ALTERNATIVE MODEL FOR DETERMINING THE STRUCTURE OF INVESTMENTS ACCORDING TO MARKET SITUATION - A CASE STUDY

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Abstract

The investment is one of the main vectors of growth economic performance to microeconomic and macroeconomic level. Their effectiveness is to determine the relationship between the economic effects they cause and the efforts required by this. At the same time, the investment opportunity is determined by their ability to be replaced external factors. The research methodology consisted in making a case study in a farm in the county of Vaslui. The results show that some investments in agriculture, although they can be considered effective, may be declared inopportune for the economic conditions.

Key words: investment opportunity, external factors, efficiency, agriculture

Strategy on investments resulting from the following factors: investment demand; Interest rate on home loans and the ratio of the rate of profitability; liability and risk taking by firms and financiers; the existence of aggregate supply fluids; Dynamic profits within existing investments and developments in the world economy (Adumitrăcesei I., 1997; Ungureanu G., 2009)

The efficiency of investments on its implications determines a drive companies, a growth and development of their volume of activity, promotion and use of modern technology efficient economic, energy and environmental, increase the supply of goods and services (Cocriş V. *et al*, 1995).

The main approach to economic efficiency implies the several phases: prioritization of investments, determining the volume of investment, establishment of investment financing sources; choosing the optimal investment (I. Stancu, 2004).

The calculations underlying the invetiţiilor, using indicators such as yield per shift; operating ratio probable; work productivity; direct cost savings per unit of product or work; the return on investment, etc. (Donosa D. *et al*, 1999; R. Voicu, 1999).

All these analyzes are based on determining the economic performance of investment at the microeconomic level determined based on their need technically to their effect on the use of other inputs.

On the other hand, economic circumstances in which they operate and economical analysis unit may significantly influence investment opportunities. An investment can be effective in terms of effects and economic efforts on the company's products but ineffective in relation to the possibilities offered by the economic environment (Barreto H., 2012; Manzoni E., 2011).

If the investment firm that brings higher costs to lease the same assets or acquisition of specialized services on the same activities they carry out investment, it proves to be inappropriate. Although the investment firm is efficient, effective would have been better renting the same assets or outsourcing of activities they perform.

This mode of analysis is derived from appreciation of investment opportunity costs that induce the need for valuation variant foregone compared to the version that will be adopted (J. Bouman, 1994; Ignat I. *et al*, 1998; Perloff JM, 2011; S. Rode, 2013).

Accordingly, this paper provides a functional model of assessment depending on volume and structure of investment opportunities offered by the economic environment. This does not exclude the need for other analysis tools but can be viewed as an investment strategies.

MATERIAL AND METHOD

The analysis model used is based on the opportunity costs, which highlights the effect modification considered due to the change in the

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fixed assets. In other words, the model used fixed assets can be characterized by efficiency indicators determined as the ratio between the effect and effort. The effort takes the form of company ownership and use costs of fixed assets and the effects are expressed as savings to pay for services that would make it not holding company assets.

The model was applied to machines: Combines Claas 150 Domination, Domination combines Claas 96, Combine Class C 116 combines Claas Mega 208, Rippers Rippers Maschio Gaspardo Artiglio model Magnum, cultivator Lemken Karat 9/300 easily.

Case study was chosen the company S.C. Tivico Impex LLC, located in the village Sarateni Murgeni town, Vaslui county, a company organized in two sectors: agriculture and services.

RESULTS AND DISCUSSIONS

In terms of harvested area under the farm examined, it can be observed *(table 1)* that the most productive combine this view is combine Claas C 116, this yielding one day an area of 47 hectares Pole opposite it is the least productive combine harvester Claas D 150 which only 15 hectares.

Regarding diesel consumption per hectare is the Combines Claas combines an efficient 96 D, with an average consumption of 6.73 l / ha and the highest consumption is achieved which combines Class D 150 per hectare harvested consume average 10.33 liters of fuel.

The lowest consumption is achieved by combining Claas D 150 with an average consumption of 155 l / day followed by combines Claas D 96 with a consumption of 148 l / day, Claas combine M208 with an average consumption of 210 l / day and the highest consumption of diesel per day is achieved by combining Claas C 116 with an average consumption of 325 liters / day, this being influenced by hectares harvested with a certain type of combining a day and fuel consumption per hectare achieved fiecrare combined basis.

Table 1

Analysis of work rules and diesel consumption

Construction type	Surface (ha/ day)	Total (ha)	Diesel fuel consumption (l/ day)	Average consumption (l / ha)
Combine D150	15	150	155	10.33
Combine D96	22	220	148	6.73
Combine C116	47	330	325	6.91
Combine M208	31	310	210	6.77
Scarifier	15	120	178	3.85
Grower	63	504	174	4.35

On labor efficiency in the equipment used, the research showed that operators who handle these machines are sometimes one for each machine individually with a salary / day of 18.2 euro for operators combine and 15.9 euro for other machines. Also on the table are specified and repair costs and which utialajului price and rental price thereof.

Table 2

Analysis of wage costs, repairs and agricultural services

Construction type	Wages operator (euro / day)	Annual repair costs (euro)	Equipment Acquisition price (euro)	Price rent (euro / ha)
Combine D150	18.2	380	80,000	45.5
Combine D96	18.2	360	15,000	45.5
Combine C116	18.2	400	20,000	45.5
Combine M208	18.2	425	35,000	45.5
Scarifier	15.9	60	7,000	25.0
Grower	15.9	98	2,500	13.6

Costs of outsourcing the four combine considered are *(table 2):* to combine Claaas D 150 are from 6,818 euro to combine Claas D 96 are 10,000 euro for Claas combine C 115 is 15,000 euro, and combines Claas M 208 are 14,091 euro. In terms of time of use of the equipment it is around 25 years for combines, 8 years and 20 years ripper for the grower.

Machinery depreciation was determined as the ratio between the price of equipment and during its use, so the four combine depreciation is 3,273 euro combine Claaas D 150,614 euro to combine Claas D 96,818 euro to combine Claas C 116 and of 1,432 euro for Claas combine M 208.

Expenses saved because the company has not paid agricultural services are 55,782 euro. These expenses were distributed machines combine D150 - 6,818 euro, combines D96 - Euro 10,000 Combine C116 - EUR 15,000 Combine M208 - 14,091 euro, Rippers - 3,000 euro and easy grower - 6,873 euro.

For this, it was necessary for the work with their own equipment, which is why he spent 1,762 euro material costs, amortization of 7,159 euro, 928 euro wage, 816 euro and 14,551 euro taxes and energy costs.

Table 3

Cost Analysis (euro)

Tip utilaj	Externalisation costs	Material costs	Amortisation	Salaries	Annual taxes	Energy costs
Combine D150	6,818	389	3,273	182	409	1,585
Combine D96	10,000	368	614	182	77	1,514
Combine C116	15,000	409	818	128	102	2,334
Combine M208	14,091	435	1,432	182	179	2,148
Scarifier	3,000	61	895	127	36	4,729
Grower	6,873	100	128	127	13	2,242

Analyzing the profitability indicators of the equipment, especially the 4 combine within the unit we can say that these indicators refer to their use project expenditures in the period under review. Thus in these project expenditures included material costs (consumables consisting of annual operation to combine effective remedy) and energy costs (fuel consumption) and annual taxes. Toal their value is 25,215.8 euro *(table 3).*

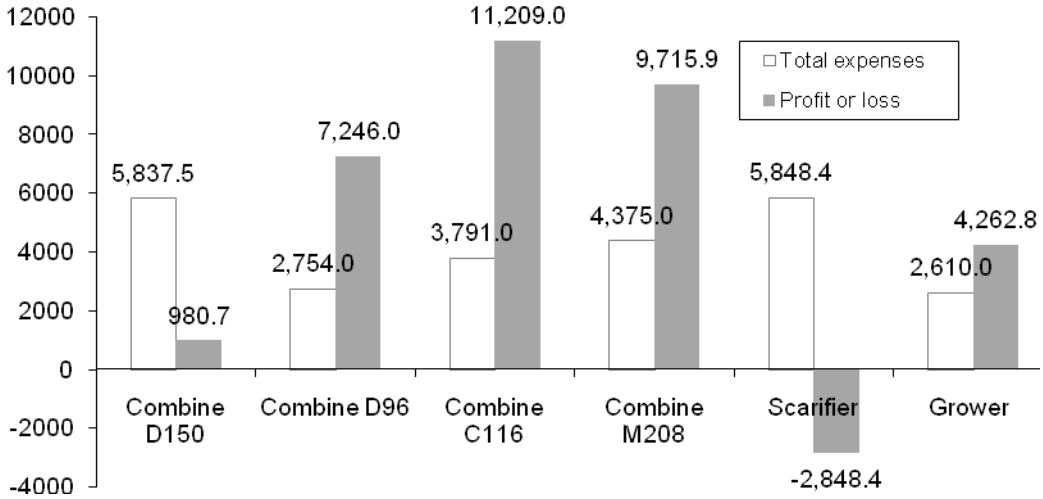

Figure 1 **Total expenses, profit and loss (euro)**

As can be seen the highest expenses are recorded ripper with a value of 5,848 euro and the lowest expenses are recorded grower about 2,610 euro per year *(figure 1).*

The difference between total expenditure and the outsourcing allowed the determination of profits made each year by combining hand. So to combine Claaas D 150 profit is 980.7 euro / year, 7,246 euro / year to combine Claas D 96, from 11,209 euro / year lei for Claas combine C 116 and 9,716 euro / year for Claas combine M 208 . Scarifier a loss of 2,848.4 euro / year, which is the only machine whose acquisition of all machinery proved inopportune analyzed.

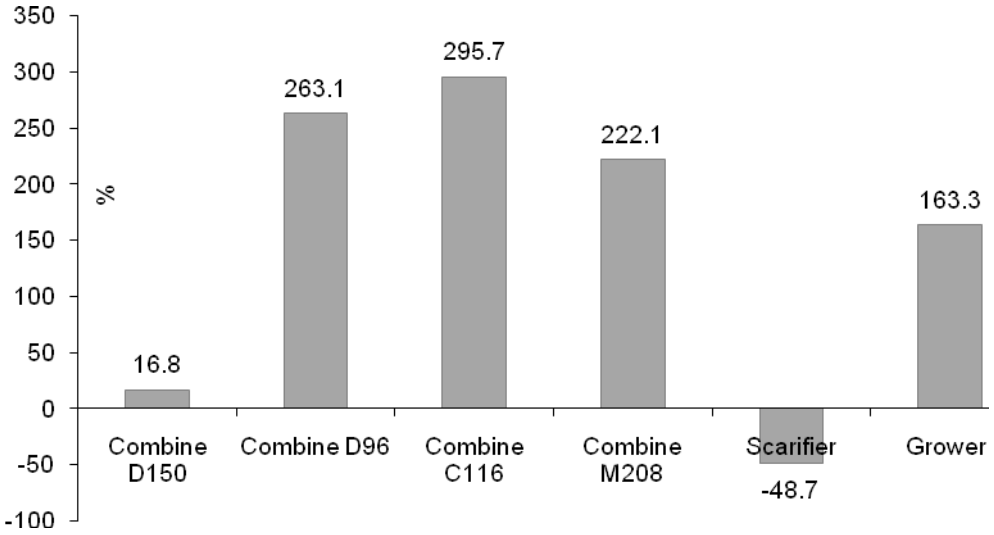

Figure 2 **Economic efficiency specifies the use of fixed assets (%)**

Based on profit and total expenses recorded four combine their profitability rate was achieved *(figure 2)* registered the highest rate of Claas combine C 116 295.7% and the lowest rate recorded for Claas combine D 150 at a rate of 16.8%. Sure scarifier brings a curtain of 48.7 euro for every 100 euro spent. It is recommended to use the services of scarification.

CONCLUSIONS

Investments in combine and cultivator proved timely because this leads to a profit Additional combine Claaas D 150 profit is 980.7 euro / year, 7,246 euro / year to combine Claas D 96, from 11,209 euro / year lei Claas combine C 116 and 9,716 euro / year for Claas combine M 208. Scarifier a loss of 2,848.4 euro / year, which is the only machine whose acquisition of all machinery proved inopportune analyzed.

The profitability analysis showed that the most cost effective equipment Claas C 116 is combined with the highest rate recorded by 295.7% and the lowest rate recorded by D Claas 150 combine with a percentage of 16.8%. Scarifier brings a curtain of 48.7%.

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