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Research Paper

Investment Analysis of Ijen Nirwana Residence Development in Malang City (Case Study on Real Estate and Property Company REI Malang)

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Abstract

Planning Thisisintendedtoprovide a generalandobjectivedescriptiontothe owner project as an investor as well banks/financialinstitutions as as giver lending funds / credit , regardingthefeasibilityoftheproject in question, in termsofvariousaspectssuch as organizationandmanagement, marketing, technicalandfinancial. With method study studies case on the Project Housing , Kelurahan Together, Subdistrict Klojen , Malang City, East Java Province. From the results that , researcher try look forknowaboutisinvestmentdevelopmentpropertyhousing areaisinvestmentbest on location the . So that obtained results research results of investment analysis based on the data obtained from executor as a new investor with assumption required investment capital costs _ by 40% of land asset value or IDR 32,000,000,000, -, assuming a MARR of 13%, interest loan 12%; made in cash flow , then investment in housing IjenNirwana Residence is very decent for run . Then the results of sensitivity analysis used for get eligibility limits receipt of housing assets IjenNirwana Residence on the variables determinant investment as price sell , cost construction , MARR, interest loan , structure and cost of investment capital .

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I. Introduction

Along with speed development of urban areas good physical nor non- physical has many influence change behavior from Public agrarian going to to Public urbanist , so direction development of urban areas (urban development) demands necessity spatial management _ capable cities _ accommodate need physical will more facilities and infrastructure _ complex and heterogeneous .

Since the crisis economy hit Indonesia down prolonged , then moment now this great hope $_$ raises excitement for the world of business and stretching wheel economy has show exciting developments $_$ good in the sector industry nor service , expected grow with well fit $_$ with prediction government .

After The 2019 general election is underway with well , condition Indonesia 's economy is expected grow with all right , accordingly with prediction government that is , level growth of 5.4% per year . This is hope big raises _ excitement for the world of business and stretching wheel economy has show exciting developments _ good in the sector industry nor service , expected grow with well fit _ with prediction government . This hope has raises excitement for the world of business and stretching wheel economy has show exciting developments _ good in the sector industry nor services .

The property sector is a part of the industry and services sector which has also experienced this development. From2010 to2019 has shown good development, market it theproductsproduced and offered is very good, both at the center and in the regions. This is evident from the many constructions of new houses by developers who were previously in suspended animation or by new developers, or many new projects by these developers have emerged. People's absorption capacity has also begun to increase, especially in themiddleclassmarket, as evidencedbyanincrease in thenumberofcredit applications ownership houses (KPR) at the bank, although this condition has not been accompanied by the disbursement of construction credit for developers , and entering 2020 conditions _ this correct correct Becomes whip for property sector due to the covid 19 pandemic.

Housing and settlement development needs to be developed in a more directed and integrated manner by taking into account increasing population and its distribution, land use, financing, expanding employment opportunities and environmental health. Thushousingdevelopmentisexpectedtoincreasepeople'swelfare, which in

turnmeansincreasingtheabilityofthecommunitytoparticipate in nationaldevelopment. In addition, an increase in the number of housing developments needs to take into account the level of ability of the target community.

The density of settlements in the city center, especially in big cities on the island of Java, has exceeded the carrying capacity of the environment, thus requiring a more basic solution so that people can live in a healthy and comfortable environment. To overcome this situation, it is necessary to carry out a settlement planning that focuses on harmony, beauty, comfort and health of the environment so that there is a good balance

Malang as oneoftheeducationalcitiesontheislandof Java, especiallyEast Java, is currently Malang this canbereachedonly1 (one) hourawaybylandtransportationfrom Surabaya, oneofthedestination cities for residentsofregionssuch as Bali, Kalimantan, Papua, Sulawesi andothers. This condition places Malang as one of the destination cities for children's education in Eastern Indonesia. As a result, investment in the housing sector is quite attractive to individual investors and migrants, especially students, job seekers and business groups from variousgroupsofpeopleandfromregions.

CityPooriscitybiggestsecondinJavaEastafterSurabaya,and is one of the largest cities in Indonesia by population.CityEducationwhichbe

equippedwithvariousfacilitycentershoppingscaleregional,manycollegetallpublic/privateas well asconvenienceaccessliaisoncityairandmeanstransportotherwhichgiveconveniencefor people from out of town to visit, travel, stay, traveleducationnorstaytake placestayinMalang city.

One of the areas in the cityMalang which has a growing number housing quiterapidly in the northern part of Malang. The scope of the area poor north according to Plan Details System Room (RDTR) Part Region Development (BWP) Poor North Year 2015–2035

,plannedwideapproximately 1,610.90 hectares in the high-density house sub-zone and sub-zonemedium density house. The high-density housing sub-zone is planned for an area of approximately 144.54 hectares and a Density House Sub Zone is being plannedcovering an area of approximately 1,466.36 hectares, covering 12 sub-districts located inSubdistrictLowokwaruand1WardinSubdistrictClojen .Enhancementtotalhousing in the North Malang Regional Development Sectionis amultiplayereffectfromexistencecentereducationtallwhichthere isinregionThis resulted in the development of an integrated housing zone. Besides that there issub-center of economic growth with trade and service zones on the corridormainlyas well asexistsavailabilityroompublicwhichcozy,worthy,andaffordablemake the main attraction for residents from outside the city of Malangforinvestandresidearoundpartpoorthis north.

Ijen NirvanaResidenceis a housing project in Malangwhich has received the *Green Property Award*. Ijen NirvanaResidence offerenvironment which safe, cozyas well as location which strategic with type house diverse wide building from i 100 m2 - until 345 m ² which complete with a number of facility moderna shotel, hall, swimming pool and restaurant, jogging tracks and etc. Location _who are in middle City Poor provide various conveniences its *residential*. Close to center shopping Mall Olympic garden Poor, hospital Hermina Malang , College tall as Institute National

Technology (ITN), Brawijaya University (UNBRA) and number of important facility other. Residential project built by PT. Dutaperkasa superior sustainable is one _ developing company _ a housing development project on a rea of 22.0 Ha (twenty two) hectares, located in the District Klojen Malang City which is designated as a residential and settlement area.

The increasing interest of the community, especially the middle class, in choosing a place to live in the city has led to an increase in the number of landacquisitions for the construction of new residential areas or their expansion. The variety of types built in this city also varies. In fact, many large-type residential houses are sufficient many that sell well, when offered and most of the buyers come from outside the Greater Malang area. However, with the increasingly limited landavailable and the high price of land in areas near cities, it is difficult to build residential areas in cities.

To anticipatethe level ofdemandforhousing in thiscity in thefutureduetothehigh level ofeconomicgrowth in the cityandthe East Java region in general, residential constructionisstill horizontal in the city of Malang. Demand for housing in the Greater Malang area and its surroundings still shows a high level of demand. Planning This is intended to provide a general and objective description to the owner project as an investor as well banks/financial institutions as as giver lending funds / credit, regarding the feasibility of the project in question, in terms of various aspects such as organization and management, marketing, technical and financial.

II. Research Methods

Studythisisstudywithusemethodsurveyandinterviewlivetopartycompanydevelopersproperty. In this study the data needed is primary dataused in this study are data obtained directlyfrom data sources. In this caseisthrough a fieldsurveywithquestionnairesandinterviews.

III. Results and Discussion

Sensitivity to Change Cost Construction

Cost approximated construction $_$ implementer at first is IDR 3,250,000,-/m2, based on analysis sensitivity as shown in Table 4.13. generated that increase cost construction of 30.77% (Rp. 4,250,000.-) can resulted the change in NPV becomes negative, meanwhile every subtraction cost of 7.69% resulted in an increasing NPV large (positive). Figure 4.3. show that cost minimum construction possible accepted by the executor of the investment order the worthy run is IDR 3,315,000, -/m2, so big cost construction results sensitivity more small from score approach beginning executor .

Table 4.13.	NPV	against	Change	Cost	Construction

Nomor	Biaya Konstruksi	NPV (Rp.)
1	3.250.000	29.289.696.601
2	3.500.000	20.109.682.268
3	3.750.000	10.929.667.935
4	4.000.000	1.749.653.603
5	4.250.000	(7.430.360.730)
6	4.500.000	(16.610.375.062)

NPV- Cost Sensitivity Construction

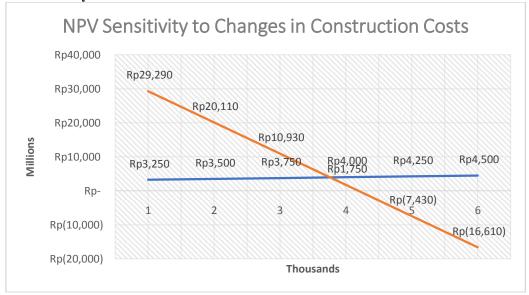


Figure 4.3. NPV graph against Change Cost Construction

Cost construction Rp.3.250.000 ,-/m2 can accepted by the executor with a moderate attitude , that is that cost as big that can held in a manner real because housing area barada / located in the city of Malang. Taking attitude executor the could concluded with Pay attention to cost data construction development home on some housing area medium and above in Malang Raya in 2020 as shown in table 4.14. Attitude executor as new potential investors housing area Ijen Nirvana Residence will Becomes pessimistic if location housing area in Kepanjen $_$ Malang Regency .

Table 4.14. Comparison Data Cost Construction Housing area Intermediate

No	Nama Perumahan	Lokasi	Biaya Konstruksi/m2
1	Permata Jingga	Lowokwaru	4.500.000
2	Green Orchid	Lowokwaru	4.500.000
3	Rives Side	Bale Arjosari	5.000.000
4	The Araya	Blimbing	4.500.000
5	Graha Kencana	Bale Arjosari	4.500.000
6	Citra Land	Puncak Tidar	5.500.000

Source : Survey Results

Sensitivity to Changes in Selling Prices

Approach beginning executor for price sell consists from price land Rp.3.315.000 ,-/m 2 and price building Rp . 4.875.000,-/m 2 . In Table 4.15 shows that every increase price sell land by 4-5% can resulted NPV changes more and more large (positive), whereas every subtraction price sell land by 7-9% resulted in the NPV to be negative . In Table 4.16 shows that every increase price sell building by 4-5% or Rp . 250,000, - resulting in an increasing NPV big , meanwhile subtraction price sell building by 5-6% or of IDR 250,000, - causing the NPV to become the more small and finally negative . Analysis results the sensitivities shown in Figure 4.4 and Figure 4.5 show that price sell land the minimum you can accepted by the executor of the investment order the worthy run is Rp.3,315,000 .-/m2 and Rp.4,875,000.-/ m2 for price sell building , so big score price sell results sensitivity more big from score approach early .

Table 4.15 NPV against Changes in Land Selling Price

1 401	Table 4.15 W against Changes in Land Sening Price				
Nomor	Harga Jual (Rp.)	NPV (Rp.)			
1	2.750.000	- 7.444.465.132			
2	3.000.000	8.796.360.958			
3	3.250.000	25.079.893.862			
4	3.315.000	29.289.696.601			
5	3.500.000	41.682.873.741			
6	3.750.000	58.461.805.698			
7	4.000.000	74.984.496.766			

Data Processed

NPV Sensitivity To Changes in Land Selling Price

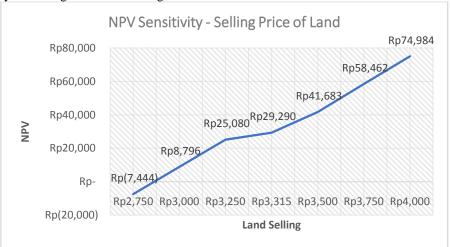


Figure 4.4. NPV graph against Changes in Land Selling Price

Table 4.16 NPV against Changes in Selling Price of Buildings

Nomor	Harga Jual (Rp.)	NPV (Rp.)
1	4.000.000	- 2.203.745.239
1	4.250.000	6.800.481.975
1	4.500.000	15.804.709.188
1	4.875.000	29.289.696.601
2	5.000.000	33.770.456.800
3	5.250.000	43.179.544.618
4	5.500.000	52.455.387.174

NPV Sensitivity- Building Selling Price

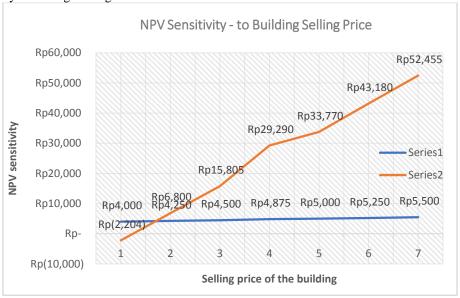


Figure 4.5. NPV graph against Changes in Selling Price of Buildings

Based on results analysis above sensitivity _ obtained that score Rp.3.250.000 ,- $^\prime$ m2 for price sell land and IDR 4,875,000/ $^{\rm m2}$ for price sell construction by executors as a new investor Housing IjenNirwana Residence can accepted , for example type 100/135 price sell it Becomes Rp . 935.025.000,-. Attitude executor the concluded because also pay attention to price data sell competitors on some housing area middle school in Sidoarjo as in table 4.17. Taken example price sell from Permata Jinggahousing , which is located no far from location research , home with the 90/90 type costs Rp. 2.178.930.000,-, if counted price sell building Rp. 8.500.000,-/ $^{\rm m2}$ so price sell the land is Rp. 10,500,000,-/m 2 , Housing The Araya with type 100/84 costs Rp. 1,528,000,000, -, if counted price sell building Rp. 7.500.000,-/ $^{\rm m2}$ so price sell the land is Rp. 9.250.000,-/m2 $^{\rm m2}$ Competitor prices the still far more big compared price sell results sensitivity . Based on condition such , then executor optimistic could do sale corresponding price results sensitivity because still below _ price sell competitors .

Table 4.17 Selling Prices for Equal Houses in Malang

No	Nama Perumahan	Tipe	Harga Jual	Lokasi
1	Permata Jingga	Tipe 90/90	2.178.930.000	Lowokwaru
2	Green Orchid	Tipe 103/106	1.895.000.000	Lowokwaru
3	River Side	Tipe 86/143	1.937.000.000	Bale Arjosari
4	The Araya	Tipe 100/84	1.528.000.000	Blimbing
5	Graha Kencana	Tipe 100/153	1.426.500.000	Bale Arjosari
6	Citra Land	Tipe 131/95	2.520.000.000	Puncak Tidar

Source: Survey Results

4.3.1. Sensitivity to Change Investment Capital Structure and Cost

Approach beginning executor for cost of investment capital obtained with debt 40% of score asset land to party banking Rp .32,000,000,000,-. After conducted sensitivity to magnitude value and composition debt as in table 4.18, is generated that with reduce magnitude debt , then the NPV value increases big on value positive , otherwise the more big debt the NPV value increases small and on moment burden Debt of IDR 100,000,000,000,- the NPV becomes negative . From analysis sensitivity could concluded that change structure and cost of investment capital no too influential in determine decision worthy or nope investment this done .

Table 4.18 NPV against Change Investment Capital Structure and Cost	: t
(Loan Party to three)	

Nomor	Komposisi Hutang	NPV (Rp.)
1	10.000.000.000	34.497.197.971
2	20.000.000.000	32.469.136.746
3	32.000.000.000	29.289.696.601
4	40.000.000.000	26.727.697.694
5	50.000.000.000	23.094.263.330
6	60.000.000.000	18.207.351.267
7	70.000.000.000	12.465.068.367
8	80.000.000.000	7.650.332.999
9	90.000.000.000	3.312.403.645
10	100.000.000.000	- 2.287.548.514

NPV Sensitivity- Change Composition Debt

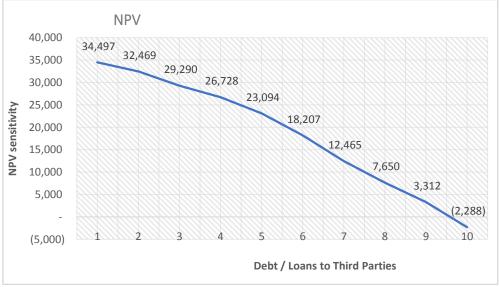


Figure 4.6. NPV graph against Change Investment Capital Structure and Cost

4.3.2. Sensitivity to Changes in Loan Interest

Approach beginning executor for cost of investment capital got with debt 40% of land asset value to party banking that is in the amount of IDR 32,000,000,000.- with flower loan 12% per annum . After conducted NPV calculation on interest loan as in table 4.19., generated that increase score flower cause the NPV to be negative. Whereas decrease score flower causing the NPV to be positive . In Figure 4.7, it appears that in order for the NPV > 0 (zero) then big flower loan is 12%. In case this change flower loan can influential in determine decision worthy or nope investment this done .

Table 4.19. NPV	against	changes	in	Loan	Interest
1 auto 4.19. 191 V	agamst	Changes.	ш	Loan	mucicsi

Nomor	Bunga	NPV (Rp.)
1	10,00%	50.541
2	11,00%	39.452
3	12,00%	29.290
4	13,00%	19.953
5	14,00%	11.322
6	15,00%	3.417
7	15,00%	- 3.913
8	15,00%	- 10.680

NPV- sensitivity to Changes in Loan Interest:

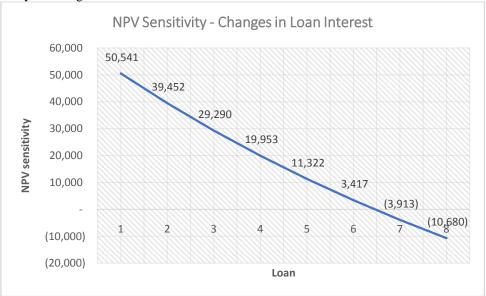


Figure 4.7. NPV against Changes in Loan Interest

IV. Conclusion

Conclusion of the analysis of investment in housing IjenNirwana Residence is : Results of investment analysis based on the data obtained from executor as a new investor with assumption required investment capital costs _ by 40% of land asset value or IDR 32,000,000,000, -, assuming a MARR of 13%, interest loan 12%; made in cash flow . From initial cash flow and results calculation criteria investment obtained NPV value of IDR 29,289,696,601, - IRR of 15.78%, and PI of 1.3936 (112,886,895, -) , With NPV value > 0, IRR > MARR and PI > 1, then investment in housing IjenNirwana Residence is very decent for run . Then the results of sensitivity analysis used for get eligibility limits receipt of housing assets IjenNirwana Residence on the variables determinant investment as price sell , cost construction , MARR, interest loan , structure and cost of investment capital . Results obtained that limit limit magnitude score each variable in order to invest could be accepted with NPV > 0, namely the minimum price limit sell land to IDR 3,250,000, -/m2, price sell building to Rp. 4,875,000, -/m2, and costs construction to IDR 3,250,000/m2. The MARR limit is 13.0%, the interest limit loan of 12.0%/ year with composition debt from banking by 40% of land asset value or IDR 32,000,000,000.

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- [3]. Law No. 1 of 2011 (Renewalof Law Number 4 of 1992) concerning Housing and Residential Areas.
- [4]. Regulation of the Minister of Public Housing of the Republic of Indonesia Number 10 of 2012 concerning Administration Housing and Residential Areas with Residential Balanced.
- [5]. The valuation process is a systematic procedure carried out to obtain answers to client questions about the value of a real property(Prawoto, 2015)

Investment Analysis of Ijen Nirwana Residence Development In Malang City..

- [6]. Cash disbursement is something engendering transaction _ decrease owned cash and bank balances resulting company _ exists buyer cash , payment of debt or results transaction that causes reduced cash. (Soemarso , 2004).
- [7]. Income is current enter gross from something benefit emerging economy _ from normal company activities in time one period if current enter that resulted increase equity , which is not originate from contribution investment . (IAI, 2002)
- [8]. Property value is The annual *Net Operating Income* generated by the property the converted with something level capitalization certain (Amen, 2014)
- [9]. Calculation of cash flow and loading cost on the item to be burden cost according to Poerbo (1998),
- [10]. According to Kuswadi(2007), the steps taken in NPV calculation
- [11]. According to Kasmir and Jakfar (2003) *Net Present Value* or score clean now is difference between net cash PV with PV investments During age investment
- [12]. According to Husnan and Muhammad (2000) the most appropriate goal from taking decision for do investment is for maximize the market value of own capital (shares).
- [13]. Investment is every outlay of capital or funds either that embodied form land or embedded building _ with expectations of the funds or capital will be accepted return good in period short nor in period long (Nino, in Manullang et al , 2019).
- [14]. "Whole score purchase businessman on capital goods and spending for establish industries, production Public for establish houses and places stay, increase in score stock goods form ingredients raw, unfinished goods _ finished processed and goods so" (Sukirno, 2004).
- [15]. Margareta 2005 stated that "project investment is something plan for invest sources power, fine project giant or project small for obtain future benefits come."
- [16]. Housing area is a group working house _ as environment the place stay or occupancy equipped human _ with infrastructure environment that is completeness base physical environment, for example supply of drinking water, disposal trash available _ electricity, telephone, roads, that allows environment settlement function as should (Mukono in Xisuca, 2010).
- [17]. Based on Law Number 1 of 2011 concerning Housing and Settlements , Housing is a group of houses that function as a residential area or residential area equipped with facilities , infrastructure and utilities . general .
- [18]. Housing is a form of housing that has a very close relationship with the community. This means that housing in a location more or less reflects the characteristics of the people living in that housing, (Abrams, 1664: 7).