I. BOSTAN, M. ONOFREI

ISSN 0543-5846
METABK 51(4) 548-550 (2012)
UDC – UDK 669.1.498:517.003.1=111

THE ECONOMIC ANALYSIS OF THE EVOLUTION OF ROMANIAN FERROUS METALLURGY

Received – Prispjelo: 2012-01-07
Accepted – Prihvaćeno: 2012-03-30
Review Paper – Pregledni rad

The ferrous metallurgy represents a traditional occupation, being extremely important for the national economy. Romania has gone through all the stages foreseen for the restructuring of this industry in compliance with the provisions of the European Council's Decision (1999/582/EC) concerning the partnership for the EU adherence, which included a special chapter on ferrous metallurgy, the provisions of the Protocol no. 2 (ECSC), as well as with other significant normative acts subsequently enacted. Following the performed restructuring – privatizations, state allowances, liquidations, re-technologization – the activity of this sector has developed, still being under the potential of the Romanian metallurgic industry. Nowadays, the disadvantages relating to energy intensity and the increased need for imported raw materials are doubled by the difficulties generated by the global crisis.

Key-words: metallurgic industry, Romanian plants, restructuring/privatization, ECSC, import/export of steel.

Ekonomska analiza razvoja rumunjske crne metalurgije. Crna metalurgija je tradicionalna djelatnost i veoma je značajna za nacionalno gospodarstvo. Rumunjska je prošla kroz sve faze predviđene za preustroj te industrije sukladno odredbama Odluke Europskog vijeća (1999/582/EZ) u svezi s partnerstvom za zajedništvo EU, što je obuhvaćalo i posebno poglavlje o crnoj metalurgiji, te sukladno odredbama Protokola br. 2 (EZUČ – Europska zajednica za ugljen i čelik) kao i drugim značajnim naknadno donesenim normativnim aktima, Nakon obavljena preustroja – privatizacije, državnih subvencija, likvidacija, retehnologizacije, razvila se djelatnost ove grane, ali još uvijek ispod mogućnosti rumunjske metalurške industrije. Danas su se zbog teškoća generiranih od globalne krize udvostručile nepovoljne okolnosti koje se odnose na energijski intenzivne djelatnosti i povećanu potrebu za sirovinama.

Ključne riječi: metalurška industrija, rumunjske tvornice, preustroj/privatizacija, EZUČ, uvoz/izvoz čelika

THE TRADITION OF THE METALLURGIC SECTOR IN ROMANIA

The metallurgic industry has always been a difficult to manage economic sector, due to its massive concentration in mono-industrialized areas, with people being dependent on the existence of highly specialized companies and implying the profound involvement of the state for their support, being considered of strategic importance. Despite this, on the current territory of Romania there are metallurgic plants still functioning today – and built in the 18th and 19th centuries such as: Resita, Otelu Rosu and Hunedoara. Later on, there was the plant from Campia Turzii, which was founded during the two world wars as well as the units from Targoviste, Galati and Calarasi, established in the period of centralised economy [1].

Before 1990, Romania produced around 17 million tonnes of raw steel, of which resulted 10-11 million tonnes of laminated products, a level three times higher than in 2011, which is of approximately 4,5 million tonnes. During that period, the state orders for machines-tools, wagons, railway engines, trucks and the munitions industry enabled the absorption of quantities of 8-9 million tonnes of steel on a yearly basis on a local level [2].

Subsequently, the decline in the domestic market and the loss of some traditional international markets as well as the weak technologization, have significantly reduced the steel production.

In spite of this situation, during the present times [3], the metallurgic industry occupies an important place in the ensemble of the Romanian economy, position also highlighted by the weights in the industrial production and in the total export:

- 6,8 % of the value of the country's industrial production (year 2009);
- 8,9 % of the value of the processing industry production (year 2009);
- 11,9 % of the total exports of the country (year 2010).

Taking into consideration these facts, we estimate that, in the present, the sector under analysis holds a special importance for the Romanian industry and national economy in its whole, ensuring an appropriate rhythm of sustainable economic development.

I. Bostan, "Stefan cel Mare" University, Faculty of Economics, Suceava; M. Onofrei, „Al.I. Cuza" University, Faculty of Economics, Iasi, Romania.

EVOLUTIONS FOLLOWING THE RATIFICATION OF THE PROTOCOL NO 2 – ECSC

Owing to its strategic importance for the European economy, the steel industry has benefited from a particular legislative framework since the foundation of the European Union. Thus, the ECSC Treaty laid the foundations of a common European market for the steel and coal industries.

On a whole, Romania has got through all the stages stipulated for the restructuring of the metallurgic industry in compliance with the provisions of the European Council's Decision (1999/582/EC) regarding the partnership for the EU adherence (which comprised a special chapter for the metallurgic sector), the provisions of the Protocol no. 2 (ECSC), as well as with other important normative acts subsequently ratified.

In the activity following the year 1993, when the Protocol no. 2 (ECSC) was signed, most of the metallurgic companies in Romania, regardless of the structure of their social capital, recorded important debts to the public budgets and to the utility providers (especially electric energy and methane), as well as to banks, as a consequence of the contracted loans that had not been duly paid.

These debts, the non-performing management, the lack of investment funds, the imperfections of the capital markets, etc. have negatively influenced their economic and financial activity. That is why the solution to restructure these plants through privatization (Table 1) was found, also combined with the state allowances (aiming to avoid bankruptcy).

Table 1 **The situation of metallurgic companies (the formula of acquisition by the owner) [4]**

Company	Situation	Owner	Starting with
ISPAT-SIDEX Galati	Privatized	LNM Holdings	November 2001
SIDERURGICA Hunedoara	Privatized	LNM Holdings	October 2003
COS Targoviste	Privatized	Conares	August 2002
IS Campia Turzii	Privatized	Conares	March 2003
CS Resita	Privatized	T.M.K. Sinara	February 2004
Gavazzi Steel Otelu Rosu	Court-supervised liquidation	Gavazzi Steel	2002
Donasid Calarasi	Privatized	Beltrame	February 2003

The cumulated value of state allowances reaches 1 362 million USD (1993-2002), of which over 75 % represents the subsidies granted to Sidex Galati, before and especially, at the moment of privatization [5].

We would like to underline that the majority of the plants possessed during that period lamination capacities which needed a sustained financial effort for modernization (Table 2).

Table 2 **The Evaluation of the capacities of steel production and lamination [1]**

Metallurgic plant	Steel plant	Continuous casting	Mills
Ispat-Sidex Galati	◕ + ◑	● + ◑	◕
Siderurgica Hunedoara	◕	●	◑ + ○
COS Targoviste	◕ + ◑	◑	◕ + ◑
IS Campia Turzii	●	▭	◑ + ○
CS Resita	◑	▭	◑ + ○
Gavazzi Steel	◔	◑	◑ + ○
Donasid Calarasi	◕	●	◕ + ⊗

Symbols: ● *- Modern* ◕ *- Relatively new* ◑ *- Acceptable* ◔ *- Old* ○ *- Outdated technology* ⊗ *- Non-functional* ▭ *- Non-existent*

Until 2002 – when the applicability of the ECSC Treaty ceased – and, later on until the occurrence of the effects of the global crisis in 2008, the metallurgic industry in Romania recorded a positive evolution – characterised by the increase in production and sales under somehow relatively performing technical and economic conditions – and a significant amount of technological and environmental investments. For instance, in 1999, the steel production was of 4,2 million tonnes, in 2002 – 5,4 million tonnes, while in 2003 – 5,6 million tonnes.

A complete picture of the production from the Romanian metallurgic sector for the period 2007-2010 can be found in Table 3.

Table 3 **The indicators of the metallurgic production during 2007-2010 [9,3]**

Specification	- Thou tonnes -			
	2007	2008	2009	2010
The production of raw steel, of which:	6 261	5 035	2 761	3 721
Converter steel	4 356	3 343	1 790	1 990
Electric steel	1 906	1 692	971	1 731
Production of straight-flow raw steel	6 051	4 871	2 677	3 614
Production of raw cast iron	3 923	2 945	1 575	1 726
Production of finite compact* laminates, of which:	5 730	4 652	2 862	3 540
Flat products	3 662	2 869	1 674	1 815
Long products	1 463	1 221	870	1 295
Production of steel tubes and fittings, of which:	767	712	479	679
Weldless tubes	605	562	318	431
Welded tubes	162	149	161	249
Export of semifabricates and metallurgic products	3 785	3 193	2 030	2 950
Import of semifabricates and metallurgic products	3 550	3 685	2 095	2 770
Apparent consumption of metallurgic products**	6 110	5 800	3 345	3 555

Note: **exclusively seamless tubes; *equivalent raw steel.*

The work productivity has also increased at the level of this economic branch, estimating to reach on a medium and long term values comparable with other European countries – Poland, Czech Republic, etc. [6,7].

INTERNATIONAL TRADE WITH METALLURGIC PRODUCTS

The metallurgic industry is one of the few activities in the Romanian activity which registers trade surplus (Table 4), even in the years when the production decreased [3].

The export deliveries of *Cast Iron, Iron and Steel* held a weight of 45,1 % - 49,8 % of the total Romanian exports of *Base metals and derivative items* [9], while the imports reached weights of 32,4 %-42,4 % of the Romanian imports recorded for this section.

Table 4 **The exterior trade of Romania with metallurgic products [3,9]**

- Million Euros -

Code and name of product categories		2007	2008	2009	2010
Cast Iron, Iron and Steel	Export	2 389,8	2 457,7	1 316,6	2 166,2
	Import	2 229,1	2 753,6	1 229,2	1 841,6
	Balance	160,7	- 295,9	87,4	324,6
Products made of cast iron, iron and steel	Export	1 097,1	1 261,9	807,0	1 121,8
	Import	1 746,7	1 987,2	1 345,5	1 590,1
	Balance	-649,6	-725,3	538,5	-468,3

The exports registered a fluctuating evolution [3,9], the lowest occurring in 2009 (1 316,6 million Euros) and the highest in 2008 (2 457,7 million Euros). In 2010 [3], the exports were of 2 166,2 million Euros (with 64,5 % higher than in the previous year), the highest being registered in the groups *Ferrous waste and scrap; remelting scrap ingots of iron or steel* with 729,0 million Euros (33,7 %), *Flat, hot-rolled, non-plated and non-covered laminated products, of iron or non-alloy steels*, *having a minimum width of 600 mm,* with 578,1 million Euros (26,7 %) and *Flat laminated products from stainless steels, with a width under 600 mm* with 137,3 million Euros (6,3 %).

The imports also had a fluctuating evolution, the lowest value being registered in 2009 (1 229,2 million Euros), while the highest value was registered in 2008 (2 753,6 million Euros).

CONCLUSIONS

The road trodden by the metallurgic sector, starting with the year 1993, when the Association Agreement was signed, until the integration of Romania in the EU, was difficult, characterised by great budgetary efforts, implying the payment of compensation wages of the fired personnel and all the facilities granted to investors. In spite of all this, after the consequent processes of restructuring, the Romanian metallurgic industry has the ability to enhance its contribution to the economic development, trend also favoured by the expansion of beneficiary branches – the automotive industry and the constructions sector.

The analysis of the evolution of statistical data shows that some products maintain on a descending trend, due to the fact they are great energy consumers, they exclusively depend on import or have not been subject to demands (raw cast iron, ferro-alloys, plates and galvanized strips, wires of cold drawn steel, cast pieces).

What is important for the sector under analysis is the improvement in efficiency and competition, their main parameter being the reduction in the specific consumption of energy and raw materials.

We should also focus on the progress which is to be done towards the production increase and the export of higher added value items. We refer to the fact that it is necessary to modify the structure of raw steel production, in favour of the electrical procedure of obtaining steel, which is also less expensive.

REFERENCES

[1] Government of Romania, The steel industry restructuring strategy for the period 2004-2010, approved by Decision 655/2004, Official Gazette 425 of 12 May 2004.

[2] A. Cojocar, How was restructured in the last 20 years one of the main pillars of the industry: ferrous metalurgy, Financial Journal, 26 January 2011.

[3] A. Beldescu et al., Sector Analysis - Romania Metallurgical, Romanian Center for promotion of Trade and Foreign Investments, Bucharest, 2011, pp. 4-5.

[4] Minister of Economy, The steel industry restructuring strategy, Bucharest, 2005, http://minind.ro/domenii _sectoare/.

[5] G. Oprescu et al., Control policy of state aid granted to specific sectors: Coal, steel (...), European Institute of Romania, Impact studies, No. 2, Bucharest, 2004, pp. 99-100

[6] Gh. Moraru, Romanian Ferrous Metallurgi phase of EU accession, Engineering Universe, No. 23/2004 (334).

[7] National Commission for Economic Forecasting, The Metallurgic Industry - Present and Perspectives, Bucharest, 2006, pp. 1-5.

[8] National Institute of Statistics, International Trade Statistics, Bucharest, 2011, http://www.insse.ro/cms/files/arhiva_buletine2011/bsci/.

[9] World Steel Association, Steel Statistical Yearbook – 2011, http://www.worldsteel.org/dms/internetDocumentList/yearbook-archive/Steel-statistical-yearbook-2011/.

Note: The responsible translator for English language is the lector from Faculty of Economics, Suceava, Romania