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# Changes in the Romanian automotive parts sector in the context of globalization

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## **Abstract**

*This paper explores the changes in the auto parts sector from the industrial policy perspective of Romania, in the context of globalization. We propose to find the place of the means of transport industry in the processing industry sector and we studied the document of Industrial Policy for 2005-2008 in Romania.*

*Another issue treated in our paper is the impact of the industrial restructurings in Romania on the human resources in the automotive industry. The Romanian national policies of development will be strongly connected to the EU policies and objectives as well as to its principles and regulations, to ensure an European style of development and to reduce as quick as possible the significant disparities versus EU. This connection has been determined and will continue to determine industrial reorganization which leads to unemployment and will have a direct impact on the human resources, including automotive industry and especially the automotive parts area.*

*The directions of the Romanian industrial policies and the SWOT analysis of the automotive industry and automotive parts sector are a support to emphasize the changes that occur and which will continue to affect the production factors involved in this area.*

**Keywords:** automotive sector, globalization, industrial policy, Romanian industry, structural changes

## **Romania's industrial policy**

Romania's industrial policy aims at creating an adequate environment in order to develop a competitive Romanian industry, in harmony with the industrial structures in the European Union, which to lead to the reduction of the lagging existing between Romania and other countries of the EU. Industry, as main branch of the Romanian economy accomplishes, on average, around 27% of the gross domestic product, contributing annually with 1,2 - 1,5% to its increase. Within this branch, the processing industry constitutes the dominant component, covering about 80% of the activity volume where there activate about 1,5 million persons.

The document of Industrial Policy for 2005-2008 (G.D. no. 1172 /29 September 2005) says that it is essential that the three pillars of the sustainable development - economic, social and environmental ones - to be correlated and evaluate in close connection and harmony. The industrial policy has at its basis both the objectives and the strategic directions of the Romanian economy and industry and the fundamental elements of the European industrial policy.

Having in view the modifications which occurred in the internal and regional relations related to the European integration, to the globalization and liberalization of the goods, services, and labour force, there appears the tendency of the industrialized countries to

attract qualified staff, so the Romanian trading companies will also have to meet the increased requirements of very good products under the circumstances of confronting themselves with an evaluated industrial environment. One aims at reconsidering the strategy, the organization and the promotion of the staff preparation process on categories, specialty and fields.

The export national strategy 2006-2009 (G.D. no. 1828 of 22 December 2005), document of the Romanian Government, states that the existence before 1989 of a processing automotive industry and the increase of the global competition in the field led to the revival of this sector in two ways:

- strategic decision of the big world manufacturers, especially Renault, to take over the control on the facilities and to modernize technology, producing now under Dacia brand a new generation of automotives at European standards (Logan program), a part of the production being exported
- the increasing demand for the automotive parts manufactured by Renault created new opportunities of business for the old providers of the automotive industry in Romania, on condition to meet the new requirements increased by the standards of the international automotive manufacturer.

Some weak points of the industry (rigidity in organization and management, lack of marketing aptitudes, technologic lagging, lack of aptitudes adapted to new needs, incapacity of innovation and weak activities of research and development) are counterbalanced by advantages (tradition in production, cheap labour force, experience in subcontracting).

### **The place of the means of transport industry in the processing industry sector**

The processing industry constitutes the main component of industry in Romania, covering in 2005, according to the National Institute of Statistics, 83,14% of the industrial activity volume where 85,43% out of the staff industry work, and the sector of automotive construction represents 11% of the processing industry activity.

The International Organization of the Automotive Constructors (I.O.A.C.) made a statistics regarding the top of the automotive manufacturers countries, and Romania had the 32<sup>nd</sup> position on the world level and the 13<sup>th</sup> in Europe. The means of road transport represent an important sector of the national economy, and following the results in 2006, without doubt the Romanian auto market will wholly climb in this top. The most powerful support for Romania's place in the top had been brought by Automobile Dacia. In the constructors' top, Dacia is part of Renault Group, which places itself on the 10<sup>th</sup> position on the world level.

Without doubt, at the present time, Renault is the main foreign investor in the automotive industry in Romania. This one started at Automobile Dacia Pitești 7 years ago a project of about 850 million dollars, representing more than 700 million euro investments to the present time, project which aimed at two aspects: modernizing the enterprise and launching an auto of 5000 euro.

Dacia Group Renault has become today the second make of Renault Group which created through investments, on the structure of the former factory Dacia, a factory of car body-assembling and one of gear-box,

engines and transmissions. Thus, Dacia industrial platform became important not only in Romania, but also on the regional level. A SWOT analysis of the auto sector, effectuated by the Romanian Government with the view to elaborating the Action Plan for the implementation of the industrial policy of Romania, renders obvious:

**Table 1: The SWOT analysis of the Romanian auto sector**

<p><u>Strong points:</u></p> <ul style="list-style-type: none"> <li>- very well qualified staff personal;</li> <li>- increasing absorption auto potentialities on the internal market;</li> <li>- compartments of research-design with a good professional level;</li> <li>- companies with certificate for the quality management system;</li> <li>- gradual implementation of EU directives;</li> <li>- application of the European technical standards;</li> <li>- increase of the export quality;</li> <li>- potentialities for a horizontal industry diversified in the field.</li> </ul>	<p><u>Weak points:</u></p> <ul style="list-style-type: none"> <li>- unfavorable economic results of the companies manufacturing field automotive and microbuses, goods and passengers automotives, due to the unavailability for technological development and restructuring of the production;</li> <li>- using old technologies fact which determines the non-observance of the products' conformity;</li> <li>- gradual increase of the energy price and other price increases in raw materials;</li> <li>- low physical productivity;</li> <li>- inferior quality of Romanian automotive parts compared to the offer of the foreign companies.</li> </ul>
<p><u>Opportunities:</u></p> <ul style="list-style-type: none"> <li>- continuous increasing tendency of the internal market demand, especially for buses and special automotives (but an afflux of foreign investments is necessary);</li> <li>- the increase of the automotives in this sector will determine the development of an automotive parts industry, inclusively through the attraction of direct foreign investments;</li> <li>- the development on medium and long term of the automotive industry related to the road infrastructure of the country;</li> <li>- the necessity of renewing the commercial automotive park, regarded as a means of production, especially in the private sector (may determine an increase of the sector production and become in the future an important generator of working places);</li> <li>- the increase in the quality of the products and the informational technological expansion.</li> </ul>	<p><u>Constraints:</u></p> <ul style="list-style-type: none"> <li>- the competitiveness increase on the market, where the importation of new and second-hand cars had an increasing evolution in the last years;</li> <li>- the transfer of some industries with high labour force consumption towards countries with lower salaries;</li> <li>- the obligation to respect the environment legislation (and mainly of the requirements regarding the collecting and the turning to account according to the targets established by G.D. 2406/2004 regarding the management of the automotives out of use).</li> </ul>

A statistics of I.O.A C. effectuated in 39 countries renders obvious the fact that in the auto industry in 2005 there were over 8 million direct working places (59.000 in Romania), and for each position there were at least 5 indirect working places related to the automotive production. Thus, we can say that this branch contributes essentially to the welfare of the entire society.

On the level of the means of road transport industry in Romania, in 1999-2006 one found the tendency of dropping the number of salaried persons from the other superior branches (processing industry and total industry). Reducing the staff was due to the restructuring of the trading companies. To the externalization of some connected activities, to the modernization of the manufacturing and of the performant management imposed by the multinational companies.

The presence of the Renault company in Romania attracted also traditional suppliers, who implanted themselves around the new factory, investing in unities which will produce not only for the Dacia-Renault company, but also for the customers abroad: Auto Chassis International (auto chassis), Valeo (cables), Johnson Controls (chairs), Cortubi (evacuation system), Euro APS (plastic and thermoformed parts), Valeo Climate (climate installations).

Besides the investors of the suppliers chain of Dacia-Renault Group, one must mention the investments in Romania of some foreign concerns with world ramifications: Continental, SNR, Dura Automotive, Delphi, Lisa Draexlmaier, INA Schaeffler, Timken, Koyo, Sumitomo, Yazaki, Leoni, Lear, Takata Petri, Faurecia and others, clients of the big automotive manufacturers Ford, BMW, Daimler Chrysler, Peugeot, Citroen, Fiat, Mercedes Benz, Volvo, General Motors, Toyota, Subaru.

### **The impact of the industrial restructurings in Romania on the human resources in the automotive industry**

During the economic transition, the occupancy volume in Romania dropped almost continuously, the distribution on branches and sectors of this one changed completely and the changes will go on, shows a study of the National Institute of Scientific Research in the Labour and Social Protection Field, "The evolution of occupancy on the labour force market in Romanian in the perspective of 2010" ([www.guv.ro](http://www.guv.ro)). If in the process of economic restructuring, the processing industry lost an important number of staff (especially among the qualified workers), the economic branches within the tertiary sector (commerce, hotel activity and public alimentation, finances, banks, insurances, education, health and social assistance, public administration and social insurances) raised its number but not in the necessary rhythm, which renders obvious only an orientation of the Romanian occupational system toward the European one.

Globalization leads to brands regroupings to meet the requirements of competitiveness and is translated through restructuring and working places suppression. The automotive industry in Romania knew important such restructurings, mainly characterized by diminution of the staff, simultaneously with the increase of the active firms. The most tensioned problems have been generated by the companies' restructurings, respectively by the staff redundancies.

Industrial restructurings are reactions of enterprises' adaptation to the evolutions of the different markets on which they act, the managers having to permanently optimize the organization through the substitution of the production factors (replacing labour through capital) and through the reorganization of the productive system (externalization) or even through the installation in other areas

where the labour factor is cheaper or the regulations less strict (relocation).

A study of the German Company for Technical Cooperation for its activity component of sectorial economic promotion, states that the automotive constructing industry in Romania knew after 1990 a series of changes de mutations:

- giving up the etatist and hypercentralized development way, without a definite strategy
- important modifications of the internal market (insufficient investments programs), of the external market (eradication of CAER and URSS division), integrating Romanian industry with the European and world market, where there functions the mechanism of competition and competitiveness, as a factor of development, under the conditions of a technologic and economic lagging
- limiting the capacities to the commodities market
- structural adjusting (slow privatization)
- sustaining some industrial platforms
- industry qualified staff towards the commerce and services.

Connecting the development national policy of Romania to the communitary policies, objectives, principles, and regulations in the field determined and will continue to determine industrial restructurings which lead to the staff reduction, so they have a direct impact on the human resources.

We consider that the staff of an enterprise should be regarded on in the first place as a resource and then as an expense. It is a paradox that one observes a recurrence of the managerial practices according to which this is regarded as adjustment variable in case of industrial restructurings. The traditional approach of the industrial restructurings is that the human resources are considered as the first adjusting variable. The consequences of these decisions, which affect sometimes negatively the human resources, can not be imputed to the companies since they are imposed by the globalization of the economy as a reality of the contemporary society.

An example of industrial restructuring is the situation from Dacia Renault Group which represents equally a strong notoriety and image factor and a successful foreign investment example.

### **The auto parts industry from the industrial policy perspective of Romania**

As far as the auto parts industry is concerned, this one represents the industry segment with the most important increase of production, being stimulated by the dynamics of the means of road transport road industry.

The sector of auto parts developed in Romania in the '60 and '70 so that to manufacture almost all the auto parts. After 1989, merchandising the auto industry on the free market crossed a long transition, so that its modernization has been late. From tyres covering all the dimension range at mechanical subsystems (transmissions, steering boxes and shock absorber) to the electrical equipments, everything had to be produced locally and it was produced, but - without generalizing - neither the products, nor the technologies and especially the quality of the parts could keep the pace with the technological level in the West.

In the last period, the things started to change. Today, many of the companies in this field find themselves in a process of adaptation in order to be able to orientate themselves and adapt with the support of foreign auto construction companies and of those manufacturing auto parts towards the technologies and methods of organization in the West-Europe. There where the management was open and active enough one attracted technologies and capital; the result: the respective parts are produced at quality international standards.

So, within the national economy, the means of road transport industry recorded rises to a great extent determined by the privatizations in the sector. There are in Romania at the present time over 250 profile trade companies, most of them being small and medium enterprises, which developed either as a consequence of the restructuring process, or through privatization with external companies, or through the relocation of the manufacturing or through Greenfield-type investments.

The main fields where these Greenfield investments were made with the contribution of the foreign investors are (according to the document of the Romania Government regarding the National Plan of Development 2007-2013): tyres, auto parts, equipment for telecommunications, processing wood and construction materials. Developing the auto parts manufacturing sector was done both through the specialization of some autochthonous companies and the attraction of some foreign investors. The auto parts industry met an impressive development after 1999, when Renault took over Dacia. Since then, 14 traditional suppliers of Renault invested in Romania a sum which is close to 150 de million euro.

Developing the network of „auto parts manufacturers” makes the object of some concrete programs of Dacia Renault, of ACAROM and of the Ministry of Economy and Commerce. The parts factories in Romania do not work only for Dacia, they become subcontractants of the systems and modules manufacturers for the big automotive constructors in West or for the international exchange parts networks. The German industrials who subcontract auto parts from Romania are a successful example in this sense.

The parts factories in Romania may be classified in four categories:

- 1 The new occidental investments („greenfield”), positioned especially in the west of the country are mainly German investments (for instance, Continental)
- 2 The sections of production and assembling of the international groups which followed Renault in Romania. These ones had investments especially in the industrial park from the Dacis platform: Johnson Controls (chairs), Valeo (cables), Auto Chassis International (bridges), Faurecia (plastic parts, board table), Cortubi (exhausts), Piroux (containers), Inergy (plastic fuel tank), Dow Chemical (putties, sound attenuations), Michelin (local tire industry ), as well as the cables manufacturers: Lisa Draxlmaier, Lear Corporation, Yazaki, Sumitomo
- 3 The old Romanian factories that had partnerships with the profile occidental industry: Thyssen-Krupp-Bilstein (steering boxes), Thyssen-Krupp Compa Arcuri (auto springs), Magnetto Wheels (plate wheels), Autoliv Romania (seat belts), Koyo Romania (bearings)
- 4 The unities with autochthonous capital which did not set out mixed companies or business cooperation with foreign partners in the auto industry (for instance, S.C. Subansamble Auto S.A. Pitești). They rely on the reduced cost of the labour force, on the good qualification of the workers and on short transport distances for delivering the merchandise; they also manufacture exchange parts for

the auto Dacia which is in circulation. Their main problems are the too high degree of integration (lack of specialization, inclusion some too diverse professions), the insufficiency of the financial resources for the development of the products and technologies, lack of modernization of the industrial infrastructure and transport logistics, the poor quality of some local raw materials (plate, steel).

The Renault program for Dacia offered chances for all the auto parts suppliers, but „the ones who were chosen“ were those who understood that the normal capitalist solution in the globalization stage involves flexibility, restructuring, cooperation for the development of the own parts, investments for modernization, and the last but not the least, quality, competitive price, rhythmical deliveries.

The idea of system / modules suppliers was also adopted by Dacia for its products. For example, Auto Chassis International delivers for the Dacia Logan the front and back bridge; Valeo provides the electrical part of the auto, Euro APS - the bord table and the interior door panels, Johnson Controls - chairs, Euralcom - aluminum parts and Michelin Romania - tires. Among the Romanian suppliers which equip Logan Model there are Elba in Timișoara, which assures the illuminating system, UAMT Oradea - rear reflecting mirrors, shading devices, windshield wipers, Autonova Satu Mare - brakes, Policolor București - auto varnishes and dyes and ROMBAT Bistrița - accumulators.

By the force of things, Dacia will not be able to turn to account all the potentiality of the Romanian auto parts manufacturers (although the Renault projects for Dacia are really generous), but assuming the status of suppliers - sub-suppliers permits, when the parts are of good quality, deliveries towards several beneficiaries at the same time with lower risks. So, the ones who have and can turn to account the concurrencial potentiality, will orientate themselves towards other directions too.

The auto industry in Romania is characterized by an effervescence generated on one side by the foreign capital infusion attracted by the cheap labour force, well qualified, low costs, the experience in the relations with the foreign partners, desire for collaboration, and on the other side by the Romanian auto parts manufacturers. These ones find themselves in full restructuring of the activity, in process of certification according to the requirements imposed by the European legislation in force, continuously prospecting the market, for the establishment of new contacts, with the view to signing new contracts with foreign partners.

Manufacturing automotives and vehicles suffered a process of modification of the systems, i.e. the companies which finish the products in this category influence mutually for the achieving of the finished good. The finalizing companies transferred towards the parts industry the actions taken related to the degree of innovation and competitiveness of the products in the context of ensuring a sustainable development.

On elaborating the export strategy in the auto parts sector, one left from the zonal context, in which one identifies already a small opportunity, that will remain open until the beginning of the next decade: the new European auto pole. It is a challenge and, also a chance for the Romanian auto industry. An important component of our sector strategy - and not only - should be the intelligent use of this opportunity.

The SWOT analysis of the auto parts industry, according to the document of Industrial Policy of Romania, may lead to positive appreciations on the sector, thus:

**Table 2: The SWOT analysis of the Romanian auto parts industry**

<p><u>Strong points:</u></p> <ul style="list-style-type: none"> <li>- the labour force is technically qualified, having adaptation and assimilation capacities;</li> <li>- internal available raw materials;</li> <li>- the execution of some parts for the finalizing companies;</li> <li>- openness and opportunities for "greenfield" investments;</li> <li>- production capacities available in the nearby of the infrastructure networks;</li> <li>- the internal market of great dimensions with increasing absorption capacity;</li> <li>- the existing regulation and institutional frame for the application of the EU directives and of the Economic Commission of the United States for Europe's regulations.</li> </ul>	<p><u>Weak points:</u></p> <ul style="list-style-type: none"> <li>- technological lagging - the existent technologies being to a great extent on the level of 80s;</li> <li>- systems of traditional manufacturing not modernized yet;</li> <li>- defective management of the human, material and energetic resources;</li> <li>- the non-performant approach of the "quality - cost - delivery" system;</li> <li>- the reduced presence of the training courses, fact which diminishes the development of the professional abilities;</li> <li>- the low rate of usage of the quality management system and of the environment management;</li> <li>- the sustaining mechanisms of recuperation, recycling and turning to account the used vehicles must be developed;</li> <li>- reduced innovative actions and specific industrial services weakly developed.</li> </ul>
<p><u>Opportunities:</u></p> <ul style="list-style-type: none"> <li>- increasing tendencies of the markets absorption power;</li> <li>- orientation of the multinational companies to new markets and relocation of the parts manufacturing in the countries with industrial representation in the sector;</li> <li>- apparition on the national level of the sustaining and promoting mechanisms of the competitiveness through the promotion of the quality management systems series ISO 9000:2000 and ISO TS 16949, of the environment management systems series ISO 14000;</li> <li>- promoting innovation as a factor of competitiveness through diverse mechanisms;</li> <li>- increasing the products' quality;</li> <li>- expansion of the informational technology;</li> <li>- continuation of the afflux of foreign investments.</li> </ul>	<p><u>Constraints:</u></p> <ul style="list-style-type: none"> <li>- the capacity of the suppliers chain forming sector for the companies which integrate parts and accomplishes the finished goods;</li> <li>- the variable capacity of adaptation of the parts manufacturers to the demands of productivity, quality and reduction of the consumptions;</li> <li>- the aspects related to the environment protection and to the limitation of the materials and energetic consumptions constitutes real challenges;</li> <li>- the restriction of the energy-intensive and pollutant productive activities;</li> <li>- the reduced funds allocation in research, development, innovation on the level of companies does not stimulate the application of innovation on large scale in the sector, most of the funds in this field being sustained only by the State.</li> </ul>

Supplier globalization involves much more than simply locating manufacturing activity in another country. It frequently encompasses general management, HR, design/engineering, sourcing materials and components, manufacturing and assembly, and marketing and distribution (Nyce 2006).

The recent adhering to the European Union, the moderated taxes charged in Romania and the cheap costs on the labour market make from Romania an attractive destination for the auto parts manufacturers who supply to all the factories on the world level and which aim now at the East-European market.

The region became a strong point for the auto production of the last years, after big companies on the auto market redirected the production lines towards the ex-states, component of the Sovietic block, being encouraged by the low salaries practiced in the area and the possibilities of a quick development of the business.

The West-European auto parts orientate themselves from different reasons towards the Eastern Europe. Romania offers from this point of view a series of advantages which are, especially for the field of the auto parts manufacturers of great interest:

- comparing with the neighbor countries, the advantage of the production costs and mainly of the salaries costs (the gross average salary is about 400 dollars i.e. 315 euro a month in Romania, less than the monthly average in the Check Republic, where the salary is 890 dollars, i.e. 700 euro a month, or Slovakia, where an employee receives 620 dollars, i.e. 490 euro a month, both countries becoming important centers for the auto industry)
- reasonable distances towards the Western Europe
- improvement of the transport infrastructure, especially for trucks
- specialized labour force and high qualified engineers
- qualified universities and open to research and development, a basis which to possibly meet the requirements of the auto parts suppliers
- increasing auto market.

As a consequence of the foreign capital infusion, there developed some economic regions, București, Argeș, Timișoara etc., perfectly comparable with any industrial zone of the European Union. Besides it, through other investors who continue to be attracted by the favorable economic framework offered by Romania, there develop new industrial zones where there is also present the auto industry as an "engine" of the Romanian industry.

The sub-systems foreign producers will invest in Romania at least 500 million euro annually in 2006-2008, declared in an interview for the Financial Newspaper, the vice-president of the A.C.A.R.O.M., Constantin Stroe.

For the global auto manufacturers, the full benefits of globalization depend upon increasing the standardization of models across markets (Humphrey and Memedovic 2003).

The present state of the automotive industry in Romania denotes that the interest for the potentiality represented by the Romanian parts' manufacturers is a real one and is increasing, the foreign companies expressing their interest in developing business in the automotive industry in our country be it through direct investments be it through formation of joint-ventures with the Romanian companies.

## Conclusions

The transforming process of Romanian economy and its orientation towards a durable development, according to our national interests and with recent integration in the European Union, presumes a profound implication of the Romanian industry, since to realize and maintain a high rhythm of economic growth, the industry has a major contribution and will remain one of the most important sectors of our economy.

In the more and more globalized economy, the auto parts fluxes configure more and more ignoring the borders, almost exclusively on the competitiveness criterion in its three facets in the auto sector: costs, quality, delivery deadlines.

One can say that the industry of the means of the road transport and of the automotive parts has a favorable perspective due to the increasing absorption potential of the internal market, and on the export too, under the conditions in which the economic agents will meet the requirements of competitiveness and reduction of the pollution wastes in order to protect the air and the environment in general.

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