THE INFLUENCE OF THE NET PROFIT OVER THE INVESTMENT DECISION MAKING

Mihaela GÂDOIU[1], Mariana BĂNUŢĂ[2]

[1] Faculty of Economics and Law, University of Pitesti, Romania
mihaela_gadoiu@yahoo.com
[2] Faculty of Economics and Law, University of Pitesti, Romania
mari.banuta@yahoo.com

***Abstract**: This article aims at analysing how the investment decision is influenced by the final result of the activity of an entity after paying the profit tax. Starting from the need to make investments in order to ensure the economic efficiency and subsequently the economic growth, we sought to capture both the advantages and the disadvantages of the various versions that must be considered for the selection of the investment project. From the perspective of the presentation of this topic, we have analysed, in addition to the aspects related to the notion of investment, the investment typology, the decision to invest in a certain environment, and a number of economic and financial indicators used in order to make an investment decision.*

Keywords*:* Investment, Economic efficiency, Certain environment, Investment decision, Cash-flow, Profit net.

JEL Classification Codes: G11, G12.

1. INTRODUCTION

For the approval of an investment project, economic entities can use various versions, each of these versions having its own advantages and disadvantages. In this respect, it is necessary to choose the version based on which the investment will be made based on scientific criteria and calculations, able to provide a clear image concerning the option with the biggest advantages. Otherwise, the implementation of the investment will prove to be uninspired and may generate significant financial loss following which entities might even go bankrupt.

In the preparation of this topic, the research method we used was based on the theoretical substantiation of the notions specific to the assessment of investment projects, according to the opinions expressed in the specialized literature. For the preparation of this paper we used, as documentary material, the financial information provided by accounting, with the purpose of assessing the investment projects of an entity.

As a component of the economic information system, accounting supplies most of the information required to make investment decisions. We also resorted to the economic and financial analysis, which is one of the most frequently used tools in order to make investment decisions. In fact, investment decisions are made by managers only based on a previously prepared economic and financial diagnosis.

2. THE SUBSTANTIATION OF THE INVESTMENT DECISION

On the background of the market economy and of the competition, investments must be spent in such a way as to ensure **maximum efficiency**, i.e. a level of effects per unit of effort as high as possible. Everything that is not spent directly, and is saved instead, is the support of investments. In their turn, the latter are the support of economic growth and therefore, of the economic and social development.

The economic efficiency of investments has a number of specific features (Bondoc and Burcea, 2011) such as: depends on the joint action of all production factors and process phases, and is part of the overall productive activity; The economic efficiency of investments also defines its content by comparing various expected effects to the expenditure needed to obtain them. In the period preceding the execution of the objective and its functioning, calculations are made that influence the level of economic efficiency, more specifically, they are determined in advance based on forecasts; Due to the gap between the moment when the resources are spent and the moment when the economic effects are obtained, there is a close correlation between the effort-effect ratio and the time factor; the economic efficiency of investment is expressed in the process of its implementation on absolute form, but it is also calculated in relative form in order to make comparisons between the project versions; as a result of the interdependence between the economic processes, the economic efficiency should be based on an approach as systematic as possible.

An investment project is deemed truly efficient when it meets the economic efficiency criteria.

The criterion of combining macroeconomic and microeconomic optimum plays a very important and complex role, because in a competitive economy that is based on a higher or lower level of economic liberalism, the effort-effect ratio takes into account the individual interests of an economic agent. In order for the economic agent to be viable, it must take into account the other categories of interests, while obtaining its own economic efficiency. An important criterion in the assessment of the economic efficiency is **the criterion of correlating the economic requirements with extra-economic requirements**, so that any investment project is designed in such a way as to obtain, in addition to an acceptable economic ratio, other kind of effects, such as social, political and ecologic ones.

The criterion of the influence of the time factor is another extremely important assessment criterion in the investment issues, because both the implementation and the operation of an investment project are expanded over long periods of time. The increasingly rapid progress made in all fields requires a dynamic shortening of any investment decision, and therefore, if we are currently talking about a feed-back, now the idea of a mechanism of preventing certain influences (feed-before) is recognized. The effect-effort ratio is characterised by a certain relativeness, in relation to the correct comparison between efforts and effects, thus the comparison base is selected by means of the **correct data comparison criterion**.

For an investment project, when the economic efficiency is calculated the following factors are taken into account (Popa et al. , 2000) : the rational distribution and the optimal structuring of the investment efforts at macro and microeconomic level; the substantiation of the investment decisions by means of feasibility studies and based on a system of efficiency indicators (natural, general, specific to various branches); the optimal location and sizing concerning the future investment; taking into account the influence of time factor, risks, uncertainties related to investments; the use of modern, mathematical and economic methods of scheduling and monitoring the actual implementation; the optimal use or operation throughout its useful life; the

restructuring and substantiation of modernizations, the reconstruction and development of existent objectives, the influence of modern financial phenomena.

The participation to the investment process of the numerous economic agents (investors, consultants, banks, the state, the managers who lead the investment process and its subsequent operating during the lifetime of the achieved objective) leads to solving problems in a market economy.

In the specialized literature, the decision can be defined as a rational act of choosing strategic actions with the purpose of achieving objectives, taking into account the available resources and the required conditions. The objectives pursued by economic entities are the economic growth and the continuity of their activity. Economic entities can expand and grow by **investments**, building production assets and marketing**.** The implementation of investments requires significant financing needs, leading to the long-term affectation of the capital. For this reason, when investments are made, it is very important to take into account the financial risks that can have serious consequences at the level of an entity's capital structure. In this respect, the projects in question must be compared to the yield of capital investments. Given the financial risks, we can agree to the idea that an investment decision *"is a bet on the future of the company*[1]**.**

The investment decision involves choosing the most advantageous and relevant option in several variants. Quite often, however, this option takes place in an environment over which the decision-maker has limited control, or no control at all. Depending on the information available, the decision maker groups these environments into certainty, probability and uncertainty. The **certain** environment is represented by the state of decisional information in which the decision-maker knows the specific result for each and every version and knows where those versions lead. The environment is the most certain, because the information is certain and the manager has complete information on the consequences of each of the versions, which he/she will consider in the future. The **probabilistic** environment represents the state of knowledge where each decisional version leads to one of the specific results from a given multitude each result being able to occur with a probability known by the decision-maker. The **uncertain** environment is described by the state in which the decisional alternatives (the investment project) have results or not, from a given multitude, and if they have results, their probability of occurrence is unknown or impossible to asses.

The notion of investment defines a financial category, as complex, as it is controversial. The common point found in the authors who have expressed their opinion is that the investment is seen in concrete terms as an operation for modification and increase of the original patrimony, for example: machinery, installations, constructions, equipment, acquisitions, etc. Thinking of a more specialized side, the investment is far more than a money allocation, or a capital allocation saved in a lucrative activity.

The investment decision is a strategic decision, defined according to the capacity to invest as being the purchase of an asset or the construction of an asset in order to obtain larger cash flows in the future.

Thus, at **macroeconomic level**, the investment corresponds to that part of the gross domestic product (GDP), dedicated to the creation of production capitals. The creation of production capitals or the gross fixed capital formation is represented by the value of the durable goods, with a lifetime of at least one year, acquired or built by the resident productive units, with the purpose of being used in the production and marketing period. According to the economic, financial or accounting side, at **microeconomic level** we find several concepts that we can attribute to the notion of investment (Sichigea et al., 2015).

From the economic point of view, the investment is the creation of capital over a longer period of time, i.e., sustainably, and therefore the accumulation of physical, production and marketing assets. From a financial point of view, the investment is the decision to employ a current and certain amount of money, which is invested in favour of a larger cash-flow. In other words, we are investing part of the capital in the hope of getting more profit.

From the accounting point of view, the investment is assimilated to the notion of intangible, tangible and financial assets. Thus, the purchase of equipment, investment titles or licenses can be viewed as investments. In other words, the investment designates the allocation of treasury available to acquire a fixed asset that will lead to future financial flows. This notion of investment raises a double interest. On the one hand, it allows for overlapping an accounting vision and a legal vision on the investment because only the patrimonial items are retained;

On the other hand, such an approach can be easily applied especially when the balance sheet is analysed, because it has an incontestable objective nature, attested by accounting proof. Nevertheless, this notion of investment is restructure because it does not allow for taking into account the vestments that do not impact the company asset or do not lend themselves to an explicit monetary valuation. This patrimonial investment vision can be reproached that it does not take into account all the expenses that that increase the future potential of the entity because they fail to increase the value of the assets. This exclusion is not justified, because recent studies estimate that the patrimonial investment share is approximately 40% in the company's overall investment effort and thus underline the determinant role, of 60%, of the "immaterial" investments, which cannot be found in purchases of simple asset items.

From the point of view of the general policy of the company, two categories of investments are pursued, such as: **internal investments** and **external investments**. **Internal investments** are related to saving money and allocating capitals to purchase material goods (patents, equipment, licenses, constructions, machinery, supplementing stocks such as raw materials, goods, packages, etc.) in favour of improving and revamping production facilities, improving the quality of the products, services, and their distribution. Behind all these investments there are strategies for the improvement and specialization of the production or for the expansion on the outlet, at local, national or international level, of the products and services of the companies. We should highlight that, in order to implement this strategy and to cope with the competition, the entity must keep modernizing its production technologies and diversify its distribution channels. For this purpose, the company must always have a budget available and come with an added value compared to its competitors. **The external investments** are capitals coming from outside, targeting capital investments for the increase of the financial participation to the formation of other capitals. The investment can be defined as a permanent budget expenditure fund, with the purpose of creating new fixed assets, meant to improve, develop, maintain, or modernize its production or services.

The staff development expenses, the staff training expenses, administrative expenses, or expensed contributing to the company growth can also be considered investments.

3. THE INVESTMENT DECISION IN A CERTAIN ENVIRONMENT

As mentioned above, there are three types of environments/situations when we substantiate the investment decision. One of them is the certain environment. When we talk about the certain environment we are talking about something certain. The specialized literature is increasingly mentioning that the certain environment is a purely theoretical notion that does not exist in reality. There are cases where the manager has all the complete information in the sense that when he/she decides on a project, he/she knows what the approach of such decision will be,

because at that moment he/she knows all the factors that will influence it. In such a certain environment there are no unknown variables, the course of the investment decision is clearly known

In an economic entity, the choice of an investment project can only be called into question when there is capital available or when the updated cash flows exceed the cost of the investment.

In the specialized literature, **cash-flows** are the difference between the collections and the current payments of an entity. When an investment decision is estimated in the near future, we should take into account certain principles:

- the investment must produce a series of cash-flows, at a certain time;
- there must be a perfect capital market;
- there is no risk or uncertainty;
- the investment project must be independent.

An entity, in order to have full performance, needs to make a positive cash-flow in addition to making profits. Profit is the first indispensable step in achieving performance, but it must be doubled by cash-flow

The efficacy if an investment project is assessed as profitable, if cash flows are correctly evaluated. Depending on the duration of the project, cash-flows can have different values, and therefore, depending on time periods, there are different types of cash-flows, such as cash-flow in the initial phase, cash-flow during the exploitation of investments, etc.

In the case of cash-flow in the initial phase the amount that must be invested is calculated, by taking into account the direct and indirect costs related to the investment project and also the fiscal effect on certain amounts obtained from disinvestment operations required by the project. For a given investment project, the invested cost consists of the following cash outflows:

- the price of goods such as purchased tangible assets;
- the difference between the collected amount and the asset net book value whose selling or collection is required for the implementation of the project;
- assembly, commissioning and transport expenses;
- the income the entity would have obtained if it had invested the capitals required for the project in another way, i.e. taking into account the opportunity cost;
- determining the increase in the production as a result of making the investments, i.e. the need for additional working capital (increasing receivables, stocks, goods);
- staff training costs, development costs.

In the evaluation of the **cash-flows in the period of the operation of the investments**, certain aspects should be considered, such as:

- amortization is a cost item, its amount is a cash inflow, due to the recovery through the product price;
- amortization allows for tax saving (T*A), where T is the profit tax rate and A is the amortization;
- the interest paid is not taken into account in the calculation of cash flows because it is used to calculate the discount rate;

For the calculation of the net cash flow corresponding to the operation activity, the following items will be taken into account:

1. The Gross Operating Surplus (EBE) is an intermediary management balance highlighting the gross accumulation made by the company from the operating activity. This indicator does not take into account the amortizations, the provisions, the financial incomes and expenses, and the

taxes, which made certain authors deem that the gross operating surplus reflects the company's self-financing capacity, on the one hand and well as its potential to remunerate those who have entrusted capitals to it (banks, shareholders, other economic agents, etc.) (Stancu, 2007). The gross operating surplus (or the gross operating deficit, as the case may be) is determined as a difference between the receivable operating income and the payable operating expenses. EBE is determined as follows:

EBE = Operating Monetary Income– Operating monetary expenses (1)

The category of operating incomes includes incomes resulting from the sale of goods and the provision of services, incomes generated from the sale (assignment) of asset items, incomes obtained from the enforcement of certain obligations of third parties to the company.
The monetary expenses include expenses that generate or will generate cash outflows. They include costs of raw materials and consumables, staff costs, taxes, extraordinary expenses, paying the profit tax, etc. (Gadoiu, 2015).

2. Amortization (A);

3. The Gross Operating Profit (PBE) is an intermediary management balance that reflects the net overall accumulation from the operating activity, providing a clear image of the company operating efficiency, without taking into account the company's funding policy and the profit tax (Helfert, 2001). The indicator is determined starting from the gross operating surplus, to which the calculated incomes corresponding to the operating activities are added and from which the calculated expenses corresponding to the operation are decreased, according to the following formula:

PBE=EBE+VC-CC (2)

VC = calculated incomes obtained from the operating activity (such as the incomes from the decrease of the operating provisions);
CC = calculated expenses (non-monetary) corresponding to the operation (Expenses with Valuation Adjustments for Operating Assets, operating provision costs, costs of assigned asset items, etc.).

Thus, while the gross operating surplus was obtained as a between the receivable operating income and the payable operating expenses, the operating result is calculated by taking into account *all* the incomes and expenses corresponding to the operating activity of the company (both the real, as well as the calculated ones).

4. The Profit Tax (IP);

For the calculation of the net cash flow corresponding to the operating activity it is necessary to know both the accounting approach (Table 1) and the financial approach (Table 2).

Table 1. Determining the net cash-flow corresponding to the operating activity from the accounting point of view

Source: Drafted by the authors

It. no.	Accounting calculation formulas	Key
1	PBE=EBE – A	PBE-the Gross Operating Profit; A-amortization; EBE-gross operating surplus;

2	PNE=PBE – IP	PNE-net operating profit; IP- profit tax; PBE-the Gross Operating Profit;
3	CFE=PNE+A	CFE- operating cash-flow;

Table 2. Determining the net cash-flow corresponding to the operating activity from the financial point of view

Source: Drafted by the authors

It. no.	**Financial calculation formulas**	**Key**
1	CFE= EBE (1-T) + A * IP	CFE- operating cash-flow; EBE-gross operating surplus; IP- profit tax; T-tax rate; A-amortization;

There are differences between the accounting and the financial calculation of the net cash flow when the amortization exceeds the gross operating surplus. In this case, the accounting calculation is real.

A first example concerning the calculation of the net cash flow corresponding to the operating activity, can be seen in an entity that has a turnover of 20,000 lei, with a gross rate of return of 10%. The profit tax is 16%. The annual amortization is 1,200 lei.

1. From the accounting point of view:
   CF = PNE + A
   PNE= PBE – IP
   Rv= PBE/CA*100
   where: CF = CASH - FLOW
   PNE = NET OPERATING PROFIT
   A= AMORTIZATION
   PBE= GROSS OPERATING PROFIT
   CA= TURNOVER
   Rv= rate of return on sales

   10= PBE /20,000*100
   PBE= 2,000 LEI
   Profit tax = 16%* 2,000 lei = 320 lei
   PNE= 2,000 - 320= 1,680 lei
   CFE= 1,680+1,200= 2,880 lei

2. From the financial point of view:
   CF=EBE*(1- T) + IP* A
   EBE=PBE+A
   EBE= 2,000+1,200=3.200 lei
   CF=3,200(1-16%)+16%*1,200= 2,880 lei

The investment project has a high efficacy, consequently the project will be accepted.

Another example of calculation of the net cash flow corresponding to the operating activity can be seen in an entity on which the following information is known: it purchased a new machine with a value of 90 000 lei, its transport commissioning costs were 10 000 lei, the lifetime of the machine is 10 years. The new machine replaces the old one with a nominal value of 60 000 lei. The turnover is 300 000 lei and the gross rate of return is 15%.

a) We calculate the amortization:
   A= The value of the machine/ lifetime = 90,000+10,000/10=10,000 lei

b) We calculate the net profit:
   Rb= PNE/CA*100
   PNE= 300,000*15%/100%= 45,000 lei

c) We calculate the cash-flow from the accounting point of view:
   CFE = PNE + A = 45 000 lei + 10 000 lei = 55 000 lei

d) We calculate the cash-flow from the financial point of view:
   PBE = PNE +IP = 45 000 lei + 16% PBE = 53 571. 42 lei
   CFE = (PBE+A) * (1 – IP) + A * IP = (53 571. 42 lei + 10 000 lei) (1 – 16%) + 10 000 * 0.16 = 55,000 lei.

The investment project will be accepted because it is expected to have a high efficacy.

1. CONCLUSIONS

When an increase in the net profit of an economic entity is pursued, the economic and financial consequences of the management's decisions are measured, as substantiated in investment activities. An important issue is the determination of the efficiency of the use of the resources that were available to the entity, of the extent to which the profitability of the entity fulfilled the shareholders' expectations and of the prudence exercised in making investment decisions. The maximization of the company value is directly influenced by its positive results in all these aspects. The decision-making process is based on the selection of the version deemed to be the best one if it achieves the objectives pursued by the entity.

This article approaches the investment decision-making process and highlights the importance of both approaches (the financial and the accounting one) of the net cash-flow.

An aspect that characterises the true value of the investment is the net cash flow available after covering the subsequent economic growth of the investment project. This refers to the increase in operating receivables and stocks, but can also refer to the net fixed asset increase. It is important for the entity to recover the amount invested in an investment project and to remunerate shareholders by means of dividends.

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