

THE IMPORTANCE OF CAPITAL BUDGETING IN LONG TERM INVESTMENT DECISION MAKING

Syarifah Alda Azlika¹, Kurnia Diana², Mardian Adma Gumilang³, Erik Mario Sihotang⁴, Indrayani⁵, Muammar Khaddafi⁶, Damsar⁷

Corresponding Author: khaddafi@unimal.ac.id

Abstract

Lack of significant planning in investing by a company. This because in planning an investment project of course requires substantial funds, so if not budgeted and calculated properly, it can result in investment failure projects that can cause a company to experience large losses. This study discusses capital budgeting of a project in CV. ABC will buy a new machine. In the This study discussed how to calculate the initial investment, estimate the income that the company will get during the project, how long is the capital issued by the company for investment projects will be returned, and at most what is important is whether it is feasible or not is the investment project planning. Method used in capital budgeting calculations is the payback period, discounted payback period, Net Present Value (NPV), and Internal rate of Return (IRR). In the The results showed that CV ABC accepted the plan to purchase a corn drying machine by calculating the payback period for 5 years, the NPV and IRR are considered feasible.

Keywords: Investment, Capital Budgeting, Payback Period, Discounted Payback Period, Net Present Value, Internal rate of Return

INTRODUCTION

Investment decision is one of the important decisions in financial management. This decision has significance because companies or individuals who want to start or expand their business require large capital. In addition, returns from investment activities cannot be obtained immediately in a short time. If the decision is wrong, this can cause the company to suffer huge losses. In order to develop a business to meet consumer demand, a company planning an investment project requires a capital budget calculation to determine investment decisions. This involves considering whether the project is feasible, how long it will take the invested capital to return, and what the cash flow is according to the company's projections. This calculation is still based on estimates or projections, which are uncertain in the future. Therefore, financial managers must be careful and careful in calculating these investments. The method used in capital budgeting is the capital budgeting method. Capital budgeting is used to provide an overview and consideration of whether a company's investment project plan is feasible or not to be implemented.

This study will discuss capital budgeting in long-term investment decisions by providing case study examples of companies that will invest in purchasing machines to meet increasing consumer demand. This case study will explain how the calculation of the initial investment, estimated sales, cost of goods sold, costs incurred, depreciation, and interest costs are totaled to find out the income that will be used in calculating the payback period, discounted payback period, Net Present Value (NPV), and Internal Rate of Return (IRR). Conclusion: Capital budgeting has an important role in making long-term investment decisions. By using an appropriate capital budgeting method, companies can evaluate investment feasibility, allocate resources efficiently, reduce uncertainty, and monitor and evaluate ongoing investment projects. Thus, capital budgeting becomes an important tool in helping companies achieve their long-term investment goals.

^{1,2,3,4,5} Master of Management Study Program, Universitas Batam

⁶ Faculty of Economics and Business, Universitas Malikussaleh

⁷ Faculty of Economics and Business, Universitas Andalas



DEFINITION OF CAPITAL STRUCTURE

Definition of Capital Structure Capital structure is a collection of funds that can be used and allocated by companies where the funds are obtained from long-term debt and equity (Gitman, 2006). Capital structure is a combination or balance between debt and equity (preferred stock and common stock) used by companies to plan capital gains (Ambarwati, 2010). According to Fahmi (2014) states that the capital structure is a picture of the form of the company's financial proportions, namely between owned capital that comes from long-term debt (long-term liabilities) and equity (shareholders equity). Capital structure is a company's long-term expenditure as measured by a comparison of long-term debt with its own capital (Sudana, 2011).

LITERATURE REVIEW

1. Investment

Investment is a current commitment to a number of funds or other resources with the aim of obtaining future profits (Tandelilin, 2007; 3). According to Jones (2007), investment is a commitment to a number of funds to acquire one or more assets in the future. Assessment of investment is based on the company's ability to generate profits that are greater or at least equal to those desired by the owners of capital. If the income generated is less or does not meet the expectations of the capital owner, then the investment project is not feasible to carry out because it does not provide added value to the company. Investors need to make two types of investment decisions, namely asset allocation decisions and asset security selection decisions (Bodie, Kane, and Marcus, 2007).

Investment decisions in fixed assets are also known as capital budgeting decisions. Meanwhile, if you look at the relationship between investments, investments can be divided into two, namely mutually exclusive investments and independent investments (Brigham and Houston, 2003). An independent project is a stand-alone project or investment, where only one investment proposal is accepted, while other project proposals will not affect or eliminate other project opportunities. If the company has limited funds, then the company must choose one of the proposed investment projects that meet the requirements. However, if the company has unlimited funds to invest, then all independent project proposals that meet the company's requirements can be accepted and implemented. Meanwhile, mutually exclusive projects are projects that have the same function. If one of the project proposals is accepted, the other project proposals will be rejected. That is, the opportunity to carry out project proposals is relatively low because only one project proposal can be implemented.

2. Capital Budgeting

There are several basic terms that need to be understood in capital budgeting (Brigham and Houston, 2003), including:

- a. "Capital" refers to fixed assets used for production.
- b. A "budget" is a detailed plan that projects cash inflows and outflows over several future periods.
- c. "Capital budget" is an outline of the planned expenditure for fixed assets.
- d. "Capital budgeting" is an overarching process that analyzes projects and determines which projects to include in the capital budget. This is also the expense planning process for assets that are expected to be used for more than one year.

According to Brigham and Daves (2010: 399), capital budgeting is the process of analyzing potential projects. This capital budgeting decision is an important decision that must be made by a manager. Meanwhile, Van Home and Wachowicz (2008) explain that capital budgeting is the process of identifying, analyzing, and evaluating investment projects that last more than one year. This process is important in making a decision whether an investment project is feasible or not, because it can have an impact on the success of the company in the future.

Capital budgeting involves several steps, including:

- a) Investment project planning and calculation of the initial investment required to run the investment project.
- b) Estimates or estimates of cash inflows (receipts) and outflows (disbursements) related to investment projects.
- c) Evaluation of project cash flows.
- d) Project selection from existing proposals.
- e) Re-evaluate the investment projects that have been determined.



There are several methods used in evaluating and assessing projects in corporate budgeting, as used in this study, namely Payback Period, Discounted Payback Period, Net Present Value (NPV), and Internal Rate of Return (IRR). Payback Period is a method for calculating the time required for a return on investment in a project to occur. Discounted Payback Period takes into account cash flows that have been discounted, by including interest payments in it. NPV is a calculation method that considers the time value of money, which is the difference between the present value of cash flows and the present value of an investment. If the NPV is positive, it means that the investment project is feasible, whereas if the NPV is negative, the project is not feasible. IRR finds the discount rate that equates the present value of the cash flows to the present value of the investment. The cost of capital also needs to be taken into account, including the weighted average cost of capital (WACC) if the company uses multiple sources of capital.

In capital budgeting, it is necessary to consider the estimated cash flow and cost of capital associated with the use of capital in investment projects. Estimating cash flows involves calculating a company's cash flows after the investment project is implemented. The cost of capital includes the opportunity cost of the capital used, such as the rate of return expected by company owners or investors if they invest their own funds, or the expected rate of return on stocks. If the capital comes from own funds, it is necessary to consider the cost of retained earnings. If the capital comes from bank loans, it is necessary to consider the interest costs set by the bank. If using multiple sources of capital, it is necessary to calculate the weighted average cost of capital (WACC) of all the capital used.

CASE STUDY

In order to gain a better understanding of the feasibility calculation of investment in a project proposed by a company, a case study is presented below. The following is a more detailed case study regarding the calculation of investment feasibility in a company project proposal: CV. ABC is a manufacturing company engaged in the production of furniture. They plan to expand their production capacity by purchasing new, more efficient and modern machines. This project involved several major components, including the purchase of machinery, factory renovation, and additional operational costs. The company wants to evaluate the investment feasibility of this project before making a final decision.

1. Cost Analysis:

- a) Machine Purchase: The desired new machine has a price of IDR 1,500,000,000
- b) Factory Renovation: Factory renovation needs to be done with an estimated cost of IDR 500,000,000
- c) Additional Operational Costs: It is estimated that additional operational costs of IDR 200,000,000 per year for 5 years.

2. Revenue Projection:

- a) Furniture Sales: Based on market analysis and demand trends, the company projects an increase in furniture sales of 15% per year for 5 years.
- b) Selling Price of Furniture: The average selling price of furniture per unit is IDR 2,500,000
- c) Production Volume: With the new machines, the company can increase production capacity by 20% per year.

3. Cash Flow Analysis:

- a) Production Cost: The company calculates the cost of producing furniture per unit, including raw materials, labor and overhead costs. The production cost per unit is estimated at IDR 1,800,000
- b) Operating Cash Flow: Generated from the difference between sales revenue and production costs.
- c) Additional Cash Flow: Derived from production cost savings and increased production volume.

4. Evaluation Method:

- a) Payback Period: Find the time needed to return the initial investment. If the payback period is less than the desired period (eg 5 years), the project is considered feasible.
- b) Net Present Value (NPV): Calculates the difference between the present value of the cash inflows and the present value of the investment. If the NPV is positive, the project is considered feasible.
- c) Internal Rate of Return (IRR): Determines the rate of return that makes the NPV zero. If the IRR exceeds the expected rate of return, the project is considered feasible.

Journal of Accounting Research, Utility Finance and Digital Assets



The company conducts an analysis based on the cash flow projections and calculates the evaluation method above to determine the investment feasibility of this project. They also consider risk, inflation, and other factors that can affect investment returns. By using accurate data and considering all relevant factors, companies can make an informed decision to undertake or reject this investment project.

DISCUSSION

In calculating the capital budget (Capital Budgeting), important financial information includes project proposals as alternative investments, cash flow estimates, investment feasibility calculations, and determination of projects to be taken if there is more than one proposal. This study describes the feasibility of investing in the purchase of a corn seed drying machine in one company. There are several methods used, including Payback Period, Discounted Payback Period, Net Present Value (NPV), and Internal Rate of Return (IRR).

- 1. Payback Period is the time needed for an investment to get back the initial capital. Investments with a shorter payback period are considered more attractive because they can generate income faster after the investment returns. The Discounted Payback Period is similar to the regular payback period, but calculates discounted cash flows. The advantage of this method is that it is easy to calculate and provides information about project risk and liquidity. However, the drawback is that it ignores cash flows after the payback period and does not take into account the time value of money.
- 2. Net Present Value (NPV) is the difference between discounted cash inflows and outflows. NPV is calculated by estimating the present value of each cash flow and adding it up. If the NPV is positive, the project is acceptable. The CV.X case study resulted in a positive NPV, so that the project to purchase a corn seed drying machine was acceptable.
- 3. Internal Rate of Return (IRR) is the rate of return on investment that equates the present value of cash inflows with project costs or makes the NPV equal to zero. IRR is calculated by finding a discount rate that meets these conditions. If the IRR is greater than the required interest rate (cost of capital), the project is acceptable. Although the IRR has advantages, such as providing information about the rate of return and can be used in ranking projects, it has disadvantages such as the difficulty of dealing with multiple IRRs and the neglect of cash flows after the payback period.

CONCLUSION

In carrying out long-term investment projects, it is important to carry out careful and detailed calculations regarding the estimated capital required, the cash flows to be issued, and the estimated cash flows generated by the company if the project is carried out. Furthermore, the calculation is evaluated in terms of investment feasibility to determine whether the proposed project is feasible or not to be accepted by the company. This has great importance, because if the project is not feasible, then the project will not generate income or cash inflows that meet the company's expectations, which can cause significant losses. Investment decisions are important decisions that must be taken by a manager. Several methods commonly used in evaluating investment feasibility include the payback period, discounted payback period modification methods, Net Present Value (NPV), and Internal Rate of Return (IRR).





REFERENCES

Afriyeni, Endang. 2012. Keputusan Investasi Jangka Panjang: Capital Budgeting. Politeknik Negeri Padang. Padang

Hery (2017), Teori Akuntansi Pendekatan Konsep dan Analisis, Jakarta : PT Grasindo.

Kamaludin & Rini Indriani (2012), Manajemen Keuangan "Konsep Dasar dan Penerapannya", Edisi Revisi, Bandung: CV. Mandar Maju.