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# THE RELATION BETWEEN THE LONG-TERM INVESTMENTS AND THE RISK IN AGRO-INDUSTRIAL COMPLEX

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#### **Abstract**

Long-term investments are considered as the investments of capital in assets and activities from which the beneficial effects are expected in the future e.g. in a period which is longer than one year. Those are the investments in permanent (fixed) assets, permanent (lasting) turnover assets and long-term financial disposal.

The long period of investments, such as the independence of the events which can take place during a longer period of time makes these investments to be of a greater risk than the ones which are made in a shorter period of time, at which the time proximity of the events allows the effects of the investments to be seen with a greater certainty. The risk encloses the capital of the investments, but also the profit that is expected from their usage. It is as a rule proportional of the time for the tying of the capital. But, besides the duration of the investments, the degree of risk is under the influence of some other circumstances as well, such as the dynamics of the economic development, the changes in the market, the political situation in the country etc.

The incertitude and the risk are following the man and all of his activities. But, the urge to maintain the life forces the people to operate in risk conditions. That does not yet mean that every long-term investment in conditions of incertitude and risk is justified and acceptable. What is acceptable is only the investment for which there is a relatively lesser probability for that risk to manifest itself with some damaging consequences.

**Key words**: Long-term investment, Risk, Incertitude, Capital, Profit, Funds, Turnover, Assets.

### 1. Introduction

The existing incertitude about the long-term investments effects and the risk to save the funds of the invested capital should not represent an obstacle in economic activities fulfillment. The risk is always present, and the management of the capital in terms of incertitude and risk should not be seen as a tool for the restraint of the investment capital, but should be seen from the perspective of the existing capabilities to estimate the greatness of the risk and the probability for manifestation in damages and in undertaking some measures for the decreasing of those damages, if their creation could not be completely avoided. For that purpose, when decisions are made about the longterm investments, it is necessary to see the factors of the risk, to estimate their action and when appropriate measures will be undertaken, the probability for it to manifest in damages will be brought to a more acceptable measure.

#### 2. Types of long-term investments

A treatment of long-term investments has all of the investments from which effects are expected in the future, during a time longer than one year. From that type are not only the investments in physical objects-supplying of land, building objects and equipment, but also the investments in buying other enterprises, implementation of the economic-propagation campaign, realization of marketing products, but also the investments in researches and development.

Irrespective of the type of objects and activities which are being invested in, the long-term investments can be investments in agro-industrial complex in the permanent capacity (enterprise, a single department etc) which are changing the permanent conditions for working (the old, lasted equipment is being changed, the capacity is being expanded etc.) or investments in a new capacity or activity, which are helping in the cre-



ation of conditions for the inducing of a new activity. The distinction of the long-term investments according to these criteria has a great, practical meaning in the assessment of the effects from the long-term investments. The constant capacity is a result of the former investments. Those investments are followed by expenses which together with the operative expenses are a condition for the creation of output, realization and certain profits. With the additional investments in the already existing capacity new work conditions are being created, but there is also a change in the constant extents of the expenses and the profits. To realize the effects of the additional long-term investments, it is necessary from the extents of the expenses and profits which are being expected from the exploitation of the total investments (old and new) to subtract the ones that would be realized with the usage of the old, former investments. The assessment of the effects of the long-term investments in a new capacity is much simpler, because all of the profits (utilities) from the usage of the new capacity are a result of the new long-term investments [1].

## 2.1 Planning of the long-term investments in agro-industrial complex

The planning of the long-term investments, whether there are investments in permanent or in new capacities is a complex process which includes more activities. The more important ones between them are: [2]

- Perception of some alternative possibilities for investing
- Researching and planning of technical, technological, organizational solutions for the realization of the investment
- Market researching
- Researching of the possibilities for securing of a necessary capital for investing
- Researches and assessment on the economic justification of the investments

Besides a complaint and an intention for investing a capital, the investor usually also has an idea that he or she would like to realize with the investment. If there is not such an idea, there comes the need for gathering ideas for a possible investment. But in both of the cases, the ideas for investment should be preliminary examined, with a purpose to reject the ideas which will show themselves as unrealizable or do not fit in the concept for the development of the enterprise. The selection of ideas is necessary to reduce their number, but also to protect the investor from some unnecessary investments and expenditures that would be created in the further phases of their research.

The preliminary accepted idea for investment, de-

pending on its nature must be a subject of further researches. This type of researches usually demands more time and also repeating to laboratory and other experiments, until the expected results are achieved. Nevertheless, the researches do not stop only on the finding of solutions directly connected to the product, but also to series of other circumstances which are meaningful for the accomplishment of the manufacture, such as: the choice of the location, the type and the size of the building objects, the type and the size of the manufacturing equipment etc. The researches on the market are also necessary because of the estimate of the capacity size and the profitability.

The technical, technological and organizational solutions for the manufacturing of a certain product, complemented with certain normative and data about the prices of the certain elements of the investments, in agro-industrial complex give the possibility to assess the size of the necessary capital on the part of the constant assets, but also on the turnover assets. The gained size of the necessary capital often passes the possibilities of the investor for his assurance from proper resources, which causes the need to also engage capital from other resources. When there are some more important projects in question, the promoter of that project himself takes the care for assuring of capital for the financing of the project. For that purpose, the promoter makes efforts to gain partners whose participation in the project can either be with securing of financial means or with securing an area for building, objects for administration, for manufacture, warehouses or parts of the necessary equipment.

We should have in mind that the success in the assurance of the necessary capital depends mostly on the quality of the project and the capability of the promoter to affirm the idea for investing in the public and convince the same one about its justification. In case of, besides all of the efforts, a part of the need for capital is not covered, the promoter is left with the possibility to make a modification of the project, with the leaving of some phases or parts of the production, reducing of the capacity and the necessary equipment and in the expense of that, he will accept the services of some other enterprises.

From the previous researches we get the answers on questions about the possibilities for physical realization of the investment, the possibilities for sale of the products and services at definite prices, such as for the possibilities for assurance of the capital that is necessary for investment. But, for the investor it is very important to know whether the invested capital in the realization of the idea assures an appropriate profit - gain. For the realization of the economic justification of the investments, it is necessary to have some appropriate data about the incomes from the sale and the expenses of the work.



For the definite acceptance of an idea about investments, not only the fact that a realization of a gain is expected - is the one that is important, but also that gain should fulfill some normative which enable the project to be assessed as economically justified.

If we have in mind that the effects of the long-term investments in agro-industrial complex are realized during a longer period of time, when those investments are being assessed we should take the total effects of the project, about the whole economic life of the investment. To that effect, in the practice are used different criteria and methods for assessment of the efficiency of the long-term investments.

From an aspect of the financial planning of the longterm investments, the following activities have the greatest meaning: [3]

- Assessment of the expenditures and the expected usages (profits)
- Assessment of the investments, for each alternative of the investments separately
- Assessment of the value of each alternative of the investments, with the application of certain evaluation methods and
- Choosing the most favorable alternative for investment.

### 2.2 Assessment of the monetary flows of the investment

In the complete age of the investment we could differ two periods: period of investing - in which are created permanent conditions for the realization of a certain activity and a period of exploitation (economic life of the investment) - in which the previously created permanent conditions are used for the realization of a certain activity. In the period of the investment, the assets are invested in various forms, such as: the repurchasing of the land, building of objects, supply and installation of equipment etc.

During the exploitation, as a result of the work we have profits from the sale of the products and services. The basic rule of the long-term investments is with the profits that are realized in the period of the exploitation in order to cover the investments of the capital made during the investment, such as the operative expenditures that are created in the working during the period of exploitation. For that purpose, the size of the total investments from the period of the investing as capital expenditures are being arranged by the separate years in order to be covered with the profits, which are expected to be realized in the concerned year.

The capital expenditures of the investments which are arranged by the separate years from the period of ex-

ploitation are actually the amortization of investments. The amortization as an expenditure that comes from the capital investments can be extended to the whole period of exploitation or on just one part of it as long as the period of amortization of these investments is shorter than the period of exploitation of the investment.

With the subtraction of the total expenditures from the total profits by separate years, as long as the total profits are bigger than the total expenditures, we will get a positive difference - gross profit. After its taxation we get a net profit, as a clear financial result from the investment. But, the net profit has a relatively limited usage in the assessment of the economic effectiveness of the long-term investments. The modern methods of assessment of investment effectiveness are mainly used by the monetary flows from the investment which are gained when on the net profit from the separate years you add the monetary flows that are realized depending on the amortization and some other elements (for example, payment of capital from the long-term marketing).

To gain the complete basis for application of the separate methods for evaluation of the investment, this type of gained monetary flows is supplemented with monetary overflows (negative sizes) that are created with the investments in the period of investing, but also with the monetary flow that will come out of the eventually unredeemed part of the investment as long as the period of exploitation is shorter than the period of amortization of the investments. Treatment of this kind of rest from the investment (residual value) is mostly received by the turnover assets, which do not undergo amortization. With this rest, that gains treatments of monetary overflow, we receive enlargement of the monetary overflow in the last year of the exploitation period. After these supplements of the annual monetary flows, we receive the net - monetary flows after years, for the whole duration of the investment.

The calculation of the monetary flows in agro-industrial complex when we talk about investing in a real capacity has some certain singularities related to the investments in a new capacity. This comes out in a way that the total profits and expenditures in these types of investments are a result of the old, but also the new investments. To receive the effects of the new investments it is necessary to find the difference between the effects of the total investments and the ones that would be received on the basis of using the old investments.

Because of that, the usefulness of the new investments is not only seen in the expected enlargement of the profit from the sale, but also in the decreasing of expenses because of the enlargement of the process efficiency, because of the enlargement of profit from the



sale of the written off (amortization) equipment. When the amortization is being calculated, we only take the part of the amortization from the enlarged long-term investments and when it comes to the operative expenditures, only the enlarged part of these expenses.

# 2.3 Criteria for assessment of the financial effects from the long-term investments

For assessment of the financial effects from the longterm investments, we use the criteria of profitability and liquidity of the investments.

The profitability of the long-term investments is expressed through the rate of profitability that is gained when a net-financial effect that is expected from the usage of the investment (it can also be the net-profit enlarged with some other monetary flows such as: the amortization and the paid capital of the long-term marketing), is related to the invested capital (the value of the investment).

The liquidity of the long-term investments which shows the capability with the net-monetary flows, which enclose the capital of the used long-term trusts and the payments in favor of the capital holders (dividends, compensations for permanent investments) is being expressed through the monetary remain of the net-monetary flow that will be gained when from the net-monetary flow we subtract the payments of weight of the net-monetary flow.

To enable the usage of these criteria for the estimation of the financial effects from the long-term investments it is necessary to explain some dilemmas about the following three questions:

- Question of the contents of financial effects,
- Question of the capital price and
- Question of the length of the period for exploitation of investments.

When from the total profit we subtract the total expenditures, not including the rate of interest that has to be paid for the borrowed capital, we receive the trading profit. It is, according to that, the result from the usage of the total capital (personal and someone else's) because of which the rate of the trading profit shows the profitability of the total capital. While if we from the trading profit subtract the expenditures from the financing (the rate of the borrowed capital) and the income-tax, we will receive the net-profit. The rate of the net-gain that will be received related to the net-gain shows us the profitability of the personal capital. [4]

The usage of the gain as an element for calculation of the profitability of the long-term investments is very limited in modern conditions. Instead of this traditional period in the assessment of efficiency, we mostly use the net-monetary flows as a type of a financial result from the long-term investments. As we have seen that for several times, they also include some other monetary flows, like the amortization and the paid capital from the long-term marketing. The monetary flows according to the quoted bases are enlarging the total monetary assets that enlarge the possibility of the enterprise for investments. From an aspect of the enterprise which better invests for the amortization of the invested assets to be done in a shorter period of time, creates the conditions for the gathered assets of the amortization to be invested again (reinvested). [1]

The second question connected to the criteria for assessment of the effects from the long-term investments in agro-industrial complex is the question about the price of the capital sources. The price of the borrowed capital which can be seen in the height of the rate of interest from the used trusts is known for the beneficiary and the expenditures that come out of it can be easily calculated in the total expenditures from the exploitation of the investment. But, that size does not enclose the price of the personal capital. It is normally to presume that the beneficiary expects to realize a profit with a certain size on its invested capital, from which it is possible to settle the obligations for dividends and compensations for permanent investments, but also to secure a part of that profit for the enlargement of the capital.

The price of the personal capital is usually expressed in a rate of minimal profitability. For orientation in the justification of this rate, the following can be useful: the rate of profit of the personal investments of the investor can be realized through the investing in some alternative projects; the rate of the profit that is already being realized on the personal assets in the real projects; the average rate of cost-effectiveness of the personal capital which is realized in the branch in which the project belongs to in which there is also an investment; the rate of interest of the long-term deposits in the banks etc.

Because of the fact that the long-term investments are being financed by the personal and someone else's assets, there comes the need to see the average price of capital. It can be possibly done if we are familiar with the sizes of the personal capital and the capital of someone else, such as the rate of interest of the borrowed capital and the rate of profit of the personal capital. [5]

The third question is tied to the assessment of the effects from the long-term investment and it is about the length of the period of investment exploitation (the period of the economic life of the investment) in the agro-industrial complex. Related to this question we could say that here are no precise criteria for the definition of the length of the period of the economic life of the investment, but, yet, the practice uses some of



the indicators which orient the investment planners to define it. In that way, there is a rule according to which the economic life of the investment can not be longer than the time duration of the permanent conditions which are created with the investment. It means that it can not be longer than the physical life of the more significant parts of the equipment and the rest of the elements from the investment. [6]

If we talk about the usage of minerals, the economic life of the investment can not be longer than the time of the total impoverishment of the minerals. The second rule when we determine the period of economic life of the investment is that it should not be shorter than the time of returning of the borrowed capital, as long as the investment is financed with the participation of someone else's capital. According to that, the period of economic life of the investment should move in the frames provided with these two rules.

It is certainly possible to have a certain displacing of these borders, if the high profitability allows that, without disruption of the liquidity to make the payments, which fall on the burden of the net-monetary flows. Besides, because of the more dynamic technical progress, the investors tend to shorten the economic life of the investments, so that they can be in step with the progress.

If the valid regulations in the country do not limit the rates of amortization, the organizers practice to make a faster amortization of the real assets, ensuring in a way, greater monetary flow for reinvesting in a shorter time. We often use this for other reasons, above all, to enlarge the costs of the enterprise through the enlargement of the amortization, which will contribute to decreasing of the rate of pay, to taxation of the gain.

### 3. Conclusions

More of the conditions have an affect on the bringing of financial decisions in agro-industrial complex in terms of incertitude, between which the more meaningful are the size of the investments, the time of assets tying, the size of the expected profit of them to the degree of possibility to realize the expected profit. With the separate possibilities for investing, the quoted conditions can come in some different combinations. On principle, we could say that for the investor what is more acceptable are the investments on a shorter period, from which we expect a greater profit, with a greater degree of possibility that it will be realized, than the investments on a longer period, which promise a smaller profit and for which there is a lesser possibility that the same one will be realized. But, if between the alternative possibilities there are some meaningful differences in the size of the capital, then as a more favorable alternative we usually enforce the one

- from which a greater gain is expected, with a lesser probability that the same one will be realized, as long as the capital that should be invested is smaller, because in the smaller investments, the risk for capital is also smaller.
- Irrespective of the combinations of these three conditions, the acceptance of decisions for long-term investments is often also conditioned by the philosophy and character of the subjects which bring and submit their consequences. Some of the subjects are satisfied with a smaller gain if there is a greater certitude that it will be realized. On the contrary, others determine for a greater incertitude and risk. In normal conditions of working the realization of a greater profit is connected to the greater incertitude and the risk.

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