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The Analysis of the Royalty Difference towards Investment Value of Y City Government A Case Study of Alun-Alun Mall

***Nugroho Suryo Bintoro and Akhmad Makhfatih**

Faculty of Economic and Business, University of Brawijaya, Malang, Indonesia

ABSTRACT

The aim of this research is to estimate the fair value of a royalty that should be paid by X Inc. (lessee) to the Local Government (lessor) using discounted cash flow method which is applied, Build Operate Transfer (BOT). The discounted cash flow analysis method is conducted by estimating: gross potential income, loss collection, operational cost, and capitalization. The build operate transfer (BOT) method agreement of Alun-Alun Mall has been executed by the first party to the second party for 25 years. This analysis is using three scenarios consisting of: pessimistic, most likely and optimistic. The result obtained by the pessimistic scenario shows that the %age is 31 % for the lessor and 69 % for the lessee. Meanwhile, most likely scenario shows the %age of 64 % for the lessee and 34 % for the lessor. On the other hand, the third scenario, optimistic, shows that the %age of property value indication is 59 % for the lessee and 41 % for the lessor. Based on these scenarios, it can be assumed that the lessor has lost out. The lessor should have had the revaluation of %age by 30 % for the lessee and 70 % for the lessor

Keywords: Build Operate Transfer (BOT), Discounted Cash Flow (DCF).

INTRODUCTION

The implementation of Local Autonomy marked by the validity of Law No. 32 year of 2004 about Local Autonomy is the beginning of the new era for Indonesia in local government policy decentralization, especially in the management of local goverment assets. Some examples of (permanent) assets owned by local government are: tourist destinations, multipurpose buildings, traditional markets, etc. The management types of those assets are some purely managed by the local government and some are managed by cooperating with private parties. The purpose of cooperation with the private parties is to optimize the local government assets. The purpose of optimizing the local government assets itself is to improve the benefits or suppress the expenses so that it can be one of the pillars of local income.

Reviewing to the past, the action done by the government, either local or national, to optimize their assets was by doing privatization. Privatization is, however, only one of the restructuring ways (options) in the efforts to optimize the local assets. Another way to optimize the assets is by involving private parties in managing the local assets. The effort to involve the private parties in managing the State's wealth is known as *Public-Private Partnership* concept. According to Shapiro and Rosenquist [1], the purpose of *Public-Private Partnership* can be observed from 2 (two) point of views, i.e. government's side, which has the intention to improve local people's *income* and focus on the establishment of conducive environment for the cooperation between *stakeholders* and the government. Meanwhile, private parties have the importance to get continuous *input* and focus on the guarantee of getting enough material supply for production.

Based on *appraisal* discipline, the involvement of private parties in local asset management can be performed in various methods using *income approach*. The possible methods are *Build Operate Transfer* (BOT), *Build Transfer Operate* (BTO), and *Build Transfer* (BT). One of the examples of BOT system application in East Java Province, especially Y City in optimizing local assets is the modern shopping centers. There are some assets that apply BOT system from Y City Government such as MOG and Alun-Alun Mall. Alun-Alun Mall is the application of Build Operate Transfer system between Y city government and X Inc. Alun-Alun Mall was built in 1994 on an area of 6,142 m^2 (six thousand one hundred forty two square meters). Build Operate Transfer system was then applied to the building with Y Inc. in 1994 and there was a transfer of rights to X Inc. in 1997 with the capitalization of IDR 1,834,000,000 (one billion eight hundred thirty four million rupiahs) from the city government and IDR 10,000,000,000 (ten billion rupiahs) from X Inc. Hence, the total of initial capitalization was IDR 11,834,000,000 (eleven billion eight hundred thirty four million rupiahs) with BOT duration of 25 (twenty five) years since Alun-Alun Mall was operated officially on 4 November 1994 (cooperation agreement).

According to the information obtained by the researcher, Alun-Alun Mall often reports its loss in management so that it cannot payback the royalty as stated in the previous agreement. The loss of the investor

***Corresponding Author:** Nugroho Suryo Bintoro, Faculty of Economic and Buisness, University of Brawijaya, Malang of Indonesia. Email: Nugroho.S.B@ub.ac.id

has a direct effect to the income of Y City Government. However, it does not mean that X Inc. does not pay the royalty to Y City Government. Based on the interview, the amount of royalty paid according to the agreement and the ability stated on the cooperation agreement is IDR 60,000,000 (sixty million rupiahs) per year. Observing the ratio of royalty paid by X Inc. to Y City Government from the total investment of Y City Government, it is known that the ratio of royalty is 3.271 % with the inflation rate of 4.90 % in 2009 and risk free interest rate of 7.15 % in 2009 (www.bi.go.id, accessed on 28 June 2010). The amount of inflation and interest rate clearly affects the real paid royalty value of IDR 60,000,000 (sixty million rupiahs). This study becomes interesting because it tries to see the *gap* between the real paid royalty and the should-be-paid royalty by X Inc. to Y City Government.

MATERIALS AND METHODS

This study had been performed for 3 months to Alun-Alun Mall modern shopping centre in Y City, East java, Indonesia as the subject of study. The research approach used in this study is *discounted cash flow* approach using economic basis of capitalization level i.e.: *discount rate*, *recapture rate*, and *effective tax rate*. It also uses the basis of gross potential income per year [2]. In the calculation, this research considers the emptiness level of the subject of study (*void*), yearly operational expenses (*outgoings*), and capitalization.

RESULTS AND DISCUSSION

Several studies about Build Operate Transfer issue have been performed. According to Algami *et.al* [3] in his research entitled *Build Operate Transfer in Infrastructure Projects in The United States*, it is noticed that BOT method is not allowed due to some reasons, which are: (1) The alternative methods are proven to be more reasonable; (2) There are some political factors that cause obstacles; (3) There are no problems in the funding of the previously finished projects; (4) There are no suitable laws; (5) Private parties are not interested in BOT; and (6) It contains resistance to the changing factors.

This is in accordance with Subrason and Chen [4] in *Effects of Regulation on Highway Pricing and Capacity Choice of a Build-Operate-Transfer Scheme* which concluded that out of 5 (five) available schemes, rule combination of total cost and street capacity will have the best result in improving social prosperity. Those rules, however, can cause financial pressure to private investors in operating BOT projects. Thus, there should be a subsidy for the investors so that they can obtain decent financial profits.

Yet, this is not in line with Yun *et.al* [5] who tried to present a model to optimize the structure of capital city infrastructure projects funded by private parties such as BOT and BTO through Monte Carlo simulation. The result of this simulation will be continued by the conversion (IRR and DSCR) to integrated value based on utility concept. *Generic Algorithm* function is used to optimize the integrated value which reflects both IRR and DSCR.

From the previous studies presented above, it is summarized that there are similarity and differences with this study. The similarity is the theme which is related to Build Operate Transfer (BOT) by local government to private parties. Meanwhile, the differences are the type of building to be applied of BOT, the location of research, the time of research, and the analysis which is applied.

Discount Level

Assessment of an asset needs some assumptions, among which is Discount Level. Discount level is made into 3 (three) scenarios, which are: optimistic, *most likely* (moderate); and pessimistic. In optimistic scenario, discount level is assumed to be 10.5 % which is the assumption of risk free interest level of 6.5 % (www.bi.go.id) plus the risk compensation of 2 % and the investment management expense of 2 %. For the second scenario, moderate (*most likely*), the assumption of free risk interest level is 6.5 % plus the risk compensation of 4 % and investment management expense of 2 % which results in 12.5 % for the discount level of moderate scenario. The third scenario, pessimistic, is assumed to be 14.5 % which comes from the assumption of free risk interest level of 6.5 % plus the risk compensation of 6 % and investment management expense of 2 %.

Emptiness level (*VOID*)

From direct observation to the subject of study, it is concluded that there are some unrented parts (5 %) of the whole rented building. This void is located in the third (3^{rd}) floor of the mall. Although the rent is relatively lower than the first (1^{st}) and the second (2^{nd}) floors, the little enticement for investors to open a business on the third (3^{rd}) floor causes the void on that floor. The approximation of occupancy rate in the subject of study is around 95 %.

Expenses (*OUTGOING*)

Yearly expenses or *outgoings* are routine expenses spent every year to run the building in order to make rental income. These yearly expenses are: property tax, building insurance, building maintenance, and management cost such as salary, telephone bill, electric bill, water bill, promotion, and marketing.

Capitalization

Capitalization level is the ratio between the net incomes of a property and its value. In the property assessment practice with *income approach,* capitalization level is used to convert the income from a property into the property value. There are two methods commonly used to determine capitalization level, which are *direct capitalization* and *yield capitalization.* This study uses yield capitalization, which results in the following table.

Table 3.2 *Capitalization Rate* Scenario

Scenario	Amount of Capitalization Rate
Pessimistic	14.05%
Moderate (*Most Likely*)	12.05%
Optimistic	10.05%

Source: Processed data

Based on table 3.2, it is clear that the capitalization level of pessimistic scenario is 14.05 %, that of moderate (*most likely*) scenario is 12.05 %, and that of optimistic scenario is 10.05 %.

Analysis result

Employing the determined assumptions, the Property Value Indicator and the amount of royalty are obtained by using *Discounted Cash Flow* method and the explanation by using the 3 (three) scenarios: pessimistic, moderate (*most likely*), and optimistic, is as follows.

Table 3.3 Property Value Indication Based on Scenario

Pessimistic		IDR 12,353,533,070	69%
Value for Lessee (Investor)			
Value for Lessor (Local Government)	IDR 5,624,188,463	31%	
		IDR 13,580,234,311	64%
Most Likely			
Value for Lessee (Investor)			
Value for Lessor (Local Government)	IDR 7,598,492,997	36%	
		IDR 14,974,225,050	59%
Optimistic			
Value for Lessee (Investor)			
Value for Lessor (Local Government)	IDR 10,602,023,460	41%	

Source: Processed data

Based on table 3.3, it is obvious that the Property Value Indication based on pessimistic scenario is IDR 12,353,533,070 for the investor or 69 % of the total property value and IDR 5,624,188,463 for the local government or 31 % of the total property value. Meanwhile, the second scenario, moderate (*most likely*), indicates that the Property Value Indication for the investor is IDR 13,580,234,311 or 64 % of the total property value and IDR 7,598,492,997 or 36 % of the total property value for the local government. And based on the optimistic scenario, the Property Value Indication is IDR 14,974,225,050 of 59 % of the total property value for the investor and IDR 10,602,023,460 or 41 % of the total property value for the local government.

The %age between the local government and the investor based on the total property value, whether in pessimistic, *most likely*, or optimistic scenario, shows that the investor gets bigger number than the local government although the ownership of the land belongs to the local government. The share %age for the local government, which is not more than 45 %, based on the agreement needs to be reviewed by X Inc., which runs Alun-Alun mall, and Y City Government. If the %age between Y City Government and X Inc. Investor is changed into 30 % for the investor and 70 % for Y City Government, then the result is as follows.

Table 3.4 Property Value Share Options (Scenario)

Pessimistic		
Value for Lessee	30%	IDR 5,393,316,460
Value for Lessor	70%	IDR 12,584,405,073
Lessor's PV Royalty Portion		IDR 7,191,088,613
Royalty per Year		IDR 701,202,403
Most Likely		
Value for Lessee	30%	IDR 6,353,618,192

Value for Lessor	70%	IDR 14,825,109,115
Lessor's PV Royalty Portion		IDR 8,471,490,923
Royalty per Year		IDR 803,952,787
Optimistic		
Value for Lessee	30%	IDR 7,672,874,553
Value for Lessor	70%	IDR 17,903,373,957
Lessor's PV Royalty Portion		IDR 10,230,499,404
Royalty per Year		IDR 945,265,575

Source: Processed data

Table 3.4 shows that when the share proportion is changed into 30 % for the investor and 70 % for the city government, the lessee will get IDR 5,393,316,460 and the lessor will get IDR 12,584,405,073 in pessimistic scenario, where the royalty also increases into IDR 701,202,403 per year instead of IDR 60,000,000. In the second scenario, *most likely*, the investor will get IDR 6,353,618,192 while the city government will get IDR 14,825,109,115 and there is an increase in the paid royalty, which becomes IDR 803,952,787 per year. And the third scenario, optimistic, shows that the investor will get IDR 7,672,874,553 while the city government will get IDR 17,903,373,957 and the royalty will be IDR 945,265,575 per year. If this property value %age option is applied, there will be more income for Y City Government.

When an approach by seeing Selling Value of Taxed Object (NJOP) to the subject of study is performed, the result will be as follows.

Table 3.5 Property Value Indication Based on NJOP

Investment & Royalty (NJOP)		**BOT Value Indication**	
Lessor's Investment		IDR 1,834,000,000	
Lessee's Investment		IDR 10,000,000,000	
Lessor's Investment (II)		IDR 3,584,000,000	
Royalty/year	IDR 60,000,000		
		IDR 44,961,048,495	**IDR 25,576,248,510**

Source: Processed data

According to table 3.5, it is clear that property value indication based on Selling Value of Taxed Object (NJOP) from the first year its establishment until today has reached IDR 44,961,048,495 (forty four billion nine hundred sixty one million forty eight thousand four hundred ninety five rupiahs). This value is completely different from the build operate transfer value, which is only IDR 25,576,248,510 (twenty five billion five hundred seventy six million two hundred forty eight thousand five hundred ten rupiahs). It happens because in the assessment process from the past to today, the risk free interest has increased so high due to the monetary crisis in 1998 where SBI level reached 28 %, which made the average SBI from 1997-2010 still have two digits, which was 12.95 %. It makes the property value indication increase sharply. Furthermore, the amount of investment can become the basis of the share %age between First Party and Second Party.

Table 3.6 Property Value Indication Based on NJOP

NJOP	**Land**	**Cost**	**BOT Value Indication**
Area (m^2)	6142		
NJOP/ m^2	IDR 2,013,000	IDR 12,363,846,000	
Lessee's Investment		IDR 10,000,000,000	
		IDR 22,363,846,000	**IDR 25,576,248,510**

Source: Processed data

Table 3.6 shows that when the property value indication is reviewed from the amount of investment by both parties, the value will be IDR 22,363,846,000 (twenty two billion three hundred sixty three million eight hundred forty six thousand rupiahs). The area of 6,142 m^2 is calculated based on 2010 NJOP. On the other hand, the assessment value based on build operate transfer method is IDR 25,576,248,510 (twenty five billion five hundred seventy six million two hundred forty eight thousand five hundred ten rupiahs).

CONCLUSION

Noticing the big gap between the royalty paid by X Inc. to Y City Government, which is IDR 60,000,000 (sixty million rupiahs) per year and the royalty that should be paid using *Discounted Cash Flow* method employing 3 (three) scenarios i.e. pessimistic, *most likely*, and optimistic, it is concluded that the big gap in the amount of royalty paid by X Inc. to Y City Government happens because the share portion of the property

value for Y City Government is too small compared to that for X Inc. as the investor, which is 69 % for the investor (X Inc.) and 31 % for Y City Government in pessimistic scenario. In moderate (most likely) scenario, the share becomes 64 % for the investor (X Inc.) and 36 % for Y City Government. And in the optimistic scenario, the result is 59 % for the investor and 41 % for Y City Government.

Considering the amount of proportion between the Investor (X Inc.) and Y City Government, this study recommends that local government involve academicians in making cooperation. Thus, when there are some inappropriate things in the agreement, there can be a re-arrangement in the agreement which in this study is particularly the share between Y City Government and the Investor (X Inc.) with the proportion will be 30 % for the Investor (X Inc.) and 70 % for Y City Government. This new agreement will increase the royalty paid by the Investor to Y City Government. The increase can be explained as follows: based on pessimistic scenario, the royalty for Y City Government is IDR 701,202,403 per year; *Most likely* scenario will make IDR 803,952,787 for Y City Government; and the royalty based on the optimistic scenario will make IDR 945,265,575 for Y City Government.

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