Volume 1, No. 12 December 2023
p-ISSN XXXX | e-ISSN XXXX

ADVANCES IN SOCIAL HUMANITIES RESEARCH

ANALYSIS OF THE FEASIBILITY OF INVESTING IN TAMAN MELATI DINOYO APARTMENTS, MALANG CITY

Bella Astrina Classinta Ard, Haris Muhammadun, Laksono Djoko Nugroho
Fakultas Teknik, Universitas 17 Agustus 1945 Surabaya
E-mail: Bellaastrina9@gmail.com, hardun.wtu1@gmail.com,
laksononugroho7366@gmail.com

Abstract:
This research aims to investigate the investment potential of Taman Melati Dinoyo Apartments, Malang City as a promising form of property. Through an economic and property market analysis approach, this research explores the factors that influence investment decisions and the impact on local economic growth. An in-depth literature study was used to understand property investment trends and apartment market characteristics. The data analysis method includes collecting primary data through interviews with property developers and other related parties. Additionally, secondary data from financial institutions, local governments and other sources were used to validate the findings. The results of this research identify the main factors that influence apartment investment such as property prices, construction costs, occupancy rates and interest rates. Apart from that, this research can also be a reference for project developers to identify potential risks and stimulate effective mitigation strategies by using investment capital that is used in a ratio of 30% own capital and 70% loans.The analytical method used to analyze this research is data collection, data processing, income analysis, cash flow and reviewing financial aspects using the NPV, IRR, BCR, Payback Period method. The final stage of work is analyzing the sensitivity of investment costs to investment costs, Sensitivity Analysis rates. The results of the analysis of the Taman Melati Dinoyo Apartment project, Malang City, are that it has an NJOP value of Rp. 418,462,5800,000,- and was declared financially feasible with a positive NPV value of Rp. 55,585,691,096,- IRR is worth – 8.99% which is less than MARR, namely 7.79%, BCR <1, namely 0.7997 and the payback period is IDR, 186,959,656,- in year 2, sensitivity analysis shows the project an apartment is declared feasible if the increase in investment reaches 38% and the decrease in income is 20%.

Keywords: Investment, Taman Melati Dinoyo Malang Apartment, financial aspects, NPV, IRR, BCR, Payback Period, Sensitivity Analysis.

INTRODUCTION

Malang City is the second largest city in East Java after Surabaya City, along with Malang Regency and Batu City, Malang City is part of a unitary region known as Malang Raya. Malang City has an area of 11,426 km2 and is located at an altitude between 440 – 667 meters above sea level. Based on data from BPS Malang City, the population in 2020 was 843,810 people, in 2021 it was 844,933 and in 2022 it was 846,126 people. The population is spread across five districts, namely: Koljen District, Blimbing District, Kedungkandang District, Sukun District, Lowokwaru District.

Malang City as a tourism city is evidenced by various tourist destinations that can be visited such as: natural tourism, ride tourism, prehistoric tourism, religious tourism, culinary tourism both in the Malang City area and the Malang Raya regional area. Mountain areas whose areas are fertile, climate and weather are cool and have beautiful natural panoramas make tourists interested in visiting this city, can be seen from data from BPS Malang City, the number of domestic tourists visiting Malang City in 2020 was 662,570, in 2021 it was 771,670 while in 2022 it was 2,749,783 tourists and the number of tourist visits in Malang City until July 2023 through data on the occupancy rate of star classification hotel rooms reached 61.71 percent.

Malang City is known as the city of education because it is one of the centers of education in East Java Province. The existence of public or private institutions based on education that is of very good quality and leading in this city, Malang City has as many as 3 State Universities, 4 Private Institutes, 29 Colleges, 8 Academies, and 5 Polytechnics. According to data from BPS East Java last update on July 20, 2023, in 2020 there were 251,902 students, in 2021 the number of students in Malang City was 253,158 students, in 2022 there were 255,481 students. The increase in the number of students in this city has indirectly caused the growth of the need for residential facilities that are rented, such as boarding houses, rents, dormitories and apartments to increase.

Rapid economic growth, urbanization, and industrial development have become the main drivers of the development of the property sector in various cities in Indonesia. Malang City, as one of the development centers in East Java, is no exception in attracting the attention of investors in the property sector. Malang City with significant economic growth and industrial development, has experienced an increase in demand for comfortable and affordable housing. Taman Melati Dinoyo Apartment in Malang City emerged as an attractive alternative in meeting urban housing needs. The presence of modern facilities, good accessibility, and the potential increase in property values are important factors that encourage investor interest to invest in apartments.

Taman Melati Dinoyo Apartment in Malang City, located on Jl. M.T. Haryono no 19 Dinoyo, Lowokwaru, Malang City with a land area of 4,841 m2, a building area of 25,423 m2, has a total of 20 floors with a building height of 64.20 meters. The apartment has the concept of Give You Smart and Natural Living making the apartment a building that blends with nature, the environment that supports a modern lifestyle and the existence of high-speed internet

technology. Taman Melati Dinoyo Apartment has 728 units with 3 different types, namely: studio type, type 2 BR, special type.

The number of developments in Malang City causes the narrower land that can be built and causes land prices to be more expensive so that policies and thoughts arise to utilize limited land as much as possible, the concept of vertical development becomes a reference for investors for office trade and residential flats or better known as apartments. The concept of vertical residential function development can optimize land use although it is not the best solution because it causes an increase in construction value of 1.8% of the construction value of a single house generally (according to REI Center).

The growth of apartment value is in great demand by the upper middle class and makes the level of sales of apartment units high. The current condition of Indonesian property makes it easier to realize these residential needs as a form of property business which is then again strengthened by low bank interest from the previous year so that many capital owners choose to switch from a bank saving system that hopes to benefit from bank interest to investment in property because it is considered more profitable.

One of the profitable property investments because the price continues to increase every year is apartment project investment. The existence and development of apartments for the upper middle class which is one of the many forms of housing is influenced by business factors and not just because of the need for housing. In addition, large investment costs and the tendency of apartment occupancy that continues to decline make investment analysis very necessary.

Investments made must be calculated carefully and precisely using complex calculations. This is done to assist the task of owners and investors in making decisions related to the construction of new projects. Investment is faced with a future full of uncertainty, so before carrying out an investment, it is necessary to conduct an investment feasibility analysis to determine whether the investment can be carried out by obtaining profits or vice versa.

This study aims to determine the feasibility of project investment by reviewing it from a financial perspective. The financial aspect is carried out to determine the investment parameters of the price of a land and building, calculate expenses, receipts that can then be made cash flow during the investment period, calculate capital returns and investment appraisals from technical analysis methods, then sensitivity analysis is carried out on each investment, namely: investment costs, annual costs, investment age and interest rates.

Based on the description in the background above, several research questions were formulated as follows: 1) What is the value of the building to be built? 2) How is the investment feasibility of Taman Melati Dinoyo Apartment in Malang City, if analyzed by the Net Present Value (NPV), Internal Rate of Return (IRR), Benefit Cost Ratio (BCR), and Payback Period (PP) methods? 3) What is the level of investment sensitivity of Taman Melati Dinoyo Apartment in Malang City?

The objectives of this study are as follows: 1) Know the value of the building to be built. 2) Knowing the feasibility of investing in Taman Melati Dinoyo Apartment in Malang City with the Net Present Value (NPV), Internal Rate of Return (IRR), Benefit Cost Ratio (BCR), and Payback Period (PP) methods. 3) Knowing the level of investment sensitivity of Taman Melati Dinoyo Apartment in Malang City.

The benefits of this research include: 1) Can identify a problem that occurs in terms of apartment project investment. 2) Can apply the knowledge gained to prove in an apartment project investment research. 3) Can analyze social symptoms that occur in the community to be observed and conclusions are drawn as appropriate research for the community in the future.

METHOD

Sensitivity analysis research design is an approach to evaluate the extent to which the results of a study or research model will be influenced by variations and uncertainties in the value of parameters and assumptions used. Apartment investment objectives involve evaluating several factors that can influence investment decisions in apartment properties. Start the research by providing background context, identifying property market trends, residential needs and economic factors that can affect the demand and price of an apartment.

Location selection to determine the most potential location can be seen from the number of campuses in a sub-district by considering accessibility, infrastructure development, security and residential needs. There is market research to understand the demand and supply of apartments in the region. After reviewing property prices, a financial feasibility study is carried out which is an integral part of apartment investment research. Calculated from development costs including land acquisition, construction and other costs.

Reviewing competitors in the area around the project site can adjust marketing strategies and determine competitive prices by providing apartment designs and features to influence attractiveness and selling or rental prices with the intention of accelerating units sold and rented. Below is an illustration of the research design starting from the background of the research, the methods used to the results to be obtained, so as to provide an overview of the course of this research. The stages of research to be carried out are explained in the following flow chart:

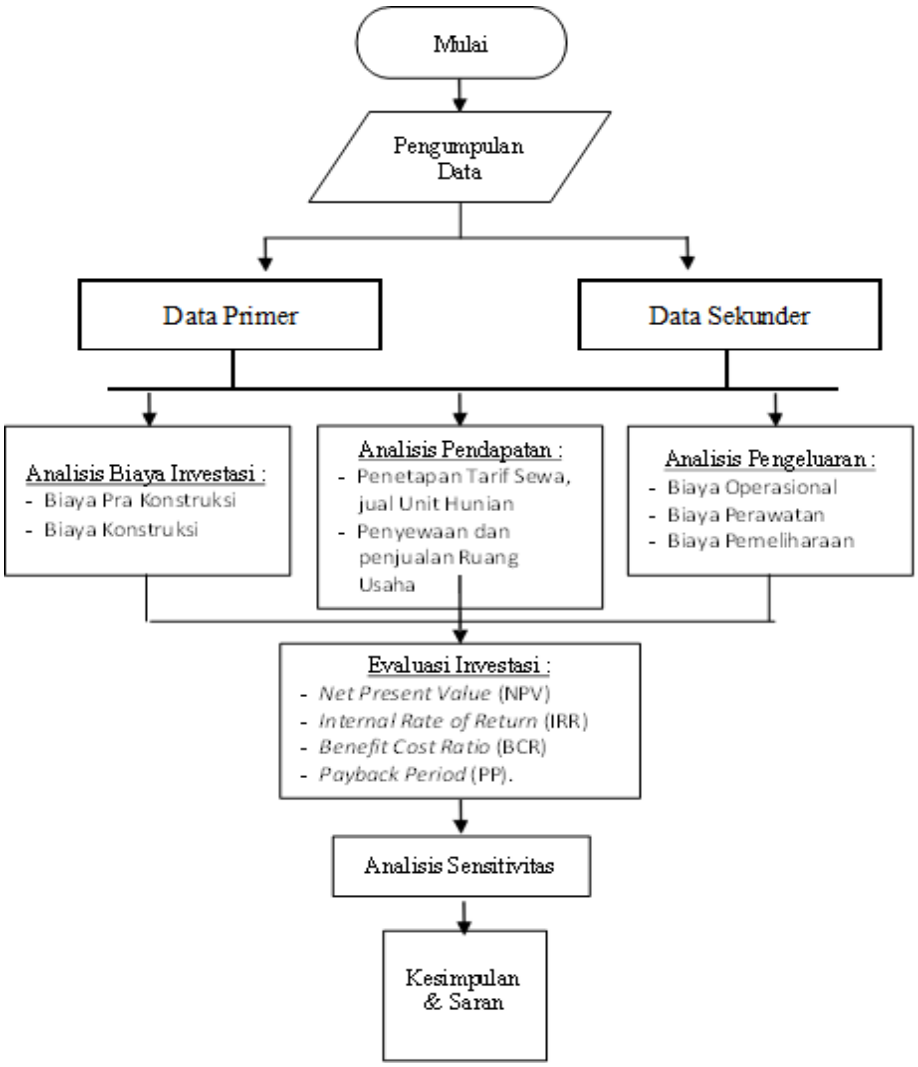

Figure 1 Research Flowchart
Source: processed researcher, 2023

The subjects in this study are individuals who play a role in the construction project of the construction of the Taman Melati Apartment, including the owner or employer, namely PT. Adhi Karya Propety, a service provider consisting of contractors represented by project managers and supervisory consultants. The research location is in Malang City – East Java, precisely on the MT road. Haryono No. 160/4. This location is very strategic because it is located between several well-known campuses such as Brawijaya University, Uin Malik Ibrahim, POLINEMA, UMM.

The research instruments used in this study are interview guidelines and observation sheets or observation guides as data collection instruments. Data collection methods are techniques or ways that can be used by researchers to collect data. Method (method or technique) designates a word that is abstract and not embodied in objects, but can only be seen in its use through questionnaires, interviews, observations, tests, documentation, and others

(Riduwan, 2013). In this study, the data collection method used was using interview, observation methods.

Data analysis is the process of investigating, examining, and interpreting data to uncover patterns, trends, and information that can be used for decision making. The purpose of data analysis is to present insights that can support informational and rational decision making. The process of data analysis can involve a variety of techniques, methods, and tools, depending on the nature of the data and the purpose of the analysis.

RESULTS AND DISCUSSION

A. Investment Cost Analysis

An apartment investment cost analysis involves a thorough understanding of the costs involved in buying, owning, and managing the property. Here are some aspects to consider in conducting an apartment investment cost analysis:

1. Land acquisition fee (based on tax)

Based on the price survey in the Lowokwaru District area, the price in the area was Rp. 2,925,000/m2. The area of apartment land to be built multiplied by the tax value price, then the value is obtained as follows:

1.841 m2 x Rp. 2.925.000/m2 = Rp. 14.159.925.000,-.

Considering that Lowokwaru District which has a strategic location and is a profitable investment because the prediction of land prices every year will increase by up to 20%.

2. Pre construction cost

a. Licensing Fee

Zoning and spatial planning permits (Article 5 paragraph 1 of ATRBPN Regulation 13/2021):

KKKPR (Suitability of Spatial Utilization Activities) services for business activities issuance service rates are calculated based on the formula:

Publishing service fee KKKPR = Business Type Index x [Rp. 1.500.000, - + (Land x Regional index x Rp. 1.350.000, -)], boulder:

Publishing service fee KKKPR = 1,50 x [Rp. 1.500.000, -
+ (4.841 m2 x 0,5063 x Rp. 1.350.000, -)]

Calculation results = Rp. 4.965.521.557, - m2

Building Permit (IMB)

Determine the cost of a Building Permit (IMB) by determining the building index first. The following is the value of the building index needed to calculate the cost of IMB according to SK No: KEPWAL NUMBER 354 OF 2022.

Index Integrasi= Index KFuB x Index KLB x
KLob Index x KTib Index Integration Index = 1,75 x 4,5 x 2,25 x 2,5
= 44,297

It is known that the value of the levy unit price according to the type of building, which includes multi-storey permanent buildings worth Rp. 2,367,000, -

Components of levy fees:

Planning costs and levies are calculated by the formula: Planning= Rp. 500, - x Building Area

= Rp. 500, - x 4841 m2

= Rp. 2.420.500, -

Levy = 2% x Integration Index x Area x Land Unit Price (according to tax)

= 2% x 44,297 x 4841 m2 x Rp. 2.925.000/m2

= Rp. 12.544.843.955, -

Nuisance Permissions

The Hinder Ordinary (HO) permit through the Minister of Home Affairs Regulation (Permendagri) Number 19 of 2017 has been officially removed.

Land Use Permit

A land use permit is an official permit granted by a local government authority or agency to a land owner or user for a specific activity or change in land use. This permit acquisition process aims to ensure that land use is in accordance with applicable regulations and policies in the area. Land use permits are free of charge.

Permission Reklame

A billboard permit is an official approval required from the authorities or local government agencies to place certain billboards or advertisements in a location. The process of obtaining this permit may vary depending on local regulations, government regulations, and the type of billboard to be posted. Based on Malang Mayor Regulation No.34 of 2012 concerning Billboard Tax Rate remains with a tax period of one year.

B. Production Analysis

Expense planning for Taman Melati Dinoyo Malang City apartment consists of operational costs and maintenance costs. Operating costs include employee costs, electricity costs, and water costs.

1. Employee Salaries

The organizational structure and the amount of labor required for the operation of the apartment are needed to analyze expenses. The salary of each employee is calculated according to the amount of labor and position. Total expenses derived from employee salaries are calculated by multiplying the number of employees by the nominal amount of their respective salaries. Employee salary estimation based on analysis of approaches with similar projects. Total employee salary expenditure in the first year amounted to Rp. 1,365,600,000.00 Based on the analysis of the calculation of the minimum wage of the city of Surabaya every year an average increase of 17%.

2. Electricity Cost

According to ASEAN USAID (1992) about the intensity of energy consumption, for apartment energy needs of 300 KWh / m2 years. According to Juwana (2005) the electricity demand for basements, halls, and corridors is 5 watts / m2. The electricity requirement for parking is assumed to be the same as the basement, which is 5 watts/m2, while the electricity requirement for the elevator is 20 watt/m2. Electricity for residential units that have been filled is borne by buyers or tenants, so that the calculated electricity costs are residential units that have not been filled and existing public facilities include corridors, stairs and others. Annual electricity needs for basements, parking lots and elevators are the area multiplied by the electricity needs of KWh / m2.

Basement= 25.423 m2 x 0,005KW/m2 x 24 jam x 365 hari

= 1.113.527 KWh

3. Water Cost

The cost of residential unit water is borne by the buyer or tenant, so that the calculated water costs are existing public facilities such as swimming pools, toilets, public parks and prayer rooms. The amount of water needs per year in m3 units is:

= 20 liter/m2 x 0,001 m3 x 30 hari x 12moon

= 7,2 liter /m2 per year

The calculation of water cost expenditure is the annual water requirement multiplied by the cost of water usage. It is assumed that the occupants of the studio type are 2 people / unit, the 2BR type is 4 people / unit and the special type is 5 people / unit.

C. Revenue Analysis

The income of The Taman Melati Dinoyo Apartment consists of residential and commercial unit income. Income from residential units in the form of sales and rentals. Commercial units sold are in the form of shophouses outside apartments, while those rented are in the form of space for ATMs, function rooms, child care, cafes, kiosks, restaurants, laundry rooms, fitness center rooms, offices and service charge income.

1. Commercial Unit Revenue

Commercial unit income is in the form of selling canteens outside apartments and renting space for ATMs, function rooms, child care, cafes, kiosks, restaurants, laundry rooms, fitness center rooms, and offices per year. Commercial unit prices are obtained from the results of surveys and analysis of approaches with similar projects. Then adjusted to the area and design of the commercial unit of Taman Melati Dinoyo apartment in Malang City.

2. Apartment Residential Unit Rental

The unit rental price was obtained from a survey to the marketing of Taman Melati Surabaya. The rental price of residential units including furniture includes mattresses, cabinets, tv cabinets, kitchen sets, and dining tables. However, the rental price of residential units does

not include additional service charges, electricity costs and water costs. It is assumed that residential units from the 5th floor to the 10th floor are rented out.

3. Sales of Apartment Residential Units

The selling price of residential units was obtained from a survey to the marketing of Taman Melati Dinoyo Apartment in Malang City. Electricity costs and water costs are assumed to be residential units from the first floor to the 4th floor and the 11th floor to the 18th floor.

4. Service Charge Revenue

The income of Taman Melati Dinoyo apartment in Malang City is also obtained from service charges. In this study, a service charge of 30% of the first year's residential and commercial rental income was used. So that the calculation of income from service charge in the first year is: Service Charge = 30% x residential rental income and commercial rental

= 30% x Rp. 1.389.315.840

= Rp. 416.794.752, -

D. Debts and Installments

It is assumed that the amount of debt is 70% of the investment value. The debt comes from a bank loan that will be repaid for 10 years. The interest rate used is from the average interest rate of several banks in Indonesia. So that the debt interest that will be used in the calculation is: 8.00% obtained from the calculation of the average loan interest rate. The amount of loan repayment:

$$L = P\left[\frac{A}{P}, 8.00\%, 20\right] = P\left[\frac{i(1+i)^n}{1+i^n-1}\right]$$

$$L = Rp.319.896.766.848\left[\frac{0{,}08(1+0{,}08)^{10}}{(1+0.08)^{10}-1}\right]$$

$$= \text{Rp. } 47.674.051.599{,}2451$$

E. MARR

The rate of return on capital itself is obtained from the average deposit interest rate of several banks in Indonesia where the safe rate ± risk. The risk is assumed to be 1.5% of the safe rate. Rate of return on own capital = safe rate ± risk

= 2,92% ± (1,5 x 2,92%)

= 7,30%

The rate of return on loan capital is obtained from the average interest rate on bank loans in Indonesia. Bank interest rates in Indonesia can be seen in Table 4.13. So the capital return rate of this Taman Melati Dinoyo Malang apartment loan is 7.30%. Then it is calculated with the MARR (Minimum Attractive Rate of Return) of investment as follows:

MARR = (CoC debt x % debt) + (CoC equity x CoC equity)

= (8% x 70%) + (7,30% x 30%)

= 7,79 %

F. Terminal Value

Terminal value is obtained from operating income minus operating expenses then divided by the Cap Rate. Where revenue of Rp. 21,993,462,275 minus service charge of Rp. 4,710,182,400 so operating income of Rp. 103,895,099,733.46 and operating costs of Rp. 44,960,311,315 Because Cap Rate (Capitalization Rate) is an aggregation or collection of individual investors' MARR, empirically according to Miles (2007) cap rate is +/- 1% of MARR. Then the terminal value of operating cost income can be calculated as follows:

$$Terminal\ value = \frac{Pendapatan - biaya\ operasional}{cap\ rate}$$

$$Terminal\ value = \frac{Rp.\ 103.895.099.733{,}46 - Rp.\ 44.960.311.315}{7{,}79\%}$$

$$= \mathbf{Rp.}\ 756.544.138.871{,}04$$

G. Aliran Kas

After calculating the cash flow in and out at the Taman Melati Dinoyo apartment in Malang City, the cash flow is then calculated. The cash flow calculation uses the amount of MARR based on the rate of return on own capital and return on loan capital. Each year's cost is calculated by Discount factor (DF) using the formula:

$$DF = \frac{1}{(1+i)^{n}}$$

Where:

i = MARR investment = desired rate of return

n = year when expenses are incurred (year 1 to year 20) Example of calculation DF first year:

$$DF = \frac{1}{(1+0{,}0779)^{1}}$$
$$= 0{,}8884$$

The criteria used to assess the feasibility of investing in Taman Melati Dinoyo Malang City apartments using the NPV IRR, BCR, PP methods, then analyzed sensitivity. The construction of Taman Melati Dinoyo apartment in Malang City requires an investment cost of Rp. Rp. 456,995,381,212, - Assuming an investment period of 10 years. From the calculation of cash flow, a Net Present Value (NPV) feasibility analysis value of IDR 55,585,691,096 is obtained The calculation of cash flow can be seen in the Appendix. So the NPV of Taman Melati apartment in Malang City when using the assumptions used in this study is financially feasible because the NPV value > 0.

H. Sensitivity Analysis

Sensitivity analysis is used to determine how much influence a decision has on changes that occur. The result of the calculation of the NPV value and is a financial analysis of the Taman Melati Dinoyo Malang apartment is feasible, then a sensitivity analysis is carried out by changing the parameters to see the extent to which the project can be said to be feasible or acceptable. In this final project, the parameters that were changed were residential unit selling rates, residential unit rental rates, and increased investment costs. Then we see the relationship to the NPV cash flow of Taman Melati Dinoyo apartment Malang City

Some of the causes of unfeasible projects include: 1) The burden of debt repayment. 2) High investment costs. 3) Low rent. 4) Operating expenses. 5) The potential of the terminal value is changed.

Table 1 Relationship of Residential Selling Cost to NPV

tarif jual unit residence	tarif jual unit hunian (Rp)			NPV (Rp)
	studio A	2BR	Special	
20%	486.000.000.00	506.400.000.00	996.000.000.00	8.249.694.687
10%	445.500.000.00	464.200.000.00	913.000.000.00	(20.079.949.656)
now	405.000.000.00	422.000.000.00	830.000.000.00	(48.409.594.000)
-10%	364.500.000.00	379.800.000.00	747.000.000.00	(76.739.238.343)
- 20%	324.000.000.00	337.600.000.00	664.000.000.00	(105.068.882.686)

***Source**:* Processed Author, 2023

From the graph of the relationship between the selling rate of residential units to NPV, it can be seen that the higher the selling rate of residential units, the higher the NPV value. The limit of investment acceptance for the construction of Taman Melati Dinoyo apartment in Malang City is around 18% of the selling rate of residential units set at this time. The cash flow relationship between the increase in the selling rate of residential units to NPV is in table 2.

Table 2 Relationship of Residential Rental Rate to NPV

tarif jual unit hunian	residential unit rental rate (Rp)			NPV (Rp)
	studio	2 BR	Special	
40%	3.500.000	4.060.000	7.700.000	3.855.928.042
20%	3.000.000	3.480.000	6.600.000	(22.276.832.979)
now	2.500.000	2.900.000	5.500.000	(48.409.594.000)
- 35%	2.000.000	2.320.000	4.400.000	(74.542.355.020)
-20%	1.625.000	1.885.000	3.575.000	(94.141.925.786)

Source: Processed Author, 2023

From the graph of the relationship between residential unit rental rates and NPV, it can be seen that the higher the rental rate per unit, the higher the NPV. The limit of investment acceptance for the construction of Taman Melati Dinoyo apartment in Malang City is around 38% of the rental rate of residential units set at this time. The relationship between the effect of investment costs on NPV can be seen in the following table:

Table 3 Relationship of Investment Cost Effect on NPV

Changes in Investment Costs	Cost of Investment (IDR)	NPV (Rp)
raised 20%	525.440.496.869	(130.897.250.029)
raised 10%	481.653.788.797	(89.653.422.014)
now	437.867.080.724	(48.409.594.000)
down 10%	394.080.372.652	(7.165.765.985)
20% down	350.293.664.580	34.078.062.030

Source: Processed Author, 2023

From the graph of the effect of investment costs on NPV, it can be seen that the lower the investment cost, the higher the NPV, the limit of investment acceptance for the construction of the Taman Melati Dinoyo apartment is around 7.79% of the investment cost set at this time. Cash flow relationship of investment cost effect on NPV.

CONCLUSION

From the results of this study, several conclusions can be drawn, as follows: 1) From the calculation results based on the NJOP value, the Taman Melati Dinoyo Apartment building has a value of Rp. 418,462,580,000. 2) Taman Melati Dinoyo Apartment in Malang City is financially declared feasible to be shown with a positive Net Present Valus (NPV) value of Rp. 55,585,691,096, IRR of -8.99% which is less than MARR of 7.79%, BCR < 1 of 0.7997 and Payback Period of 0.992 of Rp. Rp. 186,959,656.53. 3) Sensitivity analysis shows that apartment projects are declared feasible if the increase in investment reaches 38% and the decrease in income is 20%

BIBLIOGRAFI

Abdul-Rahman, H., & Alidrisyi, M. N. (1994). A perspective of material management practices in fast developing economy: The case of Malaysia. Construction Management and Economics, 12(5). https://doi.org/10.1080/01446199400000051

Assaf, S. A., & Al-Hejji, S. (2006). Causes of delay in large construction projects. International Journal of Project Management, 24(4). https://doi.org/10.1016/j.ijproman.2005.11.010

Ir. Iman Soeharto. (1999a). Manajemen Proyek Jilid 1 (Dari Konseptual sampai Operasional). Manajemen Proyek Jilid 1 (Dari Konseptual Sampai Operasional), 60(5). https://doi.org/10.3938/jkps.60.674

Peraturan Daerah Kota Malang Nomor 2 Tahun 2022 tentang Penyelenggaraan Reklame.

Peraturan Daerah Kota Malang Salinan 3C Tahun 2011 tentang Retribusi Perizinan Tertentu.

Peraturan Daerah Kota Malang Nomor 8 Tahun 2015 tentang Ketentuan Umum, Maksud dan Tujuan, Dokumen Lingkungan, Penilaian AMDALdan Pemeriksaan Ukl – Upl, Komisi Penilaian AMDAL, Penerbitan Izin, Pembinaan dan Pengawasan, Pendanaan, Sanksi Administratif.

Peraturan Menteri Dalam Negeri Nomor 19 Tahun 2017 tentang Pedoman Penetapan Ijin Gangguan Daerah.

Peraturan Walikota Malang Nomor 34 Tahun 2012 tentang Tarif Pajak Reklame dengan Ketentuan Masa Pajak Selama Setahun.

Peraturan Menteri Ketenagakerjaan Nomor 18 Tahun 2022 tentang Penetapan Upah Minimum tahun 2023

Ir. Iman Soeharto. (1999b). Manajemen Proyek Jilid 1 (Dari Konseptual sampai Operasional). Manajemen Proyek Jilid 1 (Dari Konseptual Sampai Operasional), 60(5). https://doi.org/10.3938/jkps.60.674

Kerzner, H. (2009). Project Management: A System Approach to Planning,Scheduling, and Controling. In Patent Project Management.

Kimmons, R. L., & Loweree, J. H. (2017). Preface. In Project Management: A Reference for Professionals. https://doi.org/10.1201/9780203741771