

# Analysis of Investment Decisions of SMEs

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**Abstract**—With the gradual improvement of China's market economic system and the rapid development of financial markets, the correct investment decision-making of enterprises has become the key to enterprise development. For SMEs, the investment evaluation method is to use the discounted cash flow method or the accounting profit method, which needs to be carefully analyzed and studied before the enterprise invests.

**Keywords**—Analysis; Investment decisions; SMEs

## I. INTRODUCTION

With the globalization of the economy and the accession to the WTO, China's SMEs have achieved great development. One of the more important tasks in the management of SMEs is the analysis of project investment decisions. The impact of an investment decision on SMEs is huge, and the wrong analysis of investment decisions will cause the company to be in trouble or even go bankrupt [1-2]. Therefore, it is very important to analyze the investment decisions of SME projects. SME project investment decisions must choose the appropriate method for the characteristics of their investment decisions.

## II. CHARACTERISTICS OF SME PROJECT INVESTMENT

Most of China's SMEs use inward investment methods, which bring development vitality to SMEs. There are four main aspects of China's SMEs' internal investment: First, the expansion of existing products to achieve economies of scale. The second is the trial production of new products. Due to the limited market share of SME products, the company's main products also have a certain life cycle. If the company can not produce new products that are marketable, it may be eliminated in the fierce market competition. The third is the renewal of machinery and equipment. If the company's production equipment is not advanced [3-4], it is difficult for the product to have a competitive advantage in the market. The fourth is the investment in human resources. The gap in the talents of SMEs is very large, and the investment in human resources is very necessary. Having management talents and technical talents is the foundation for the healthy development of SMEs.

The strength of SMEs is limited, and their development will inevitably be constrained by their own factors. The size of China's small and medium-sized enterprises is small, the funding gap is large, talents are scarce, family businesses account for a large proportion, and management is not perfect. At the same time, the financing ability of SMEs is relatively poor, the ability to resist risks is weak, the reputation and image of enterprises have not yet been established, and China has not formed

a sound system to support the development of SMEs. Banks will not lend funds to small and medium-sized enterprises on a large scale. Enterprises come to invest. SMEs can only rely on their own accumulation of funds to expand their investment. It is impossible to make strategic, long-term investment decisions with limited funds, and often use short-term investments to generate income. Secondly, SME project investment rarely focuses on the long-term strategy of the company, and the direct purpose is only to increase revenue. The investment decision-making schemes made by SMEs are based on the size of investment income [5]. The pursuit of short-term gains often makes the company ignore the investment in the development of corporate strategic space, and the company does not have a long-term development plan.

## III. COMPARISON OF CASH FLOW VIEW AND ACCOUNTING PROFIT VIEW IN SMES' INVESTMENT DECISION

There is a direct contradiction: on the one hand, the net cash flow is more useful than the accounting profit is more useful for business decision-making, and has become the basis of contemporary financial management and management accounting; on the other hand, the majority of small and medium enterprises operate in the minds of the people, there is no concept of cash flow. They pursue profit maximization. When making decisions on project investment, if they use mathematical methods for quantitative calculation and analysis, they mainly use financial accounting data.

In theory, net cash flow is more objective than investment accounting to reflect the return on investment, and when using discounted analysis techniques, the concept of cash flow has almost to be adopted. But in reality, SMEs are more accustomed to using accounting profits. The reason for this is that at least one reason can be attributed to the shortcomings of operators in modern management and financial management. The author believes that if the quality of SME operators can be further improved, they can master more modern financial management knowledge, then they can accept this concept. Propagating new ideas and theories to operators is certainly an effective way to resolve the contradiction between this theory and reality, but the author's deeper thinking is: in the investment decisions of SMEs, accounting profit is not the net cash flow. A good substitution variable? Or, in the view of SME decision makers, can the loss caused by not using net cash flow be compensated by the income generated by accounting profit? The author believes that this guess can find some practical basis:

Project investment Future cash net flow data must be obtained on the basis of sufficient data. This is difficult and costly for SME decision makers, but the accounting profit forecast

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only needs to be based on corporate book data. Coupled with personal experience, this is not only cost-effective, but also makes decision makers feel reliable.

The main difference between the net cash flow and the accounting profit is the depreciation expense in the investment project. The investment amount of the SME is often not large, and the depreciation expense for each year will not be much. The net cash flow and accounting profit are The difference in quantity is not large.

If cash discount analysis techniques are used, it is clear that net cash flow should be used. However, according to the author's survey of small and medium-sized enterprises, it is found that in reality, SMEs rarely use discount analysis technology, and the advantages and necessity of cash flow are not obvious.

Conclusion: Different from the huge and relatively frequent project investment decisions of large enterprises, SMEs do not necessarily have to adopt the concept of cash flow in their investment decisions. Under the following conditions, the application of accounting profit data will be a better choice: the enterprise has more complete and accurate accounting data; the investment amount of the project is not large; the non-discount analysis technology is adopted.

#### IV. ANALYSIS OF PROJECT INVESTMENT DECISION-MAKING METHODS

Net present value is the difference between the present value of a program's future cash inflows and the present value of future cash outflows. It is a way of considering the time value of money. If the net present value is positive, indicating that the project's return on investment is greater than the discount rate, the investment plan is feasible. Otherwise, the investment plan is not feasible. In the mutual exclusion of multiple schemes, the larger the net present value scheme should be preferred.

The average rate of return is the average annual rate of return on investment in the life cycle of the project, also known as the average rate of return on investment. With an average rate of return, the average rate of return required by an enterprise should be determined. When making project investment decisions, only the plan that exceeds the required average rate of return can be selected for the investment of a single project. In the mutually exclusive choice of multiple options, the plan with the highest average rate of return should be selected. .

The internal rate of return is the discount rate at which the net present value of an investment project equals zero, or the discount rate at which the present value of future cash inflows equals the present value of future cash outflows. In a decision with only one alternative, if the internal rate of return is greater than or equal to the cost of capital or the necessary rate of return, it can be used. Otherwise, you should give up. In the choice of decision making for several alternatives, the rate of return should be chosen to exceed the cost of capital or the most necessary rate of return.

The profit index method, also known as the present value index method, is the ratio of the total present value of the future return of the investment project to the present value of the initial investment amount. When the profit index is greater than

1, the scheme is considered feasible; if less than 1, the scheme is not feasible. The plan with a large profit index is better than the one with a small profit index.

The payback period refers to the time required to recover the initial investment, usually in years. It represents the years required for investment, and the shorter the payback period, the better the program. The principle of project measurement using the payback period criteria is: If the investment payback period is less than the baseline payback period, the project can be accepted, and vice versa. In the practice analysis, it is generally considered that the investment recovery period is less than half of the project cycle, otherwise the project is considered not feasible. In the comparative analysis of mutually exclusive projects, the shortest solution in the payback period should be the optimal solution.

#### V. SELECTION OF INVESTMENT DECISION-MAKING METHODS FOR SME PROJECTS

The net present value method fully considers the time value of money, and the obtained figures are more realistic. It is a more scientific method of decision analysis. In practical applications, large companies generally use the net present value method, but it is not suitable for SMEs. First of all, the net present value method is too complicated, and the calculation is difficult. If the application is not good, the investment decision will be wrong. Secondly, the analysis of the net present value method is too costly, and it is difficult for SMEs to afford it. Third, the net present value method also needs to be applied by higher-quality financial personnel, and it is quite difficult for SME operators to understand. Finally, the measurement of net cash flow and the determination of the discount rate are difficult, and SMEs are difficult to measure.

The average rate of return method does not reflect the impact of the length of the investment period and the different investment methods on the project, which is not conducive to the comparative analysis of the various purposes of the SMEs. Due to its own shortcomings, companies rarely use it in practice. Although the internal rate of return method can dynamically reflect the actual income level of the enterprise, its calculation is very complicated, sometimes it has to be measured several times, and at the same time it may lead to the emergence of multiple internal rate of return methods, which lacks practical significance. The profit index method is too complicated to calculate, and the calculation caliber is also inconsistent. It cannot directly reflect the actual income level of SMEs, and SMEs do not need to calculate profit indicators. They are not suitable for SMEs.

The investment payback period method is simple and easy to understand, and the required data is relatively easy to obtain. This enables SME operators to effectively grasp and conduct decision analysis, which is quite operable. First of all, SMEs use inward investment methods, so that the relevant costs of investment, expenses and cash flow from investment are easier to obtain, which creates preconditions for the application of the payback period method. Secondly, SME investment has the characteristics of small amount and short time. Even if the investment payback period method does not fully consider the time value of money, the time value of money has little influence on the whole project investment. It can satisfy small and

medium enterprises. The need for investment decision analysis does not cause significant deviations. Finally, SMEs lack funds, limited strength, and weak anti-risk ability. The application of the investment recovery period method can directly reflect the return period of the original investment, which helps SME operators to try to recover the original investment, thereby reducing investment risks. The use of the payback period method can better reflect the income of decision-making, meet the needs of SMEs, achieve the expected goals, and reduce the cost of analysis.

#### VI. APPLICATION OF INVESTMENT PAYBACK PERIOD METHOD IN INVESTMENT DECISION-MAKING OF SME PROJECTS

Through the above analysis, it can be shown that SMEs use the investment payback period method to make investment decisions is the most effective. The correct calculation of the payback period and the scientific use of the payback period calculation method by SMEs are of great significance to avoid the blindness of investment and reduce the risk of investment decisions. But how SMEs use the payback period method and what steps to take are crucial. The general steps for using the payback period method to make project investment decisions are as follows: First, design an investment plan based on the actual situation of the company or project and the market prospects. The second is to forecast the cash flow of enterprises or projects under different investment schemes, and calculate the investment recovery period of each scheme. The third is to determine the expected payback period of the investment, as the minimum period for the enterprise or project to recover the original investment. The fourth is to make investment decisions, that is, to choose the scheme with the shortest payback period in the plan that achieves the expected payback period.

#### VII. THE APPLICATION OF NON-CASH FLOW DISCOUNTING TECHNOLOGY IN THE INVESTMENT DECISION OF SMES

The two most commonly used methods in non-cash flow discounting technology are the payback period method and the accounting yield method.

The payback period method is easy to understand, roughly reflects the speed of investment recovery, and the calculation is simple, but this method has two shortcomings: First, it ignores the benefits after the payback period, and is likely to cause serious retreat. Because many of the larger investment projects that are critical to the long-term survival of a business do not generate revenue in the first few years, in fact, the entire purpose of capital investment is to create profits, not just to preserve capital. Second, because decision makers use the payback period as a parameter, they often lead companies to prioritize projects that are quick and profitable, leading to abandoning long-term success. However, whether a scheme is desirable is relative, and it is suitable for different situations and different projects. SMEs are limited by various factors such as their own capabilities, investment projects are often small and short-term, which makes the impact of the time value of money on it. Enterprises must of course be profitable, but if they are lost, what are the profits? In this case, it is unlikely that SMEs will make wrong decisions by using the payback method; but for projects with large investment and long cycle, it is not appropriate to

use this indicator only, especially in the upgrading stage of SMEs, the quick success and often benefit the company to the opposite direction of development.

The accounting rate of return method is based on the accounting rate of return method as a parameter for evaluating investment. Accounting yield = annual average net income / original investment amount. It uses the data on the accounting statements as well as the general accounting income and cost concepts when calculating. This method requires the company to determine in advance the necessary accounting rate of return to be achieved. When making a decision, a scheme that exceeds the necessary accounting rate of return can be selected. Among the multiple exclusion schemes, the highest accounting income is selected. The objection to the accounting rate of return law is that the cash flow concept is not adopted, and the second is that the time value of the currency is not considered. I think it is suitable for SMEs to evaluate project investment.

#### VIII. THE APPLICATION OF FULL-CURRENT DISCOUNTING TECHNOLOGY IN THE INVESTMENT DECISION-MAKING OF SMALL AND MEDIUM-SIZED ENTERPRISES

Although in most cases SME investment decisions tend to use non-discounting analysis methods, this does not undermine the scientificity and rationality of the discounting method. The more developed a small and medium-sized enterprise is, the more it seeks to upgrade and grow, the closer the scale, scope and frequency of long-term investment is to large enterprises. At this time, the concept of cash flow and the corresponding discount analysis technology should be used as much as possible to assist decision-making.

The reason why SMEs' investment decisions basically do not use cash flow discounting technology is mainly because the analysis cost of discounted technology is relatively high (education cost, employment cost), such as the analysis of the professional education level, analysis and forecasting methods, means, etc. High requirements. From a certain perspective, the cost of such analysis is fixed, so it is uneconomical to use discounted technology in small SMEs with small investment. But I think that when the following two basic conditions are met, the discount analysis technique that considers the time value of money will be more commonly used in SMEs:

Operators are generally well educated and professionally trained. This aspect enables operators to understand and be willing to accept modern investment decision-making methods, and on the other hand to reduce the cost of using discounted analysis techniques (learning costs).

The external environment of SMEs has been greatly improved. Firstly, the financing conditions of enterprises have improved. This makes it possible for SMEs to make large-scale long-term investments. Secondly, the market is gradually maturing, and the uncertainty of SMEs' operations. Reduce it to make a more accurate estimate of future cash flows, especially medium and long-term cash flows.

The most commonly used cash flow discount analysis techniques are the net present value method, the present value index method and the internal rate of return method. According to the net present value method, if the net present value is equal to

zero, it means that the return rate of the investment project is not lower than the predetermined discount rate, and the plan is feasible; if the net present value is less than zero, the return rate of the investment project is lower than The planned indicator, the plan is not feasible. The main disadvantage of the net present value method is that it cannot be evaluated between several independent schemes, but this shortcoming is almost non-existent in the view of SMEs. Because SMEs rarely invest in several independent projects at the same time, mainly to evaluate the mutual exclusion scheme. In the mutual exclusion scheme, the project with high net present value is of course the best choice. Therefore, in the investment decision-making of small and medium-sized enterprises, in general, the advantages of the net present value method can be fully exerted and its shortcomings just fail to appear. The present value index method is proposed for the shortcomings of the net present value method, which can rank the investment efficiency of independent programs, but this need is not common in SMEs. The internal rate of return method has the same advantages as the present value index method, and it can also roughly indicate the actual rate of return of the investment project. The disadvantage is that the calculation is complicated.

#### IX. CONCLUSION

At this stage, China's small and medium-sized enterprises use the investment payback period method to analyze the project investment decisions, which is in line with the company's own situation. It not only meets the needs of SMEs for decision analysis, but also greatly reduces the cost of analysis, but also has strong operability.

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