FINANCIAL FEASIBILITY INVESTMENT PROPERTY SHOP DEVELOPMENT (CASE STUDY AT CEMPAKA PUTIH RUKO IN BECORA-DILI)

Regina Yomima	Wiagustini	Augusto da Costa Soares
Institute of Business (IOB)	Institute of Business (IOB)	Institute of Business (IOB)
Timor Leste	Timor Leste	Timor Leste

ABSTRACT

This study aims to determine and analyze: **The feasibility of investing in the property of the Cempaka Putih shophouses in Becora, Dili, Timor Leste based on specific financial aspects**, such as Net Present Value (NPV), Payback Period (PP), Internal Rate of Return (IRR) and Profitability Index (PI). The results of this study are also expected to provide benefits for the feasibility of investing in shop property development based on economic analysis from the financial aspect, namely Net Present Value (NPV), Payback Period (PP), Internal Rate of Return (IRR) and Profitability Index (PI) and also expected to be references for further researchers.

The analysis technique in assessing the feasibility of investing in the Cempaka Putih shop-house property in Becora, Dili, Timor Leste from a financial aspect is a Quantitative Descriptive Analysis, which uses the Payback Period (PP) method, Net Present Value (NPV), Internal Rate of Return (IRR) and profitability. Index (PI).

The results showed that the property of the Ruko Cempaka Putih in Becora, Dili, Timor Leste was feasible from a financial aspect by using the analytical calculation formulation Payback Period (PP) 9 years, 10 months and 10 days smaller than the project life (20 years); NPV has a positive value of USD $ 556,734.62, the analysis of the amount of IRR is 117.81% greater than the WACC of 10.8%, and the PI analysis is found to be 1.825%> 1 which means that it is acceptable.

Keywords: *Payback Period (PP), Net Present Value (NPV), Internal Rate of Return (IRR) and profitability Index (PI).*

1. INTRODUCTION

One of the most sought after property businesses in Timor-Leste is the shophouse business. The shophouse business is now being pursued by foreign and local investors. The shop-house business has grown quite a bit in recent years, inseparable from market demand, so that entrepreneurs in the shop-house property sector take advantage of this opportunity to rent out, open offices, shops or develop new business branches. This situation was not wasted by an entrepreneur named Mrs. Humbelina who built a Cempaka Putih Shop house in Becora area – Dili, Timor Leste. In making an investment, it is necessary to pay attention to several aspects of supporting the business to get maximum profit and to find out whether the business is feasible or not, among others, the market aspect, if the market or consumers who enjoy this service product are not so meaningful from the market aspect this business is not feasible. The second is the management aspect, who carries out these aspects, the social aspect, how it affects the community around the project, from the financial aspect whether the required capital meets the target and the estimated funding sources.

The investment appraisal can be done by using analysis on various aspects. However, in this case, the researcher will only take the financial aspect. In the financial aspect, investment appraisal criteria can be used, such as the investment appraisal method which measures how much profit from the investment is; Payback Period, which describes the length of time required to recoup the funds that have been issued or invested; Net Present Value; a method that calculates the difference between the present value of an investment and the present value of net cash receipts in the future. Internal Rate of Return; a method that calculates an interest rate that equates the present value of the investment with the present value of future net cash receipts; Profitability Index; namely to calculate the comparison between the present value of revenues with the present value of investments. The problem for the project owner in analyzing the feasibility of an investment project in the construction of shophouses is the most important in terms of the financial aspect because in the financial aspect it aims to determine the estimated funding and cash flow of the project so that it can be known whether or not a project is feasible. Meanwhile, the project owner has not fully analyzed the investment from the financial aspect, only using the recapitulation of the budget plan for the implementation of the shophouse construction work. In addition, the situation in the Becora area, Dili, which is very strategic for investing with the construction of shophouses, has a very positive impact on the environment in the area which is still less than a shopping center or the construction of shophouses so that this is the reason why the project owner chose and decided to invest in shop property

Investment, of course, requires substantial funds in its implementation, and the expenditure of funds/capital will affect the company in the short term. The existence of a fairly large expenditure of funds and is

bound for a long period of time in an investment activity makes capital owners have to be careful not to continue to invest funds in the form of projects that turn out to be unprofitable in the future.

According to Suad and Suwarsono (2008:16) Investment is to maximize the market value and own capital. Owners of own capital are companies should try to increase their prosperity. There are many benefits that can be obtained from investment activities, including employment, increasing output, saving foreign exchange or increasing foreign exchange. Basically, an increase in investment activity can spur economic activity in a country. Of course, the investment activities referred to here are investment activities that bring benefits to the parties involved in the future.

Overall this form of investment requires substantial funds in its implementation and the expenditure of funds/capital will generally affect the company in the long term. Expenditures of funds that are quite large and bound in the long term in an investment activity make the owners of capital (investors) must be careful not to already invest funds for projects that turn out to be unprofitable (failed) in the future, for example planning errors, mistakes in estimating the market, errors in estimating the appropriate technology used, and errors in estimating labor requirements. Therefore, it is necessary to conduct a project feasibility study, namely research on whether or not a project (usually an investment project) is carried out successfully according to Suad and Suwarsono (2008:4). The larger the scale of investment, the more important this study is to carry out because the larger the scale of investment, the greater the amount of funds invested. Although this feasibility study will cost money, the cost is relatively small when compared to the risk of failure of a project involving a large investment.

Before carrying out a feasibility study, it is necessary to first determine what aspects will be investigated because these aspects will determine whether an investment project is feasible or not to be implemented. One of the feasibility studies that must be carried out to determine whether an investment project is feasible or not is a feasibility study from the financial aspect (Suliyanto, 2010: 195). The financial aspects include the cost of using capital, depreciation, cash flow, income tax, and investment valuation methods.

Several studies have been carried out, such as the research conducted by Sari (2009) in the title "Investment Feasibility Analysis of Adding Fixed Assets (Machinery) to UD Company. Karya Baru di Mataram" which aims to determine the feasibility of investing in additional fixed assets in terms of investment appraisal criteria (especially PP, NPV, IRR and PI). The method used is the case study method, because it highlights the case in depth with a complete picture of the investment in additional fixed assets (machinery) at the UD printing company. Mataram's New Works.

Trisnawati (2010) with the research title "Study of Feasibility of Investment in Additional Rooms at Hotel Handika Mataram". The purpose of this study was to determine whether the addition of rooms by Hotel Handika Mataram was feasible or not to be done if viewed from the investment criteria, namely Payback Period (PP) and Net Present Value (NPV). This research was conducted at Hotel Handika, which is located in Mataram. The variables used are initial investment (Initial Investment), proceeds and Cost of Capital (cost of capital). While the type of research used is comparative research, comparing the results obtained with investment criteria, namely PP with economic life and the resulting NPV is positive or negative, the data collection method is case studies, and data collection techniques are carried out by interviews and documentation.

In the current economic condition of Timor Leste, the development of shophouse business in Timor Leste has made significant progress. This is indicated by the large number of shophouse property businesses spread across the capital city of DILI. With the shop-house property business, it certainly has its own benefits for the wider community and the government. The creation of job vacancies from newly established businesses will be very helpful for people who do not have jobs. As for the government, the unemployment rate can be slightly reduced so that the remaining attention can be diverted to the whole process of economic development. Every business, whether engaged in shop-house property, industry, services or trade, must have different or the same vision, mission and goals, both short term and long term. The short-term goal of the business is to earn profit (profit), while the long-term goal is to develop the business so that it becomes more advanced and to maintain the viability of the business in order to survive in this era of increasingly fierce competition.

Based on the above background and some of the research that has been done, this inspired the author to conduct research on the Feasibility Analysis of the Cempaka Putih shop house investment. Based on an economic analysis of the financial aspects of Net Present Value (NPV), Payback Period (PP), Internal Rate of Return (IRR) and Profitability Index (PI)

Problem Formulation

Based on the background above, the problem can be formulated, namely: Is the Cempaka Putih shop house property investment plan feasible based on the financial aspect?

Research Objectives

The expected objectives of this research are: to determine the feasibility of shop-house property investment based on financial aspects.

Financial aspects that will be analyzed for investment feasibility, such as Net Present Value (NPV), Payback Period (PP), Internal Rate of Return (IRR) and Profitability Index (PI)

2. LITERATURE REVIEW
Definition of Feasibility Study

Every type of business that will be run must have risks that must be faced. A business feasibility study is one way to predict future risks and provide an overview of what business actors should do in dealing with these risks. The following are some definitions of business feasibility studies according to experts.

According to Kasmir and Jakfar (2003:17) define a business feasibility study as an activity that studies in-depth means of an activity or business to be carried out, to determine whether or not a business is feasible or not. According to Kasmir and Jakfar (2007:4) "A business feasibility study is a method of exploring a business idea about whether or not the business idea is feasible or not."

According to Suad Husnan and Suwarsono (2002:4) "A project feasibility study is a study on whether or not an investment project can be implemented successfully." According to Husein Umar (2005:8) Business feasibility studies are research on business plans that not only analyze whether it is feasible or not for a business to be built, but also when it is routinely operated in order to achieve maximum profit for an unspecified time, for example a new product launch plan.

Based on the above definition, a business feasibility study can be interpreted as a means or tool to measure whether or not a business is feasible to run and can also be used as a tool to predict and deal with future business risks.

Investment

Investment is the investment of money or capital in a company or project for the purpose of making a profit (Big Indonesian Dictionary). Investments are current expenditures to buy real assets (land, houses, cars, etc.) or financial assets with the aim of earning even greater income in the future (Murdifin, Haming and Basalamah, 2010).

The decision to make an investment involving a large amount of funds in the hope of getting many years of profit in the long term has a considerable impact on the continuity of a company's business. Therefore, before making a decision to invest, first review a feasibility study, especially the financial and economic aspects (Soeharto, 1999).

Investment can also be interpreted as investment in an activity that has a relatively long period of time in various business fields. Investments that are invested in a narrow sense are in the form of certain projects, both physical and non-physical, such as projects for building factories, roads, building construction and research and development projects.

Feasibility study from financial aspect

The feasibility study from financial aspect can be studied from the assessment of the cash flow of an investment. The methods used in assessing the cash flow of an investment are: 1) the payback period method, 2) the net present value, 3) the internal rate of return, and 4) the profitability index according to Suliyanto (2010: 195).

Payback period method

Definition and Formula

Payback Period (Payback Period) is a method used to calculate the length of the period required to return the money that has been invested from the annual cash inflows (Proceeds) generated by the investment project. If the annual proceeds are the same, the Payback Period (PP) of an investment can be calculated by dividing the total investment (outlays) by the annual proceeds, according to Suliyanto (2010: 196). The formula used to calculate the Payback Period (PP) is as follows:

$$\text{Payback Period (PP)} = \frac{\text{Net cash investment}}{\text{Annual net cash inflow}}$$

To calculate the Payback Period (PP) which has unequal proceeds every year, the accumulated proceeds must be calculated first so that the accumulated cash inflows (zero) are obtained. The eligibility criteria for investment acceptance using the Payback Period method is that a proposed investment is declared feasible if the Payback Period is shorter than the maximum payback period. On the other hand, if the Payback Period (PP) of an investment is longer than the maximum payback period, then the investment is declared unfeasible. If there are several investment alternatives, then to determine the best alternative, the investment that has the shortest payback period is chosen.

Net Present Value Method

Definition and Formula

The Net Present Value (NPV) method is used to reduce the shortcomings contained in the Payback Period (PP) method. The Net Present Value method is a method that is carried out by comparing the present value of net cash inflows (proceeds) with the present value of the cost of spending an investment (outlays). Therefore, to calculate the

feasibility of investing using the NPV method, data are needed for initial cash outflows, future net cash inflows, and the desired minimum rate of return. If the result of NPV Positive means that the investment will provide higher returns than the desired minimum rate of return. Conversely, if the NPV is negative, it means that the investment will yield lower returns than the desired minimum rate of return, then the investment should be rejected. The formula used to calculate the Net Present Value (NPV) is as follows:

$$Net\ Present\ Value\ (\text{NPV}) = \sum_{t=0}^{n} \frac{At}{(1+k)^t}$$

Information:

k = Discount rate used

At = Cash flow in period t

n = the last period in which cash flow is expected

Assessment criteria:

if NPV > 0 or positive value, then the project proposal is feasible

if NPV < 0 or negative, then the project proposal is not feasible

if NPV = 0, the value of the company remains even if the proposed project is implemented or not implemented.

Internal rate of return method

Definition and Formula

This method is used to calculate the interest rate that can equalize the present value of all cash inflows with cash outflows from an investment project according to Suliyanto (2010:211). The formula used to calculate the Internal Rate of Return (IRR) is as follows.

$$IRR = \sum_{t=0}^{n} \left[\frac{A_1}{(1+r)^t} \right] = 0$$

Information:

r = Interest rate that will make PV and proceeds equal to p.v. from capital outlays

At = Cash Flow for period t

n = the last period in which cash flow is expected

Profitability Index method

Definition and Formula

The profitability Index (PI) method can be found by calculating the comparison between the present value (present value) of net cash receipts in the future (proceeds) with the present value of investment (outlays) according to Suliyanto (2010: 205). The formula used to calculate Profitability (PI) is as follows:

$$Profitability\ Index\ (\text{PI}) = \frac{Proceeds}{Outlays}$$

If the proceeds of an investment are not the same from year to year, then, as in the case of NPV to calculate using the Profitability Index (PI) method, you must first calculate the Present Value of the proceeds each year to be added up so that the total Present Value of the entire proceeds expected investment.

Selection criteria:

if PI > 1, then the project proposal is said to be feasible

if PI < 1, then the project proposal is said to be unfeasible

3. RESEARCH METHOD

Research design

This research is a descriptive research, which is intended to describe the phenomena as they are. Descriptive research does not provide treatment, manipulation, but describes a condition as it is. In this descriptive research, it is descriptive quantitative because the description uses size, number, or frequency (Syaodih, 2006: 73). This research is a case study research with a quantitative descriptive approach. In this study, an analysis of the feasibility of shop-house property investment will be carried out.

Research sites

This research was conducted in Ruko Cempaka Putih in Becora, Dili. This location was chosen because of the indications of problems related to the topic of this research.

Types of quantitative data are data in the form of numbers. Quantitative data in this study is data that can be measured and calculated with numbers, for example in the business of building shop houses in the form of financial data such as income levels, total costs incurred and fixed assets owned and Qualitative data used in this study are as follows: the location of shop houses and activities.

Primary data in this study is research data obtained directly from the original source (not through intermediary media). Research with primary data can collect data according to what is desired and **secondary data** sources is data in finished form, obtained from other parties who have collected such data such as campuses, financial data and others.

Data analysis technique

Analysis technique in assessing the feasibility of shophouse property investment from the Financial Aspect is Quantitative Descriptive Analysis, which includes the following.

Payback period method,

$$\text{Payback Period (PP)} = \frac{\text{Net cash investment}}{\text{Annual net cash inflow}}$$

To calculate the Payback Period (PP) which has unequal proceeds every year, the accumulated proceeds must be calculated first so that the accumulated cash inflows (zero) are obtained. The eligibility criteria for investment acceptance using the Payback Period method is that a proposed investment is declared feasible if the Payback Period is shorter than the maximum payback period. On the other hand, if the Payback Period (PP) of an investment is longer than the maximum payback period, then the investment is declared unfeasible. If there are several investment alternatives, then to determine the best alternative, the investment that has the shortest payback period is chosen.

Net Present Value Method,

$$Net\ Present\ Value\ (\text{NPV}) = \sum_{t=0}^{n} \frac{At}{(1+k)^t}$$

Information:

k = Discount rate used

At = Cash flow in period t

n = the last period in which cash flow is expected

Assessment criteria:

if NPV > 0 or positive value, then the project proposal is feasible

if NPV < 0 or negative, then the project proposal is not feasible

if NPV = 0, the value of the company remains even if the proposed project is implemented or not implemented.

Internal rate of return method and

$$IRR = \sum_{t=0}^{n} \left[\frac{A_1}{(1+r)^t} \right] = 0$$

Information:

r = Interest rate that will make PV and proceeds equal to p.v. from capital outlays

At = Cash Flow for period t

n = the last period in which cash flow is expected

Profitability Index method

If the proceeds of an investment are not the same from year to year, then, as in the case of NPV to calculate using the Profitability Index (PI) method, you must first calculate the Present Value of the proceeds each year to be added up so that the total Present Value of the entire proceeds expected investment.

Selection criteria:

if PI > 1, then the project proposal is said to be feasible

if PI < 1, then the project proposal is said to be unfeasible

$$Profitability\ Index\ (\text{PI}) = \frac{Proceeds}{Outlays}$$

4. RESULTS AND DISCUSSION

Research result

For the construction project "Ruko Cempaka Putih in Becora", Dili, Timor Leste there are several assumptions used which are based on the rules in the current economic system and conditions.

1. Sources of funding come from own capital and loans from banks.

2. The age of the project is calculated based on the economic life of the building, which is 20 years.

3. The amount of the loan capital cost is calculated at the Bank's loan rate of 12%

   Per year and the own capital is calculated at the deposit interest rate of 9% per

   year.

4. The capital structure for investment is 60% Bank loan, which is USD $ 408,300.00 and 40% Own Capital of USD $ 272,200.00. So the total investment funding is USD 680,500.

5. The total capital of 680,500.00 consists of:

   - Fixed Asset Investment: $575,000.00

   - Pre-Operational Investment: $5,500.00

   - Working Capital Investment: $1000.000, 00

The discussion is carried out to review and answer the formulation of the problem, because the focus of the study in this thesis only emphasizes on the Financial Aspect, there is no in-depth study of other aspects (Market Aspects, Legal Aspects, Technical Aspects, Human Resource Management Aspects and Socio-Economic Aspects) or in other words the feasibility aspects outside the Financial Aspects are assumed to be given. In addition to the various feasibility aspects described in the previous section, the developers or investors of a business will pay more attention to the financial aspects. The description of the business to be obtained in this financial aspect is to answer the problem of whether the "Ruko Cempaka Putih in Becora" investment is feasible to be developed. In this regard, the following will describe in detail the feasibility of developing the investment "Ruko Cempaka Putih in Becora, Dili-Timor Leste"

5. DISCUSSION

Financial Analysis

1. Payback period (PP)

Tahun	Laba Setelah Pajak	Penyusutan Aktiva Tetap	Cash Flow			
Investasi		$ 625,000.00			Investasi	625,000
Aliran Cash Flowas						
1	10,175	21,625	31,800		Cash Flow tahun 1	31,800
2	16,325	21,625	37,950		Belum tertutup	593,200
3	22,670	21,625	44,295		Cash Flow tahun 2	37,950
4	29,220	21,625	50,845		Belum tertutup	555,250
5	35,984	21,625	57,609		Cash Flow tahun 3	44,295
6	42,915	21,625	64,540		Belum tertutup	510,955
7	50,142	21,625	71,767		Cash Flow tahun 4	50,845
8	57,619	21,625	79,244		Belum tertutup	460,110
9	65,357	21,625	86,982		Cash Flow tahun 5	57,609
10	73,369	21,625	94,994		Belum tertutup	402,501
11	81,606	21,625	103,231		Cash Flow tahun 6	64,540
12	90,208	21,625	111,833		Belum tertutup	337,961
13	99,129	21,625	120,754		Cash Flow tahun 7	71,767
14	108,383	21,625	130,008		Belum tertutup	266,193
15	117,987	21,625	139,612		Cash Flow tahun 8	79,244
16	127,892	21,625	149,517		Belum tertutup	186,950
17	138,250	21,625	159,875		Cash Flow tahun 9	86,982
18	149,013	21,625	170,638		Belum tertutup	99,968
19	160,202	21,625	181,827		Cash Flow tahun 10	94,994
20	171,838	21,625	193,463		Belum tertutup	4,974

Kelebihan investasi tahun	0.048		
Payback periode	**10.00**	tahun	

Analysis with the Payback Period (PP) method in moderate conditions by using the formulation of the Payback Period (PP) calculation, namely by subtracting Initial outlays (Io) with net cash flows (proceeds), it can be proven that the return on investment in shophouse construction is still smaller compared to the project life (20 years) with PP: 10 years, so the investment is worth doing.

2. Net Present Value (NPV)

To calculate the discount rate is as follows: k = Wm.Km + Wu.Ku

Where:

k = discount rate

Wm = percentage of funding from own capital

Km = own capital interest

Wu = percentage of funding from debt

Ku = loan interest

k = Wm.Km + Wu.Ku

k = (40% x 9%) + (60% x 12%)

k = 10.8%

Then with the help of the excel program the following results will be obtained:

Investasi		$ 625,000.00				
Aliran Cash Flow						
Tahun	Laba Setelah Pajak	Penyusutan Aktiva Tetap	Cash Flow	DF 10,8%	PV Cash Flow	NPV
1	10,175	21,625	31,800	0.9025	28,700	(596,300)
2	16,325	21,625	37,950	0.8146	30,912	(565,387)
3	22,670	21,625	44,295	0.7352	32,564	(532,823)
4	29,220	21,625	50,845	0.6635	33,735	(499,088)
5	35,984	21,625	57,609	0.5988	34,498	(464,590)
6	42,915	21,625	64,540	0.5405	34,881	(429,709)
7	50,142	21,625	71,767	0.4878	35,007	(394,702)
8	57,619	21,625	79,244	0.4402	34,886	(359,817)
9	65,357	21,625	86,982	0.3973	34,560	(325,257)
10	73,369	21,625	94,994	0.3586	34,064	(291,193)
11	81,606	21,625	103,231	0.3236	33,410	(257,783)
12	90,208	21,625	111,833	0.2921	32,666	(225,117)
13	99,129	21,625	120,754	0.2636	31,833	(193,284)
14	108,383	21,625	130,008	0.2379	30,932	(162,351)
15	117,987	21,625	139,612	0.2147	29,980	(132,372)
16	127,892	21,625	149,517	0.1938	28,977	(103,395)
17	138,250	21,625	159,875	0.1749	27,964	(75,430)
18	149,013	21,625	170,638	0.1579	26,938	(48,493)
19	160,202	21,625	181,827	0.1425	25,906	(22,587)
20	171,838	21,625	473,463	0.1286	60,882	38,296

Net Present Value is obtained from calculating the difference between the present value of the investment and the present value of net cash receipts in the future. From the results of the analysis conducted using the Net Present Value (NPV) formulation, the value of the NPV in the 20th year is USD $ 38,296. These results mean that the benefits received are greater than the costs incurred so that the results of this study indicate that the construction of the Ruko Cempaka Putih in Becora building is said to be feasible.

3. Internal Rate of Return (IRR)

Investasi		$ 625,000.00							
					10.8%			12%	
Tahun	Laba Setelah Pajak	Penyusutan Aktiva Tetap	Cash Flow	DF 10 %	PV Cash Flow	NPV	DF 11 %	PV Cash Flow	NPV
1	10,175	21,625	31,800	0.90253	28,700	(596,300)	0.89286	28,393	(596,607)
2	16,325	21,625	37,950	0.81456	30,912	(565,387)	0.79719	30,254	(566,354)
3	22,670	21,625	44,295	0.73516	32,564	(532,823)	0.71178	31,528	(534,825)
4	29,220	21,625	50,845	0.66350	33,735	(499,088)	0.63552	32,313	(502,513)
5	35,984	21,625	57,609	0.59883	34,498	(464,590)	0.56743	32,689	(469,823)
6	42,915	21,625	64,540	0.54046	34,881	(429,709)	0.50663	32,698	(437,125)
7	50,142	21,625	71,767	0.48778	35,007	(394,702)	0.45235	32,464	(404,661)
8	57,619	21,625	79,244	0.44023	34,886	(359,817)	0.40388	32,005	(372,656)
9	65,357	21,625	86,982	0.39732	34,560	(325,257)	0.36061	31,366	(341,290)
10	73,369	21,625	94,994	0.35859	34,064	(291,193)	0.32197	30,585	(310,704)
11	81,606	21,625	103,231	0.32364	33,410	(257,783)	0.28748	29,676	(281,028)
12	90,208	21,625	111,833	0.29209	32,666	(225,117)	0.25668	28,705	(252,323)
13	99,129	21,625	120,754	0.26362	31,833	(193,284)	0.22917	27,674	(224,650)
14	108,383	21,625	130,008	0.23793	30,932	(162,351)	0.20462	26,602	(198,047)
15	117,987	21,625	139,612	0.21474	29,980	(132,372)	0.18270	25,507	(172,541)
16	127,892	21,625	149,517	0.19380	28,977	(103,395)	0.16312	24,390	(148,151)
17	138,250	21,625	159,875	0.17491	27,964	(75,430)	0.14564	23,285	(124,866)
18	149,013	21,625	170,638	0.15786	26,938	(48,493)	0.13004	22,190	(102,677)
19	160,202	21,625	181,827	0.14248	25,906	(22,587)	0.11611	21,111	(81,565)
20	171,838	21,625	473,463	0.12859	60,882	38,296	0.10367	49,082	(32,483)
	NPV 1=	38,296		i1=	11%				
	NPV2=	(32,483)		i2=	12%				
	IRR=	11.45%							

Analysis using the Internal Rate of Return (IRR) method in moderate conditions. Based on the analysis of the data, the IRR is 11.45% greater than the WACC 10.8%. This means that the relative returns received from investment are greater than the capital costs that must be borne.

4. Profitability Index

Investasi		$ 625,000.00			
Aliran Cash Flow					
Tahun	Laba Setelah Pajak	Penyusutan Aktiva Tetap	Cash Flow	DF 10,8%	PV Cash Flow
1	10,175	21,625	31,800	0.90253	28,700
2	16,325	21,625	37,950	0.81456	30,912
3	22,670	21,625	44,295	0.73516	32,564
4	29,220	21,625	50,845	0.66350	33,735
5	35,984	21,625	57,609	0.59883	34,498
6	42,915	21,625	64,540	0.54046	34,881
7	50,142	21,625	71,767	0.48778	35,007
8	57,619	21,625	79,244	0.44023	34,886
9	65,357	21,625	86,982	0.39732	34,560
10	73,369	21,625	94,994	0.35859	34,064
11	81,606	21,625	103,231	0.32364	33,410
12	90,208	21,625	111,833	0.29209	32,666
13	99,129	21,625	120,754	0.26362	31,833
14	108,383	21,625	130,008	0.23793	30,932
15	117,987	21,625	139,612	0.21474	29,980
16	127,892	21,625	149,517	0.19380	28,977
17	138,250	21,625	159,875	0.17491	27,964
18	149,013	21,625	170,638	0.15786	26,938
19	160,202	21,625	181,827	0.14248	25,906
20	171,838	21,625	473,463	0.12859	60,882
Jumlah PV Cash Flow					663,296
	Profitability of Index =		PV Cash Flow		
			Investasi		
	Profitability of Index =		1.06	Lebih besar dari Satu	

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Analysis using the Profitability Index (PI) method based on an analysis of the data, the magnitude of the PI is 1.06% greater than 1. This means that the project proposal is said to be acceptable.

Based on the 4 (four) feasibility methods on the financial aspect used in assessing the investment in the construction of the Ruko Cempaka Putih, it can be proven that: with the Payback Period (PP) Method the payback period for the shophouse construction investment is still smaller than the project life (20 years) PP 10 years, so the investment is worth doing.

Net Present Value with the value of the NPV in the 20th year is USD $ 38,295.71. Means that the benefits received are greater than the costs incurred so that the results of this study are said to be feasible. The Internal Rate of Return (IRR) is in moderate condition with an IRR of 11.45% % which is greater than the WACC of 10.8%. This means that the relative returns received from investment are greater than the capital costs that must be borne and Profitability Index (PI) based on an analysis of the data, the magnitude of the PI is 1.06% greater than 1. This means that the project proposal is said to be acceptable. For this reason, based on the above analysis from the financial aspect, seen from PP, NPV, IRR and PI, this investment in the Ruko Cempaka Putih property is feasible from the financial aspect.

6. CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the analysis of the construction of the Ruko Cempaka Putih, it is feasible to do from the financial aspect which can be seen by using the calculation formulation Payback Period (PP) 10 years smaller than the project life (20 years); The NPV in the 20th year was positive at USD $ 38,295.71, the analysis of the data showed that the IRR was 11.45% greater than the WACC 10.8%, and the PI analysis was found to be 1.06% > 1.

Research Limitations

This research only focuses on the feasibility study from a financial aspect so that it does not consider legal aspects, environmental aspects, technical & technological aspects, management & HR aspects, market & marketing aspects.

Suggestions

Suggestions for further research

In further research in the project feasibility study on investment decisions, other aspects need to be considered as the basis for making investment decisions such as legal aspects, environmental aspects, technical & technological aspects, management & HR aspects, market & marketing aspects. In addition, other methods of financial analysis can be used to minimize investment risk.

Advice for Investors and Government

It is recommended for investors to consider other aspects besides financial aspects such as legal aspects, environmental aspects, technical & technological aspects, management & HR aspects, market & marketing aspects. As for the government, it is recommended to have data related to the property business in Timor Leste to support the data for further researchers.

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