COMPETITIVENESS AND ECONOMIC-FINANCIAL PERFORMANCE IN THE METALLURGICAL INDUSTRY COMPANIES IN ROMANIA

The paper presents the level and evolution of indicators for determining the degree of competitiveness in the metallurgical industry in Romania. For this purpose, were used aggregate data for a sample of 22 of the largest companies in Romania operating in metallurgy, for the period 2004 - 2013. The aim of the paper is to identify the factors that determined the negative trend in terms of economic and financial performance of the companies analyzed.

Key words: metallurgical industry, competitiveness, financial and economic performance, Romania

INTRODUCTION

Companies in the metallurgical industry were and are considered important elements in ensuring the development of the economic environment [1]. In addition, at the level of manufacturing industry, the metallurgical sector is the most important [2].

The metallurgical sector in Romania has undergone a long process of restructuring and privatization, with direct implications on its size. Currently, the largest metallurgical companies are part of some multinational companies. This is an advantage in terms of access to international markets while also being an element of risk, whereas the international situation rapidly influences the evolution of production, the number of employees or the financial situation of the national components. This is backed by the metallurgical industry's evolution, after the most powerful manifestation of crisis in the last decades. A significant downward trend both of production and of the capacity to obtain certain financial surpluses was determined by the restriction of foreign markets but also by the costs of raw materials, dependence on energy resources, increase if energy tariffs, low degree of labor productivity.

Moreover, metallurgy was the most affected sector, both in Romania (in the first 5 months of 2009 there was a decrease of industrial production by 49,9%) and the EU. Therefore, at the level of EU 27 in 2009, the annual rate of production growth in metallurgy was the lowest in all industries (- 27,1 %). [3]

In this context, the real diagnosis is required, based on the SWOT analysis so that there are highlighted, in particular, the hazards affecting this sector [4].

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Reduced selling prices, increased energy tariffs, long periods for cashing debts, fiscal and budgetary measures taken to reduce the deficit in the state budget are some elements that negatively influenced metallurgical companies. The level of debts experienced continuous increases, affecting the ability to pay.

Moreover, a study of companies that became insolvent points out that „Romania recorded the highest number of insolvencies in the whole CEE region – 27 145 companies representing an insolvency of 6,4 %" in the year 2013, among the largest insolvencies being a metallurgical company, namely Aromet SA, with a total debt level of 20 699 107 euro [5]. The situation has not improved even in 2014, in the first half of the year, the metallurgical industry positioning itself in 3rd place in the economic sectors in terms of the number of insolvencies reported for 1000 active companies.

RESEARCH METHODOLOGY

For sizing the performance and competitiveness in the metallurgical industry, a set of indicators can be used, established in accordance with the formulas shown in Table 1.

The added value is a very important indicator because it enables sizing the surplus realized by a company over the value of inputs consumed. It allows identifying how the revenues are distributed to the compensation of employees, creditors or the state. Labor productivity reflects the efficiency of using the human factor. For this sizing we used the ratio between the value added and the number of employees, this being the formula used for decades [6]. The financial performance can be identified by the ability to achieve profit and generate cash flow, capable of supporting real development of a company. The level of cash flow is extremely

Table 1 **Indicators of competitiveness and performance used in the analysis**

Indicators	Meaning
VA = T + NI + Ce + D + Ip	VA –added value T – taxes NI – net income Ce – cost of employees D- depreciation Ip- interest paid
Lw = VA / Ne	Lw – labor productivity
Cm = Mr + Cgs	Cm – material costs Mr - Raw materials Cgs – Cost of goods sold
Ce = S + Se	Ce – cost of employees S – salaries Se – social expenses
NI / E = NI / Ne	NI / E – profit per employee Ne – number of employees
NI = Or + Fr + Er	Or – operating result Fr – financial result Er – extraordinary result
CF = NI + DA	CF – cash flow DA - depreciation and amortization

important in ensuring sustainability and economic development. This is supported by numerous examples of the insolvency of companies that have registered accounting profit, but faced with the lack of cash (the remaining uncollected receivables contributed decisively to such situations).

THE ANALYSIS OF THE PERFORMANCE AND DEBT IN THE METALLURGICAL INDUSTRY OF EU 28 UNDER THE IMPACT OF FINANCING POLITICS

The information used was obtained from the database AMADEUS. Thus, we selected the largest companies in the metallurgical industry in Romania (among these we included: ArcelorMitttal Galaţi, Alro, Silcotub, TMK Artrom, Ductile Steel, Dan Steel etc.). The sample consists of 22 companies and the data corresponds to the period 2004 - 2013. An important point in the analysis relates to value added and the labor efficiency used, whose evolution is shown in Table 2.

Table 2 **Evolution of performance indicators and the number of employees**

Years	VA / EUR	Ne Persons	Lw / EUR	Ce / EUR	Ce / VA / %
2004	850 722	49 586	17,15	235 608	27,69
2005	303 103	47 586	6,36	284 348	93,81
2006	615 662	42 883	14,35	335 272	54,45
2007	807 229	39 879	20,24	345 655	42,81
2008	849 784	37 669	22,55	315 844	37,16
2009	12 301	30 632	0,40	321 051	2609,9
2010	295 251	27 261	10,83	263 891	89,37
2011	341 053	26 107	13,06	275 471	80,77
2012	345 444	21 600	15,99	247 407	71,62
2013	235 310	19 577	12,01	226 122	96,09

Source: own computations and data from [7]

There should be noticed the sharp downward trend recorded for the value added. The decrease was drastically in 2009 compared to 2008, the situation rebounding during 2010 - 2012. In the year 2013 there was a new decrease, representing approximately 27,69 % of the level achieved in the year 2008. If there is considered the share of wage costs in the total of value added, there may be noticed a negative aspect that warrants the negative financial situation recorded after 2009. Thus, with the exception of 2004 and the interval from 2006 to 2008, the maintenance of wage costs at a very high level in terms of share in value added (96,09 % in 2013) can be noticed, reducing the remaining level to cover debts or tax obligations. This problem is even more difficult as the number of employees decreased considerably during the same period (in 2013 it accounted for about 39,5 % of the number for 2004) and labor productivity dropped by almost half compared to 2004. The decrease of employees and hours worked was also registered in the EU during 2001 - 2012. Therefore, a report on the competitiveness of the industry shows a decrease of - 2,4 % of employees and - 2,2 % of hours worked [2].

The unfavorable financial situation is also reflected by the volume of net profit. The data in Table 3 reflects the accentuation of losses from 2009 to 2013.

Table 3 **Tendencies in the evolution of net profit and cash-flow**

Years	Cm / EUR	NI / EUR	NI / E EUR/ E	CF / EUR
2004	2 177 636	552 568	11	655 627
2005	2 539 307	-148 986	-3	2 317
2006	2 814 336	181 837	5	257 877
2007	2 449 248	170 560	6	378 308
2008	2 510 381	179 725	6	432 502
2009	1 558 298	-528 960	-17	-351 306
2010	2 341 542	-169 867	-6	- 22 036
2011	2 682 675	-175 934	-6	-3 114
2012	2 071 012	-98 725	-4	46 265
2013	1 682 500	-197 338	-9	-30 983

Source: data from [7]
Legend: Cm – material cost; NI – net income; E – employee; NI / E – profit per employee; CF – cash-flow.

The data in the table above provides important information on the evolution of the indicators analyzed, their correlative interpretation being though necessary. Thus, the trend of significantly reducing net profit after 2008 can be justified by the decrease in sales in a faster pace compared to the decrease of material costs and labor costs: turnover decreased by 49,84 % in 2009 compared to 2008 and 37,67 % in 2013 compared to the same year; material costs were reduced by 37,92 % in 2009 compared to 2008 and 32,97 % in 2013 compared to the same year; costs of employees increased in 2009 compared to 2008 by 1,64 % and decreased in 2013 by 28,40 % compared to the same year. This negatively influenced the cash flow, diminishing the ability to honor payment obligations.

Another important set of indicators used in performance analysis of the companies is the rates of return [9], which are shown in Table 4.

Table 4 **Evolution of rates of return and marginal profit during 2004 – 2013 / %**

Years	ROE	ROA	ROS	Pm
2004	31,97	20,91	17,98	16,03
2005	- 7,31	- 4,00	- 4,42	- 3,72
2006	9,76	6,25	4,55	5,46
2007	9,74	5,78	4,21	5,19
2008	10,26	6,13	4,30	5,71
2009	- 30,91	- 16,92	- 25,26	- 27,59
2010	- 10	- 4,80	- 5,66	- 5,11
2011	- 9,60	- 4,35	- 4,69	- 4,00
2012	- 6,24	- 2,87	- 2,99	- 2,83
2013	- 14,51	- 6,42	- 7,58	- 7,12

Source: own computations and data collected from [7]
Legend: ROE - Return on equity; ROA - Return on assets; ROS - Return on sales; Pm - profit margin

The information summarized in the table above confirms the difficulties that have arisen in the companies analyzed. Therefore, reducing the net profit generated the decline in the return on equity and those employed and sales. The situation is not much different from the marginal profit determined as a ratio between profit before tax and the sales made, which demonstrates the inefficiency of operating activity and the influence of financial expenses due to interest paid on loans.

The collected data reflect the difficult situation recorded in the large companies in the metallurgical sector. But it should be noted that the net result has not resulted in losses to all companies from the analyzed sample. For example, in 2013, important losses were recorded by ArcelorMittal Galaţi (- 165 213 EUR), Alum SA (- 30 634 EUR), Alro Slatina (- 26 860 EUR) while net profit was obtained by Silcotub (41 413 EUR), Universal Alloy Corporation (8 050 EUR) TMK Resita (3 975 EUR) etc. It is noted that the profit realized has very small values compared to those for losses, which determines the overall negative situation. Incidentally, this is a common problem throughout the metallurgical sector, regardless of the size class of companies operating within it. In this regard, the aggregate financial situation for a number of 253 small companies showed a loss of - 2 662 EUR for 2013, respectively - 4 865 EUR for 103 medium companies and - 20 906 EUR for 29 large companies.

This is determined by the need to contract loans to supplement equity, the cost of which has lead to a negative financial result. The level of indebtedness increased in the period under review, the data in Table 5 being suggestive in this regard.

Tougher lending conditions after a period in which banking institutions have promoted an extremely imprudent broad policy have influenced the demand for products offered by the metallurgical sector and other

Table 5 **The evolution of indebtedness level**

Years	AT / EUR	DT / EUR	GI / %
2004	2 665 133	881 354	33,06
2005	3 171 073	1 344 553	42,40
2006	3 523 332	1 267 985	35,98
2007	3 819 738	1 553 588	40,67
2008	3 951 269	1 591 699	40,28
2009	3 113 519	1 409 040	45,25
2010	3 299 101	1 717 217	52,05
2011	3565 099	1 949 401	54,68
2012	3 249 476	1 755 403	54,02
2013	2 964 083	1 653 103	55,77

Source: own processing by using data from [7]

sectors [9]. The elements specified allow drawing conclusions regarding the factors that have led to a downward trend in performance and competitiveness in the metallurgical sector:

- Reduction in domestic and external demand for products produced;
- Fierce competition registered at national and European level, driven by powerful transnational companies (Riva Fire S.P.A., Qutokumpu Stainless, Tata Steel IJmuiden B.V., Acciaierie Valbruna S.P.A.);
- Increasing labor costs (wages and mandatory contributions) in the context of a significant decrease in the number of employees; thus, in 2013 the average salary expenses per employee was 11,55 EUR compared to 4,75 EUR with 2004;
- Increasing energy tariffs, the metallurgical sector are characterized as an important consumer and raw materials used;
- Reducing the ability to create added value;
- Promoting a broader trade policy in order to increase turnover, which generated a negative relation between the time of debt collection and debt settlement, and thus reducing cash flow available for development.

CONCLUSIONS

Ensuring competitiveness in the context of economic and financial globalization is a real support of the existence and development of any company. Reducing costs, improving product quality, increasing labor productivity and capacity to release positive cash flows are critical factors in ensuring competitiveness. The paper highlights the competitiveness and performance level within the largest companies operating in the metallurgical sector in Romania. The analysis was performed in the time interval 2004 - 2013 so that there can be captured the trends before and after the manifestation of economic and financial crisis of 2008. The influence of business climate and financial environment instability cannot be challenged. In this respect, 2009 is an important point of inflection in the development of performance indicators and the level of competitiveness in the

metallurgical sector. Their tendency was determined by the influence of a combination of factors, which requires the application of support strategies of the metallurgical sector and the implementation of a proactive risk management.

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Note: The responsible translator for the English language is Ramona-Elena Herman, Sibiu, Romania