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The question of State aid for rescuing and restructuring undertakings in difficulty in the context of the general government sector debt of EU Member States

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**The question of State aid for rescuing and  
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Member States**

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## **The question of State aid for rescuing and restructuring undertakings in difficulty in the context of the general government sector debt of EU Member States**

**JEL Classification:** E62, K20, K33.

**Keywords:** *the European Union, legal regulation, rescue and restructuring aid, the general government sector debt, financial and economic crisis*

**Abstract:** The subject of the article is an analysis of the rules of state aid admissibility on the basis of the implementing regulations, adopted by the European Commission in 2004 and 2014 on rescue and restructuring aid. This should lead to verify the thesis that due to the taken up at EU level - in response to the effects of the financial and economic crisis – economic recovery plan, the support of the public authorities directed at rescuing and restructuring undertakings in difficulty has become the most broadly used form of State aid due to the value among all the forms of aid granted by Member States of the European Union. The adoption of such a thesis raises the question of the influence of State aid on the size of the *general government* sector debt in the EU Member States, which have provided State aid for undertakings in difficulty. This analysis was carried out based on the linear regression model. The response variable (dependent variable Y) is the size of the *general government* sector debt, and explanatory variable (independent variable X) is the expenditure on State aid. The research shows that between expenditures of the EU Member States on aid for rescuing and restructuring undertakings in difficulty and the condition of the public finances of these countries there is no substantial statistical relationship. Taking this into consideration the most important question arises. Does the State aid "to prevent the bankruptcy of undertakings" follow the condition of art. 107 par. 2 point c of Treaty on the functioning of the European Union?

### **Introduction**

The crisis in the financial markets, which began in 2007, in a short time began to significantly affect the real economy. This effect could be observed by a strong downward turn in the overall economy, which affected directly both households and undertakings. The result of the financial crisis in the banking sector in the Member States of the European

Union was the process carried out by banks of reducing own debt relation to equity capital. Banks have therefore become less willing to take risk comparing to the previous years, which in turn led to reduced availability of credits as a source of financing for undertakings and reduce the number of credits in general. This trend had negative consequences not only for enterprises that did not have adequate financial security in case of insolvency, but even for enterprises with good and stable financial condition, which were suddenly reduced the credit line or denied the credit. Taking into account that affordable and sufficient access to finance is a prerequisite for undertakings in making investments and creating new jobs, it should be noted that a restrictive credit policy affected mainly small and medium-sized enterprises, which access to financing is more difficult compared with large enterprises. Hence, in this economic situation State aid granted by the Member States started to be an important complement of efforts to unblock credits for enterprises.

The financial crisis ended a period in the European Union of economic growth, low intensity of granted State aid and decreasing budget deficits as well as declining unemployment rate (compare Hallerberg, 2011). On 26 November 2008 the European Commission adopted a statement titled "The European economic recovery plan" (EC, 2008) talking about how to get Europe out of the financial crisis. This plan, which was based on two interdependent components, assumed a more intense and faster implementation of reforms already underway under the Lisbon Strategy. The first is the short-term measures to increase demand, job protection and restore confidence to financial institutions, and the second is "smart investments", which in the long run were to ensure a higher growth rate and sustainable economic growth. Economic recovery plan also contained proposals on the application of State aid rules in a way that achieves maximum flexibility for tackling the crisis while maintaining equal conditions for all enterprises and avoiding excessive restriction of competition.

Taking into consideration that the consequence of the financial crisis affecting the restriction of access to finance and the crisis in the real economy which leads mainly to a decline in production is a crisis of excessive public debt and budget deficit resulting from the slowdown in the various fields of economy, the purpose of this article is to analyze the conditions of admissibility of State aid for rescuing and restructuring undertakings in difficulty. This should lead to verify the thesis that due to the economic recovery plan taken by the European Union, the implementation of which would result in a reduction in the social costs of the economic downturn, stimulating demand and strengthening consumer confidence, as well as supporting innovation, building a knowledge-based

economy and quicker transition to a low-carbon and efficient in terms of resource use economy, the support of the public authorities directed at rescuing and restructuring undertakings in difficulty has become a form of State aid the most widely used due to the value from all forms of aid provided by Member States of the European Union. The adoption of such a thesis raises the question of the influence of State aid on the size of the *general government* sector debt in the Member States, which have provided aid to enterprises in difficulty. It is possible – with a certain simplification - to accept that since the premise of granting such aid is prosperity and increase of the competitiveness of the European Union, such aid should have a positive impact on public finances, as the expenditure on this aid will be offset by a strong reduction of operational aid granted to cover current cost of the enterprise activities as well as budget revenues from taxes and other public levies paid by effectively functioning, restructured enterprises. Thereby, it will be possible to say that the amount of expenditure on State aid to undertakings in difficulty for the whole European Union and particular Member States should be negatively correlated with the size of the *general government* sector debt. The negative correlation of the size of the *general government* sector debt with the amount of expenditure on State aid for rescuing and restructuring undertakings would mean that with increasing amount of State aid to enterprises in economic difficulty the *general government* sector debt of Member States providing such aid should decrease.

### **Methodology of the research**

A feature of applied research method is the analysis of the intervention instruments used by the State from the point of view of concepts of State aid within the meaning of art. 107 par. 1 of the Treaty on the functioning of the European Union (TFEU - OJ 2010 C 83/1). The adoption of such a method provided an opportunity to: firstly, determining the semantic scope of admissibility and the rules of providing aid as interpreted by the Court and the Court of Justice of the European Union, and secondly - capturing the specific characteristics of State aid for enterprises in difficulty. Another feature of the method used in the paper is the analysis of the relation between the Member States expenditure on State aid designed for rescuing and restructuring undertakings in difficulty and the size of the *general government* sector debt of these countries. This analysis was carried out in accordance with the linear regression model. The response variable (dependent variable Y) is the size of the debt of the *general government* sector and the explanatory variable (independent variable X) is the expenditure on State aid.

Statistical analysis was carried out based on three source tables. The first and second table show the calculations for the linear regression model concerning respectively the intersection parameter (free term  $\hat{a}$ ) and slope parameter (directional factor  $\hat{a}$ ). The factors  $a$  and  $b$  of the regression function II are the estimators of the parameters  $\hat{a}$  and  $\hat{a}$  of regression function I (Bielecka, 2011, pp. 279-281). The standard error  $S_a$  is the standard error of the estimator  $a$  of the parameter  $\alpha$ , whereas the standard error  $S_b$  is the standard error of the estimator  $b$  of the parameter  $\hat{a}$ . The designations "Lower 95%" and "Upper 95%" concern lower and upper limits of so-called confidence interval of numerical values for parameters  $\hat{a}$  and  $\hat{a}$ , where these parameters are with a probability of 95%.

t Stat is a test of linear relationship occurrence between expenditure on State aid to enterprises in difficulty and the size of the *general government* sector debt. This statistical test allows to verify the authenticity of the so-called null hypothesis that the parameters of the regression function I type  $\hat{a}$  and  $\hat{a}$  are equal to zero, with the alternative hypothesis that they are not equal to zero ( $H_0: \hat{a} = 0$ ;  $H_A: \hat{a} \neq 0$  and  $H_0: \hat{a} = 0$ ;  $H_A: \hat{a} \neq 0$ ). The acceptance of the null hypothesis that the parameter  $\hat{a} = 0$  would mean that if the expenditure on State aid are zero (State aid does not exist), then the value of the *general government* sector debt will also decrease to zero. In turn the acceptance of the null hypothesis that the parameter  $\hat{a} = 0$  would mean that the increase in the value of expenditure on State aid by € 1 million will not cause any changes in the size of the *general government* sector debt which means the lack of any relationship between expenditure on State aid and the size of the *general government* sector debt. In other words, the acceptance of the null hypothesis means the lack of the influence of the State aid for rescuing and restructuring undertakings provided by the Member States of the European Union on the size of their *general government* sector debt. From the perspective taken in this paper it will be essential to reject the null hypothesis in favor of the alternative hypothesis which states that between the studied phenomena - expenditure on State aid and the size of the *general government* sector debt - there is a significant statistical relationship. From the tables of critical values of t-Student it is seen that  $\pm t_{\alpha/2} = \pm 2.5706$  for  $\alpha = 0.05$  and  $n - 2 = 5$  degrees of freedom. The null hypothesis can be rejected in favor of the alternative hypothesis only when  $t_b < t_{\alpha/2}$  or  $t_b > t_{\alpha/2}$ , that is when  $-t_b < -2.5706$  or  $+t_b > +2.5706$ .

The  $p$ -value is the probability of making so-called type I error, involving the rejection, based on the results of the test, of the hypothesis that assumes the values of the parameters  $\hat{a}$  and  $\hat{a}$  are equal to zero, when in fact they are equal to zero in the whole population. In other words, type I error is a rejection of a real null hypothesis. The higher the value of the t-test means

the lower the probability of type I error. In general, it is assumed that if the p-value is less than 0.05, the null hypothesis can be rejected in favor of the alternative hypothesis, and thus claim that there is a statistically significant relationship between the expenditure of EU Member States on State aid directed at enterprises in difficulty and the size of the *general government* sector debt of these countries.

The third table contains regression statistics. Among the regression statistics are: the correlation coefficient, determination coefficient, standard error and the parameters of F test, that is the value of F-test and the probability of making type I error, when the hypothesis is verified concerning the lack of impact of expenditure on State aid on the size of the *general government* sector debt (irrelevance of State aid expenditure in the regression model). F-test, similarly as described above t-test, is used for testing the significance of linear regression coefficient  $\hat{a}$  evaluation. The checking of this test is a statistic F having F-Snedecor distribution of  $k_1$  and  $k_2$  freedom degrees. When rejecting the null hypothesis  $F > F_{\alpha}$  of no relation between expenditure on State aid and the size of the debt of the *general government* sector and accepting the alternative hypothesis of the existence of a statistically significant relationship between the variables. From the table of critical values of the F-Snedecor for  $k_1 = 1$  (1 independent variable) and  $k_2 = n - 2 = 5$  degrees of freedom and  $\alpha = 0.05$  we read  $F_{0,05} = 6.608$ . Thus, the alternative hypothesis can be adopted only when  $F > 6.608$ .

### **Economic justification for intervention in the Internal Market mechanisms**

From the economic point of view relating to state interventionism it ought to be noted that State aid can be a justified action mainly because of the social prosperity if free competition market mechanism does not bring satisfactory results. In this case, a well-planned state intervention may improve the allocation of production factors, reduce the irregularity in the market functioning and enable the achievement of common interest. The major criterion for providing State aid should be rationality, which is the highest determinant of the admissibility of using the aid measures. It results from the fact that in a market economy the competition is essential for the proper functioning of the market and protecting the interests of its participants. State aid should not violate it unless its violation will be compensated by positive market phenomena that were caused by providing the aid. With the use of the aid instrument the State realizes the objectives that are considered a priority for socioeconomic development.

In the market of the European Union, which is based on the mechanism of free competition, many changes occur as a result of the impact of micro-, meso- and macroeconomic factors. On the one hand, these changes go together with positive effects in the form of the development of the enterprises, both those already operating in the Internal market as well as those whose strategic goal is to enter the market and do business activity in the long term. Compliance with the principles of free competition, reduction of the entry barriers, elimination of customs barriers, consistent combating monopolistic practices, the inflow of direct foreign investments and the related production increase, creating the conditions for public procurement and the suppliers endeavour for uniform purchase prices and purchasing the products at prices adopted in the country where they are the lowest, they are the desired effects of competition in the Single European Market, enabling economic and social development of the European Union (Adamkiewicz-Drwiłło, 2010, p. 58). On the other hand, not all market processes can be considered as the desired effect of competition. Then it is indicated, that the market economy, in which the primary regulator of the occurring processes is the competition, is burdened with certain deficiencies. The deficiencies of the market system are in such a situation justification for a replacement or supplement based on free competition of the market mechanism by other decision making processes, such as the State intervention.

The existence of market inefficiencies makes the assumptions, on which the model of the perfect competition is made, not always fulfilled, and thus it becomes difficult to achieve overall balance as well as maximize total prosperity. In other words, the lack of optimal market efficiency in the Pareto sense may justify the state interventionism with the object of ensuring the optimal allocation of resources. Therefore, the market inefficiencies justify the State intervention and legitimize public authorities to adopt specific legal, administrative and economic regulations within the scope of aid for enterprises, however it is important to remember of such balancing of the size of provided aid so as the negative consequences do not bring more harm to entities functioning in the market. The actions taken by the State aimed at correcting the market failures within the scope of the intervention in economic processes can also be ineffective due to the probability of government failures. At this point the failure of the state is shown, associated with its role as a remedy to the problem of information asymmetry and coordination of supply and demand, which means that the state actions to encourage improvements in efficiency and allocation of market mechanism are subject to failures and as a result can lead just as the market mechanism to inefficient allocation of resources (Demsetz, 1969). This means that the State intervention in the economy is basically justified



only in the occurrence of market imperfections, even then there is no guarantee that the measures used by the state will lead to greater prosperity, which is due to the lack of possession by the public authorities of the necessary information or high cost of the use of appropriate measure of aid. However, even if the State has the necessary information and relevant financial resources and intervenes in order to promote the market mechanisms and economic growth, the control of these interventions can not be avoided at the supranational level. This is because even the legitimate actions taken by the given state within the interference in economic processes can cause harmful side effects in other countries (Nicolaidis, 2004, pp. 365-396). Hence, due to the impact that the provided aid has on the economic interests of enterprises that are beneficiaries, and also their competitors, and the economy of individual countries, the issues relating to the admissibility of the aid are precisely regulated within the European Union. The rules adopted at EU level affect the national regulations that relate to the provision of aid itself (see Hille & Knill, 2006; Toshkov, 2008; König & Mäder, 2013; Böhmelt, 2013). They answer the question of whether the aid designed by a Member State, legal in the light of its national law, may be considered as compatible with the objectives of the European Union and whether it can be given? These principles are addressed to the Member States and are designed to eliminate the aid which has negative impact on competition and trade within the Internal market, and in cases where such aid must be exceptionally provided – discipline of these countries and standardizing the conditions within the EU that must be fulfilled in order for aid to be provided, which in turn should minimize its negative effects.

### **Admissibility of State aid for rescuing and restructuring undertakings in difficulty**

State aid for rescuing and restructuring enterprises is without a doubt one of the most controversial cases of financial support provided by the State, which considerably affects the distortion of competition and trade within the European single market (Nicolaidis & Kekelekis, 2005, pp. 17-26). The only legal basis on which the aid for undertakings in difficulty can now be regarded as admissible is art. 107. par. 3 point c) of the Treaty on the functioning of the European Union (TFEU). According to this provision the European Commission has the power to authorize "aid to facilitate the development of certain economic activities or of certain economic areas, if [the aid] does not affect trading conditions to an extent contrary to the common interest". This case may take place in particular when the aid is necessary to correct disparities caused by market failures or to ensure

economic and social cohesion. Therefore providing the aid to the economic entities in this field can be regarded as legitimate only under certain conditions. This aid may be justified, for example, due to the applied social or regional policy, because of the need to take into account the advantageous role fulfilled by small and medium-sized enterprises in the economy or, exceptionally, due to the need to maintain the competitiveness on the market at a time when the liquidation of enterprises in difficulty could lead to create a monopoly or clear oligopoly on that market. On the other hand, in any case, it is not justified to artificially support of the activity of the enterprise in a sector characterized by long-term and structural overproduction or the enterprise whose survival depends only on repeated state interventions.

The existing rules for granting aid to undertakings in difficult economic situation were largely based on the practice of supporting the steel sector in Europe in recent decades. In article 4 point c of the Treaty establishing the European Coal and Steel Community it was specified that any State aid is incompatible with the common market of coal and steel (ECSC - Treaty of Rome, 1957). In practice such a provision would mean that State aid is prohibited within the Community. This provision however proved to be too far-reaching and, consequently, granting of certain types of aid was allowed, recognizing them as the community aid – it mainly concerned State aid for the mining sector in order to secure energy supplies in the Community. The first report on Competition Policy of 1971 stated that the European Commission will not, as a rule, oppose granting aid by the Member States to enterprises in difficulty, if such aid will be used in exceptional circumstances and on the basis of clearly specific program of reorganization, so that it becomes a real contribution to the reorganization of their respective enterprises or regions (Anestis & Mavroghenis & Drakakakis, 2004, p. 27). Basing on the experience gained the European Commission announced in subsequent reports on competition policy more detailed rules for granting aid to undertakings in difficulty (compare Borghetto, 2014). As a result the conditions of admissibility of State aid directed at rescuing and restructuring of enterprises in difficulty were determined in the appropriate community guidelines adopted in the form of communications from the European Commission.

The Commission adopted its original Guidelines on State aid for rescuing and restructuring undertakings in difficulty in 1994 (OJ C 368, 23.12.1994, p. 12). In 1997, the Commission added specific rules for agriculture (OJ C 283, 19.9.1997, p. 2). A modified version of the guidelines was adopted in 1999 (OJ C 288, 9.10.1999, p. 2). In 2004 the Commission adopted new guidelines (OJ C 244, 1.10.2004, p. 2), the validity of which was first extended until 9 October 2012 (OJ C 156,

9.7.2009, p. 3) and subsequently until their replacement by new rules (OJ C 296, 2.10.2012, p. 3) in line with the reform programme set out in the Commission Communication of 8 May 2012 on EU State aid modernisation (EC, 2012). From 1 August 2014 the provisions entered into force of the new guidelines on State aid for rescuing and restructuring non-financial undertakings in a difficult situation (OJ C 249, 31.7.2014, p. 1), which introduces some changes, most favorable to the beneficiaries - e.g. temporary restructuring support.

European Commission guidelines clearly indicate that aid for rescuing and restructuring undertakings in difficulty can be granted only to enterprises in difficulty. An enterprise in difficulty is the business entity which using its own funds is not able to reduce the growing negative financial result and without outside intervention of public authorities is not able to function in the short or medium term. According to the guidelines of the European Commission in 2004 - on the basis of which Member States granted State aid both before the financial crisis and already in the period of its duration - the undertaking was considered to be at risk in the following circumstances:

- 1) where more than half of the registered capital has been lost including more than one quarter of that capital over the preceding 12 months (a limited liability company, joint stock company), or when more than half of the company's capital according to the financial statement has been lost, including more than one quarter of the preceding 12 months (personal trading company and a civil partnership);
- 2) if the criteria of the national law were met concerning collective insolvency proceedings (regardless of the type of company).

The enterprise was also regarded as a threat, if there are premises indicating loss of financial liquidity, such as increasing losses in the current activity, diminishing turnover, growing stock inventories, excess capacity, declining cash flow, mounting debt, rising interest charges and falling or nil net asset value. In each of these cases an enterprise in difficulty was eligible for aid only if it clearly could not regain financial liquidity through its own resources and, in some justified cases, through resources obtained from the shareholders or from market sources.

The previous definition of "undertaking in difficulty" contained both so-called "hard" (objective) criteria and "soft" criteria which required a broader and more subjective assessment of the undertaking's situation. To improve clarity and legal certainty, the new guidelines aim to shift the emphasis from soft to hard criteria, making it easier for granting authorities and potential aid beneficiaries to determine whether a given undertaking is in difficulty. The soft criteria are therefore reduced to a residual category that will apply only in exceptional circumstances. To keep the coverage of

the definition approximately the same overall, the new guidelines balance the reduction in the scope of the soft criteria by introducing new hard criteria. Therefore, an undertaking is considered to be in difficulty if at least one of the following circumstances occurs:

- a) in the case of a limited liability company (Annex I, OJ L 182, 29.6.2013), where more than half of its subscribed share capital has disappeared as a result of accumulated losses. This is the case when deduction of accumulated losses from reserves (and all other elements generally considered as part of the own funds of the company) leads to a negative cumulative amount that exceeds half of the subscribed share capital.
- b) in the case of a company where at least some members have unlimited liability for the debt of the company (Annex II, OJ L 182, 29.6.2013), where more than half of its capital as shown in the company accounts has disappeared as a result of accumulated losses.
- c) where the undertaking is subject to collective insolvency proceedings or fulfils the criteria under its domestic law for being placed in collective insolvency proceedings at the request of its creditors.
- d) in the case of an undertaking that is not an SME, where, for the past two years:
  - 1. the undertaking's book debt to equity ratio has been greater than 7,5 and
  - 2. the undertaking's EBITDA interest coverage ratio has been below 1,0.

New guidelines from 2014 do not contain an indication that the quarter of enterprise capital loss must have occurred within the preceding 12 months.

Community guidelines of 2004 distinguish between two types of aid to enterprises in difficulty, i.e. aid for rescuing and aid for restructuring. EU guidelines of 2014 distinguish additionally third type of aid - temporary restructuring support.

### ***Rescue aid***

Rescue aid for undertakings in difficulty is a support which is by nature temporary and reversible, which is focused on maintaining financial liquidity of unprofitable enterprise for the time to develop a plan for its restructuring or liquidation. The general principle is that rescue aid makes it possible to provide temporary support to an undertaking facing a serious deterioration of its financial situation, involving an acute liquidity crisis or technical insolvency. Such temporary support should allow time to analyse the circumstances which gave rise to the difficulties and to develop an appropriate plan to remedy those difficulties.

Rescue aid cannot be longer than six months, is repayable and is admissible in the form of credit guarantees or loans with an interest rate comparable to loans for enterprises in good financial condition, including, in particular, with an interest rate comparable to the reference rates published by the European Commission (OJ C 14, 19.1.2008, p. 6). Within six months from the moment of granting the aid the Member State has three possibilities of action: 1) it shall notify the enterprise restructuring plan to the European Commission; 2) it shall submit a plan of liquidation of the enterprise; 3) it shall provide proof of full repayment of the loan or proof of termination of the guarantee validity. New guidelines of 2014 show that the amount of admissible rescue aid must be limited to the minimum. Rescue aid must be restricted to the amount needed to keep the beneficiary in business for six months.

It should be noted that the rescue aid is a one-off operation designed to keep functioning of the undertaking in a certain period of time, in which its chances will be assessed concerning continuing existence in a given market - i.e. the principle of *one time last time* (Mehta, 2009, pp. 216-217). In the situation when the rescue aid is granted to an enterprise that has already received restructuring aid, it can be considered that the beneficiary's difficulties are of lasting and stable nature and frequent state interventions cause distortions of competition, which is contrary to the principles set out in the TFEU of State aid admissibility. Repeated granting of rescue aid essentially misses the principle when it only comes to the shift in time of inevitable liquidation of the enterprise. Therefore, in order to avoid unfair provision of aid to the undertakings that can survive on the market only by repeatedly granted State aid, rescue aid should be granted only once. In turn, the responsibility of the Member State intending to provide emergency aid should be submitting to the European Commission the necessary documentation which shows if the potential beneficiary used in the past ten years of this type of aid. In addition, the application of the principle of "first and last" is in no way affected by the ownership changes of the enterprise following the granting of aid and any administrative or judicial procedures, aimed at "healing" the balance sheet, reducing liabilities or cancelling previous owner debts.

### ***Restructuring aid***

From the moment in which the restructuring or liquidation plan of enterprise in difficulty has been established and is being implemented, every additional aid will be considered as aid granted for the purpose of restructuring. The purpose of restructuring aid is to restore the long-term profitability of the undertaking. Restructuring may involve one or more of the following elements: the reorganisation and rationalisation of the

beneficiary's activities on to a more efficient basis, typically involving withdrawal from loss-making activities, restructuring of those existing activities that can be made competitive again and, possibly, diversification towards new and viable activities. It typically also involves financial restructuring in the form of capital injections by new or existing shareholders and debt reduction by existing creditors. It should be however noted that restructuring processes cannot be limited only to financial aid which will compensate the losses without identifying and removing the causes of their occurrence. The restructuring plan which duration must be as short as possible, must accurately describe the circumstances that led to the company's difficulties, thereby providing a basis for assessing whether the proposed measures are appropriate. In addition the restructuring plan should include the analysis of the current status and forecasts concerning changes in demand and supply in the market, taking into account situations based on the best, and the least favorable and intermediate assumptions and the specific weaknesses and strengths and of the enterprise. This plan must also provide such a change in the situation of enterprise, which after the completion of the restructuring processes will allow it to cover all costs including amortization and other charges.

The amount and intensity of restructuring aid must be limited to the strict minimum necessary to enable restructuring to be undertaken, in the light of the existing financial resources of the beneficiary, its shareholders or the business group to which it belongs. In particular, a sufficient level of own contribution to the costs of the restructuring and burden sharing must be ensured. Such assessment will take account of any rescue aid granted beforehand. The European Commission expects the beneficiaries of the aid that a substantial contribution to the restructuring plan will come from their own resources, including the sale of assets that are not essential to the continued existence of the undertaking. Contributions must be real, that is to say actual, excluding future expected profits such as cash flow, and must be as high as possible. The minimum contribution is at least 25% for small enterprises, 40% for medium-sized enterprises and 50% for large enterprises. In order to limit the distortive effect, the amount of aid or the form in which the aid is granted cannot provide the company with the surplus cash, which can be used for speculative activities distorting competition in the internal market. Therefore the Commission shall make a thorough analysis of the enterprise liabilities after the restructuring, taking into account primarily financial situation after each postponement or reduction of its debts. In the case of restructuring aid to small and medium-sized enterprises it is sufficient to forward each year a copy of the balance sheets and profit and loss account of the aided enterprises. In the case of aid granted to large enterprises, the Commission shall require providing

confirmation of the proper way of implementation of the restructuring plan through regular detailed reports transmitted by the Member State concerned, which contain all the necessary information on the stages of the implementation of restructuring program, the schedule of payments of subsequent tranches for the enterprise and its current financial situation and to comply with all conditions and obligations laid down in the decision approving the aid.

The previous guidelines has required undertakings that are being restructured to make a contribution to the restructuring costs from their own resources. This "own contribution" rule has helped to limit the amount of aid to the minimum necessary. However, it has lacked the precision needed to ensure that the costs of restructuring are distributed fairly among investors and taxpayers. In dealing with State support to banks during the crisis, the Commission developed a more targeted approach in this respect, using the concept of "burden sharing". This concept looks not only at the amount of own contribution, but also at who is providing that contribution. In particular, since the high returns that shareholders obtain when a enterprise is performing well are balanced by the risk of losses that they bear, there is no justification for expecting taxpayers to bear losses in place of shareholders.

Another issue, which therefore required more detailed regulation was the sharing of the burden between current investors. The draft guidelines of 2014 contained two possible approaches to this question. Option 1 took a more broad-brush approach by requiring that the contributions made by incumbent shareholders and creditors should be reasonable in view of the likely losses that they would have suffered in the event of insolvency. Option 2 was more precise, requiring first that all past losses be borne by shareholders and then, if that is not sufficient, that subordinated creditors also contribute. Finally the principle of adequate burden sharing was accepted, according to which incumbent shareholders and, where necessary, subordinated creditors must absorb losses in full. Subordinated creditors should contribute to the absorption of losses either via conversion into equity or write-down of the principal of the relevant instruments. Therefore, State intervention should only take place after losses have been fully accounted for and attributed to the existing shareholders and subordinated debt holders.

Admissibility of restructuring aid depends on taking appropriate compensatory measures to avoid excessive distortions of competition. Aid for undertakings in difficulty cannot be treated in terms of "automatic mechanism", where its operation will be based on the principle: "if necessary - the State will intervene and grant appropriate support". The possibility of receiving unconditional State aid in the event of a threat of

bankruptcy on the one hand can lead to excessive risk-taking, on the other hand, however, such aid may mean rewarding those enterprises that have the latest adapt to changing market conditions. Compensatory measures are intended to provide a kind of renunciation for the enterprise benefiting from State aid, the price for the opportunity to remain on the market. It is most often the appropriate reduction of capacity. The reasoning behind this requirement is, however, more difficult in a situation where on a given market there is no excessive production capacity. In this case, production capacity limitation of the undertaking which is a recipient of the State aid will in the short term cause the shortage of production capacity on a given market and, consequently, decrease the supply of the goods and increase of prices. In the long term, assuming that the market is a competitive market and is not characterized by a very low price elasticity of supply, the balance will be restored, because the most effective competitors, adapting to changing market conditions by lowering costs and increasing productivity, will fill the gap on the market.

Condition for implementation of compensatory measures would not be normally applied to small enterprises, since it can be assumed that *ad hoc* aid to small enterprises generally do not distort competition to an extent contrary to the common interest. Generally speaking aid for small and medium-sized enterprises have a lesser effect on trading conditions than aid granted to large enterprises. Hence the plan of restructuring small or medium-sized enterprise is not subject to individual notification and notification by the European Commission, but only to approval by the Member State concerned (Quigley, 2009, p. 311). Whereas any rescue aid to granted for more than six months, or stopped after a period of six months must be individually notified to the Commission. Aid schemes for rescuing and restructuring aimed at small and medium-sized enterprises must specify the maximum amount of aid that can be granted to each enterprise, taking into account possible changes in the restructuring plan. The maximum amount of aid granted in total for rescuing and restructuring undertakings may not be more than € 10 million, and if it is exceeded it shall be individually notified to the European Commission. In addition Member States are required to individually inform the Commission of the aid granted to the enterprise, which took over the assets of another, already supported for rescuing and restructuring, enterprise.

The tangible result of the restructuring processes carried out should be a significant reduction or complete cessation of activity by the undertaking. It results from the fact that the decrease in market share is necessary to achieve the intended efficiency and rationality of management, regardless of the reduction of production capacity. However these savings lead to a reduction in employment in the restructured enterprise. Therefore the aid is



additionally distinguished to cover the social costs of restructuring. Beside covering the costs of redundancy payments and early retirement, this aid includes special restructuring schemes through training, counseling and practical help with finding alternative employment, aid in moving, as well as professional training and assistance for employees who want to run their own business. Given that such measures, which increase the employability of redundant workers, further the objective of reducing social hardship, the European Commission consistently takes a favourable view of such aid when it is granted to undertakings in difficulty.

### ***Temporary restructuring support***

The previous guidelines have treated all forms of restructuring aid alike: loans, guarantees, capital injections, debt waivers and even outright cash grants. However, liquidity assistance (loans and guarantees) that is limited in both amount and duration is less distortive than other forms of aid, since it does not go beyond what is needed to address the liquidity problems that are commonly the main obstacle to restructuring and since it must be repaid with interest. To simplify the provision of aid for restructuring, while also reducing distortions of competition, the guidelines of 2014 include a new concept of temporary restructuring support.

Temporary restructuring support is liquidity assistance designed to support the restructuring of an undertaking by providing the conditions needed for the beneficiary to design and implement appropriate action to restore its long-term viability. Temporary restructuring support may only be granted to SMEs and smaller State-owned undertakings. This kind of State aid may also be granted to undertakings that are not in difficulty but that are facing acute liquidity needs due to exceptional and unforeseen circumstances.

Temporary restructuring support may be granted for a period not exceeding 18 months. Before the end of that period the Member State must approve a restructuring plan, or liquidation plan, or the loan must be reimbursed or the guarantee terminated. Recipients of temporary restructuring support do not have to submit a full restructuring plan, but they are required to provide a simplified plan that identifies the actions that they intend to take to restore their long-term viability.

### **Does the provision of State aid by the EU Member States for rescuing and restructuring enterprises in difficulty affect their *general government sector debt*?**

Taking into account the rules of admissibility of aid for rescuing and restructuring undertakings in difficulty, the enterprise interested in

receiving aid must comply with a number of conditions. While the rescue aid is a one-off operation, the aim of which is a temporary improving finances of the enterprise for the time needed to prepare a restructuring or liquidation plan, the restructuring aid is based on the specified plan to restore long-term profitability of the enterprise. Hence in the latter case, to get the support of the public authorities, the undertaking must provide a detailed recovery plan that describes how to return to financial liquidity and reduce the production, which is a form of compensation for other enterprises in the sector of the economy that did not receive State aid.

Table 1 shows the intensity of State aid provided for the purpose of rescuing and restructuring undertakings in the Member States of the European Union in 2007-2013.

**Table 1.** Rescue and restructuring aid in the EU Member States in 2007-2013 (in millions of euros)

<b>Member States</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total</b>
<b>Austria</b>	0,5	3,0	540,7	6,0	6,0	5,9	3,9	0,5
<b>Belgium</b>	15,9	0,0	0,0	0,0	0,0	0,0	0,0	15,9
<b>Bulgaria</b>	1,2	0,3	1,2	0,3	0,0	0,0	0,0	1,2
<b>Croatia</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Cyprus</b>	17,0	0,0	0,0	0,0	0,0	0,0	0,0	17,0
<b>Czech Republic</b>	0,1	2,0	12,3	76,0	5,3	16,7	0,0	0,1
<b>Denmark</b>	0,0	4,6	4,8	4,7	0,0	0,0	0,0	0,0
<b>Estonia</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Finland</b>	0,5	0,8	0,0	0,2	0,3	1,6	0,0	0,5
<b>France</b>	11,3	1,3	35,5	2,8	0,5	1,0	0,5	11,3
<b>Germany</b>	19,1	22,5	20,4	13,3	56,4	173,1	11,9	19,1
<b>Greece</b>	19,1	0,0	16,9	18,7	2,0	0,0	21,3	19,1
<b>Hungary</b>	45,4	0,0	25,5	149,6	0,0	0,0	0,0	45,4
<b>Ireland</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Italy</b>	36,8	67,4	37,3	60,9	41,2	44,7	33,0	36,8
<b>Latvia</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Lithuania</b>	2,5	0,0	0,0	0,0	0,0	0,0	0,1	2,5
<b>Luxembourg</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Malta</b>	16,2	7,9	0,0	1,6	3,9	25,3	60,0	16,2
<b>Netherlands</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Poland</b>	60,9	184,5	39,9	56,6	12,2	103,1	5,2	60,9
<b>Portugal</b>	0,2	0,1	29,9	10,2	0,6	0,6	0,0	0,2
<b>Romania</b>	150,5	38,0	20,5	3,6	4,2	9,2	10,4	150,5
<b>Slovakia</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>Slovenia</b>	1,8	1,7	3,6	2,7	2,6	0,5	37,5	1,8
<b>Spain</b>	5,7	6,1	10,2	12,7	25,2	8,2	0,0	5,7
<b>Sweden</b>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
<b>United Kingdom</b>	274,8	277,3	280,3	283,0	399,5	304,1	320,2	274,8
<b>EU 28</b>	679,3	617,3	1079,0	703,1	559,8	694,1	503,9	679,3

Source: EUROSTAT.

In the analyzed period the total amount of aid for rescuing and restructuring, which in table 1 is presented jointly in a horizontal and sectoral manner, settled for the area of the EU-28 at € 679 million in 2007, € 617 million in 2008, € 1079 million in 2009, € 703 million in 2010, € 560 million in 2011, € 694 million in 2012 and € 504 million in 2013. On the basis of the data presented in table 2 it can be concluded that it corresponded to a share in the total amount of the State aid in these years

respectively at the level: 1.20%, 0.96%, 1.58%, 1.11%, 0.98%, 1.20% and 0.92 %. Therefore, on the basis of available statistical data covering the period 2007-2013 it is difficult to positively verify the thesis adopted at the beginning of the article of a significant increase of the aid in the European Union for rescuing and restructuring enterprises in difficulty during the crisis.

**Table 2.** Share of rescue and restructuring aid in total State aid in 2007-2013 (in%)

<b>Member States</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Austria</b>	0,04	0,20	23,95	0,32	0,38	0,35	0,24
<b>Belgium</b>	1,06	0,00	0,00	:	0,00	:	:
<b>Bulgaria</b>	3,57	1,63	3,71	1,68	0,00	0,00	0,00
<b>Cyprus</b>	18,82	:	:	:	:	:	:
<b>Czech Republic</b>	0,01	0,18	1,60	7,81	0,46	1,30	0,00
<b>Denmark</b>	:	0,24	0,21	0,23	0,00	0,00	:
<b>Finland</b>	0,06	0,09	0,00	0,02	0,02	0,13	:
<b>France</b>	0,13	0,01	0,26	0,02	0,00	0,01	0,00
<b>Germany</b>	0,13	0,14	0,12	0,10	0,50	1,56	0,11
<b>Greece</b>	2,28	0,00	0,88	1,10	0,09	0,00	0,80
<b>Hungary</b>	4,23	0,00	1,83	8,00	0,00	0,00	:
<b>Italy</b>	0,73	1,25	0,73	1,81	1,36	1,20	1,18
<b>Lithuania</b>	4,11	0,00	0,00	0,00	0,00	0,00	0,06
<b>Malta</b>	12,38	6,83	0,00	2,02	4,04	24,31	46,83
<b>Poland</b>	4,38	7,29	1,47	2,07	0,55	4,57	0,27
<b>Portugal</b>	0,01	0,01	1,80	0,62	0,04	0,06	0,00
<b>Romania</b>	36,43	12,13	9,92	1,73	1,05	1,44	1,23
<b>Slovenia</b>	1,37	0,93	1,23	0,92	0,77	0,14	7,26
<b>Spain</b>	0,14	0,13	0,21	0,29	0,67	0,26	0,00
<b>United Kingdom</b>	6,42	6,53	6,17	5,96	9,65	6,43	7,50
<b>EU 28</b>	1,20	0,96	1,58	1,11	0,98	1,20	0,92

Source: EUROSTAT.

Among nine Member States there can be noted a significant growth in the rescue and restructuring aid in 2008-2010, when the most intense anti-crisis measures were taken. These were: the Czech Republic, Greece, Spain, France, Italy, Hungary, Austria, Poland and Portugal. However, as in the case of the EU level, the increase in the absolute value of this kind of aid did not translate into a significant increase in relation to the total State aid, which resulted from an increase of the expenditures at the same time by the Member States on regional and horizontal aid.

In the so-called group of countries of "old fifteen", which have provided this kind of support to domestic entrepreneurs in the greatest amount there should be indication on Austria, Germany, the UK and Italy. These countries provided aid for rescuing and restructuring primarily to large enterprises of iron and steel sector (ThyssenKrupp - Germany, Arcelor - France) and air transport (Alitalia - Italy, Olympic Airlines - Greece) and the automotive sector (Opel - Germany, Peugeot Citroen - France). However in the group of 13 countries that joined the European Union since 2004, the support provided in this direction is characteristic mainly for Poland, Romania and Hungary, and in most cases it is also sectoral aid. It should be noted that in the group of the EU-15 the upward trend of provided aid for rescuing and restructuring undertakings can now be pointed for Greece and the UK, and in case of the EU-13 countries the State aid to enterprises in difficulty in 2013 was increased by 3 countries: Malta, Romania and Slovenia.

Table 3 shows the size of the *general government* sector debt of EU Member States in the years 2007-2013. Bearing in mind that in the analyzed period the *general government* sector debt showed continuously a rising trend, it is difficult to mention the positive impact of State aid for rescuing and restructuring undertakings in difficulty on the condition of public finances of the Member States, as the size of the debt is fairly not reduced. Thus already at this point, we can reject the hypothesis set at the beginning of this article of a negative correlation of expenditures on State aid for rescuing and restructuring enterprises with the size of the *general government* sector debt. Does therefore the aid provided by Member States to enterprises in difficulty have an adverse effect on the condition of their public finances, leading to an increase in the *general government* sector debt? Or does such aid not have any impact on the *general government* sector debt? Answers to these questions will be provided by the regression analysis. Table 4 shows the test result for the sought relationship between the State aid for rescuing and restructuring undertakings in difficulty and the size of the *general government* sector debt, whether the intersection of the regression line with the axis of ordinates (free term) is equal to zero.

**Table 3.** The size of the *general government* sector debt of EU Member States in the years 2007-2013 (in billions of euros)

<b>Member States</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Austria</b>	183,0	200,0	228,2	242,4	253,3	259,3	262,0
<b>Belgium</b>	299,9	327,5	347,2	364,1	388,1	403,7	413,2
<b>Bulgaria</b>	5,3	4,8	5,1	5,9	6,3	7,4	7,5
<b>Croatia</b>	15,1	17,0	20,2	23,4	26,4	28,2	32,8
<b>Cyprus</b>	9,3	8,4	9,9	10,8	12,9	15,4	18,5
<b>Czech Republic</b>	40,0	42,8	50,5	60,2	63,9	73,2	68,2
<b>Denmark</b>	63,8	80,5	93,0	103,5	114,5	114,0	114,1
<b>Estonia</b>	0,0	0,0	0,0	1,0	1,0	1,7	1,9
<b>Finland</b>	63,4	63,3	75,5	88,2	95,5	105,5	112,7
<b>France</b>	1248,9	1354,2	1527,1	1627,8	1749,4	1865,8	1949,5
<b>Germany</b>	1592,9	1660,2	1778,5	2067,4	2095,6	2173,6	2159,5
<b>Greece</b>	240,0	264,6	301,0	330,3	356,0	304,7	319,1
<b>Hungary</b>	66,0	72,6	75,7	78,4	72,2	76,7	77,7
<b>Ireland</b>	47,1	79,6	104,5	144,2	190,1	210,2	215,6
<b>Italy</b>	1605,9	1671,2	1769,8	1851,3	1907,6	1989,9	2069,8
<b>Latvia</b>	1,9	4,5	6,8	8,4	8,7	9,1	8,9
<b>Lithuania</b>	4,8	5,0	7,8	10,2	11,7	13,3	13,6
<b>Luxembourg</b>	2,6	5,4	5,6	7,7	7,9	9,4	10,7
<b>Malta</b>	3,6	3,8	4,2	4,5	4,8	4,9	5,2
<b>Netherlands</b>	259,9	348,1	348,9	372,6	393,9	426,1	441,0
<b>Poland</b>	145,9	143,3	165,3	193,8	191,0	215,6	222,9
<b>Portugal</b>	120,1	128,2	146,7	173,1	195,7	211,8	219,2
<b>Romania</b>	14,8	17,2	28,0	37,5	44,7	50,1	54,2
<b>Slovakia</b>	16,8	19,2	23,0	27,6	30,5	37,6	40,2
<b>Slovenia</b>	8,0	8,2	12,5	13,7	17,0	19,2	25,4
<b>Spain</b>	383,8	439,8	568,7	649,3	743,5	891,0	966,2
<b>Sweden</b>	133,5	114,6	129,3	144,2	148,0	156,2	164,4
<b>United Kingdom</b>	879,6	822,1	1099,4	1384,1	1585,3	1741,3	1792,8
<b>EU 28</b>	7456,0	7906,4	8932,0	10025,5	10715,4	11415,0	11786,8

Source: EUROSTAT.

**Table 4.** Size of State aid for rescuing and restructuring undertakings in difficulty and the size of the *general government* sector debt - analysis of variance: the line "intersection"

EU Member States	Free term $a$	Standard error $S_a$	$t$ Stat $t_a$	$p$ -value	Lower 95%	Upper 95%
<b>Austria</b>	233267,9	13802,19	16,90078	1,33E-05	197788,2	268747,6
<b>Belgium</b>	373993	13661,13	27,37643	1,22E-06	338875,9	409110
<b>Bulgaria</b>	6628,469	423,4498	15,65349	1,93E-05	5539,957	7716,981
<b>Croatia</b>	-	-	-	-	-	-
<b>Cyprus</b>	12640,23	1545,76	8,177358	0,000445	8666,731	16613,74
<b>Czech Republic</b>	55361,52	6125,906	9,037279	0,000277	39614,37	71108,66
<b>Denmark</b>	101495,9	10431,19	9,730034	0,000195	74681,63	128310,1
<b>Estonia</b>	-	-	-	-	-	-
<b>Finland</b>	84961,15	11030,38	7,70247	0,000589	56606,66	113315,6
<b>France</b>	1671963	118535,3	14,1052	3,22E-05	1367259	1976668
<b>Germany</b>	1844646	118855,5	15,52007	2,02E-05	1539118	2150174
<b>Greece</b>	306348	25484,15	12,02112	7,03E-05	240838,9	371857,1
<b>Hungary</b>	73684,63	2051,833	35,91161	3,15E-07	68410,22	78959,04
<b>Ireland</b>	-	-	-	-	-	-
<b>Italy</b>	2024086	256920,9	7,878244	0,00053	1363650	2684522
<b>Latvia</b>	-	-	-	-	-	-
<b>Lithuania</b>	10276,33	1383,649	7,426979	0,000697	6719,548	13833,11
<b>Luxembourg</b>	-	-	-	-	-	-
<b>Malta</b>	4160,836	261,1844	15,93064	1,77E-05	3489,44	4832,231
<b>Netherlands</b>	-	-	-	-	-	-
<b>Poland</b>	199338	17583,21	11,33684	9,34E-05	154139	244537,1
<b>Portugal</b>	175917,9	18513,45	9,502169	0,000218	128327,6	223508,3
<b>Romania</b>	42293,25	5556,953	7,61087	0,000622	28008,65	56577,85
<b>Slovakia</b>	-	-	-	-	-	-
<b>Slovenia</b>	12399,54	2029,298	6,110261	0,001701	7183,065	17616,02
<b>Spain</b>	668096	150409	4,441862	0,006753	281457,4	1054735
<b>Sweden</b>	-	-	-	-	-	-
<b>United Kingdom</b>	-283945	1004120	-0,28278	0,788678	-2865117	2297226
<b>EU 28</b>	11915358	2720436	4,379945	0,007155	4922256	18908460

Source: Own calculations.

The formulated hypothesis concerning the size of the *general government* sector debt in the Member States of the European Union, according to which lack of State aid to enterprises in difficulty will reduce the *general government* sector debt to zero, must be rejected. Outside the United Kingdom, the test for individual Member States exceeds a critical value  $t_{\alpha/2} = \pm 2.5706$  for  $\alpha = 0.05$  and  $n - 2 = 5$  degrees of freedom. The

probability of making type I error is smaller than the accepted significance level of 0.05, and thus it is very unlikely that the wrong conclusion will be drawn that not granting State aid by a Member State for rescuing and restructuring undertakings cannot lead to a total decrease of the *general government* debt in the European Union. With a probability of 0.95 it can be concluded that in the absence of State aid for rescuing and restructuring in the EU the *general government* sector debt of all 28 Member States should adopt a value between (€ 4922.26 billion, € 18908.46 billion). In the case of Poland this range would form: (€ 154.14 billion, € 244.54 billion). The interpretation in relation to the UK is noteworthy at first glance, where the cessation of granting aid to enterprises in difficulty could lead not so much to total reduction of public debt, but also to developing substantial budget surpluses. However, this is due to a large type I error value (p-value), which is much higher than the reference threshold of 0.05, which prevents the rejection of the null hypothesis in favor of the alternative hypothesis.

The most essential statistical test in a simple regression analysis is a test of whether the regression coefficient equals zero. If in a particular case a conclusion can be drawn that the slope coefficient of the true regression line in the population equals zero, it will mean that between expenditures on State aid to enterprises in difficulty and the size of the *general government* sector debt there is no linear relationship, or expenditures on aid and the size of the *general government* sector debt are not linearly dependent. Therefore, it is needed to test the occurrence of linear relationship between expenditures on State aid for rescuing and restructuring undertakings in difficulty in the Member States and the size of the *general government* sector debt. The statistics on this test are shown in table 5. Based on the calculations, it should be stated that the statistical basis for the recognition of the occurrence of a linear relationship between expenditures on State aid and the size of the *general government* sector debt do not exist both in the case of the individual Member States, as well as at the level of the European Union (EU- 28). In other words, on the basis of the t-test value and the value of the probability of making II kind error the hypothesis can be tested which concerns the lack of stochastic relation between State aid to enterprises in difficulty and the amount of the *general government* sector debt providing such aid EU Member States, in such a way that it is not possible to reject the hypothesis zero for the alternative hypothesis, which means lack of stochastic dependence between the studied variables.



**Table 5.** Size of State aid for rescuing and restructuring undertakings in difficulty and the size of the *general government* sector debt - analysis of variance: the line "variable X"

EU Member States	Regression coefficient $b$	Standard error $S_b$	t Stat $t_b$	p-value	Lower 95%	Upper 95%
<b>Austria</b>	-8,35138	67,52197	-0,12368	0,906384	-181,92	165,2194
<b>Belgium</b>	-4651,33	2268,211	-2,05066	0,095562	-10482	1179,292
<b>Bulgaria</b>	-1340,26	628,6765	-2,13188	0,086199	-2956,3	275,8033
<b>Croatia</b>	-	-	-	-	-	-
<b>Cyprus</b>	-195,652	240,0761	-0,81496	0,452152	-812,79	421,4832
<b>Czech Republic</b>	100,0302	205,3134	0,487207	0,646719	-427,75	627,8052
<b>Denmark</b>	-1938,49	3411,499	-0,56822	0,594451	-10708	6831,044
<b>Estonia</b>	-	-	-	-	-	-
<b>Finland</b>	2700,77	15187,07	0,177833	0,865834	-36339	41740,39
<b>France</b>	-7205,17	8392,559	-0,85852	0,429831	-28779	14368,59
<b>Germany</b>	1942,345	1686,546	1,15167	0,301532	-2393,1	6277,749
<b>Greece</b>	-368,621	1766,235	-0,2087	0,842915	-4908,9	4171,632
<b>Hungary</b>	16,5059	34,2725	0,481608	0,650424	-71,594	104,6062
<b>Ireland</b>	-	-	-	-	-	-
<b>Italy</b>	-4055,92	5411,656	-0,74948	0,487312	-17967	9855,185
<b>Latvia</b>	-	-	-	-	-	-
<b>Lithuania</b>	-2121,3	1452,166	-1,46078	0,203911	-5854,2	1611,616
<b>Luxembourg</b>	-	-	-	-	-	-
<b>Malta</b>	16,18228	10,20955	1,585014	0,173818	-10,062	42,42677
<b>Netherlands</b>	-	-	-	-	-	-
<b>Poland</b>	-254,088	201,3916	-1,26166	0,262727	-771,78	263,6058
<b>Portugal</b>	-881,834	1548,272	-0,56956	0,59361	-4861,8	3098,126
<b>Romania</b>	-210,369	93,49147	-2,25014	0,074264	-450,69	29,95876
<b>Slovakia</b>	-	-	-	-	-	-
<b>Slovenia</b>	342,1536	141,3809	2,420084	0,060111	-21,278	705,5848
<b>Spain</b>	-506,427	12360,13	-0,04097	0,968903	-32279	31266,29
<b>Sweden</b>	-	-	-	-	-	-
<b>United Kingdom</b>	5278,71	3256,136	1,621158	0,16591	-3091,5	13648,87
<b>EU 28</b>	-3136,63	3819,989	-0,82111	0,448947	-12956	6682,961

Source: Own calculations.

The lack of the linear relationship between expenditures on State aid for rescuing and restructuring undertakings in difficulty in the EU Member States and the size of the *general government* sector debt is also confirmed by the F test parameters, that is the value of F-test and the probability of type I error, when hypothesis is verified which regards the lack of impact of expenditures on State aid aimed at rescuing and restructuring on the size of

the *general government* sector debt (irrelevance of expenditures on State aid in the regression model). For all the countries indicated F-test values are lower than the critical value of 6.608, and the probability of making type I error is higher than 0.05. The calculations in this regard are presented in table 6.

**Table 6.** Size of State aid for rescuing and restructuring undertakings in difficulty and the size of the *general government* sector debt - regression statistics and F-test

EU Member States	Regression statistics			Test F	
	Corelation indicator	Determination coefficient	Standard error	F	Significance F
<b>Austria</b>	0,055229	0,00305	33539,25	0,015298	0,906384
<b>Belgium</b>	0,675891	0,456829	33462,79	4,205208	0,095562
<b>Bulgaria</b>	0,690044	0,47616	849,8974	4,5449	0,086199
<b>Croatia</b>	-	-	-	-	-
<b>Cyprus</b>	0,342427	0,117256	3786,323	0,664158	0,452152
<b>Czech Republic</b>	0,212891	0,045323	13665,87	0,237371	0,646719
<b>Denmark</b>	0,24629	0,060659	20864,56	0,322878	0,594451
<b>Estonia</b>	-	-	-	-	-
<b>Finland</b>	0,079279	0,006285	21494,16	0,031625	0,865834
<b>France</b>	0,358431	0,128473	264953,8	0,737054	0,429831
<b>Germany</b>	0,45788	0,209654	241073,7	1,326344	0,301532
<b>Greece</b>	0,092932	0,008636	42836,93	0,043557	0,842915
<b>Hungary</b>	0,210553	0,044333	4616,581	0,231946	0,650424
<b>Ireland</b>	-	-	-	-	-
<b>Italy</b>	0,317801	0,100997	173900,1	0,561718	0,487312
<b>Latvia</b>	-	-	-	-	-
<b>Lithuania</b>	0,546918	0,299119	3373,968	2,133881	0,203911
<b>Luxembourg</b>	-	-	-	-	-
<b>Malta</b>	0,578293	0,334422	530,4093	2,51227	0,173818
<b>Netherlands</b>	-	-	-	-	-
<b>Poland</b>	0,491406	0,24148	30418,88	1,591787	0,262727
<b>Portugal</b>	0,246834	0,060927	42500,83	0,324399	0,59361
<b>Romania</b>	0,709321	0,503136	12099,61	5,063121	0,074264
<b>Slovakia</b>	-	-	-	-	-
<b>Slovenia</b>	0,734479	0,539459	4642,929	5,856805	0,060111
<b>Spain</b>	0,01832	0,000336	239647,4	0,001679	0,968903
<b>Sweden</b>	-	-	-	-	-
<b>United Kingdom</b>	0,58697	0,344533	355756,5	2,628152	0,16591
<b>EU 28</b>	0,344706	0,118822	1744057	0,674223	0,448947

Source: Own calculations.

Analyzing the correlation coefficient, it should be noted that they are contained within the range of (0.01832; 0.734479). However, even in the case of countries which are characterized by the highest correlation between the amount of aid to enterprises in difficulty and the level of their debt in relation to the *general government* sector (Slovenia, Romania, Bulgaria, Belgium), there can be no satisfactory adjustment of the regression line to the empirical data. The determination coefficients for these countries equal 0.539459; 0.503136; 0.47616; 0.456829. This means that the variation in the size of the *general government* sector debt of Slovenia, Romania, Bulgaria and Belgium was explained in approx. 50% by the variability in the expenditures of these countries on State aid for rescuing and restructuring undertakings in difficulty. The remaining approx. 50% is the effect of random and non-random factors (other non-aid variables, inaccuracy of adjusting straight line to the empirical data etc.). If the determination coefficient takes less than 0.5, the regression explains only less than 50% of the variation of the size of the *general government* sector debt and predictions based on such a regression model may be unsuccessful because the regression model explains then very little.

## Conclusions

Conducted regression analysis showed that between expenditures of the EU Member States on aid for rescuing and restructuring undertakings and the condition of the public finances of these countries there is no substantial statistical relationship. Granting aid by Member States to enterprises in difficulty does not affect the size of the *general government* sector debt of these countries. The question that now arises is whether: is the (potential) lack of impact of State aid for rescuing and restructuring undertakings on the size of the *general government* sector debt the sufficient justification for its granting? It should be noticed that the principle of compatibility of State aid to the mechanisms of the Single European Market is to provide State aid for the "positive" purposes that is in order to encourage beneficiaries of this aid to the activities that are considered desirable from the point of view of common European interest. Taking into account that the purpose of the "common interest" may be of a social or economic nature, State aid granted by Member States is to be directed at targets, such as environmental protection, job creation, investment in research and innovation, or the development of small and medium-sized enterprises. State aid in accordance with the provisions of the Treaty is to encourage activities to a greater extent than the market would be willing to provide. Therefore what is the purpose of the State aid for rescuing and restructuring enterprises in difficulty? The aim of this seems not to support a particular activity, but to

support the activities "as such". State aid for rescuing and restructuring undertakings in difficulty, that is, enterprises often already standing on the brink of bankruptcy, is concerned to protect existing business activities from the disappearance, which seems to be inevitable without State intervention. The conclusion can be drawn that such aid is not so to encourage specific actions as to prevent the liquidation of its business activities, which would be a natural consequence of the action of the market mechanism. This is especially seen in the case when the State aid is not for the actual restructuring of the enterprise, but it is spent to pay debts or maintain overcapacity. Such activities are often the result of the resistance of the public authorities from the introduction of the necessary, but difficult from the social perspective, changes. But this phenomenon can lead to favoring specific social groups, which can be seen in the case of big enterprises threatened with bankruptcy which operate in sensitive sectors, e.g. the mining industry, shipbuilding, rail, automotive. And does this kind of aid only delay necessary from economical point of view, but unacceptable for political reasons, certain restructuring actions, in particular the reduction of employment? The answer to this question is essential primarily from the perspective of the notification procedure under which the European Commission assesses the compatibility with the internal market of the plans of aid notified by the Member States. As far as in the case of any other State aid the notification procedures which are to determine the admissibility of aid occur between the authorities of the Member State and the European Commission whereas the beneficiary is not formally a party to these proceedings, in the case of aid for rescuing and restructuring, the role of the beneficiary is principally important. In this case the beneficiary, which is often enterprise standing at the brink of bankruptcy, must develop a restructuring plan, and then implement it and consistently realize. Member State should have in this regard extra responsibility that comes from the fact that when reporting to the European Commission a restructuring plan, the Member State confirms the legitimacy and rationality of the destination of public funds for the project, thereby confirming its credibility.

Taking this into consideration the most important question arises. Does the State aid "to prevent the bankruptcy of undertakings" follow the condition of art. 107 par. 2 point c of TFEU? It is after all based on this provision of the Treaty, which constitutes the sectoral and regional aid, such aid is considered acceptable and compatible with the internal market (CFI, T-17/03, para 43). Is regulated by this provision conditional exclusion for providing by Member States public aid in fact the basis for the promotion of the least efficient enterprises that cope the worst with competition on the free market and that in the absence of State aid would

have to fall and thus give its share in the market to competitors generating lower costs or offering more attractive products? Action of Member States in connection with the effects of the recent financial crisis has shown that State aid for rescuing and restructuring enterprises in difficulty follows more the premise of art. 107 par. 2 point b of TFEU, according to which the anti-crisis aid may be granted. Anti-crisis aid is aid to remedy a serious disturbance in the economy of a Member State. Such aid must be the action taken in response to a crisis situation concerning the whole economy of the country (CFI, T-132/96 and T-143/96, para 167; ECJ, C-57/00 P and C-61/00 P, para 97). Therefore, these serious disturbances in the economy must be of a general nature and may not apply to only one region or one sector (ECJ, C-301/96, para 106). The financial crisis showed, however, that anti-crisis aid will also be admissible in the situation when it will be one sector of the economy, but considered through the prism of several Member States. In this context, State aid may be reasoned by significant decrease in employment, production or investment or threat to the existence of strategic companies. When we go back in time and look at the actions taken by the Member States in connection with the oil crisis in the 70s of the twentieth century, which have provided State aid in the steel industry practically without specifying its purpose – first to support the expansion of the sector, and then to prevent the collapse of enterprises - a proposal to declare State aid for rescuing and restructuring undertakings in difficulty as anti-crisis aid seems to be the most reasonable. The financial crisis of the first decade of the twenty-first century, such as the oil crisis of the 70s of the twentieth century, showed that State aid for rescuing and restructuring enterprises in difficulty will always be regarded as acceptable, when a group of entities (individuals, enterprises) interested in obtaining support is determined and focused while the cost of such support are paid by all taxpayers (the whole society), so the dispersed and less interested in the cost of such support group.

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