

# State Aid in the Visegrad Countries: Similarities and Differences

GÁBOR POTVORSZKI, Ph.D.

ASSISTANT PROFESSOR

UNIVERSITY OF MISKOLC

e-mail: [regpot@uni-miskolc.hu](mailto:regpot@uni-miskolc.hu)

## SUMMARY

*This study focuses on the characteristics of those grants that are clearly for the purpose of carrying out economic activities. By giving an overview about the very specific nature of State aid rules in the European Union determining the level playing field, a Member State can grant subsidies. The main aim of this article is to identify whether there can be significant similarities and differences across the Visegrad countries, namely the Czech Republic, Hungary, Poland and Slovakia. As we are facing the next programming period of 2021–2027 it is crucial from the point of view of what can be learned about the current period and, perhaps, what should be changed.*

*Keywords: State aid, economic growth, territorial analysis, Visegrad countries*

*Journal of Economic Literature (JEL) codes: H2, H7, K2*

*DOI: <http://dx.doi.org/10.18096/TMP.2018.02.05>*

## INTRODUCTION

*"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."* (European Commission) The economics of State aid can be regarded as a little researched field until now. The main reasons for this can be that most of the empirical studies are related to examining whether a (significant) impact can be attributed to public money spent, irrespective of its "*origin*" (e.g. EU funds versus national budgetary sources), but not explicitly focusing on State aid. Because of the fact that competition law is a specific area of the European Union (hereinafter EU), limited to it and applicable to market players active in the internal market, and therefore can be considered unique in the world.

## LITERATURE REVIEW – CONCEPTS OF STATE INTERVENTION

Nearly all of the main economic theories and schools deal with the issue of State intervention and the efficiency of public spending and its (possible) impacts, from Adam Smith (1776) through Keynes (1936) and Friedman (1962)

to Krugman (1991; 1994). The basic question to answer is whether there is a need to intervene in the economy, and if so, to what extent? The theories are quite shared varied about it.

According to 17th-century mercantilism the State had to take an active role in the economy by promoting export growth and protecting the interests of the domestic industry. In contrast, the physiocrats emphasized the support of agriculture. Adam Smith argued that that market forces – influencing supply and demand – will equilibrate where products and goods are exchanged at a natural price, in which the State should not intervene or only to a limited extent. Parallel to the classical theorists, Marshall (1890) and Walras (1872) basically rejected the possibility of State intervention. In perfectly competitive markets demand and supply equilibrate due to market mechanisms. Nevertheless, they did not examine the issue of market shortage and/or failure.

Keynes (1936) was the first who comprehensively dealt with the necessity for State intervention and interpreted its role in the economy in a broader context following the global economic and financial crisis between 1929 and 1932. He argued that in times of crisis there is a need to induce demand artificially and indirectly: he thought that it could be realized through promoting investments in infrastructure and creating jobs, assuming that it would generate income in the economy by consumption and/or savings and raise the revenues of the State budget, too. In contrast to fiscal intervention, Friedman (1962) emphasized the role of money supply and

its volume in circulation on the economy. He rejected the economic role of fiscal policy instruments in essence: the State shall not intervene in promoting economic growth through the central budget. Moreover, (federal) government spending seems to make the economy less stable. In the 1970s, after the collapse of the Bretton Woods gold standard system, the liberal school became more dominant again. The neoliberals are on the side of deregulation and say that State intervention should be limited to the minimum necessary level, its role in the economy shall be reduced and the (not yet liberalised) industries should be opened to the market. Besides ensuring economic liberalism (free market and competition), State intervention shall be confined to monetary policy instruments (e.g. by floating exchange rates).

One of the main focus points of contemporary economic literature and research is the issue of economic growth and its driving forces and the role of State in it. The alternative economic theory reconsiders the fundamental economic dogmas but in a very different way because their essence lies in the different approach and handling of economic issues (see e.g. heterodox, evolutionist, institutionalist and experimental economic schools and models based on the blue, green, free or rainbow economy).

In summary, the opinions on the role of State intervention are heterogeneous, even in the view of contemporary economists who think quite differently about it. For instance, see Kornai (1982) on the role of the State in public administration and the private sector, which

is in full contrast with Piketty (2013) on the role of capital in the 21st century as regards income inequality.

## THE VERY SPECIFIC LEGAL NATURE OF STATE AID

The competition policy is a common policy meaning that national sovereignty is limited. To understand how the competition policy works in practice, its fundamentals were already laid down in the founding Treaty (namely the Treaty of Rome in 1957) in order to ensure fair market terms across the EU Member States (hereinafter MSs) and to prevent them from turning towards protectionism by protecting their markets, which could basically have undermined the creation of a common and, afterwards, a single and internal market, at the same time. The general rules are unchanged since then. State aid is a special area of the EU Competition Law. While the main task of competition law is basically to create and maintain fair market conditions focusing on the regulation of price agreements (cartels), prohibit the abuse of dominance of market power and unfair market behaviour at the same time. In the context of State aid it has the task to control when a State intervenes in the economy. Irrespective of the form of intervention (directly e.g. through cash grants or indirectly e.g. through the tax system or by regulations) and ownership issues it has to be ensured that the internal market shall not be distorted or threatened and the trade between MSs shall also not be affected as a basic principle.

Table 1

Summary on the concepts of State intervention according to the main economic theories

Economic theory	Need for State intervention	Role of State in the economy
Mercantilism	- to protect domestic industry - to promote export	Active
Physiocratism	- to support agriculture against industry	
Classical	- to act as a night-watchman - to let the invisible hand work (" <i>laissez faire</i> ")	Passive
Neoclassical	- to equilibrate in perfectly competitive markets ( $D = S$ )	
Keynesian	- to emphasize the imperfect nature of market mechanisms - to use fiscal policy	Active
Monetary	- to regulate the money supply	
Neoliberal	- to deregulate State interventions - to improve efficiency - to manage market failures, shortages	Passive
Alternative (heterodox)	- to rethink the role of the State - to use non-orthodox instruments contrary to the mainstream theories	Active/passive

Source: author's compilation

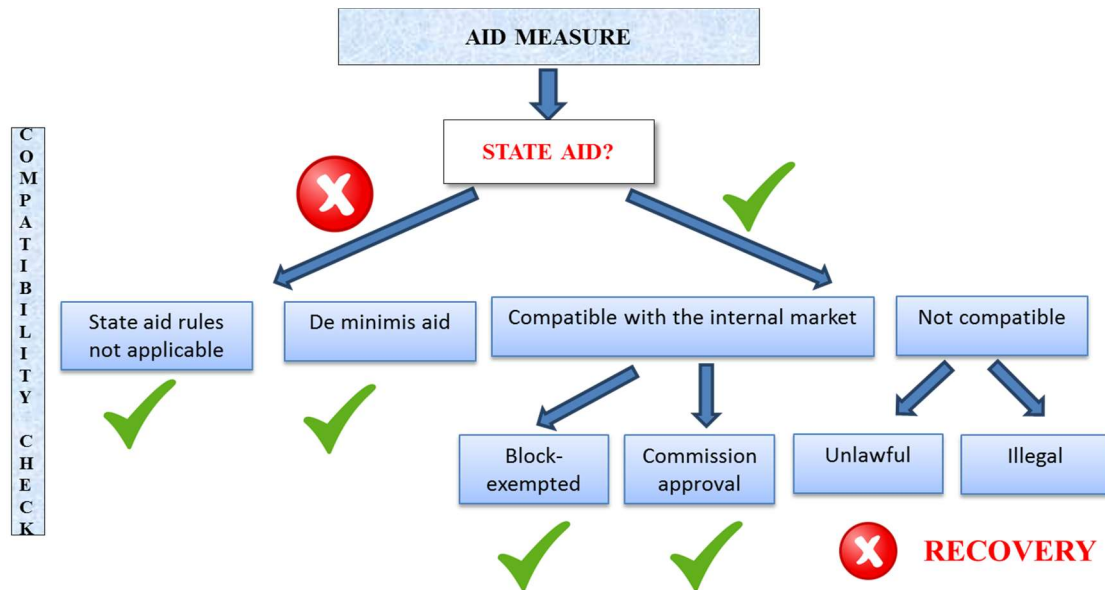
State aid is a kind of state intervention but not vice versa: only some (state) sources that are allocated to economic players during redistribution qualify as State aid. State aid therefore forms only a part of state interventions; according to the EU terminology, it is a narrow segment focusing on the interactions between the State and business sector with the exception of households (consumers and individuals).

State aid is defined in the founding treaties as the primary sources of law but is regulated by secondary and ancillary sources and the case law of the European Court. With the Treaty of Lisbon (EU 2008) having entered into force in 2007, it is now governed by Article 107(1) on the Functioning of the European Union. According to this article, *"any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States"* normally be incompatible with the internal market and therefore prohibited as a general rule.

The main elements of State aid (EC 2016) are the following:

- a) the beneficiary carries out an economic activity: any activity involving the supply of goods and services on a given market which presupposes the risk of service provided for it. Thus, the business is not merely a business with or without legal entity but any market player actually carrying out an economic activity in the internal market irrespective of its legal status.
- b) imputability and state resource: the term State includes both an institution established or managed or partly financed either by the central budget or its subsystems. Thus, any direct or indirect aid measure granted by the ministries, institutions (aid grantors) and other authorities belonging to the central government and any local government body (municipality, county, etc.) constitutes State aid. Moreover, measures creating a lack in state revenue such as tax allowances (partial or entire tax benefit and tax credit, too) also constitute aid within the meaning of the EU Competition Law.
- c) selectivity: when undertakings in the same factual and legal situation are not automatically eligible for support, the aid measure constitutes State aid because of its selective nature. The selectivity can be sectoral (e.g. covering a particular market), geographic (e.g. limited to a particular region) or discriminatory by aiming at particular market players. If undertakings in the same factual and legal situation are automatically eligible for and benefit from subsidy from an aid scheme and fulfil all the required (general and specific) conditions, it qualifies for a general measure and therefore does not constitute State aid.
- d) advantage at the level of the beneficiary: under the same market and financing conditions, the beneficiary will not be able to obtain advantage on the market compared to its competitors.
- e) impact on competition: in competing markets, including those which have not yet been liberalised (that is, closed by the state or to be opened gradually) but competition may arise, the aid measure is considered to distort or threaten to distort competition and therefore it qualifies as State aid. If a particular market had been liberalised earlier but later closed to market players, this also distorts or threatens to distort competition.
- f) effect on trade between MSs: this arises in cases when due to a subsidy it is likely that customers, investments or services are attracted from other MSs or the establishment of companies are obstructed from other MSs in the area concerned and the free movement of goods and services in the internal market are breached.

The six different constituent elements of State aid are conjunctive, that is, all of them must be fulfilled for an aid measure to qualify as State aid and vice versa: if one of the constituent elements is not met, the aid measure does not constitute State aid. However, the European Commission (hereinafter EC) basically makes the assumption that an aid measure distorts or threatens to distort competition and trade (the supply and/or demand side).



Source: author's compilation

Figure 1. Assessment and compatibility check of aid measures

When considering that an aid measure is State aid (see Figure 1) based on the six criteria, State aid rules are to be applied. The so-called de minimis aid (EC 2013a) is considered not to be State aid because of its "small" character (aid not exceeding EUR 200,000 per undertaking over any period of three fiscal years) and therefore it can be assumed that the competition is not distorted and trade is not affected but the rules are to be applied. Article 107(2) and (3) allows that under certain circumstances State aid can be granted if it is for an equitable and well-functioning economy and if it contributes to the economic development. The difference between Article 107(2) and (3) is the applicability; while in the case of the former the aid is automatically compatible with the internal market (e.g. subsidies for restoring natural disasters, social aid, supporting individuals, etc.), in the latter case the aid can only be considered compatible (e.g. to support employment, regional development, environmental protection and energy savings, culture, heritage, etc.). In the case of compatibility with the internal market it has to be assessed whether it can be block-exempted (EC 2014) – meaning that the aid can be granted under national competence – which depends on the type of aid (categories such as regional development or research and development and innovation, hereinafter RDI) and its amount, of course. Above a certain threshold determined in the so-called block-exemption regulations and in several circumstances State aid can only be approved individually (i.e. case by case) by the EC (more precisely by the Directorate-General for Competition, hereinafter DG COMP), and the MS has no more control over it. When under national competence, in Hungary it is the State Aid Monitoring Office that is in charge of ensuring whether the subsidies granted in Hungary are in accordance with the State aid rules of the EU, mediating between DG COMP and the Hungarian aid grantors, and acting if necessary at the same

time. The total number of the existing aid schemes was 187 as of 31 October 2018 (i.e. aid programmes but within the meaning of State aid rules, notwithstanding the rules on Structural funds, see EC 2013b) registered with the State Aid Monitoring Office of Hungary and reported to DG COMP.

## TIMELINE OF RULES VERSUS FACTS & FIGURES

Parallel to the rules on Structural funds, State aid rules (regulations, guidelines, etc.) normally adjust to programming periods, too. Between 2014 and 2020 the "new" rules entered into force in 2014 and the old ones expired, meaning that they could no longer be applied (although in some cases a temporary extension was granted). Nevertheless, this does not mean that they remain unchanged during a 7-year period, except for the main frames; otherwise it could lead to anomalies when rules are applied. Some amendments included new aid categories, like in 2017, or the half-time supervision of regional aid map. The State Aid Modernisation process (hereinafter SAM) was launched in 2012 (EC 2012) for the purpose to revise and modernise the rules applicable as of 2014.

One of the novelties of the newly introduced General Block Exemption Regulation (hereinafter GBER) in 2014 is that it has broadened the number of aid categories, for instance with aid to innovation clusters, for broadband and local infrastructures, heritage conservation, audio-visual works, as well as for sport and multifunctional, recreational infrastructures, in accordance with the main common policy objectives (see e.g. Europe 2020 Strategy, EC 2010). This was the case in 2017 when the GBER (EC 2017a) was amended further by new aid categories (e.g.

inland and maritime ports, regional airports). The first years' experience and expertise can be crucial for the planning of the next programming period, particularly given that the budget will be lower than the current one (EC 2017d).

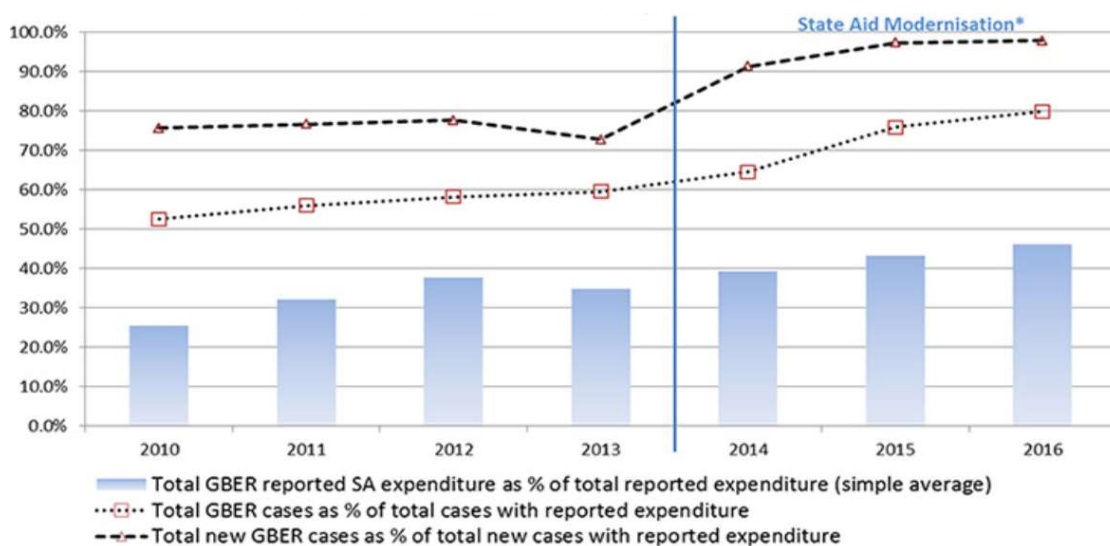
On the basis of data provided by the Member States an annual report (named Scoreboard) is published by DG COMP on subsidies according to their category, form (direct/indirect) and purpose (horizontal, sectoral). The aid amounts are collected at current price and with the exception of the euro area are converted into constant prices by the inflation rate of the given reference year in the given MS. According to the latest statistics in 2016 the overall spending by MSs for State aid was EUR 102.8 billion, around 0.7% of GDP. The importance of block-exempted grants is growing, with a relative share of 76% out of all aid measures, representing over 97% of the newly implemented measures. As far as the spending is concerned, a slightly increasing trend can be observed (see Figure 2). MSs spent on average around 46% of the total spending on GBER measures, an increase of more than 10% compared to 2013. Under the GBER aid can be granted either for horizontal or vertical objectives of common interest. The former (e.g. environmental protection, local infrastructures, RDI, regional development, SMEs and risk finance, etc.) is by far the most important, with a relative share of over 90% as regards spending. With the exception of the bailout of financial institutions due to the financial crisis, sectoral aids used to be dominant until the early 2000s but not anymore. The reason behind the increasing use of GBER is the change in approach of competition policy: "*big on big things and small on small things*" and the scenario of "*Doing Less More Efficiently*", which means the intention of DG COMP to concentrate the resources on the significant cases, which have more impact to distort

competition and affect trade, and not to bother with the "*little*" ones (EC Statement 2017c). This does not mean that the latter ones are not controlled and monitored systematically; moreover, considering the the deficiencies in aid schemes under national competence as revealed by the annual report of the European Court of Auditors in 2011, its relevance has grown since then.

## MACROECONOMICS AND MICROECONOMICS OF STATE AID

The economics of State aid is crucial when it is controlled. In the light of the development of the regulatory environment Haucap-Schwalbe (2011) laid down the main principles that should be taken into account and argued for the necessity for a more economic approach when State aid is assessed.

Meiklejohn (1999) modeled the effects of State aid on competition by entering into and intervening in monopoly markets. The main feature of the monopolistic market is its dominance in setting the price in the market. Similarly to competitive markets, the monopoly maximises its profit where the marginal revenue is equal to the marginal cost ( $MR = MC$ ), meaning that the final unit of output still results in the same cost and revenue gains. The difference is, however, that the monopoly sets its price above the marginal cost ( $P > MC = MR$  and the profit maximum  $\Pi_{max} = AR > AC$ ), that is to say, it provides lesser output compared to a competing business. Smith already recognised in 1776 the fundamental differences between perfectly competitive and non-competitive markets, including that the monopoly raises its revenue above "*the natural rate*" because it can sell its goods at a higher price on the market.



Source: Report on Competition Policy 2017. p. 26. DG COMP, European Commission (DGC 2018a, 2018b)

Figure 2. Use of General Block Exemption Regulation (GBER) for State aid (SA) in the EU

There is no doubt that the State has to intervene as a result of abuse of market dominance but it is quite not sure that by facilitating the entrance of new player(s) into the monopoly market the oligopolistic one would be less distortive to competition if the expenditure of State is compared to the lower price on the market (or on the contrary it could be effective in theory, see e.g. Collie 2000). That is, if the effect of a lower price on the consumer's level is not at least as much as the State's expenditure it can be counterproductive and cannot contribute to an increase in the welfare level at the same time. In competitive markets, therefore, aid is more likely to have an effect on the costs of an enterprise and consumers either directly or indirectly from the aspect of distortion of competition and trade, i.e. how the cost functions and affects the output of a business, and how that contributes to the consumers' utility and welfare. According to Friederiszick et al. (2006), State aid distorts competition in markets which are more competitive because it has a greater impact on the market due to lower profit margins or the volatility of market share as a result of competition. It is the operating aid which always distorts competition to a large extent compared with investment subsidies because it is directly aimed at financing the variable costs of a firm, which has an impact on its competitiveness and market share. Fingleton et al. (1999) examined the impact of State aid on the change in consumers' and producers' surplus, which have to be differentiated according to the incurred losses of a business and yields realised by a consumer.

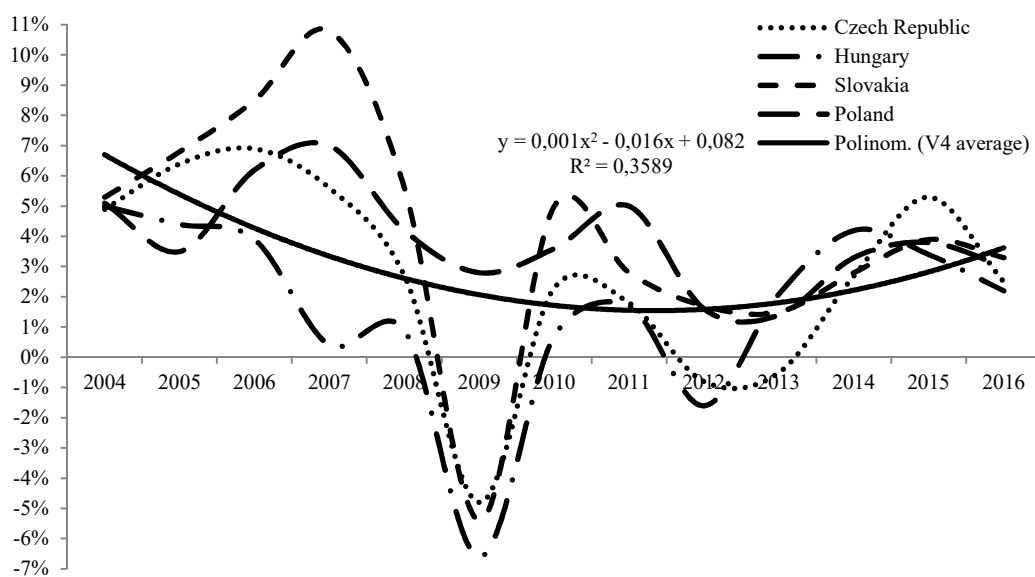
As regards the contemporary empirical studies, the international trend clearly shows the increasingly importance of microsimulation-based counterfactual impact assessments but not that of macroeconomic effects (eg. Busillo et al. (2010); Cerqua-Pellegrini (2011); Combes-van Ypersele (2012); Criscuolo et al. (2012); Le

Den et al. (2012); Martini-Bondonio (2012); Mouqué (2012); Bronzini-Piselli (2014); Einiö (2014); Aristei et al. (2015)).

## STATE AID AND ECONOMIC GROWTH IN THE VISEGRÁD COUNTRIES

There is no Member State where no State aid is granted. Between 2004 and 2016 the total spending was 0.52% of GDP on average, with a range between 0.2% and 1.67%. In terms of the absolute amounts the difference is more spectacular, with a maximum value of 500 times higher (EUR 72.8 million for Lithuania, 0.22% of its GDP, compared to EUR 38.54 billion for Germany, 1.32% of its GDP); overall the amount came to EUR 95.5 billion in 2016.

Looking at the four Visegrád countries (also called the V4), on average Hungary has the highest GDP-proportionate State aid spending: between 2004 and 2016 it amounted to 1.27%, as compared to 0.79% in the Czech Republic, 0.71% in Poland and 0.42% in Slovakia. In absolute terms, the average spending in Poland was EUR 2.28 billion, followed by Hungary with a value of EUR 1.22 billion, the Czech Republic with about EUR 1 billion and Slovakia with EUR 0.23 billion (DGC Scoreboard 2017). Nevertheless, the real State aid expenditure is significantly higher when the subsidies to the railway sector (as a public service obligation for passenger transport including also infrastructural elements) are also counted. The agricultural (plus rural development, fisheries and aquaculture) and the other transport subsidies qualifying as State aid are much less relevant.



Source: author's compilation based on Eurostat

Figure 3. Real GDP growth rate in the V4 countries between 2004 and 2016

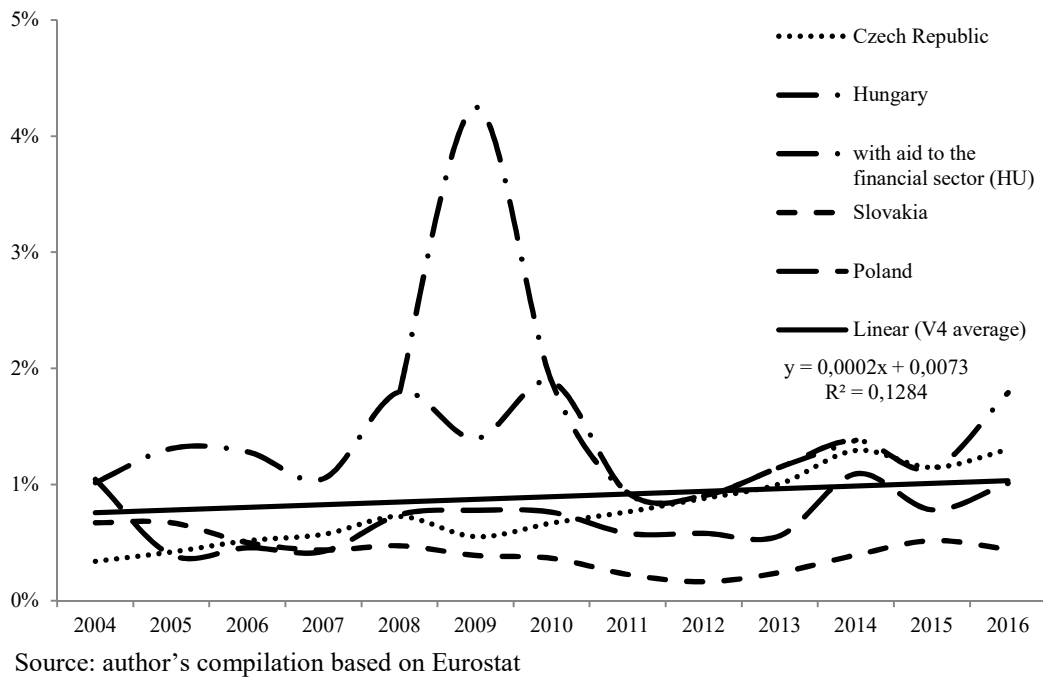


Figure 4. State aid in percentage of GDP in the V4 countries between 2004 and 2016

As it can be seen in Figure 3 and 4, State aid can be considered to be relatively independent of economic growth and constant over time in all of the Visegrad countries. The level of subsidies seems to be inflexible to the macroeconomic performance.

The impact of the financial crisis spilled over the MSs and affected them to different degrees, including of course the Visegrad countries. One can assume that the level of State aid must have changed (i.e. increased): in 2008 the total expenditure on subsidies (i.e. with the provisional aid granted to the financial sector) obviously rose and reached its peak in 2009. In practice, however out of the four countries only in Hungary and Poland was aid approved for the bailout of the financial sector: in 2009 EUR 1.07 billion and EUR 4.6 billion, respectively, for recapitalisations and EUR 5.4 billion and EUR 4.6 billion, respectively, for guarantees. In 2009 impaired assets were acquired by Hungary in the value of EUR 40 million and in 2010 for liquidity measures an additional EUR 3.9 billion was granted in Hungary. In 2012 Poland provided a much more significant amount for recapitalisation (EUR 29.3 billion) relying on a guarantee with the same value.

The overall amount approved for bailing out the financial sector in the EU reached EUR 4,885 billion (around 35% of GDP) between 2008 and 2014. However, the subsidies actually paid out were much lower: in Poland only a tiny amount was spent and only for recapitalisation

(EUR 3.75 million), and in Hungary it was EUR 0.214 billion and EUR 2.5 billion for liquidity purposes. Overall, EUR 1,935 billion (14% of GDP) was actually spent in the EU, which means that the expected negative effects of the crisis were overestimated. For comparison in the US about USD 24.8–29 billion went into the financial sector. Interestingly, in the Czech Republic and Slovakia no aid was approved in the financial sector. Nevertheless, in Poland there is no evidence that the crisis affected the economic growth – there were no other MSs that could produce a growth rate with a positive sign in 2009.

The temporary State aid to the financial sector (in the form of recapitalisations, impaired assets, guarantees, liquidity measures) had the aim to remedy the recession and to help the economy recover its pre-crisis growth path. In line with the Keynesian theory, the State intervened in the economy in order to alleviate the effects of the crisis. Not is the same vice versa: despite of the Czech Republic and Slovakia relatively prospered between 2004 and 2007 – and after 2012 all of the V4 countries – there is no sign that their expenditures on State aid would have decreased. In 2016 the level of State aid to the financial sector (both approved and used) is the lowest since 2008; in addition, there was no recapitalisation aid used for any bank. The European banking sector is relying less and less on government guarantees for liquidity support, as it is able to find the necessary liquidity on the market.

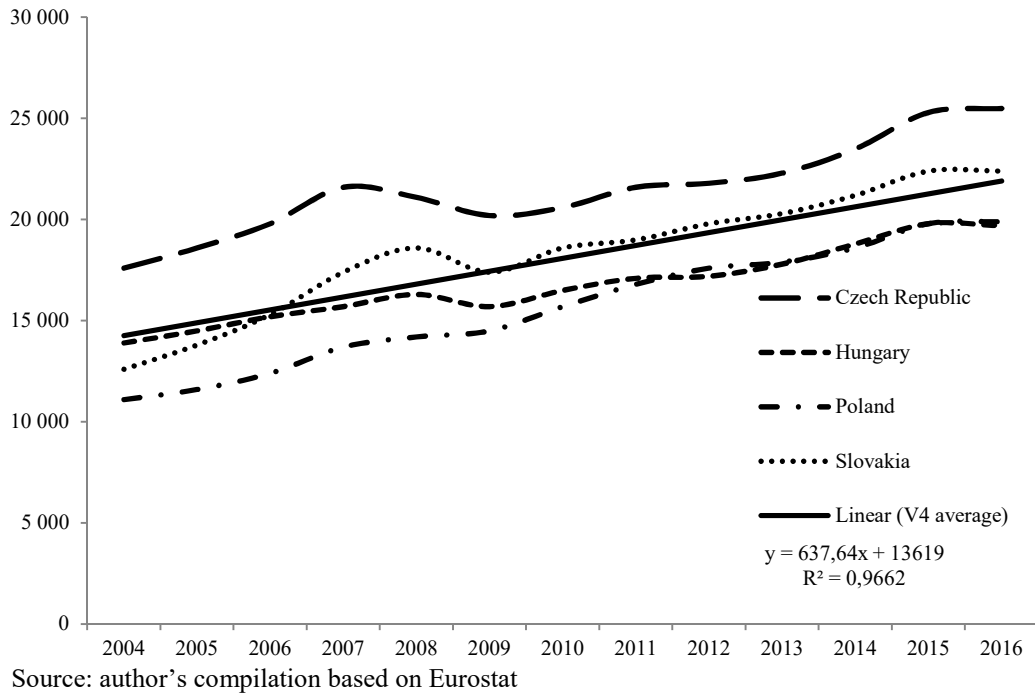


Figure 5. GDP per capita (EUR, PPS) in the V4 countries between 2004 and 2016

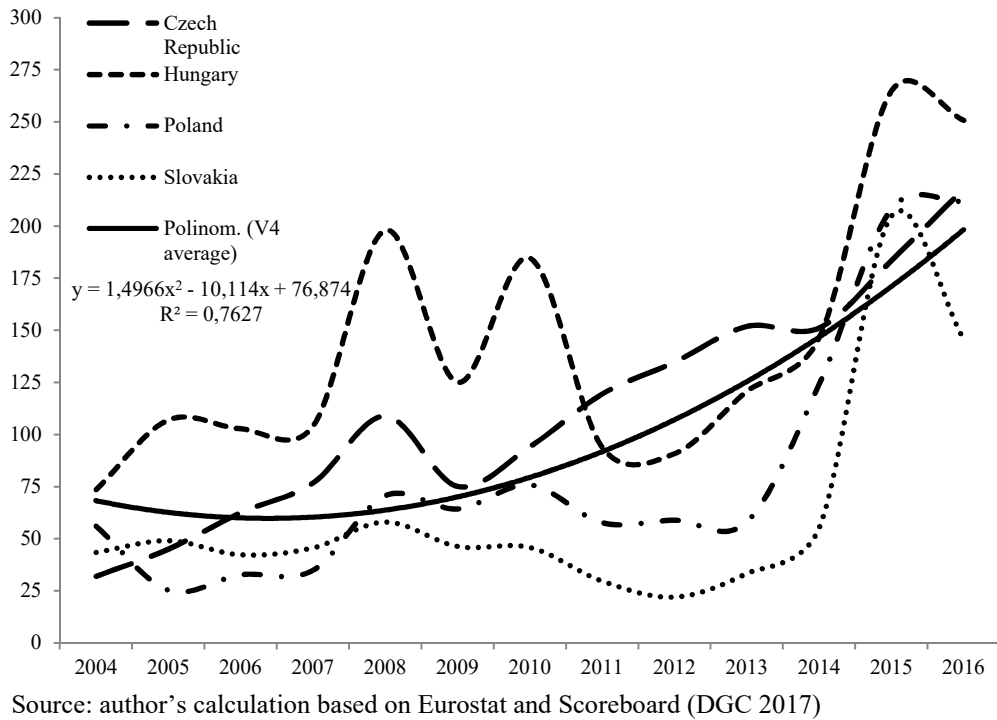


Figure 6. State aid per capita (EUR, PPS) in the V4 countries between 2004 and 2016



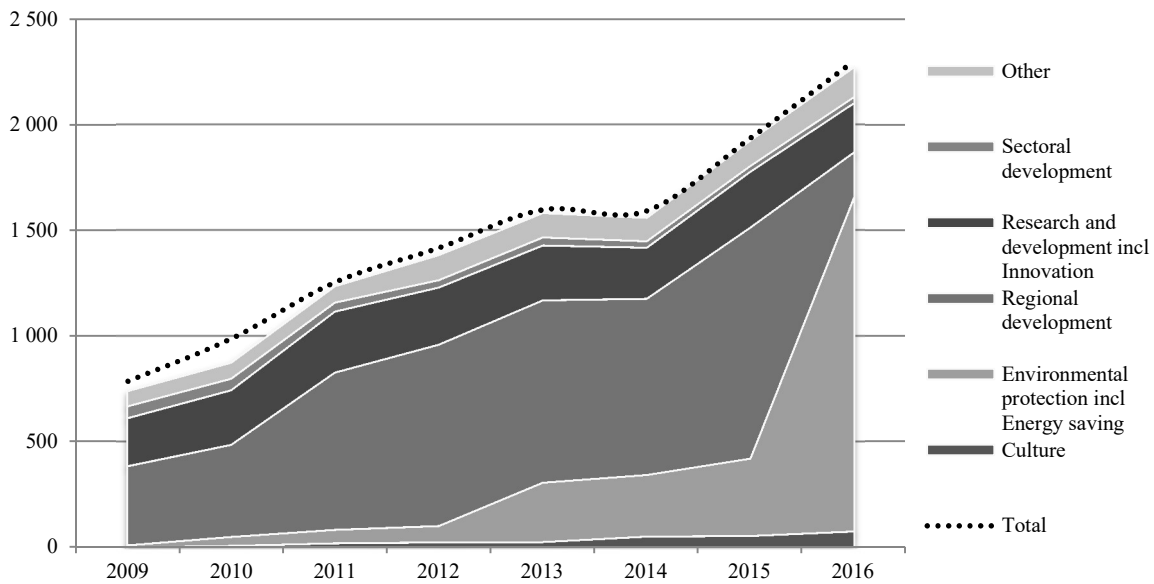


Figure 7. State aid by the main objectives in Czech Republic, 2009–2016 (EUR, million)

The average income level was EUR 18,083 in the Visegrad countries between 2004 and 2016, while the average spending on State aid per capita was around EUR 100, ranging from EUR 63 in Slovakia to EUR 143 in Hungary. Interestingly, the average level in the EU was about the same as the V4 average. The compound annual growth rate of State aid expenditure was relatively higher than that of the income level in all of the Visegrad countries (over 11.5%, compared to the average of 3.7%), meaning that all of them spent more on subsidies than their change in income level. The annual level of State aid and GDP per capita is strongly correlated (0.53 in Slovakia followed by Hungary with a value of 0.72, in Poland 0.77 and 0.96 in the Czech Republic). The turning point in the change of State aid per capita (i.e. an increasing trend) in 2015 (see Figure 4) can be obviously attributed to the beginning of the "new" programming period.

## STATE AID OVERVIEW IN THE V4 COUNTRIES

Out of the 15 aid categories it is regional investment aid that is one of the most relevant in all of the Visegrad countries and it preserved its dominant role as of 2009: on average with a relative share of 49% in Slovakia, 48% in the Czech Republic, 31% in Hungary and 21% in Poland, respectively (see Figures 5-8). The reason for this is quite prosaic. It is the eligibility (based on the regional aid map determining the maximum aid intensities), which depends on the relative development of a region (at NUTS2 level). Out of the 272 regions the number of the "a" regions falling under Article 107(3) is 72 (with maximum aid intensities of 25%, 35% and 50% of the eligible costs), with another 158 which qualify as "c" areas (meaning that

regional investment aid can be granted only in the designated areas, usually at the level of LAU1 or LAU2, with maximum aid intensities varying from 10% to 35%) in the period of 2014–2020. There are an additional 39 regions where no regional investment aid can be granted: with the exception of the Czech Prague and the Slovakian Bratislavský kraj all are situated in the "old" MSs. Apart from two regions (namely the Hungarian Közép-Magyarország and the Polish Mazowieckie, which are "c" areas) 31 regions qualify as "a" regions out of the 35 in the Visegrad countries, meaning that their income level is under 75% of the average in the EU-27. As the 7th Cohesion Report (EC 2017b) reveals, this is not exactly the sign of convergence process, meaning that the sources proved to be allocated in not the most efficient and effective way.

Regional aid is an important instrument in the EU's toolbox to promote greater economic and social cohesion. The main aim of regional investment aid is to promote investment projects in the relatively underdeveloped regions. It has an important role when attracting investors, especially foreign direct investments (large enterprises such as Audi, Mercedes or the "newcomer" BMW in Hungary) financed usually from the central budget or from EU funds when an SME invests. In principle this type of aid can be given for initial investments, whether greenfield or brownfield it covers the following activities:

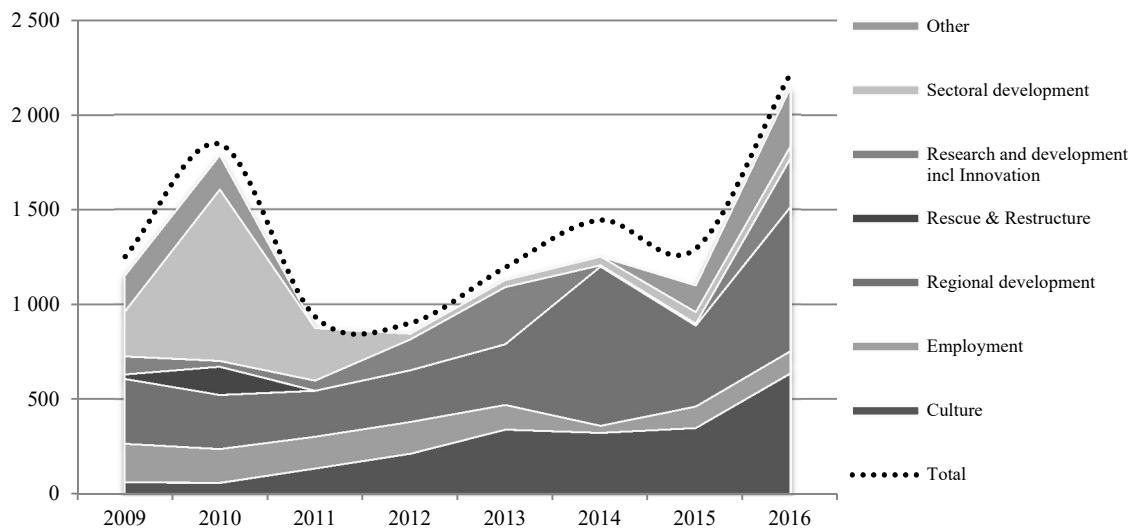
- the setting up of a new establishment,
- the extension of the capacity of an existing one,
- the diversification of the output of an establishment into products not previously produced,
- a fundamental change in the overall production process of an existing establishment,
- the acquisition of assets belonging to an establishment that has closed or would have closed had it not been purchased and is bought by an investor unrelated to the

seller and excludes sole acquisition of the shares of an undertaking, as laid down in the GBER.

It is typical that when an investor decides to realise an investment project that qualifies as an initial investment, it claims for regional aid and other types of aid, usually for employment and training, and also for RDI if it is planning in the long run. In such a case the different types of aid do not have to be cumulated unless they cover the same or similar eligible costs, or when a project is artificially split into two or more subprojects that are mutually linked to each other, the aid cumulation rules have to be applied.

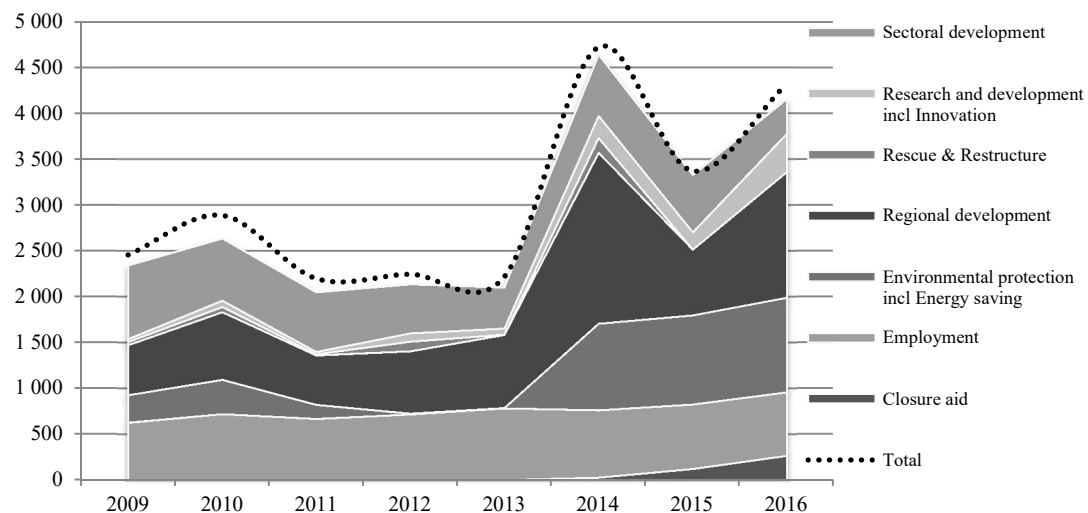
Besides the increasing trend in State aid expenditure in the V4 countries, the growing importance of environmental protection and energy saving measures (e.g. subsidies for the usage of renewable energy sources, energy efficiency projects, etc) can be observed both in the Czech Republic and Poland (see Figure 5 and 7).

Meanwhile, cultural funding tended to increase in Hungary and Slovakia from 2014 (see Figure 6 and 8). Subsidies for employment are also significant in Hungary and Poland, whereas funding for RDI is noticeable in the Czech Republic and Slovakia. Nevertheless, the overall EU spending structure clearly indicates an increasing trend in the energy sector (compared to 2013 it has risen more than 3.7 times to EUR 55.9 billion in 2016) and a decrease in regional development (almost halved to EUR 7.3 billion). The other aid categories such as heritage conservation, promotion of exports and internationalisation and rescue & restructure or closure are less significant. It is also has to be mentioned that there is no available data about the aid categories introduced in 2017 such as investment aid for local, broadband or sport and multifunctional recreational infrastructure, etc. .



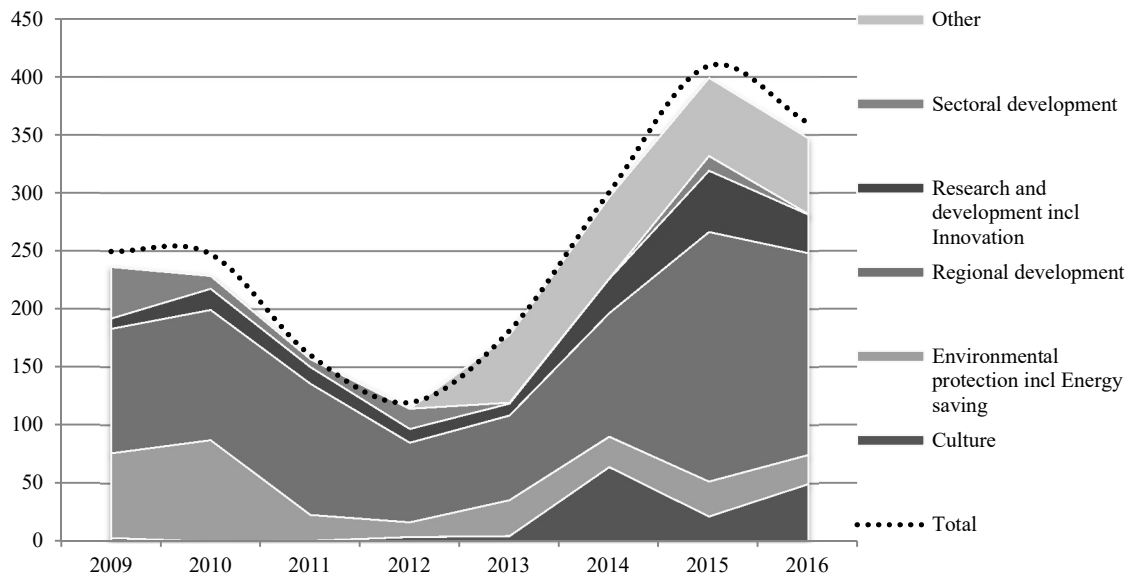
Source: author's compilation based on Eurostat

Figure 8. State aid by the main objectives in Hungary between 2009 and 2016 (EUR, million)



Source: author's compilation based on Eurostat

Figure 9. State aid by the main objectives in Poland between 2009 and 2016 (EUR, million)



Source: author's compilation based on Eurostat

Figure 10. State aid by the main objectives in Slovakia between 2009 and 2016 (EUR, million)

As regards the forms of aid, the most typical is absolutely the cash grant in the Visegrad countries, with a share of over 70% among the aid instruments on average (it is relatively less frequent only in Slovakia, with 62%) followed by tax benefits (deferral, reduction or even exemption) with a share of around 20%. The other forms of aid (equity participation, guarantee, soft loan) are less significant. The dominance of cash grants and tax benefits in the Visegrad countries is not unique – it fits the European trend with similar proportions. The main reason for this is that the aid element of a soft loan is relatively much lower as a result of the difference between the market interest rate and the subsidised rate one (around several percentage points depending on the prevailing interest rate environment). This is the case when equity is granted (e.g. a subordinated debt or a capital injection) which has to be recovered. Guarantess are less used in reality (i.e. rarely claimed), as well as tax benefits, because of the eligibility criteria to be met: in Hungary the development tax benefit can be used from the first tax year after the completion of an investment and only up to certain amount (up to 80% of the net sales).

## CONCLUSIONS

The EU rules on competition law basically determine the level playing field of a Member State, i.e. what shall be done or may not be done. State aid is not equal to a subsidy, as it forms only a type of it which is defined as being explicitly harmful for the competition. The rules on State aid are adjusted to those of the Structural funds covering the seven-year programming period. Therefore the lessons learned from the current programming period is very relevant in considering how to plan the next one between

2021 and 2027 in order to allocate the subsidies in a "better", namely more efficient and effective way. The preparatory work has already started, with the revision of rules and of course negotiations on the budget.

The main aim of this article was to familiarize readers with the very specific nature of State aid within the meaning of EU competition law on the one hand and on the other hand to give some contributions about the similarities and differences in the Visegrad countries as regards the type of and spending on subsidies at macroeconomic level between 2009 and 2016. The V4 countries have gradually increased their State aid spending since joining the EU. Moreover, the growth in their State aid spending was relatively higher than their increase in GDP per capita. The most significant aid is regional investment, which on the one hand is an important "tool" in the lagging behind regions but on the other hand makes their economic convergence to relatively developed ones rather questionable. Pisár et al. (2013) examined the deadweight of regional funds in the Czech and Slovak Republics and concluded that around 35% of subsidies can be regarded ineffective meaning that a significant part of the regional investments would have been carried out without grants. Owczarczuk (2013) draws the attention to the importance of R&D subsidies in the Visegrad countries and to the fact that the efforts by the governments are not sufficient in order to facilitate the inflow of foreign direct investments into the R&D sector. However, to raise the – non-governmental – R&D activity in the V4 in the long run is a crucial factor in terms of competitiveness.

Nevertheless, the level of State aid (as a percentage in GDP) seems to have no relation to the economic growth (Figure 3). However, this is not only characteristic of the Visegrad countries but of the EU as a whole.

## REFERENCES

- ARISTEI, D. – STERLACCHINI, A. – VENTURINI, F. (2015): The effects of public supports on business R&D: firm-level evidence across EU countries. Munich Personal RePEc Archive, p. 36. Retrieved on 24 October 2018. Available at [http://mpra.ub.uni-muenchen.de/64611/1/MPRA\\_paper\\_64611.pdf](http://mpra.ub.uni-muenchen.de/64611/1/MPRA_paper_64611.pdf)
- BRONZINI, R. – PISELLI, P. (2014): The impact of R&D subsidies on firm innovation. Banca d'Italia, p. 49. Retrieved on 24 October 2018. Available at [http://www.bancaditalia.it/pubblicazioni/temi-discussione/2014/2014-0960/en\\_tema\\_960.pdf](http://www.bancaditalia.it/pubblicazioni/temi-discussione/2014/2014-0960/en_tema_960.pdf)
- BUSILLO, F. – MUCCIGROSSO, T. – PELLEGRINI, G. – TAROLA, O. – TERRIBILE, F. (2010): Measuring the Impact of the European Regional Policy on Economic Growth: a Regression Discontinuity Design Approach. Working Papers 6/10, Sapienza University of Rome. Retrieved on 25 October 2018. Available at [http://www.diss.uniroma1.it/sites/default/files/allegati/wp-06-10-RDD\\_wp\\_18%2001%2010\\_Final\\_Version2.pdf](http://www.diss.uniroma1.it/sites/default/files/allegati/wp-06-10-RDD_wp_18%2001%2010_Final_Version2.pdf)
- CERQUA, A. – PELLEGRINI, G. (2011): Are the subsidies to private capital useful? A Multiple Regression Discontinuity Design Approach. ERSA conference papers, European Regional Science Association. Retrieved on 26 October 2018. Available at <http://www.sre.wu.ac.at/ersa/ersaconfs/ersa11/e110830aFinal01323.pdf>
- COLLIE, D. R. (2000): State aid in the European Union: The prohibition of subsidies in an integrated market. *International Journal of Industrial Organization*, Volume 18, Issue 6, August 2000, pp. 867-884.
- COMBES, P. P. – VAN YPERSELE, T. (2012): The role and effectiveness of regional investment aid. The point of view of the academic literature. European Commission.
- CRISCUOLO, C. – MARTIN, R. – OVERMAN, H. – VAN REENEN, J. (2012): The Causal Effects of an Industrial Policy. Centre for Economic Performance, London School of Economics for recent research on the effectiveness of the Regional Selective Assistance (RSA) program in the UK. NBER Working Paper No. 17842. Retrieved on 25 October 2018. Available at <http://www.nber.org/papers/w17842.pdf>
- DGC (2017): State Aid Scoreboard 2017. Retrieved on 1 October 2018. Available at [http://ec.europa.eu/competition/state\\_aid/scoreboard/index\\_en.html](http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html)
- DGC (2018a): Report on Competition Policy 2017. COM(2018) 482 final. Directorate-General for Competition, European Commission. 2018. Retrieved on 18 October 2018. Available at [http://ec.europa.eu/competition/publications/annual\\_report/2017/part1\\_en.pdf](http://ec.europa.eu/competition/publications/annual_report/2017/part1_en.pdf)
- DGC (2018b): Report on Competition Policy 2017. p. 94. Commission Staff Working Document SWD(2018) 349 final. DG Competition. Retrieved on 18 October 2018. Available at [http://ec.europa.eu/competition/publications/annual\\_report/2017/part2\\_en.pdf](http://ec.europa.eu/competition/publications/annual_report/2017/part2_en.pdf)
- EINIÓ, E. (2014): R&D Subsidies and Company Performance: Evidence from Geographic Variation in Government Funding Based on the ERDF Population-Density Rule. *The Review of Economics and Statistics*. Vol. 96, No. 4, pp. 710-728.
- EU (2008): Consolidated version of the Treaty on the Functioning of the European Union. Official Journal 115., 09/05/2008 P. 0091 – 0092. Retrieved on 15 October 2018. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012E/TXT>
- EUROPEAN COMMISSION (2010): Europe 2020: A Strategy For Smart, Sustainable And Inclusive Growth, COM(2010) 2020 final. Retrieved on 16 October 2018. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1427303331326&uri=CELEX:52010DC2020>
- EUROPEAN COMMISSION (2012): EU State Aid Modernisation (SAM). Communication from the Commission to the European Parliament, The Council, the European Economic and Social Committee and the Committee of the Regions. COM(2012) 209 final. Brussels, 8.5.2012. Retrieved on 15 October 2018. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0209&from=EN>
- EUROPEAN COMMISSION (2013a): Commission Regulation (EU) No 1407/2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid. OJ L 352/1., 24.12.2013. Retrieved on 15 October 2018. Available at [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2013.352.01.0001.01.ENG](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2013.352.01.0001.01.ENG)
- EUROPEAN COMMISSION (2013b): Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006. OJ L 347, 20.12.2013, p. 320–469. Retrieved on 15 October 2018. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1547211903799&uri=CELEX:32013R1303>
- EUROPEAN COMMISSION (2014): Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty. OJ L 187/1.,

- 26.6.2014. Retrieved on 15 October 2018. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1539854608241&uri=CELEX:32014R0651>
- EUROPEAN COMMISSION (2016): Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union. OJ 2016/C, 262/01. Retrieved on 15 October 2018. Available at [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016XC0719\(05\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016XC0719(05))
- EUROPEAN COMMISSION (2017a): Commission Regulation (EU) 2017/1084 of 14 June 2017 amending Regulation (EU) No 651/2014 as regards aid for port and airport infrastructure, notification thresholds for aid for culture and heritage conservation and for aid for sport and multifunctional recreational infrastructures, and regional operating aid schemes for outermost regions and amending Regulation (EU) No 702/2014 as regards the calculation of eligible costs. OJ L 156/1., 20.6.2017. Retrieved on 15 October 2018. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1497952641554&uri=CELEX:32017R1084>
- EUROPEAN COMMISSION (2017b): My Region, My Europe, Our Future: Seventh report on economic, social and territorial cohesion. 2017. p. 249. Retrieved on 25 October 2018. Available at [http://ec.europa.eu/regional\\_policy/sources/docoffic/official/reports/cohesion7/7cr.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion7/7cr.pdf)
- EUROPEAN COMMISSION (2017c): Statement by Commissioner Vestager - Commission simplifies rules for public investment in ports and airports, culture and the outermost regions. Statement 17/1367. Retrieved on 5 October 2018. Available at [http://europa.eu/rapid/press-release\\_STATEMENT-17-1367\\_en.htm](http://europa.eu/rapid/press-release_STATEMENT-17-1367_en.htm)
- EUROPEAN COMMISSION (2017d): The future of Europe. Reflections and scenarios for the EU27 by 2025. White Paper. p. 32. DOI:10.2775/32364I. SBN: 978-92-79-66241-6. Retrieved on 17 October 2018. Available at [https://ec.europa.eu/commission/sites/beta-political/files/white\\_paper\\_on\\_the\\_future\\_of\\_europe\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/white_paper_on_the_future_of_europe_en.pdf)
- EUROPEAN COURT (2011): Annual report on the implementation of the Budget. OJ C 326/01. European Court of Auditors. Retrieved on 19 October 2018. Available at <http://www.europarl.europa.eu/document/activities/cont/201111/20111110ATT31133/20111110ATT31133EN.pdf>
- FINGLETON, J. – RUANE, F. – RYAN, V. (1999): Market definition and State aid control. In: Meiklejohn, R. (ed): State aid and the Single Market. European Economy, Reports and Studies No 3, European Commission, Brussels.
- FRIEDMAN, M. (1962): Capitalism and freedom. University of Chicago Press, Chicago.
- FRIEDERISZICK, H. W. – RÖLLER, H. L. – VEROUDEN, V. (2006): European State Aid Control: an economic framework. p. 60. Retrieved on 29 October 2018. Available at [http://ec.europa.eu/economy\\_finance/publications/publication9549\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication9549_en.pdf)
- HAUCAP, J. – SCHWALBE, U. (2011): Economic Principles of State Aid Control. Düsseldorf Institute Competition Economics. p. 53. Düsseldorf, Germany. Retrieved on 30 October 2018. Available at [http://www.dice.hhu.de/fileadmin/redaktion/Fakultaeten/Wirtschaftswissenschaftliche\\_Fakultaet/DICE/Discussion\\_Paper/017\\_Haucap\\_Schwalbe.pdf](http://www.dice.hhu.de/fileadmin/redaktion/Fakultaeten/Wirtschaftswissenschaftliche_Fakultaet/DICE/Discussion_Paper/017_Haucap_Schwalbe.pdf)
- KEYNES (1936): The General Theory of Employment, Interest and Money. p. 472. Palgrave Macmillan, United Kingdom.
- KORNAL, J. (1982): A hiány. p. 610. Közgazdasági és Jogi Kiadó, Budapest.
- KRUGMAN, P. R. (1991): Geography and Trade. MIT Press, Cambridge, Massachusetts.
- KRUGMAN P. R. (1994): Competitiveness: A dangerous Obsession. Foreign Affairs 73(2) pp. 24-45.
- LE DEN, X. – KRÖBER, R. – PEZZA, A. R. – GILLERKE, F. – BRESSER, L. – KRÄMER, M. – KHAN, U. – OLIVAS, J. (2012): Ex-post evaluation of regional aid guidelines 2007-2013. Final Report. p. 207. European Commission, DG Competition, 2013.
- MARSHALL, A. (1890): Principles of economics. Eighth Edition. Edited by Groenewegen, P. p. 759. Palgrave Classics in Economics. Palgrave Macmillan. Sydney, 2013. Retrieved on 31 October 2018. Available at <http://www.library.fa.ru/files/Marshall-Principles.pdf>
- MARTINI, A. – BONDONIO, D. (2012): Support to SMEs and large enterprises in Italy, including a comparison of grants and other financial instruments. Retrieved on 25 October 2018. Available at [http://ec.europa.eu/regional\\_policy/information/evaluations/impact\\_evaluation\\_en.cfm#1](http://ec.europa.eu/regional_policy/information/evaluations/impact_evaluation_en.cfm#1)
- MEIKLEJOHN, R. (1999): The economics of State Aid. European Economy, Special Issue on "State Aid and the Single Market", 3, 25-31.
- MOUQUÉ, D. (2012): What are counterfactual impact evaluations teaching us about enterprise and innovation support? DG for Regional and Urban Policy, Evaluation and Semester Unit. p. 16. Retrieved on 25 October 2018. Available at [http://ec.europa.eu/regional\\_policy/sources/docgener/focus/2012\\_02\\_counterfactual.pdf](http://ec.europa.eu/regional_policy/sources/docgener/focus/2012_02_counterfactual.pdf)
- OWCZARCZUK, M. (2013): Government Incentives and FDI into R&D. The Case of Visegrad Countries. Entrepreneurial Business and Economics Review, 1(2), pp. 73-86. Retrieved on 8 October 2018. Available at <https://eber.uek.krakow.pl/index.php/eber/article/download/14/14>
- PIKETTY, T. (2013): A tőke a 21. században. Translated by Balogh-Sárközy, Zs. p. 800. Kossuth Kiadó, Budapest, 2015.

- PISÁR, P. – ŠIPIKÁL, M. – LABUDOVÁ, V. (2013): Are subsidies really needed? The case of European Regional Policy in the Czech and Slovak Republics. *E+M Ekonomie a Management/ E+M Economics & Management*. Vol. 2013 Issue 4., pp. 30-41.
- SMITH, A (1776): *Enquiry into the Nature and Causes of the Wealth of Nations*. *Nemzetek gazdagsága*. Translated by Bilek, R. p. 372. *Közgazdasági és Jogi Könyvkiadó, Budapest, 1992.*
- WALRAS, L. (1872): *Elements of Pure Economics, or The Theory of Social Wealth*. p. 620. Orion Editions, 1984.