

THE CHOICE OF INVESTMENT LOCATION – THE DETERMINING FACTOR OF ITS YIELD

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Rezume

The main objective of a financial manager is to use the funds of the company within its managerial authority, so that at long-term the firm obtains the investments yield at least as high as that which could be achieved through alternative investments, with similar risks. The second important objective is to maximize the present value of investment resources to achieve the higher yield as possible, without existing the undue risk. For maximization of the earning capacity of the firm, the resources are allocated in such a way that the earning are allocated in such a way that the earning capacity is transformed into a high efficiency as possible for the company. For achieving these objectives the measurement methods are needed to evaluate the company performance. A basic measurement method is the return on investment (ROI), which describes the relationship between profit and investment.

The planning of a business regardless of the investment area must take into account the location of the investment project because of its importance to the future success of the company. In this context, the paper analyzes the main aspects concerning the natural environment and related geophysical conditions, the environmental impact of the project, socio-economic and governmental policies as well as the industrial infrastructure conditions, key issues in determining the efficiency of investment for a company with industrial production activity.

Key words: investment, natural environment, environmental impact, socio-economical policies, governmental policies, industrial infrastructure.

JEL Classification: M21, G11, L52

1. Introduction

The business planning must take into account ever since the incipient stages the location and emplacement of the investment project because of its importance for the future success of the company. Without a suitable location any business is condemned to failure even before of beginning of its effective activity.

The analysis of business or investment location is a dynamical process and not at all one static, because it is possible to say that it continues all the period of company life. Thus, the selected management strategy (both in the moment of starting a business and afterwards) will must correspond to the requirements of the location of the investment project. In other words, the initial choice of location can influence perpetually the business activity.

Choosing a location, the entrepreneur mustn't guide himself only according to cost or comfortableness, because this false initial economy can be transformed afterwards into the costs much bigger. For example an investment location can be chosen thanks to the existence of an available place or unoccupied building near the own residence, or a small rent. The fact that a location for investment is convenient or the rent is small wouldn't be the reasons for choosing of location. On the contrary, other factors must be considered in pursuance of a complete analysis of all potential locations.

2. The investments yield – importance, usage

For the most of businesses, perhaps no other aspect of decision - making isn't so important to its success than the use and evaluation of resources. The management is constantly faced with the variety of alternatives concerning the institutional resources and is responsible for the funds which were given to its care. The selection of the most profitable alternative, the recognition of availability of funds and necessary resources to finance the investment can be considered as major functions of the management during the budget allocation process.

The main objective of a financial manager is to use the funds of the company within its managerial authority, so that at long-term the firm obtains the investments yield at least as high as that which could be achieved through alternative investments, with similar risks. The second important objective is to maximize the present value of investment resources to achieve the higher yield as possible, without existing the undue risk. For maximization of the

earning capacity of the firm, the resources are allocated in such a way that the earning are allocated in such a way that the earning capacity is transformed into a high efficiency as possible for the company. For achieving these objectives the measurement methods are needed to evaluate the company performance. A basic measurement method is the return on investment (ROI), which describes the relationship between profit and investment.

It is assumed that the main objective of a business is to generate a satisfactory return for its owners. As we will discuss, it is necessary to reduce in a higher degree as possible the intuitive factors of decision-making in favor of a more systematic and mathematical approach. However, it is important to recognize that this concept of return on investments will never replace the rational business judgment, but it helps to raise some questions such as the validity of these factors on business judgement. This indicator is a financial management instrument that defines the problem, assess and weigh the possible alternatives of investments and brings in the center those qualitative factors affecting the decision and that who can't be expressed in quantitative terms.

The return on investment is important because it helps to maintain the firm growth by measuring the historical results and it contributes to the evaluation of short-term budgets and medium-term plans of the company. It is also important because this technique is acceptable for investors, business and financial communities, economists and many students in business theories. Of course, it is recognized by most countries, internally, as a budgetary and evaluation technique. Given this kind of recognition and that the ROI (return on investment) can provide a technique for assessing of alternatives of change in the relative attractiveness of a company in comparison with the concerned community, it is easy to understand why ROI is so important.

Nowadays, the complex business environment, technological, economic and submitted to the competitive pressures tend to complicate the adoption of management decisions. This management instrument represents for managership an easy way of evaluation and to accelerate the development of past performance and that future anticipated, in an attempt to increase the development growth and productivity. The following list highlights why ROI is recommended and shows how it can ameliorate this concept of decision-making process:

- Force planning. The management of the company must have a plan, indifferently if it is a matter of short or long term, in view of measurement of efficiency or settlement of objectives. This fact is realized during the process of drawing up of budgeting and the planning at the longer term;
- As a support for decision making. It translates some decisions from the area of intuition on the area of quantitative and support basis;
- In evaluating of investment opportunities. Here can be included not only initial capital investments, but also additional labor costs, the economic cycle of investment and its effect upon the profitability of company;
- It helps the management performance. This would include the responsibility performance and total performance of the company or predetermined objectives. It helps to eliminate the inequities that may occur between managers and executing units, caused by differences in size and composition of operations, ie, strong capital intensified operations as against distributive operations that may have reduced capital investment. In addition, the performance measurement can be used by managers to evaluate the use of assets, cash flow, capital, equipment or other skills and also for the internal control;
- As answer to the market. It measures the answer of management to the market changes concerning the prices and requirements as well the profitability and cost reduction.

To understand the ROI, it is necessary to analyse the term itself. Sometimes there is great confusion regarding the term ROI. The efficiency refers to the additional amount of money expected from an investment over or near the initial investment. This efficiency can be before or after taxation. An investment can be defined as engagement of economic resources, such as years, technology and equipment, labor, etc., based on the anticipation of an income in the form of revenue, estimated value, greater efficiency or cost savings. This gain is measured over a period of time. For that reason the investments efficiency measures the gain of economic resources over a period of time, usually in the form of rate.

Management involvement is required during the process of establishing the budget because the justification for any investment opportunity is directly related to the participation of people who have technical knowledge and expertise capacity to recognize the link between input data. This is also part of the training and managers skills development. Management should be aware that the development of profitable investment opportunities often start at lower managerial levels, with technical and non-technical staff. In addition, the management helps both in determining the areas of responsibility and authority level.

Taking into account that the list of uses and applications can be quite extensive, it is important to identify the major applications and to be noted that these applications and / or techniques can be used by a company in order to serve the best needs:

- External measurement. A technique used to compare the calculation of ROI with other companies and industries;
- Internal measurement. A technique for evaluation of internal segments of the company, reflected in increase of earnings by reducing of the costs and / or profit improvement;
- Improvement of assets utilization. Ways of improvement of utilization of money available funds, stocks, capital receivables and assets for greater profitability;

- Evaluation of capital expenses. The best known technique for providing the instruments with the view of efficient allocation of capital resources;
- Disinvestment. Used to reflect the impact of business disinvestments or of some segments for improvement of ROI;
- Profit objectives. By internal and external measurement can be determined the profit objectives of the company;
- Acquisitions. They measure the impact of acquisitions on company growth at short and long term;
- Management incentives. The technique of incentives approach based on measurement of efficiency ROI;
- Elimination or addition of production lines. The techniques that have pointed out the profitability or non-profitability which exist on the new production lines;
- Manufacturing or purchasing decisions. They measure the impact of ROI for manufacturing or purchasing of a product;
- Leasing or acquisitions decisions. Similar to the techniques of evaluation of capital expenses used in comparison of learning decisions with those concerning acquisition in view of acquirement of capital assets;
- Evaluation of human resources. With the help of this concept can be determined the efficiency of human resources;
- Stocks control. It measures the changes in stocks and earnings growth as a result of additional investments ;
- Prices. They guide pricing a product using the required rate of return.

Technique of investments efficiency in internal and external performance evaluation as an instrument for management decisions should be used with caution. As with all methods of evaluation can appear improper interpretation by measuring different comparative data, relying too heavily on a single measurement method. The instrument of return on investment is vital one, but certain precautions must be recognized in its use.

Too often managers make decisions by comparing the absolute links between data sets, without paying attention to the intelligible relation data components. This outlook error can lead to bad decisions if there are no further interpretation, until the understanding of results. Therefore, the first caution in terms of ROI is not to provide exclusively absolute numerical results in the calculation of ROI rates, indifferently if are compared products, departments, divisions, companies or industries. The nature of comparative products, product quality, the nature of sales, production costs and company structure are only a few aspects to be considered before arriving at any rational conclusion. The rule of consistency is perhaps one of the most important precautions that can be mentioned. We will continually refer to this rule, because it is the basis of the concept ROI: there must be consistency if we desire making the correct decisions. Since ROI measures the comparative data for a period of time, it is important to be consistent in the measurement of such data. Once chosen a method of comparison, the basic rules should remain the same. For example, if some comparisons are made using certain allocations, these allocations must be used continuously in future comparisons to obtain valid conclusions. If the basic rules change, both the calculations of past and the future ones must be changed accordingly to develop a correct trend of operations. This rule shall be valid for all comparisons of data and is the most important in measuring ROI. ROI represents the only tool to support in reaching these decisions and not the final solution.

The failure of using other helping methods for measuring performance can lead to a focus exaggerately on ROI as a management tool. The other rational methods should be used for assesment to support the conclusions obtained by ROI calculations, such as growth rates and other techniques and processes that are found in the aspects of business planning and budget allocation in the short and long term. It is important to properly allocate net sales, net profits and segment investment for performance evaluation. These segments can be divisions, product lines, departments, centers, etc. market segments. The question is whether if all data should be allocated or only the data for which a manager has responsibility and authority?

If we accept the rule of consistency, no matter if the allocation is made as long as there is consistency in measurement, as data, from one period to another. Final yield rate can be adjusted upward if the lower investments are allocated and adjusted downward if the higher investments are allocated to the segment. Therefore the best method should be adopted to measure only the data for which a manager responsible, according to the authority which is given to a manager. It is recommended that only the data can be identified as being verifiable by a manager to be used. Other data that could be allocated and are not under the authority of the manager, could lead to erroneous decisions and the involvement of an operational segment in decisions to the prejudice of the operation, what happens if the prices increase for reaching of ROI objectives. Other unallocated data can be used to complete the entire operation of the company in setting overall goals.

It is suggested to use the profit before taxation on controllable components and net profit in the entire company. As the taxes on individual segments are difficult to be calculated, only the net profit should be used for overall assesment. In addition, it is recommended that for short evaluation period (for example less than a year), the end period balances must be used as a basis for investments. For longer periods (eg a year or more) should be used the balances of the end of year as a basis for investments or a variation of the average of beginning and ending balances of the year, changing environments or any other variation. The conclusion will not change as long as there is consistency.

Let's remember that absolute rates are not so important as profit changes that occur from one period to another. This fact indicates the performance trend and will action as an indicator of performance both past and future.

Net sales and net profits should be collected for each period from 3 months for a quarter, six months for a semester, etc. It is not necessary an average of balances for net sales and net profits, because they are not balanced at any time as in case of balance, but are needed performance data for each period of operations and can be collected for any desired period.

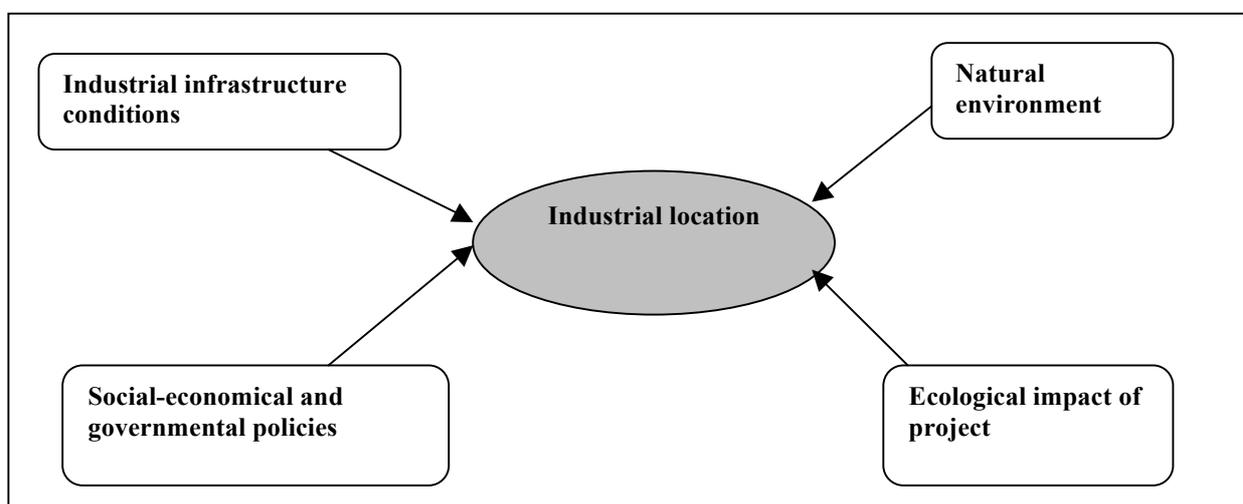
3. The choice of the location for enterprises with industrial production activity

Concerning the choice of the location for enterprises with industrial production activity several factors must be analyzed. Thus, the entrepreneur or the manager of investment project must identify the specific needs as for instance the specific requirements of ground, the type of factory which must be realized and the technical equipments.

The aspects referring to:

- natural environment, afferent geophysical conditions;
- ecological impact of project, the impact evaluation on environment;
- the social and economical politics, the governmental policies of stimulation and restriction;
- the industrial infrastructure conditions, must be analyzed.

Scheme 1. Factors which influence upon the choice of industrial location



a. Natural environment and geophysical conditions

The natural environment implicates the climate aspects as humidity, air conditions, waste evacuation, precipitations quantity, storm risk in case of agro-industrial projects, impact of the future investment project on flora and fauna of the region. The most of these aspects can be specified in terms of maximum, minimum or medium “value” for a day, a month or even for a bigger period.

The industrial project can be dependent on climatic conditions in an indirectly way. The factory construction, operation and administration can be less efficient if the work force isn't accustomed or it doesn't accustom to some climatic extreme conditions. This aspect is important for the personnel from the principal positions of management and administration.

The climatic conditions refer to: air temperature, humidity, wind, precipitations, extreme meteorological phenomena risks. The study must be concentrated on the identification and factors analysis of vital importance for the concerned project feasibility.

The geophysical conditions refer to: ground conditions, water level in the subsoil and the risk of production of earthquakes and floods.

b. Environment impact evaluation

The industrial project must be estimated also of the point of view of its impact on the environment (including here also the population, fauna and flora). The analysis must be integrative and the evaluation must be realized at the system level. Some overflows into the environment can be totally rejected and demand “the neutralization” and special treatments. Some projects can implicate a spontaneous risk of explosion and fire and technological risks. Also the gases releases, material waste, phonic pollution, residual water.

The contamination of ground water and water layer, of air ground will have a negative impact on the natural environment, plants, trees, animals, human being. Some emissions can affect the houses and metallic products because of the acid precipitations. All these negative effects must be eliminated or, at least, reduced by a better effectiveness and implementation of investment project.

The consequences bound with environment of investment project represented by the adverse effects upon the human activities have to be evaluated from the technical, financial and socio-economical points of view, because they are significant from the point of view of the implementation of investment decision. In this way the investment project can influence directly or indirectly upon the human habitat.

Choosing the location we must analyze in which measure the social community of area favors the localization of the industrial production company in this area. Some towns or social regions don't permit to carry on the activity in the area only to the companies which don't pollute the environment. But, there are also other cases – the mining areas intensely polluted and unfavorable – where the new companies with various production activities obtain a few facilities, especially of fiscal order, because they create the new places of employment.

We must avoid all the conflicts (especially those connected with the pollution) which can appear because of development of the industrial activity of the enterprise. The noxious effects of the pollution appear however inevitably in the companies with the production activities; however it matters how much can be reduced these negative effects of the pollution. Also, in this situation for a better, “management of the environment” there is proper legislation at level of each country. Also, the industrial factory must dispose of specific equipments of filtration for overflow / emission of as less as possible noxious products into the nature.

There are many factories with industrial production activity which are located in the peripheral areas of the big industrial cities just because of carbon dioxide eliminated into the atmosphere.

The impact evaluation on environment is a part of process of planning of the industrial investment project. The benefits and environment costs are externalities which affect the society. Some environment effects quantified of economical point of view are included beside the other economical factors in the evaluation cost-benefit of the investment project.

The effects of investment project on environment must correspond to the environment legislation in force: they don't depreciate the environment or the effects of residues which determine the depreciation at long term of the environment are reduced.

The objects of an evaluation of the investment project effects on the environment can be synthesized in following manner:

- the promotion of a comprehensive investigation of the environment consequences of the investment project and of its alternatives for the human community;
- the determination of the existence and of the marginal impact size on the environment of the proposed projects;
- the inclusion in the project of any regulation demands;
- the identification of the remedy measures of the adverse impact and of a possible improvement of this investment project impact on the environment;
- the identification of the critical problems which require a supplementary analysis;
- the evaluation of quantitative and qualitative point of view of the environment impact of the alternatives of investment project for the purpose of determining of the best alternative.

c. Methodologies of determination of the environment impact of investment project

The methods frequently met in the specialized literature for the determination of the investment project effects on the environment are the following:

- a) *the correct identification of the relevant environment effects*. It supposes the options identification of touching of the basis objects of the project, the determination of the implementation constraints of the investment project, the identification of the connections with the ecological, natural, social and economical resources and other development activities – a matrix can be realized with each of these identified effects. The requirements demands inclusively legal must be identified for the investment impact evaluation, the proposed investment project must be analyzed for the identification of resources demands and outputs;
- b) *the causes and the relation effects between the project and environment factors* imply the application of an inter-disciplinary evaluation;
- c) *the distribution in time of the investment project effects* (a certain evaluation of environment impact of the project in the construction and operational phases);
- d) *the evaluation in quantitative and qualitative terms of investment project*. The real costs with the resources and profits associated with environment impact must be established and incorporated the costs and benefits in the economical evaluation of the project.
- e) the mention of dynamical nature of *the environment impact* on the categories: primary, secondary, tertiary impact.

A model of analysis of the costs and benefits of the environment impact of the investment project can contain the following scenarios with corresponding financial and economical consequences:

Table 1. Example of analysis costs-benefits of environment impact

PROJECT	DISPOSITIONS	COST	BENEFIT
EXISTENT	REGULATED	ECONOMICAL AND FINANCIAL COST OF CARRYING OUT OF THE PROJECT	THE IMPROVEMENT OF THE EFFECTS ON ENVIRONMENT
IN STUDY	EXISTENT	FINANCIAL COST OF CARRYING OUT OF THE PROJECT	POSSIBLE IMPROVEMENTS OF THE ENVIRONMENT IMPLICATION
IN STUDY	IN CURRENT RECONSIDERATION	ECONOMICAL AND FINANCIAL COST OF CARRYING OUT OF THE PROJECT	NOT ONE BENEFIT FOR MAINTENANCE OF EXISTENT ENVIRONMENTAL SITUATION
IN STUDY	NOT REGULATED	DEGRADATION OF ENVIRONMENT	POSSIBLE IMPROVEMENT OF THE ENVIRONMENT IMPACT

d. Socio-economical and governmental policies

The regulations and restrictions imposed by the competent authorities at national level which elaborate and implement the environmental policies of the state can have important influences upon the performance of the projects with certain characteristics (peculiarities of the industry) can't be implemented that in certain regions.

In the industrial countries, the big industrial factories are compelled by the law to adopt measures for the reduction of pollution. Thus, the environment requirements are put on the first place for the realization of a durable development of the economy. In certain countries, zones with geographical specific character, there are special regulations with regard to the industrial activity.

Also, in some countries some stimuli and subsidies are offered for the development of the industrial activities in under-developed areas. The investments which afterwards produce goods, which will be exported, are exempted from duties and can benefit by different types of subsidies. Such facilities can be present in the feasibility stage, though these stimuli wouldn't serve as unique justification of the investment project location. On the other hand the localization of investment projects in certain regions can necessitate the external investments into the technical infrastructure and, why not, social, thanks to the legal regulations. And those who sponsor the diverse industrial investments can benefit of some facilities offered by the government.

The fiscal aspects referring to the industrial investments are various both at national level and also at local level. The duties paid by the corporations, excise duties, customs duties and other national and local taxes are established for various locations.

e. Elements of infrastructure of the industrial project

For investment project must be identified certain requirements of infrastructure. All this is necessary for having an understanding of purpose and technical and economical characteristics of the industrial investment project.

1. Elements of technical infrastructure

The study must analyze if the project requirements regarding the technical infrastructure implies a constraint of point of view of the location choice. The analysis must cover not only the demanded quantities but also the other characteristics, as for example the quality and physical aspects. The study must distinguish between the desired requirements and existent possibilities.

2. Transport

The importance of transport (railway, water, high-way, air) is determined, as a rule, by the weight, price and dimensions of the products. When the enterprise produces the goods which are sold at a price relatively small and the cost of transport on water, for example, is big, then this enterprise is obliged to sell its products only on the local market. Inversely, when the cost of water transport is smaller than the sale price of the merchandises (as, for example, for electronical products) at that time this factory will have a bigger sale market.

Another factor which must be considered in choosing the transport system is the velocity of realization of delivery of the products to customers. Thus, the relative importance of various transport systems depends on the kind of business. In addition the respective factory or plant must try to estimate both the current transport requirements and the future transport necessities.

3. Sale market for produced goods and utilized raw materials

The entrepreneur or project officer must choose adequately the location of the factory nearest possible by the utilized raw materials sources and by the future firm customers. If the firm uses for the raw materials production the transport of which will cost much until its location, then this location has to be the nearest possible by the raw materials sources. If it depend the principal local customers or it produces the perishable products, then the firm location must be near by the customers.

4. Work offer and salaries

Another element which must be taken into consideration in the localization of a factory is an offer of adequate work force. The small factories of electronical products, which require high skilled personnel, they accord more attention to the availability of this type of work force than other types of production centers. If the production firm uses unskilled work force, the development at long term of the firm is however disputable.

5. Facilities offered by social community to the firm

Not only the local community can have advantages as a result of development of production activity in a certain zone (advantages connected especially with the creation of new work places), but also the enterprise can benefit of certain facilities of the side of local community. These facilities can be a main factor of which we must take into account in the selection of the location of the producing firm. Such facilities of social community of zone of which can benefit directly or indirectly the factory, are: existent residences, education, entertainment zones, hospitals, abilities supplied by the firm zone.

A scoring model of analysis of the investment project location for the production enterprise is presented on the following table. The scoring obtained by a factor can be between 1 and 10, where 1 is the less satisfactory and 10 the most satisfactory.

Table 2. Scoring for location analysis

FACTORS	A. DEGREE OF FULFILMENT OF SPECIFIC FIRM REQUIREMENTS	B. IMPORTANCE OF EACH FACTOR FOR FIRM SUCCESS	SCORING = (A) * (B)
1. DEGREE OF ACCESSIBILITY OF THE SALES MARKET
2. QUANTITY AND QUALITY OF WORK FORCE
3. LEVEL OF SALARY IN THE COMMUNITY
4. THE ADEQUATE OFFER OF RAW MATERIALS
5. TAXATION OF BUSINESS
6. ATTITUDE OF THE COMMUNITY TOWARDS THE FIRM
7. PROPER CLIMATE OF BUSINESS
8. THE COMMUNITY FACILITIES (EXISTENT RESIDENCES, EDUCATION, HOSPITALS, ETC.)
9. THE TRANSPORT SYSTEM
10. ADEQUATE UTILITY
11. THE POTENTIAL OF LOCATION EXPANSION
12. EVALUATION OF EFFECTIVE CHOICE LOCATION IN RELATION WITH COMPETITORS
SCORING	-	-	...

As a conclusion at the thing which are presented above it is possible to estimate that the location choice, the choice of effective zone of implementation of investment project either it is a matter about the commercial, industrial, agricultural domains, or the other, the location must by attentively analyzed, because it is one of the key-points of the business success. Both the market and opportunities which it offers must be studied and the elaborate and apply the investment. Moreover the investment location analysis can continue during the whole life period of the investment.

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