



COMPARATIVE STUDY ON ASSESSING THE PERFORMANCE OF ECONOMIC ENTITIES IN MEHEDINTI COUNTY

Costin Daniel AVRAM^{1*}, Veronel AVRAM¹

[1] University of Craiova, 13 Al. I. Cuza Street, Craiova, Romania,
e-mail: avramcostindaniel@yahoo.com, veronelavram@yahoo.com

Abstract

The notion of performance normally associated with it other three notions, namely efficiency, economy and effectiveness. Involves either maximizing efficiency results obtained with a given amount of resources or minimizing resources to achieve a predetermined result, being in all cases a report, a comparison of effectiveness (outcome) and effective effort (expense) to obtain the result by a or process. Economics aims at training resources at minimum cost. Effectiveness is the quality of process to produce the desired results and that acts as a control criterion level and the achievement of objectives.

Keyword: competition, productivity, profitability, return on equity.

JEL Classification: D04, J24

I. Introduction

Financial performance was defined by Professor Mihai Ristea, as the three E's equation, the equation is as follows:

$$\text{Performance} = \text{Efficiency} + \text{Economics} + \text{Effectiveness}$$

*Corresponding author: Costin Daniel AVRAM, E-mail: avramcostindaniel@yahoo.com



From the point of view of the management team there is an interest in assessing and analyzing financial performance as it aims to increase operational efficiency and profitability while aiming to evaluate the effectiveness of the entity's resources have been used. (Huselid, 1995)

From the perspective of investors and shareholders on performance analysis seeks primarily capital cost and at the same time how managers lead the organization's work and how they respond to shareholders is very important for managers to acquire the viewpoint of shareholders expectations them in terms of financial performance of the company. (Eisenberg, 1969)

It is helpful to follow the most important indicators of efficiency which we divided into three categories:

- productivity indicators;
- profitability indicators.

For a comparison of performance indicators were considered the results achieved in 2011 by four companies Mehedinti County, in various industries, such as:

- S.C. EURO TYRES MANUFACTURING S.R.L., Drobeta Turnu Severin – industry giant tire manufacturer;
- S.C. ŞANTIERUL NAVAL ORŞOVA S.A. – engineering industry;
- S.A. HIDROSERV PORŢILE DE FIER S.A., Drobeta Turnu Severin – maintenance services;
- S.C. MERIDIAN C.C. S.R.L., Orşova – wholesale and retail.

II. Productivity indicators

Productivity indicators reflect the human resource intensive and can cause the relationship between performance and consumption of resources, such as:

- Total income per employee (I/e), reflecting the contribution made by each employee to develop and maintain the company's business in the competitive environment.

Relationship calculation is:

$$\text{Income / employee (I/e) =}$$



Total income / Number of employees (1)

Table 1 Situation total income per employees in 2011

No.	Trader	Total income	No. employees	I/e
1.	Euro Tyres	235.102.369	616	381.659
2.	Hidroserv	95.462.621	582	164.025
3.	Şantierul Naval Orşova	62.245.018	430	144.755
4.	Meridian	96.059.798	91	1.055.602

Source: www.mfinante.ro – processed date

- Value added per employee (Va / e), reflecting its effort developed by each employee for business.

Relationship calculation is:

$$\text{Value added (Va/e)} = \frac{\text{Value added}}{\text{Number of employees (2)}}$$

Table 2 Situation value added per employees in 2011

No.	Trader	Value added	No. employees	Va/e
1.	Euro Tyres	51.279.116	616	83.245
2.	Hidroserv	33.110.446	582	56.890
3.	Şantierul Naval Orşova	33.989.820	430	79.046
4.	Meridian	4.090.009	91	44.945

Source: www.mfinante.ro – processed date

The results must be assessed according to the activity profile, so Meridian Trading Company with activities wholesale and retail trade has the highest revenue per employee productivity and lowest value added per employee.



III. Profitability indicators

Profitability indicators reflecting efficiency activity, correlating with effects sizes effortlessly profit nature of expenditure and revenue nature.

For SC EURO TYRES MANUFACTURING SRL were determined as indicators of profitability and return in 2011, this unit losses:

- High profitability shows net profit income when obtaining total income of 1,000 USD. Size ratio depends primarily on the ratio between revenues and expenditures of the entity and, secondly, the structure of revenues and costs of economic activity.

$$\text{Profitability rate income} = \frac{\text{Net profit}}{\text{Total income}} \times 1000 \text{ (3)}$$

Table 3 Profitability income situation in 2011

No.	Trader	Total income	Net profit	Pri %
1.	Euro Tyres	235.102.369	-	-
2.	Hidroserv	95.462.621	321.766	3,37
3.	Şantierul Naval Orşova	62.245.018	380.016	6,10
4.	Meridian	96.059.798	92.323	0,96

Source: www.mfinante.ro – processed date

- High profitability reflects expenses the result of optimizing flows of assets to the volume and structure of funds raised, the rate being much higher as the income unit is obtained with a minimum of expense.

$$\text{Profitability rate expenses} = \frac{\text{Net profit}}{\text{Total expenses}} \times 1000 \text{ (4)}$$

Table 4 Profitability expenses situation in 2011

No.	Trader	Total expenses	Net profit	Pre %
1.	Euro Tyres	321.462.850	-	-



2.	Hidroserv	94.492.421	321.766	3,4
3.	Şantierul Naval Orşova	61.865.002	380.016	6,1
4.	Meridian	92.923.241	92.323	1,0

Source: www.mfinante.ro – processed date

Profitability indicators reflecting efficiency activity, correlating with effects sizes effortlessly profit nature of nature resources used.

- Return on equity (ROE) measures the effectiveness of the entity's own funds and provides information, including shareholders on how these funds were used.

Relationship calculation is:

$$\text{ROE} = \text{Net Profit} / \text{Equity} \times 100 \text{ (5)}$$

Table 5 Statement of financial return in 2011

No.	Trader	Equity	Net profit	ROE %
1.	Euro Tyres	270.218.838	-	-
2.	Hidroserv	13.606.809	321.766	2,36
3.	Şantierul Naval Orşova	88.410.039	380.016	1,13
4.	Meridian	11.756.608	92.323	0,79

Source: www.mfinante.ro – processed date

- Return on assets (ROA) measures the total asset performance regardless of the mode of acquisition of capital (own and borrowed) allocated for the establishment of this asset.

Relationship calculation is:

$$\text{ROA} = \text{Net Profit} / \text{Total assets at net value} \times 100 \text{ (6)}$$



Table 6 Economic profitability situation in 2011

No.	Trader	Total assets	Net profit	ROA %
1.	Euro Tyres	466.114.268	-	-
2.	Hidroserv	34.351.649	321.766	0,94
3.	Şantierul Naval Orşova	96.507.307	380.016	0,39
4.	Meridian	47.974.853	92.323	0,19

Source: www.mfinante.ro – processed date

IV. Other indicators of economic efficiency expression

Economic entities may use a number of indicators expressing economic efficiency, the most commonly used are:

- Leverage ratio (equity multiplier) measures the degree to which the attraction and use of new resources lead to increased capital efficiency.

Relationship calculation is:

$$Lr = \text{Total assets} / \text{Equity} \quad (7)$$

Table 7 Leverage ratio in 2011

No.	Trader	Total assets	Equity	Lr %
1.	Euro Tyres	466.114.268	270.218.838	1,72
2.	Hidroserv	34.351.649	13.606.809	2,52
3.	Şantierul Naval Orşova	96.507.307	88.410.039	1,09
4.	Meridian	47.974.853	11.756.608	4,08

Source: www.mfinante.ro – processed date

- The solvency ratio property (RSP) express coverage of equity assets.

Relationship calculation is:

$$Srp = \text{Equity} / \text{Assets} \times 100 \quad (8)$$



Table 8 Economic solvency situation in 2011

No.	Trader	Total assets	Equity	Srp %
1.	Euro Tyres	466.114.268	270.218.838	57,97
2.	Hidroserv	34.351.649	13.606.809	39,61
3.	Şantierul Naval Orşova	96.507.307	88.410.039	91,60
4.	Meridian	47.974.853	11.756.608	24,50

Source: www.mfinante.ro – processed date

Changing economic solvency ratio will be found in the financial rate of return, the relationship between the two indicators is as follows: lower economic solvency ratio increases leverage and hence the rate of financial return.

- Asset utilization (Au) shows total revenue is obtained from 100 USD total assets. Using the element of calculation, total income and total assets, relationship calculation is:

$$\text{Au} = \text{Total income} / \text{Total assets} \times 100 \text{ (9)}$$

Table 9 Situation the use of assets in 2011

No.	Trader	Total assets	Total income	Au %
1.	Euro Tyres	466.114.268	235.102.369	50,43
2.	Hidroserv	34.351.649	95.462.621	277,90
3.	Şantierul Naval Orşova	96.507.307	62.245.018	64,50
4.	Meridian	47.974.853	96.059.798	200,22

Source: www.mfinante.ro – processed date

- 100 lei revenue expenditure is an indicator expressing economic efficiency, calculating using the formula:

$$\text{Ex}/100 \text{ lei income} = \text{Total expenses} / \text{Total income} \times 100 \text{ (10)}$$



Table 10 Statement of expenditure to 100 lei revenue in 2011

No.	Trader	Total expenses	Total income	Ex/100 lei income
1.	Euro Tyres	321.462.850	235.102.369	136,73
2.	Hidroserv	94.492.421	95.462.621	98,98
3.	Şantierul Naval Orşova	61.865.002	62.245.018	99,38
4.	Meridian	92.923.241	96.059.798	99,85

Source: www.mfinante.ro – processed date

Efficiency of their activity is even greater as the indicator values are lower.

- Profit per employee (P/employee) reflects each employee work efficiency and effectiveness in providing management and staff use.

Relationship calculation is:

$$\text{Profit/employee} = \text{Net profit} / \text{Employees number (11)}$$

Table 11 Situation profit per employee in 2011

No.	Trader	Net profit	Employees number	Profit/employee
1.	Euro Tyres	-	616	-
2.	Hidroserv	321.766	582	552,86
3.	Şantierul Naval Orşova	380.016	430	883,76
4.	Meridian	92.323	91	1014,53

Source: www.mfinante.ro – processed date

Increasing trend indicator reflects an increase in the efficiency of every employee. Except SC Euro Tyres Manufacturing Ltd, all other company recorded net profit per employee, the highest profit per employee was recorded by SC Meridian Ltd, 1014.53.



Table 12 Situation performance indicators in 2011

Entitate	I/e	Pri %	Pre %	ROE %	ROA %	Lr	Srp %	Au %	Ex/100 lei income	P/ employee
Euro Tyres	381.659	-	-	-	-	1,72	57,97	50,43	136,73	-
Hidroserv	164.025	3,37	3,4	2,36	0,94	2,52	39,61	277,90	98,98	552,86
S.N.O.	144.755	6,1	6,1	1,13	0,39	1,09	91,60	64,50	99,38	883,76
Meridian	1.055.602	0,96	1	0,79	0,19	4,08	24,50	200,22	99,85	1014,53

Analyze economic performance assessment was based on a set of indicators expressing the results of the use of material, financial and human resources in 2011. By analyzing Table no. 12 is noted that SC Euro Tyres Manufacturing Ltd. registered lost, and performance indicators reflect a poor business.

V. Conclusions

Based on the information gathered was established economic performance of the sample with the group in economic and financial indicators:

- productivity indicators;
- Profitability;
- The profitability indicators;
- Other indicators of expressing economic efficiency.

Overall assessment of performance and multi-criteria ranking of economic entities operating in different sectors of the national economy requires performance evaluation tools widely accepted unified conceptual framework. Attention profitability and return indicators should not overshadow productivity performance and other indicators of economic efficiency expression.

References

1. Ristea M. (1997), *Contabilitatea rezultatului întreprinderii*, Tribuna Economica Publishing House, Bucuresti.



2. Eisenberg M.A. (1969), *The Legal Roles of Shareholders and Management in Modern Corporate Decisionmaking*, 57 Cal. L. Rev. 1.
3. Jianu I., Geambașu C.V., Jianu I. (2011), *Profitability analysis at regional level of the economic entities listed on the Bucharest Stock Exchange* International Journal of Scientific & Engineering Research Volume 2, Issue 9, September.
4. Huselid M. (1995), *The impact of human resource management practices on turnover, productivity and corporate financial performance*, Academy of Management Journal, Vol. 38, No. 3, pp. 635- 672
5. Science Communication Unit, University of the West of England, Bristol (2012). *Science for Environment Policy Indepth Report: Resource Efficiency Indicators*, Report produced for the European Commission DG Environment, February 2013. Available at: <http://ec.europa.eu/science-environment-policy>.
6. http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators.
7. www.mfinante.ro.
8. <http://accounting-financial-tax.com/2008/11/complete-asset-utilization-measurements-ratio-formula/>.