Suggestion

1. PT SI Tbk. The Medan branch or the owners of vacant land can consider the results of research conducted by the author as a basis for reference for the use of commercial land which is currently empty and not used in the Belawan Port area.
2. Based on the results of the questionnaire conducted by the authors, namely the improvement of the security system in the Samudera Logistics Center, Belawan to ensure the safety of all service users' items and for the construction of containers that contain cargo must be free from flooding and competitive rates offered to customers later on.
3. For Academics can learn more about Analysis of the Best and Highest Usage or HBU Analysis to be used as a guide in conducting HBU Analysis because of limited references.
4. For the community or business world, it can make container stockpiling containing cargo or Full Container Yard as one of the best alternatives in choosing the best alternative land use and can provide the highest level of profit in the area around the sea port, especially in the Belawan Port area. Especially in the business world in accordance with Director General of Sea Transportation Regulation No. HK.103 / 2/4 / DTM-16 where from 1 July 2016 each container containing cargo must be verified the gross weight of the container or container before it is loaded into the transport vessel, meaning that the Full Container Yard business can be used as a new business opportunity, namely services weighing containers that contain cargo after a company that has a business obtains approval from an authorized agency in the field of metrology or cooperates with an authorized agency in the field of metrology.
5. For appraisers in conducting the highest and best use analysis or HBU Analysis, it is better if the analysis done better should use more accurate and actual data because this research still uses assumption data.
6. For property managers, better before developing an unproductive land, an analysis of the highest and best use of land is needed so that the selection of alternative land uses can provide the best results.

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