THE EVOLUTION OF STATE AID IN ROMANIA. ANALYSIS OF THE AUTOMOTIVE SECTOR 2007-2015

George ŞTEFAN¹, Raluca Andreea POPA², Alina ARSĂNI³

¹Bucharest University of Economic Studies, Romania, email: stefan.george.m@gmail.com
²Bucharest University of Economic Studies, Romania, email: arsani.alina@gmail.com
³Bucharest University of Economic Studies, Romania, email: arsani.alina@gmail.com

Abstract: This study, according to our knowledge is among the few ones dealing with the analysis of state aid impact and of the way it was used at national level. Firstly, the goal of our study is to analyze the evolution of state aid in Romania, the impact on regional development, on creating jobs and value added. Secondly it is intented to see the contribution of automotive sector which received the highest amount of state aid to the trade balance from the current account between 2008-2015. Automotive sector is a key sector for the development of Romanian economy in the last 10 years for the manufacturing and assembly of cars and for companies producing equipment or auto parts. The paper is structured in seven parts which deal with topics like the state aid in the European Union and Romania, state aid schemes and funded sectors in Romania, sectorial and geographical distribution of the state aid, the analysis of the automotive sector for Romania.

Key words: State aid; Investment; Economic Development; Automotive sector.

JEL Classification Codes: H50, H7, I38, I39, O10, R50.

1. INTRODUCTION

Even if there is a high need in terms of the real impact of public funds on economic development, including those allocated through schemes of state aid, studies analyzing state aid in Romania are very few, being present a void of literature that deals with the issue of state aid that authorities provide to enterprises in order to contribute to regional development, improve the competitiveness of local enterprises, improving balance sheets of companies, externalities (positive or negative) on the sectors of activity, contribution to the trade balance, increase budget revenues collected number of employees etc.

This study consists of several sections and aims to achieve a diagnosis on the use of state aid in Romania in a European context, starting both from the current situation of government support in the form of State aid granted and from their impact on local economy.

The impact of state aid was aimed at macroeconomic and microeconomic level. From a macroeconomic perspective, we analyzed the situation of state aid in Romania, the contribution to regional development, the impact on jobs and investment, how the authorities have sought to achieve various objectives of economic policy, attracting foreign direct investment or contribution to improving Romania's trade balance.

From the microeconomic point of view, we aimed to analyze the influence of state aid on the automotive sector, based on codes of Classification of Activities of National Economy (CANE) referring to companies engaged in production of cars (in the case of Romania, Ford and Dacia -Renault), and production of components and / or equipment for cars.

2. STATE AID IN THE EUROPEAN UNION AND ROMANIA. LITERATURE REVIEW

In recent years, it can be seen an increased concern of the European Commission regarding state aid policy towards a more sophisticated economic approach.

Looking for similar studies in the research literature it was found that in the economic literature there are not so many studies dedicated to the topic of economic aid provided to the companies by different institutions. The studies of the economic aid were divided in two types: the ones referring to foreign aid and the ones referring to state aid. Foreign aid usually is about the aid that companies receive from different organizations like World Bank, European Bank for Reconstruction and Development (EBRD), European Union or other states for example international funds provided by Norway (Norwegian Financial Mechanism) or Switzerland-Czech Cooperation Program. Many of the studies focus more on the foreign aid received by the companies than to the state aid. State aid is a concept related to the funds provided by Governments inside their countries and the literature debates mostly the state aid control (rethinking the balance between state aid goals) focusing on market failure, well target of state aid or distortions of competition (Friederiszick, H.W., Röller, L-H, Verouden, V., 2006) than its impact on development at national, regional, sectorial or firm level. There are some studies about the impact of aid which are not so recent and they refer especially to sectors like education and health. Because of the lack of studies in terms of effects of the state aid at the national/regional/sectorial level, we became interested to investigate this topic in the case of Romania. Further we will focus on state aid and it is necessary from the beginning to underline what it is understood by state aid and which is the difference between state aid and investment incentives.

According to European Commission, State aid is "defined as an advantage in any form whatsoever conferred on a selective basis to undertakings by national public authorities. Therefore, subsidies granted to individuals or general measures open to all enterprises are not covered by this prohibition and do not constitute State aid (examples include general taxation measures or employment legislation)" being considered investment incentives. In order to be considered state aid a measure should be an intervention of the State or through State resources which can take a variety of forms (e.g. grants, interest and tax reliefs, guarantees, government holdings of all or part of a company, or providing goods and services on preferential terms, etc.), the intervention gives the recipient an advantage on a selective basis, for example to specific companies or industry sectors, or to companies located in specific regions. Not the least State aid must be selective, for it to be capable of affecting the balance between the recipient firms and their competitors (Commission's Vademecum, 2003). "Selectivity" is what differentiates state aid from so-called investment incentives which are general measures, which apply equally to all firms in all or specific economic sectors in a member state (e.g., most nationwide tax exemptions). Comparing to state aid, investment incentives are not selective and they apply to all firms/individuals who fulfill the condition.

Why do countries provide state aid? In his research, Collie R.D. (2000, 2002a, 2002b) tries to understand why states provide state aid. The author concluded that a shift in profits translated into economic growth is what motives countries to provide state aid. Also, he concludes in his studies that if Government has an opportunity cost of revenue greater than one when it adds distortionary taxation, it will prohibit state aid. Collie R.D. (2005) studies investment and R&D subsidies comparing with production subsidies, considering that operating aid is not generally permitted under European Commission state aid policy whereas state aid to investment and R&D is permitted. If there are no spillovers on investment and R&D the prohibition of state aid on investment and R&D will increase welfare. So, in this case, there is no incentive to provide state aid. When there are large spillovers to R&D and investment, the prohibition of state aid will always reduce the welfare of a country.

The welfare translated as development/economic growth is the main reason for which Governments decide to offer state aid. There are authors who analyse the impact of aid on investment and implicit in development. For example, Kasuga, H. (2007) in his study evaluates the impact of aid and foreign direct investment in developing countries and concludes the effect of aid or FDI depends on the income level of the country (for e.g. the volume of state aid varies according to the size of GDP), financial structure and governance infrastructure. Conforming to Dollar and Esterly (1999) in their research of African countries suggest that aid is inefficient and does not affect investment.

More, state aid is important also to attract more foreign investors needed by developing countries especially for their know-how. Many of them when they decide to invest are interested in minimum costs: exception of taxation, labour costs, construction cost, rental costs, transport, access to the markets, economic stability, they are also interested how can they to finance their project and which type of state aid or investment incentives are provided.

At European Union level and also in the literature regarding state aid, it is given a special attention to state aid control. It was mention before that state aid is provided by Governments to stimulate development but state aid also can bring negative effects for some stakeholders. These negative effects are related to distortions of competition and trade, government failures which may appear when governments are lobbied (Buelens, Ch.et all, 2007), market failure for example in banking sector when banks refuse to provide credits to the firms for which they do not have information to calculate the risk even the risk may not be a high one or capital market imperfections.

The paper focuses in the end the attention on the automotive sector and the impact of state aid in this sector. It was chosen this sector because, in Romania's case, it is the biggest sector, over 3.6 billion euros. According to the past years state aid had an significant contribution in automotive sector. Between 1989-2006 to this sector were applied sector specific rules in European Union. From 2007 to June 2014, The Regional Aid Guidelines 2007-2013 and the general rules for regional investment aid were applied also to this sector. The Regional Aid Guidelines for 2014-2020 was modified and requires new rules as an in-depth assessment of the incentive effect, the proportionality and the contribution to regional development as well as balancing between positive and negative effects of the aid for all the cases exceeding the notification threshold. In eligible areas the access of large firms to aid pursuant to Article 107 (3)(c) TFEU is limited to new activities, products and process innovation.

Further it is provided an analyses of state aid in European Aid and criteria of the evaluation of the state aid valid for the intern market. According to the legislation of European Union (EU), aid is prohibited *de jure* in the European Union and is considered incompatible with the internal market. It is believed that all companies benefiting from the support of the state, they gain advantages over competitors either in the country where state aid is allocated, or in other member countries - which are not necessarily linked to the performance of the market.

Thus, each state aid scheme must be well justified by national authorities when they want to implement. Usually, they invoke the importance of private investment encouraged by this instrument on (i) regional development, (ii) supporting specific regional assets, (iii) the creation of jobs for disadvantaged people, (iv) increase technology transfer, (v) process optimization production firms, etc., the European Commission approving every regulatory document that institutionalizes state aid or - in exceptional circumstances - proposing to the Council the approval of certain specific state aid.

79

¹ Treaty on the Functioning of the European Union - PART THREE: Policies and internal actions of the Union - Title VII: Common rules on competition, taxation and approximation of laws - Chapter 1: Rules on competition - Section 2: State aid - Article 107 (ex, Article 87 TEC) http://ec.europa.eu/competition/state_aid/legislation/legislation.html

In accordance with European Union law, we present in the table no.1 the categories of state aid can be considered compatible with the internal market:

Table no.1 Categories of State aid compatible with the internal market (Treaty on the Functioning of the European Union, Article 107)

- (a) aid to promote the economic development of regions where the standard of living is abnormally low or where there is an occupancy of labor extremely low;
- (b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;
- (c) aid to facilitate the development of certain economic activities or of certain economic areas, where they do not adversely affect trading conditions to an extent contrary to the common interest;
- (d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union to an extent contrary to the common interest.

According to the report of the European Commission, *Ex-post evaluation of the regional aid guidelines* 2007-2013, in the analysis of state aid schemes are important a series of criteria, such as *their degree of targeting* in such a way to stimulate investment in the less developed regions, *profitability* of the amount of money allocated in terms of externalities created in the region and created jobs and *minimizing* of the effects on competitors, on other sectors of activity and on other Member States.

In the last case, it is important that the positive effects (intentional) generated by state aid schemes to overcome the negative effects (unintended, distortive) that it may influence the market. Therefore, the framework of the European Commission comprises three categories of factors that are considered when a government plans to implement a scheme of State aid, assessing whether it is appropriate using the elements shown in Table no.2

Most financed investments are those that have an impact on job creation, but also those that fail to create additional production facilities and improve productivity. It also creates positive externalities by creating jobs indirectly, companies benefiting from state aid creating additional demand on the market when they call to sub-contractors and suppliers in the implementation of investments in the local market. In addition, financed projects with R&D and innovative activities included, can form industrial clusters at regional or inter-regional level and they can settle cooperation activities with higher education institutions or research centers.

Table no. 2 Criteria for assessing the implementation of state aid schemes (European Commission, Ex-post evaluation of the regional aid guidelines 2007-2013)

Identifying the determinants of investment	Criteriul 1 de evaluare						
determinants of investment	Identifying	the					
determination of investment	determinants of	investment					
decision or location	decision or	location					
decision of the companies	decision of the o	companies					

Criteriul 2 de evaluare	
Assessing the consequences	of
investments (positive externali	ties
on regions and benefits	at
employment level)	

Analysis distorting effects of state aid on competitors and on other regions

Decision to invest:

- labor costs
- qualified labor force
- the growth of the market
- Proximity
- Fiscal incentives

Intended consequences:

- Employment
- Professional training
- R&D
- Externalities on the accumulation of knowledge and regional development
- Development of market
- Specialization and/or diversification

Unintended consequences:

- On other activity sectors
- On competitors
- On other regions and countries

Lastly, it must be mentioned the negative aspects that may occur in the case of state aid, especially on competitors. Although there is no clear causal link between the aid and the negative externalities that may arise, it can be mentioned that by increasing the amounts allocated as state aid and the subsequent of the demand, there may arise a pressure on wage increase and it may increase competition among firms to hire the best workers.

3. STATE AID EVOLUTION IN THE EU AND IN ROMANIA

According to data published by the European Commission regarding the state aid, in 2014 were allocated over EUR 93.5 billion to the EU28, representing up to 1% of EU's GDP. While analyzing the entire period 2007-2014, their value recorded nearly EUR 534 billion (approximately 5% of the nominal GDP of the EU in 2014).

Depending on the allocation of the years of state aid, in the figure no.1 it can be observed that there is a very high concentration in 2014, when the largest increases were for schemes of environmental protection and energy efficiency, but also for schemes that encourage the investments in regional development.

According to the European Commission, from the EUR 33,4 billion registered in 2014 compared to 2013, EUR 28,5 billion (more than 85%) were part of the state aid schemes for renewable energy and environment. Also, most part of the amount was allocated through grants – EUR 27,15 billion and through taxes exemptions for companies – EUR 6,3 billion.

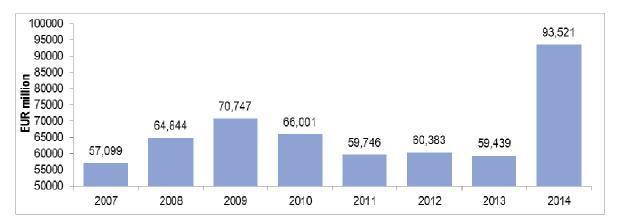


Figure no.1 Nominal value of EU state aid (except agriculture) (The European Commission in September 2016; Note: during the analysis Croatia was excluded, the country joined the EU in 2013. The aggregate amount of state aid granted to Croatia in 2013 and 2014 was EUR 303 million)

In Figure no.2 it can be observed the highest allocation of state aid was in 2014 (17.6%0 and the lowest in 2007 (10.7%). The increased value in 2009 by 3.4 pp may be explained by the

17.6% 18% 17% 16% 15% 13.3% 14% 12.4% 13% 12.2% 11.4% 12% 11.2% 11.2% 10.7% 11% 10% 9%

help Governments tried to stimulate national economies during the period of crisis, 2009 being the most critical year of the crisis.

Figure no.2 State aid distribution by year in the EU (The European Commission, September 2015. Note: during the analysis Croatia was excluded as the country joined the EU in 2013.)

2011

2012

2013

2014

2010

2007

2008

2009

In general, the state aid allocated is directly correlated to the EU countries' GDP, the highest part of the amount, namely EUR 143 billion being allocated during 2007-2014 by Germany, followed by France (EUR 101, 5 bn), United Kingdom (EUR 42 bn), Italy (EUR 33 bn), Spain (EUR 30.4 bn), Sweden (EUR 25.7 bn) and Poland (EUR 20.8 bn).

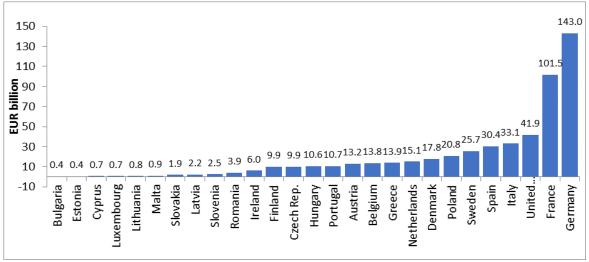


Figure no.3 State aid allocated in the EU during 2007-2014 (Eurostat, October 2016)

Romania had one of the lowest amount of state aid, EUR 3.9 billion being below the average of the European Union (EUR 19.69 billion). As it can be seen in the figure no.3 Germany and France had the highest volume of state aid during 2007-2014, that's why we calculated the average at European Union by eliminating Germany and France. After this elimination, the average decreased to EUR 11.94 billion. Even so, Romania is very far from the average of the European Union state aid amount, this may be due also to the fact that has one of the lowest GDP from EU.

Even so, it is important to study how these EURO 3.9 billion were used inside the national economy, how they were allocated among the sectors, which was the impact. In the following

sub-chapters, the study is oriented inside the national economy analyzing the situation of state aid by type of scheme, by sector and so on.

4. STATE AID EVOLUTION IN ROMANIA. STATE AID SCHEMES AND FUNDED SECTORS

Between 2007-2014, in Romania were approved several state aid schemes (presented in the table below) which had helped boost economic growth by supporting investments in production capacity, engineering or creating jobs including disadvantaged people with difficult access to the labor market (people with disabilities, youth, ethnic minorities, young people aged between 15 and 25 years, people over 50, unemployed etc.)

According to the data released by the Ministry of Finance for the period 2007-2014, the state aid schemes for the mentioned domains covered EUR 3.75 billion, being approved annually amounts between EUR 100 and EUR 200 million as it can be seen in the Table no.3.

Totally the number of signed agreements reached in June 2016 - 87 (see table no.3), most of which were approved between 2009 and 2013, and after 2014. In the mentioned period, in Romania were promoted two important state aid schemes, one for stimulating investments with major impact in the economy (GD 807/2014) and one for the job creation (GD 332/2014).

Table no.3 State aid scheme for investments in Romania (2007-2014) (The Ministry of Public Finance, State Aid, September 2016)

No.	Government Decision	State aid schemes	Period	Budget (EUR mil.)	No. of projects
1	GD 1165/2007	State aid scheme to stimulate economic growth through investment	2007-2011 (stopped in 2009)	500	4
2	GD 753/2008	State aid scheme for regional development by stimulating investment	2008-2014	575 (115 mil./year)	2
3	GD 1680/2008	State aid scheme for ensuring sustainable economic development	2009-2013	1000 (200 mil./year)	40
4	GD 797/2012	State aid scheme supporting investment that promote regional development through the use of new technologies and creating jobs	2012-2014	135	14
5	GD 807/2014	State aid scheme to stimulate investments with major impact on the economy	2014-2020	925 (145 mil./year)	8 (June 2016)
6	GD 332/2014	State aid scheme to support investments that promote regional development by creating jobs	2014-2021	600 (100 mil./year)	19 (June 2016)
	TOTAL			3735	87

According to the data published by the Ministry of Public Finance (see table no.4), the difference between the amounts approved as state aid and the amounts settled effectively by the authorities is a significant difference. Until June 2016 were settled only EUR 445 million, less than 12% from the amounts allocated for state aid – knowing that for the last 2 state aid schemes, which have been implemented starting with 2014, the money haven't been settled. The EUR 445 million have driven over EUR 2 billion investments that created more than 22800 jobs between 2007 and 2015.

Table no.4 State aid scheme situation in Romania (2007-2014) (Own processing based on the Ministry of Public Finance's data)

No.	Government Decision	State aid schemes	Reimbursement (EUR mil.)	Investment (EUR mil.)	Job Creation	Investment vs. State aid (multiplier)
1	GD 1165/2007	State aid scheme to stimulate economic growth through investment	103.1	355.7	2163	3.45
2	GD 753/2008	State aid scheme for regional development by stimulating investment	16.37	242.8	757	14.83
3	GD 1680/2008	State aid scheme for ensuring sustainable economic development	305.7	1010.7	11139	3.31
4	GD 797/2012	State aid scheme supporting investment that promote regional development through the use of new technologies and creating jobs	20	173.55	4574	8.7
5	GD 807/2014	State aid scheme to stimulate investments with major impact on the economy	0	76.3	1194	-
6	GD 332/2014	State aid scheme to support investments that promote regional development by creating jobs	0	157	2979	-
		TOTAL	445.17	2016.05	22806	

Even the total amount of money did not reach the beneficiary, it is good to underline that the state aid schemes had a good impact on job creation also because during the period of crisis, economies are confronting with high unemployment. In the case of Romania there was not a high unemployment also due to this additional job created by the state aid provided.

In Romania there are high economic disparities between some regions, that's why it is important to see which region were impacted more by the state aid in terms of number of projects gained which will create value added in the future and more jobs. Also, it is important to see the sector that managed to attract more state funds in order to understand if in the future this sectors may develop clusters and generate demand growth for other firms.

5. SECTORIAL AND GEOGRAPHICAL DISTRIBUTION OF THE STATE AID

This section reveals the counties and the sectors that received most of the state aid between 2007 and June 2016. The sectorial perspective show that most part of the amounts paid by the authorities to companies, through the Ministry of Public Finance went to the automotive sector (34 projects), IT (19 projects) and aerospace (5 projects), therefore, from the total of EUR 445 million paid/settled to companies, EUR 371 million (83% of the total) were directed to the mentioned sectors – Table no. 5.

Table no. 5 The amounts paid by the authorities to companies (Ministry of Public Finance)

Sector	No of projects	Payments (EUR mil.)
Aerospace	5 projects	31
Automotive	34 projects	316
IT	19 projects	24

As a general idea, Romania have never had the objective of developing a certain sector, the main method of offering the state aid - regardless the type of the state aid - consisted of "first come-first served" until the annual budget allocated ended. The exception was made on the 2012 scheme, which was dedicated mainly to companies investing in new technologies. All the other state aid schemes funded many sectors as there was no specific targeted sectors.

Therefore, sectors such as those mentioned below received grants:

- automotive
- aerospace
- textiles,
- health,
- IT.
- metallurgical,
- energy
- telecommunications
- food and packaging production,
- rail transport,
- cables production
- equipment for irrigation and piping production,
- tourism,
- household appliances production,
- call center and market research,
- engineering and design,
- paper and photovoltaic panels etc.

However, given the grants presented above, it can be concluded that the policy used by the Romanian authorities aimed at supporting those large investment projects scale, which have the potential to become a significant source of technology transfer to increase productivity and efficiency in the period 2007-2015. Due to sectors, such as automotive, aerospace and IT, which received most of the grants.

According to the strategy of Romania, to decrease the disparities between regions, it can be observed in the Figure no. 4 the distribution of state aid by counties, 28 from 40 counties had state aid projects by different schemes. Most of them went to the Center of Romania, Bucharest-Ilfov and East of Romania. The South part of Romania, which it is one of the less developed, attracted the smallest amount of projects.

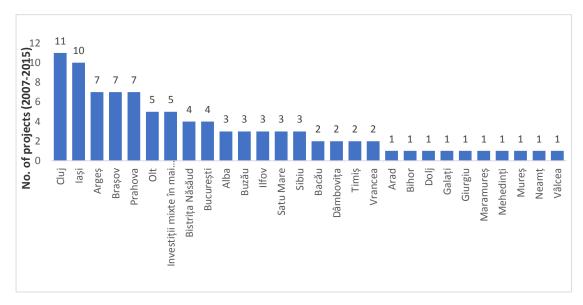


Figure no.4 Project distribution by county level (Own processing based on the Ministry of Public Finance's data)

Not only the number of project is important but also the amount of money received, For sure there is also the contribution to regional development, the state aid intensity being higher in less developed regions, so for one project they may receive more money than the ones from Bucharest-Ilfov. As the region has a smaller growth in the GDP per capita, the state aid intensity for that region is higher, so that companies have an incentive to expand and /or diversify their activities in those type of regions such us: North-East, Centre, South-Muntenia, South-East, North-West and South-West.

Therefore, the schemes implemented since 2014 in these regions had a state aid intensity that went up to 50% of eligible expenditure (or max. EUR 37.5 million). For more developed regions, the state aid intensity is lower: West Region and Ilfov - 35% of eligible expenditure, Bucharest - 15% of eligible expenditure for the period 2014-2017 and 10% for 2018-2020 (see table no.6).

• • • • • • • • • • • • • • • • • • • •					
Region	2014 - 2017	e 10% of eligible expenditure (max. EUR 7,5 mil.)			
Bucharest	15% of eligible expenditure (max. EUR 11,25 mil.)				
West Region Ilfov	35% of eligible expenditure (max. EUR 26,25 mil.)				
The rest of the	50% of eligible expenditure (max_EUR_37.5 mil.)				

Table no. 6 State aid intensity (The Ministry of Public Finance)

As regarding the relation between the GDP growth and the number of state aid projects (see figure no.5), the figure below shows that for counties such as Cluj, Iaşi and Braşov there is an important number of projects, but in the same time a significant value of GDP growth.

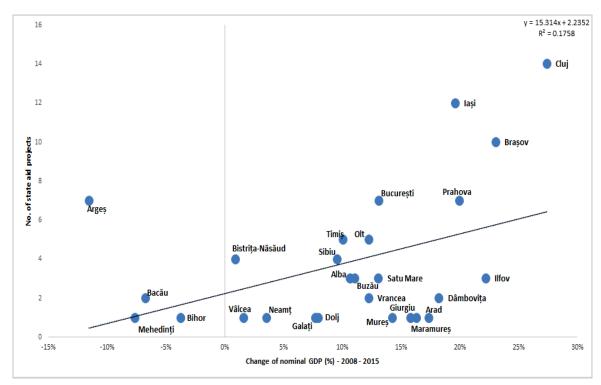


Figure no.5 The relation between the GDP growth and the number of state aid projects (The Ministry of Finance, National Commission of Prognosis)

Note: the counties without state aid projects were excluded from this analysis. (Botoşani, Brăila, Călăraşi, Caraş-Severin, Constanța Covasna, Gorj, Harghita, Hunedoara, Ialomița, Sălaj, Suceava, Teleorman, Tulcea și Vaslui). Although, were added 5 projects that were simultaneous implemented in several counties.

After the regional level, the analysis goes to the sectorial level, more exactly to the automotive sector because it was the one which attracted the highest amount of state aid during the analyzed years.

6. THE EVOLUTION OF THE AUTOMOTIVE SECTOR

In this section was analyzed the evolution of the automotive sector, due to the fact that it was one of the sectors which received an important part of the state aid schemes implemented in Romania during 2007-2015 (– for the state aid schemes implemented since 2014, the payments haven't been made yet). Also this sector is one of the most developed in Romania contributing by 10% to GDP.

The analysis was based on companies' balance sheets that are public on the Ministry of Public Finance's website. The NACE codes associated with the production of vehicles and the equipment manufacturing / automotive components were taken into consideration (see Table no.7).

Table no.7 NACE codes considered in the analysis

tyres

2219 - Manufacture of other rubber products

and springs

2720 - Manufacture of batteries and accumulators

2815 - Manufacture of bearings, gears, gearing and driving elements

2910 - Manufacture of motor vehicles

2211 - Manufacture of rubber tyres and 2920 - Manufacture of bodies (coachwork) tubes; retreading and rebuilding of rubber for motor vehicles; manufacture of trailers and semi-trailers

> 2931 - Manufacture of electrical and electronic equipment for motor vehicles

2593 - Manufacture of wire products, chain 2932 - Manufacture of other parts and accessories for motor vehicles

> 7112 - Engineering activities and related technical consultancy

This sector benefited from state aid in most of the period analyzed. The impact of the state aid schemes, along with the increased foreign demand in several EU Member States supported the turnover's growth and increased profit between 2008 and 2015 in the automotive industry, in 2015 comparing with 2008, the total turnover increased by 88.3% and the number of employees increased by 11.4% for the same period. Also, the investment made in the capital growth and in technology led to the increase of labor productivity by 69% in 2015 comparing with 2008, as can be seen in the table no. 8. All the economic and financial indicators had an increasing trend between 2008-2015 except the number of active companies which decreased.

Regarding the 34 projects which obtained the state aid, by June 2016 there had been made payments of EUR 316 mil, but the total approved state aid value for companies in the automotive sector was EUR 465 mil. Until now, the projects resulted in private investments of over EUR 1.73 bn. In addition, in terms of jobs creation, the companies have assumed about 13 thousand jobs, creating only 10 thousand since June 2016.

Table no.8 Economic and financial data for the automotive sector (The Ministry of Public Finance)

	2008	2009	2010	2011	2012	2013	2014	2015
Total turnover - mil.	9102.4	8319.9	10788.7	13736.4	14320.8	16918.5	17884.6	17144.9
EUR								
No. of companies	11203	11281	11346	11841	12044	12168	12446	12249
No. of active	9488	9453	8770	8971	9120	9308	9602	9632
companies								
(positive turnover)								
% of active	84.7%	83.8%	77.3%	75.8%	75.7%	76.5%	77.1%	78.6%
companies in total								
no. of companies								
Average no. of	181266	183457	174143	184413	194661	204137	206080	201987
employees								
Net profit - mil. EUR	473.3	433.3	555.1	650.5	686.2	755.1	912.4	931.6
Labour productivity -	50216	45351	61953	74487	73568	82878	86785	84881
EUR/employee (left								
axis)								
Net margin (%)	5.2%	5.2%	5.1%	4.7%	4.8%	4.5%	5.1%	5.4%
(right axis)								

For the national development and economic growth, it is important the capacity of this sector to create value added. As it can be seen in the figure no.6, a share over 90% of Romanian cars production goes to export. Between 2007 and 2015 the exports increased significantly from 241700 cars exported to approximately 390000 at the end of 2015. In 2012 the volume of cars exported was almost equal with the volume of cars produced (see figure no. 6).

The highest number of cars exported was reached in 2014, from over 411000 cars produced, 364 000 were exported abroad (almost 90% of total production), most of them were exported to France, Italy and Germany.

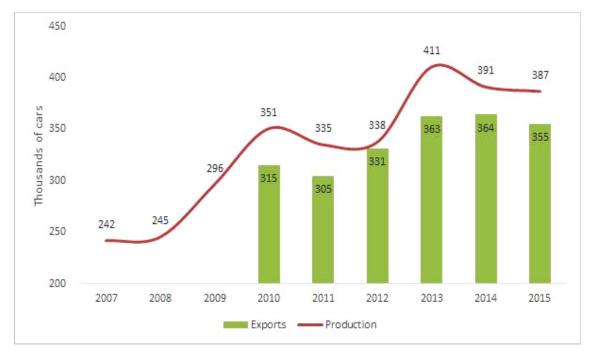


Figure no.6 The evolution of car production and exports in the automotive sector (The Automotive Manufacturers and Importers Association)

What is important to the development of automotive sector in Romania, it is primarily the location of the two largest producers /assemblers - Dacia-Renault and Ford, mainly as a result of state aid (Ford benefiting also from a law adopted in one of the Government Meeting in 2008), being eligible to attract state aid with 50% intensity.

Dacia and Ford have created around them an important network of over 600 component manufacturers and automotive equipment (both domestic and foreign), they have also invested in R&D centers as production and exports were getting higher. Gradually, the companies that have been manufacturing equipment and components in the automotive sector have developed both domestic and foreign market with a high share in exports.

The automotive sector's contribution to export was highlighted in the figure no.7, where it can be observed a strong growth especially after 2009. Romania's exports in the automotive sector increased from EUR 1 billion in 2005 to almost EUR 9 billion in 2015 (around 50% of the sector's total turnover of this year).

The high growth of equipment and components segment was more evident after 2009. On the whole horizon analyzed from 2007 to 2015 this segment grew by over EUR 3 billion which represents a growth of 216% in 2015 compared with 2007, while the car production segment (exports made by Ford and Dacia), the growth was only EUR 2 billion during this period, still for this segment in 2015 growth of exports was 268% comparing to 2007, higher than the segment of equipment and components.

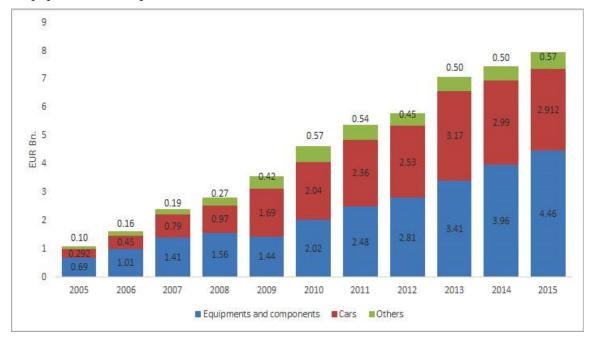


Figure no.7 The evolution of Romania's exports in the automotive sector (TradeMap, The National Institute of Statistics)

This analysis shows the high potential of the sector to grow and also to generate growth in collateral sectors. For sure to this positive trend, the state aid had an important role and also the incentives provided to the companies.

7. CONCLUSIONS

It can be seen at national level, state aid had a positive impact in developing some regions and sectors, by increasing the number of jobs, by increasing high technologies, by increasing exports, by creating value and creating clusters.

For the companies present inside Romania, state aid has an important role, providing them additional funds for increasing investment and capacity. State aid stimulates large investments with potential to create jobs and transfer of high technologies as we can see from the numbers studied above.

From our study it can be observed that only some sectors concentrate most of the grants and in the future must be taken care state aid not to be monopolized by these sectors and to give the opportunity also to sectors less developed but with high potential (e.g. creative industries, bio-economies) to gain state aid.

Looking to the facts, as lesson for the future, in order to increase the efficiency of the process, bureaucracy and timing should be improved. In terms of bureaucracy, less documents and time consuming procedures. With regards to time period, for example for the scheme

807/2014 there is only one session per year to apply for the state aid. This scheme has the attention of big foreign investors.

Thinking that it is referred to new investments and decision to invest is based on efficiency of costs, financing the project of investment, it is difficult for a new big investor to waste time and money to wait for the right moment to apply for the state aid and to wait for the answer more than 4 months.

In our vision, there should not be a specific period to apply and also there should be a shorter lag between receiving the potential application for state aid and receiving the answer, also a shorter lag between signing the contract in case of winning the grant and receiving the money.

8. AKNOWLEDGMENT

This work has been done through the Partnerships Program in Priority Areas - PNII, developed with the support of MEN-UEFISCDI, project no. 334/2014, project code PN-II-PT-PCCA-2013-4-0873, project title "A New Model for Corporate Risk Assessment: a Scientific Tool for Knowledge Based Management".

REFERENCES

- 1. Allen and Overy, CEE you there! Foreign Direct Investment in Central and Eastern Europe, 2011:
- 2. Hans W. Friederiszick, Lars-Hendrik Röller, Vincent Verouden, *European State Aid Control: an economic framework*, European State Aid Control, 2006;
- 3. Commission's Vademecum, Community rules on state aid, supra note 7, p.3, 2003;
- 4. Dollar, D., Easterly, W. *The search for the key: aid, investment and policies in Africa*, Journal of African Economies, no.8, pp 546-577, 1999;
- 5. Kasuga, H. Evaluating the impacts of foreign direct investment, aid and savings in developing countries, Journal of International Money and Finance, no.26, pp 213-228, 2009;
- 6. Collie, D. R. State Aid in the European Union: The Prohibition of Subsidies in an Integrated Market, International Journal of Industrial Organisation, 18, 867-884, 2000;
- 7. Collie, D. R. *Prohibiting State Aid in an Integrated Market: Cournot and Bertrand Oligopolies with Differentiated Products*, Journal of Industry, Competition and Trade, Vol 2, pp. 215-231, 2000a;
- 8. Collie, D. R. *Trade Liberalization and State Aid in the European Union*, in Chris Milner and Robert Read (editors), Trade Liberalization, Competition and the WTO, Edward Elgar, Aldershot, pp. 190-206, 2000b;
- 9. Collie, D. R. *State aid to Investment and R&D*, European Economy, European Commission, no.231, 2005;
- 10. Buelens, Ch., Garnier, G., Meiklejohn, R., Johnson, M. *The economic analysis of state aid: some open questions*, European Economy, Economic Papers, no. 286, 2007;
- 11. Pierre-Philippe Combes, Tanguy van Ypersele, *The role and effectiveness of regional investment aid. The point of view of the academic literature*, Report for European Commission, April 2012, Luxembourg, http://ec.europa.eu/competition/consultations/ 2013 regional aid guidelines/ literature review study en.pdf
- 12. Rainer Nitsche, Paul Heidhues, *Study on methods to analyse the impact of State aid on competition*, European Commission, Number 244, February 2006

- 13. Xavier Le Den, Robert Kröber, Alessandro Ramella Pezza, Fritz Gillerke, Lukas Bresser, Matías Krämer, Usman Khan and Jose Olivas, *Ex-Post evaluation of the Regional Aid Guidelines* 2007-2013 Final Report, European Commission, December 2012
 - http://ec.europa.eu/competition/consultations/2013_regional_aid_guidelines/study_rag_evaluation_en.pdf
- 14. European Commission, *State Aid Scoreboard* 2015 http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html
- 15. European Commission, *State aid legislation and statistics*, GD Competition http://ec.europa.eu/competition/state-aid/legislation/legislation.html

Databases:

- 16. Eurostat http://ec.europa.eu/eurostat
- 17. The Ministry of Public Finance state aid section http://www.mfinante.ro/ghidajstat.html?pagina=domenii
- 18. The Ministry of Public Finance Economic and Financial indicators of Romanian companies https://www.anaf.ro/indicatori/indfinanciari.html
- The National Commission of Prognosis, The main economic and social indicators forecast at territorial level – May 2016 http://cnp.ro/user/repository/prognoze/prognoza_profil_teritorial_mai_2016.pdf