The Relation between State Aid and Economic Development in the European Union

Nicolae Băcilă*

The main purpose of the paper is to provide a quantitative and qualitative analysis of state aid policy and its role in ensuring economic development in the EU. Based on theoretical approaches and empirical evidence, it is assumed that an efficient state aid policy should support the macroeconomic stabilization and the economic development. Therefore an econometric model is proposed to evaluate and quantify the relation between the level of horizontal aid and the value of GDP per capita at purchasing power parity standard.
According to the results of the analysis, important disparities can be identified in analyzing the correlation between the two indicators mentioned above, deficitary to several EU member states, suggesting the necessity of a better coordination in the economic policies. Thus, one of the most relevant conclusions is that while the general objective of reducing state aid level is mainly achieved since the early 1990s, a redirection of state aid towards horizontal objectives can be observed beginning with 2000 and is still ongoing at present with important consequences for the general economic development of the EU member states.
Key words: *competition policy, state aid, horizontal aid, sectoral aid, economic growth and development*
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* **Nicolae BĂCILĂ,** PhD Candidate, „Babes-Bolyai” University Cluj Napoca, bacila_nicu@yahoo.com.

Introduction

The question whether governments may grant state aid to firms has long been discussed in the public finance literature. While the debate analyses mostly the necessity, the effectiveness and the efficiency of public support to the markets for private goods, in terms of economic theory, it is recognized that the main justification for state intervention in the economy is to correct or compensate for situations of market failure in order to achieve a set of more or less explicit objectives such as increasing economic efficiency, supporting economic competitiveness and strengthening social cohesion (e.g. Bilal and Nicolaides, 1999; Wishlade, 2003). However, the only objective which is clearly stated by the Treaty establishing the European Community and which is confirmed by decisions taken by the European Commission refers to maintaining undistorted competition in the Community economic environment, validating the assertion that „state aid control in the EU is more interested in state aid negative externalities on the economies of the partner member states" (Ganoulis et al., 2001: p.290).

Methodology

In analyzing the relation between state aid and economic development in the EU, the paper is providing a quantitative approach based on the quantification of state aid in relation with the GDP and a qualitative approach as a result of the state aid classification in horizontal and sectoral aid. According to the Commission's reports, one of the most relevant determinants of state aid is GDP, but while state aid is considered to support economic growth and development, in practice the amount of aid awarded often grows with GDP, suggesting that in awarding different levels of state aid in EU member states, major issues are the political economy of state aid, the distortion of markets and state aid impacts contradicting other policy goals such as environmental and social objectives.

In this context, one of the most important contribution of the paper is related to the construction of an econometric model designed to shape the relation between the situation of state aid and the value of GDP per capita at purchasing power parity standard, which reflects the correlation between the different levels of state aid, on one hand and the economic growth and development, on the other hand, for the period 2000-2008.

$$State_aid_{(t+1)} = C(1) + C(2) \times GDP_PPS_{(t)} + \varepsilon$$

According to the model, state aid in the current period is a function of GDP expressed in PPS in the previous period, plus a residual element which represents the error degree. The independent variable is lagged by a year because State aid is a policy instrument that can be used proactively.

Historical background

In Western Europe, state aid policy is an economic reality confirmed by the integration experience in the second half of the XXth century, although the nature and use of state aid have undergone important transformations in time: state aid became an important industrial policy tool in the 1960s, initially as a response to trade liberalization (Trebilcock et al.,1990); in the 1970s, state aid was directed frequently towards specific sectors in decline such as steel and shipbuilding and creating national champions in strategic sectors such as aerospace; however, this earlier understanding of state aid use in favor of specific targets of national policy has changed since the mid-1980s, as new policies and attitudes towards industrial policy have emerged. While in the US the shift has been towards policies aimed at new capital formation and stimulation of demand (Eisinger, 1988; Gray and Lowery, 1990), in the EU ambiguous Treaty rules and heterogeneous Member States' preferences have enabled the Commission to act as a suprana-

tional entrepreneur, enforcing the prohibition of distortive state aid and partially creating positive integration (Blauberger, 2008) by developing a model of what it considers to be "good" State aid policy. This was pointed out by the Lisbon European Council of March 2000 that calls the Member States both to reduce the general level of State aid and to shift the emphasis from supporting individual sectors or companies towards horizontal objectives of common interest ("less and better targeted state aid"). This type of aid is considered more acceptable by the Commission, because it does not cause distortion of competition in the internal market and is more appropriate for making European economies more viable internationally (Commission, 2002).

In Central and Eastern Europe the concept of „state aid" has particular importance mainly as a result of political, economic and social factors. In this area, the transition was accompanied by structural changes from resource allocation through a system of central planning to one based on market mechanisms, being necessary the development of private initiative in a political and economic environment marked by the major role of the state, both as a public authority and as an economic agent, that could intervene in the market to discriminate in favor of businesses in a variety of ways. In this respect, state aid „discipline" by EU model was justified in terms of legal obligation imposed by the European Agreement (Article 64), in terms of opportunity, for avoiding sudden shock of transition to higher demands on granting state aid and in therms of macroeconomic stabilization, with consequences in the tax-budget and even monetary field (Negrescu and Oprescu, 2004).

The evolution of the EU State aid in relation with the GDP

The Lisbon European Council of March 2000 called on the Commission, the Council and Member States to "further their efforts to promote competition and reduce the general level of state aids, shifting the emphasis from supporting individual companies or sectors to-

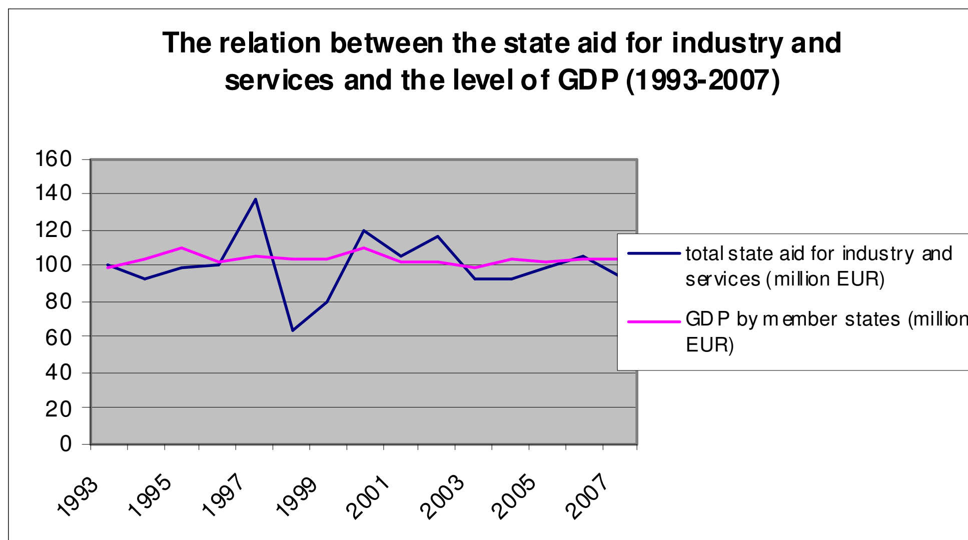
wards tackling horizontal objectives of Community interest, such as employment, regional development, environment and training or research" (Presidency Conclusions of the Lisbon European Council 23-24 March 2000), goal that was repeated by successive European Councils, the Commission Recommendation on the Broad Economic Policy Guidelines for 2005-2008 (Commission, 2005a) and the State Aid Action Plan in 2005 (Commission, 2005b).

In relative terms, the overall level of state aid in the 1980s was that of 2% of GDP, fell below 1% in the 1990s and in 2008 it stood at around 0,5%-0,6%. This decline can be explained in part by the work that began in the mid 1980s to make effective state aid control a main component of the Single Market Programme and in part by the general recognition that a high volume of sate aid not only hindered an efficient allocation of resources but also rendered the economy as a whole less competitive. State aid discipline was then widened and strengthened in the 1990s in the context of Economic and Monetary Union and then given new impetus by the Lisbon Council in 2000 and the State Aid Action Plan in 2005 (Commission, 2008).

In relation to GDP and during a period of steady economic growth, State aid for EU-27 decreased by 15% from 0,50% of GDP in the period 2002-2004 to 0,42% of GDP in the period 2005-2007. The total aid granted by the Member States in 2007 represented 65 billion EUR or 0,53% of EU GDP, while aid for industry and services was 49 billion EUR or 0,40% of GDP. Although mainly positive, this evolution hides important disparities, especially between the old member states and the new member states. From 2000 to 2003, the average aid level in the Central and Eastern European Countries that have joined the EU in 2004 amounted to 1,42% of the GDP as compared to only 0,39% in the old member states. While the aid level reached the highest point immediately before enlargement, in 2003, one can notice a rapid decline after accession, below the value of previous years. The average state aid level in the new member states converges towards an almost stable average state aid level in the old member states.

In 2007, state aid represented just below 0,53% of EU GDP, but this value hides important disparities between member states: the share of total aid to GDP ranges from around 0,4% or less in nine countries including Italy and the United Kingdom to 1% or more in five EU-12 countries together with Finland. For Bulgaria, Latvia, Romania and Finland, the high proportion can be explained by the relatively large amounts of agricultural aid which represent between 70% and 90% of aid in these countries. In Hungary and Malta, it is due largely to pre-accession measures which are being phased out under transitional arrangements or limited in time. Sweden (0,9% of GDP) also lies well above the EU average but this can be attributed to the large proportion of aid for environmental protection which represents around 80% of total Swedish aid.

Figure 1. The relation between the state aid for industry and services and the level of GDP (1993-2007)



Source: author's own calculations based on data from European Commission

Results of the econometrical model

In order to quantify the relation between state aid and the economic development in the EU member states we propose an econometric model that takes into consideration the level of horizontal aid as percentage of total aid, on one hand, and the value of GDP per capita at purchasing power parity standard, on the other hand. The main reason for evaluating the economic development in relation with the level of horizontal aid is connected to the fact that horizontal aid is, in principle, the least distorting type of support because it affects all or most firms in the same way, applying on research and development, environmental protection, small and medium enterprises (SMEs), promoting employment employment, training of employees. It also includes aid for rescuing and restructuring firms facing financial difficulties („temporary difficulties"), although this type of support differs from those mentioned above because it may have a strong distorting effect on competition.

According to the econometrical model, the relation between the the level of horizontal aid granted by member states and the economic development expressed by the value of GDP per capita at purchasing power parity standard is asymmetrical, taking into account the fact that often the objectives for granting the state aid are contradictory to the expectations. Correlation coefficient (R-squared) and adjusted correlation coefficient (adjusted R-squared) recorded the highest values in Lithuania, Spain, Czech Republic, Bulgaria, Latvia, Cyprus, Ireland and Poland, demonstrating a close correlation between the granting of horizontal aid and the value of GDP per capita at purchasing power parity standard. At the opposite side, a low value of the correlation coefficient (R-squared) or a negative sign of the adjusted correlation coefficient (adjusted R-squared) suggests that increasing the level of GDP per capita in PPS led to a decrease in the overall level of horizontal aid as a percentage of total aid and an increase in the level of sectoral aid.

Moreover, deficitary corelations between these indicators can also suggest the necessity of a better coordination in the economic policies of the member states in achieving efficiency of the public support and resource allocations.

Tabel 1. The relation between the level of horizontal aid as percentage of total aid and the value of GDP per capita at purchasing power parity standard

	Intercept	Independent variable	R-squared	Adjusted R-squared
Belgium	100.4838	-0.010144	0.001304	-0.098565
Bulgaria	-107.5531	5.021739	0.736689	0.684027
Czech Republic	-597.6306	8.814717	0.763407	0.729608
Denmark	48.90220	0.371214	0.307239	0.237963
Germany	467.2088	-3.383821	0.492799	0.442079
Estonia	98.47014	0.022794	0.094454	-0.034910
Ireland	-163.4742	1.637094	0.569887	0.526875
Greece	51.61482	0.472632	0.112214	0.023436
Spain	-296.2743	3.553293	0.762508	0.738759
France	592.0063	-4.623823	0.372185	0.309403
Italy	65.00775	0.196259	0.029788	-0.067233
Cyprus	-917.9065	10.67646	0.606751	0.550573
Latvia	-94.52610	3.677418	0.679673	0.633912
Lithuania	-211.1145	5.221481	0.864746	0.845424
Luxembourg	-	-	-	-
Hungary	-169.7506	3.550154	0.502219	0.431107
Malta	-37.10227	0.530168	0.271510	0.167441
Netherlands	74.96405	0.152068	0.036763	-0.059560
Austria	82.33742	0.081881	0.000442	-0.099513
Poland	-317.8984.	7.368032	0.550740	0.486560
Portugal	-313.5463	4.334953	0.384178	0.322596
Romania	18.80952	0.586954	0.084162	-0.144798
Slovenia	-77.88573	1.846498	0.457689	0.380216
Slovakia	-6.293250	1.268568	0.316438	0.218786
Finland	-13.81353	0.940594	0.131702	0.044873

Sweden	93.45815	0.050727	0.045091	-0.050400
United Kingdom	-136.3755	1.869903	0.105280	0.015808

Source: author's own calculations based on data from European Commission

State aid in the context of the economic and financial crisis

Referring to the situation of State aid policy in the contect of the crisis, Neelie Kroes, competition commissioner, said in February 17th, 2009 that „we must be flexible in procedure but not principle," thus suggesting the need for qualitative approaches of the public funds management, provided that the effects of the crisis have spread rapidly throughout the financial sector into the real economy, both in developed market economies and in developing countries. Faced with these challenges, the European Commission felt the need to temporarily change the mechanisms for granting aid, appealing in this respect to Article 87 (3), (b) in order to declare the aid which aims to „remedy a serious disturbance in the economy of a Member State" compatible with internal market. Therefore, the Commission adopted the „Temporary Community framework for State aid matters to support access to finance in the current financial and economic crisis", providing additional tools to combat the effects of credit contraction on the real economy (de minimis aid , public or private subsidized loans, guarantees, etc.).

In the context of the new challenges of the crisis, the countries of Central Europe have proved vulnerable due to the inheritance of structural deficiencies from the transition period, one of the most important concerns being the effectiveness and sustainability of the market-based competitive mechanism. In quantitative terms, it is indisputable that the aid has increased considerably, but the objectives and actual or potential effects of granting aid on the distortion of competition are also of equal importance. Moreover, the main objective of State aid must continue to be the correction of market failures and the

enhancing of long term competitiveness, while maintaining the principle of undistorted competition in the EU internal market.

Although it is too early to be able to make predictions about the lasting consequences of the crisis and substantial changes that have occurred or will occur in the relationship between the state and the private sector, both from a theoretical and empirical perspective, we can believe that public support correctly sized and oriented according to market needs can be a positive factor to unlock the lending process and boost investment needed to produce long term benefits.

Conclusions

To summarize, it may be noted that competition policy and state aid policy are interdependent so as to ensure the proper functioning of the market and the inevitable correction of market failures that may occur in the economy. Although regarding the transition period, State aid policy has left many issues unresolved or partially resolved, as for example, the quantitative and qualitative compatibilization with the situation in Western Europe or the link not strong enough between the process of economic growth and the effective redirecting of State aid from sectoral to horizontal objectives, State aid policy can be a component of primary importance of the public policies in order to solve current problems in a new economic and social context defined by the challenges of international economic and financial crisis.

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