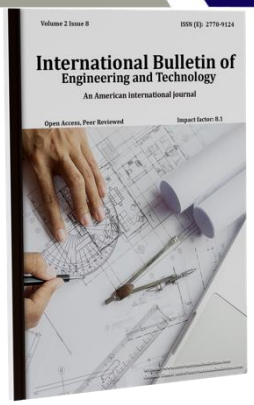

METHODS OF CREATING THE CAPITAL BUDGETING OF ENTERPRISES (FOR THE EXAMPLE OF EUROPEAN COUNTRIES)

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Abstract: This article discusses the methods of capital budgeting in the assessment of investment projects of enterprises operating in European countries, in particular Slovakia. Based on the scientific research of economists, analyzing the methods used by enterprises in capital budgeting, the specific features of each method were studied and the possibilities of using these methods in practice were revealed. For some companies operating in Slovakia, capital investment is important to create shareholder wealth. Today, it is very important to study the practices used in project evaluation. Internal rate of return (IRR) and net present value (NPV) have long been measures of corporate capital budgeting recognized by corporate management and finance theorists, respectively. Although corporate management prefers the relevance of income-based capital budgeting methods such as IRR, some financial theorists based on economic theory favor the NPV method.

Keywords: capital budgeting, internal rate of return (IRR), net present value (NPV), undiscounted payback period (PP), discounted cash flow (DCF), rate of return (ARR), return on investment (ROI).

Introduction

Capital budgeting is a planning process aimed at determining a firm's capitalization structure (debt, equity, and retained earnings) to make long-term investments such as purchasing new machinery, upgrading old equipment, building a new plant, developing new products, and research and development. Simply put, it is the process of deploying resources to fixed capital or investments. Its main goal is to increase the value of the company. Typically, when firms are faced with capital budgeting, managers are faced with a decision about project profitability.

The decision on capital budgeting consists of 3 parts: capital, budgeting and decision. While capital refers to the funds or resources of an enterprise that are available for investment, budgeting is a numerical, numerically calculated aspect of planning. Decision-making means coming to a conclusion on whether to implement the project or not. Thus, capital budgeting is a process in which various investment projects are evaluated based on analysis and the best alternative is selected. In other words, capital budgeting is a long-term investment decision-making process related to the implementation of capital expenditures, which includes the process of investment evaluation, planning and financing of a large investment project of an enterprise.

Interest in the practice of capital budgeting by enterprises appeared for the first time in the early 1960s. From the data of the 60s and 70s, we can see that there are clear managerial trends in the step-by-step application of theoretically effective models based on discounted cash flows. Sources that the development of these theories took place in the USA are given in

the works of most economists. The theory of capital budgeting of the enterprise is a theory aimed at determining and evaluating the decision-making process on long-term investments related to the implementation of capital expenditures and their expected results. The theory of capital budgeting of the enterprise is reflected not only in developed countries, but also in the works of economists of developing countries. However, there are very few studies on capital budgeting of enterprises today.

Literature analysis

According to foreign economists Baker H. K., Dutta S. and Saadi S., decision-making on corporate innovation in the capital budgeting of an enterprise depends on the influence of many factors. These include product price and cost, operating profitability, risk and efficiency of innovative projects, cost of capital for innovative investments, demand function, market and government decisions[1]. Also, according to the research of another group of economists Al-Mutairi A., Naser K., Saeid M. and McMillan D., the net present value and the rate of return are the most used methods of capital budgeting. determined by the scientific and professional capabilities of employees. In addition, factors such as the uncertainty of financial results and the lack of information necessary for the use of methods may prevent the use of capital budgeting methods. According to the results of the analysis, it was found that non-financial factors such as strategic planning, corporate image, employees' capabilities, knowledge and skills, and environmental protection should be taken into account when drawing up the capital budget of the enterprise[2].

According to the results of a survey conducted by economist Bennouna K., Meredith G., Marchant T. on capital budgeting decision-making among companies operating in Canada, the complex technique of capital budgeting methods, even 17% of large firms did not use discounted cash flow (DCF) ratio analysis. Most of the companies expressed their preference for using net present value (NPV) and internal rate of return (IRR). In general, 3 out of ten companies did not apply the discounted cash flow (DCF) correctly, and only 8 percent achieved the correct result.

The analysis showed that there are theoretical and practical gaps between the detailed elements of discounted cash flow (DCF) and real values in capital budgeting and decision-making[3]. According to another economist Brijlal P., Quesada L., there are several methods used in the preparation of the capital budget of the enterprise and the evaluation of projects. In particular, payback period, accounting rate of return, current value and internal rate of return, and profitability index. According to recent studies, financial managers around the world prefer non-discounted payback period (PP) models for capital budgeting using internal rate of return (IRR) or net present value (NPV). reported. This study focuses on small, medium and large businesses and examines several capital budgeting processes in South African businesses. The results showed that the most widely used method in various sectors of the economy is the net present value (NPV) followed by the undiscounted payback period (PP).

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64 percent of the surveyed enterprises used one method and 32 percent used 2-3 different methods for creating a capital budget and evaluating it[4].

In our opinion, it is important to study and evaluate the influence of all factors when drawing up the capital budget of the enterprise. The reason is that it plays an important role in increasing the financial status and value of the enterprise. In this process, it is important that the data used in the capital budget and the obtained results are reliable and accurate. In addition, the team organizing and managing this process requires sufficient knowledge and skills, as well as the skills to use modern computing methods.

Methodology

Capital budgeting is one of the most important areas of financial management. There are several methods commonly used to evaluate capital budgeting projects in European countries, including the Slovak Republic, namely payback period, accounting rate of return, present value and internal rate of return, and profit index. In recent years, studies show that discounted cash flow (DCF), net present value (NPV), internal rate of return (IRR), payback period (PBP), rate of return (ARR), capital investment evaluation methods such as return on investment (ROI), real option valuation (ROV) are widely used. Most of the managers and financial managers of joint-stock companies operating in Slovakia consider the internal rate of return (IRR) or non-discounted payment (PP) model to be more effective by scholars.

Analysis and discussion of results

We all know that in business activities, companies have limited financial resources and it is impossible to implement every business project in the company. It is by using capital budgeting techniques to compare the expected cash flows (ie, cash inflows and outflows, including initial investment and maintenance costs) for each project that capital budgeting maximizes profitability and shareholder value. It helps to determine which project will be the most effective way to spend these resources. Choosing the right method for implementing capital budgeting is important in making the most rational decisions in business activity. Below we will consider several methods of capital budgeting used in European countries.

The discounted cash flow method (DCF) involves discounting the cash flows to the present, adjusting their value to present value, while taking into account such things as opportunity cost and risk premium. In other words, it determines their current value. Present value is a strange concept. We know that the money we have has value, but what about the money we will have in the future?

As a result of the time value of money principle, future money is worth less to us than present money. This is due to factors such as inflation and the loss of opportunity to invest that money elsewhere

Think about it: when it comes to investing, we understand that the money we have now has a future value. For example, if we put $1,000 into a savings account with an annual rate of 10%, we will have $1,610 in five years. Therefore, we must work backwards to determine the present value of future cash flows. From the previous example, $1,610 in the future is worth only $1,000 right now. This is because we need to invest $1,000 to get an additional $610. Similarly, if the future cash flow on the project If it's $1,000,000, we need to figure out how much this amount is worth to us right now. We can do this using a method known as the

[4] Brijlal, P., & Quesada, L. (2009). The use of capital budgeting techniques in businesses: a perspective from the Western Cape. Journal of Applied Business Research, 25(4), 37-46.

discount rate. Two commonly used discount rates are **the weighted average cost of capital (WACC)** and **the risk-free rate.**

WACC is the average rate of return required by a company to finance its operations and investments. It takes into account the cost of equity and debt and represents the minimum level of revenue a project must generate to create value for the company. The risk-free rate refers to the rate of return on an investment with (theoretically) zero risk. After discounting future cash flows with an appropriate discount rate, we get their present value. There are two types of discounted cash flow methods in practice today: the net present value (NPV) method and the internal rate of return (IRR) method.

The net present value (NPV) method is equal to the sum of the present values of all cash inflows and outflows associated with the project. To determine the NPV, adding the present value of all future cash flows, then subtracting the initial investment and other costs (such as maintenance costs) from this number. Then we compare the cost of the project with how much cash it is expected to generate. Net present value analysis can involve complex calculations. Determining an appropriate discount rate can sometimes be difficult because it involves many factors, such as the cost of capital, the project's risk profile, and the opportunity cost of investing in alternative projects. That said, getting the discount rate right is critical. If this is incorrect, the NPV will be incorrect and may lead to incorrect investment decisions. If a company follows the NPV rule, it means that they are only concerned with whether the project's NPV is positive or negative. If positive, they start the project. If it is negative, they will ignore it.

The internal rate of return (IRR) is the discount rate at which the NPV becomes zero. In other words, what level of return do you need to break even on the project? IRR can be used as an internal benchmark for companies. This helps to set the minimum required income level, also known as the threshold level. Projects must meet or exceed this benchmark to be considered financially viable. Using IRR, companies can align their investment decisions with their goals and risk tolerance. One of the disadvantages of IRR is that it assumes that the project's cash flows will be reinvested at the same IRR, which is not always realistic.

In addition, IRR does not compare the size of projects. Two projects with different initial investments may have different IRRs, but this does not give us anything. When comparing projects of different sizes, it is better to use NPV or profitability index instead.

The return of investment (ROI) is a straightforward approach to capital budgeting. This method focuses on determining how long it will take for the project to pay off the initial investment (or, in other words, pay for itself). This is usually easy to determine based on estimated cash flows. For example, if the investment costs $150,000 and you expect to make $30,000 a year, it will take five years to recoup your investment. However, the return of investment has some significant disadvantages compared to discounted cash flow analysis. First, it ignores the time value of money. Using this approach, money received over three years will not have the same value as money received tomorrow. Another disadvantage of the return of investment is that it does not provide a measure of the overall profitability of the project. This is because it only depends on how long it takes for the project itself. Any cash flows that occur after the initial investment is covered are ignored. It also doesn't measure potential bursts of profitability at the end of the project, such as salvage value. Thus, if a company relies solely on the payback period method, it may choose a project that pays for itself faster than other options, but adds less value to the company in the long run. The return

of investment is a good option for companies with low liquidity. When comparing options, they'll probably want to go with the project with the fastest return, so they can stretch their cash reserves and eventually move on to bigger, more expensive projects. In general, the ROI does a good job of providing a snapshot of a project's liquidity. However, if your only option is to pursue quick payback projects, other capital budgeting techniques can improve the credibility of this picture.

The accounting rate of return (ARR) compares the present value of a project's cash inflows with its cash outflows. In other words, the profitability index shows the value created per unit of investment. Generally, managers want the profitability index to be greater than 1 because it indicates profitability. For example, if it is 1.5, then each dollar of currency generates 1.5 units of present value. If the number is only 1, then you break the tie. If it is not higher than 1, the project will not be profitable and not worth doing. A profitability index is a useful way to compare several project options. However, one major drawback is that it ignores the scale of the project. Just because one project is more profitable than another doesn't mean it's a good idea to continue. For example, it may have a very high initial cost - this company cannot afford it.

Conclusion.

In conclusion, it can be said that there are several methods of capital budgeting (assessing investment projects) in the enterprises of the above European countries, especially in the Slovak Republic. The analysis shows that, according to long-term research and interviews and surveys with company owners, there are mutually exclusive and complementary situations in which the use of one or another of the capital budgeting methods gives better results. Therefore, enterprises operating in the Slovak Republic are using all methods in capital budgeting and making management decisions based on the type of investment project that can be implemented, its value, the amount of resources available in the enterprise, the field of project implementation, and the evaluation of the investment project. However, we can see from the above analysis that each method has its advantages and disadvantages.

Based on the studies, it can be said that for some enterprises operating in Slovakia, capital investments are important for creating shareholder wealth. Today, it is very important to study the practices used in project evaluation. Internal rate of return (IRR) and net present value (NPV) have long been measures of corporate capital budgeting recognized by corporate management and finance theorists, respectively. Although corporate management prefers the relevance of income-based capital budgeting methods such as IRR, some financial theorists based on economic theory favor the NPV method.

Financial theorists have long identified the conditions under which certain methods are superior to others in the preparation of a company's capital budget. However, uncertainties in theoretical assumptions can significantly affect the consistency and superiority of the chosen capital budgeting method. Several foreign economists have conducted research in this direction, and there are different opinions on their approach. Each method of making capital budgeting decisions has its pros and cons and evaluates different metrics. What we should use to choose a capital investment depends on our specific situation. If a company is short on time and liquidity, for example, it may make sense to use the payback method rather than the discounted cash flow method to select a capital investment. However, then we lose the time

value of money. To get a more complete picture of the viability of the implementation of a particular project, it is better to combine different methods of capital budgeting analysis.

We can conclude from the above points that when evaluating the investment project facing the enterprise, we believe that it is necessary to choose the method of capital budgeting based on the nature of the project, the internal financial capabilities of the enterprise, and the development strategy of the enterprise in the coming years.

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