

# Analysis of Anti-Crisis Intervention in the Financial Sector of the EU and Serbia

Scientific article

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**KEY WORDS:** *the global economic crisis, state aid, the financial sector; the banking sector*

**ABSTRACT** - *In the extraordinary economic circumstances, such as the last global economic crisis, necessity of state intervention came to the forefront. Problems which all countries are facing, regardless of their development level, and striving to maintain the level of competitiveness in crisis conditions, have demanded an active role of the state. One of the ways of the state intervention in the economy is the state aid. A category of state aid played an important role during the period of the global economic crisis among the European Union member states, as well as in the potential member states. This paper analyses the effects and impact of anti-crisis state aid to the financial sector in the European Union and Serbia. The objective is to evaluate the effectiveness of the implemented measures with a certain time distance, and to identify the policy guidance in the future.*

Znanstveni prispevek

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**KLJUČNE BESEDE:** *svetovna gospodarska kriza, državna pomoč, finančni sektor, bančni sektor*

**POVZETEK** - *V izrednih gospodarskih razmerah, kot je v zadnjem času svetovna gospodarska kriza, je nujnost državne intervencije prišla v ospredje. Težave, s katerimi se soočajo vse države, ne glede na stopnjo razvoja, in si prizadevajo za ohranjanje ravni konkurenčnosti v kriznih razmerah, zahtevajo aktivno vlogo države. Eden od načinov državne intervencije v gospodarstvu je državna pomoč. Kategorija državne pomoči je igrala pomembno vlogo v času svetovne gospodarske krize tako v državah članicah Evropske unije, kot tudi v potencialnih državah članicah. Članek analizira učinke in vpliv protikrizne državne pomoči finančnemu sektorju v Evropski uniji in v Srbiji. Cilj je z nekaj časovne distance oceniti učinkovitost izvedenih ukrepov in določiti politične smernice za prihodnost.*

## 1 Introduction

In times of the global economic crisis, all countries are trying to do as much as possible to protect the domestic economy from negative effects of the recession and maintain a level of competitiveness. The economic situation in the EU member states in the crisis period indicates that they are not the exception, and that struggle for maintaining competitiveness is relevant for all, as for developed and developing countries. Long-term strategies to maintain the competitiveness certainly require economic development based on knowledge, along with protecting the environment, high level of employment and productivity. However, in order to set the stage for the implementation of long-term strategies, all countries had necessarily resorted to short-term measures to maintain the competitiveness during the period of crisis. These measures included the financial support of the state to real and financial sectors of the economy in increased volume.

In extraordinary crisis circumstances, different forms of government intervention are gaining importance. A form of government intervention, which played a significant role in the last global economic crisis, was state aid. State aid is a form of selecti-

ve state support for which there is a risk of favouring the aid recipient in relation to the competition. Hence, the intention of the European Commission, the body responsible for the control of state aid at the level of the European Union (EU), and intention of national systems of state aid control to lower the share of state aid in the gross domestic product (GDP). This intention is understandable, given that lower levels of state aid mean less risk of distortion of competition. However, during the global economic crisis, a tendency of reducing the state aid was abandoned and state aid was an important instrument as a response to the crisis.

On the EU level, the crisis presented substantial challenges. The EU countries needed a prompt action for reviving financial markets and diminishing the impact of the recession on the real sector of the economy (Gavrila-Paven, 2009, p. 698). Rules on state aids act as a catalyst in achieving these objectives at the European level (Sava, Zugravu, 2009, p. 337). State aid was one of the main instruments "in helping to battle the financial crisis" (Rutkiewicz, 2001, p. 52). However, the application of state aid for this purpose required the coordination of national aid measures due to a number of potential dangers. Firstly, there were clear risks of distortions within the banking sector. Banks receiving state assistance would potentially enjoy competitive advantages as compared to those who did not receive the aid. Secondly, there was a danger of distortions between member states. "Banks receiving favourable treatment in one member state might enjoy competitive advantage not available to institutions in states where the assistance was less favourable" (Doleys, 2010). This paper evaluates the effectiveness of the implementation of anti-crisis state aid measures in the financial sector of the European Union. Given that this kind of state support was present in Serbia, the paper analogously analyses the consequences of anti-crisis state aid in the financial sector of Serbia.

## **2 Analysis of the Competitive Position Dynamics of the EU and Serbia Immediately before and after the Crisis With the GCI Methodology**

In order to assess the consequences, which the global economic crisis had when it comes to competitiveness, Table 1, shows the GCI score for the analysed group of the EU countries, as well as for Serbia during the period 2007 - 2013. The last column shows the change of the GCI scores 2013 compared to 2007.

Almost all analysed countries (except Luxembourg, Poland and Sweden) were faced with declining levels of global competitiveness in a period when the effects of the global economic crisis were most pronounced (2009-2011). This situation demanded immediate implementation of various measures of state intervention. EU countries gradually improved the competitiveness in 2012 and 2013. However, based on the last column of Table 1, we can conclude that there is still a large number of the EU countries that did not reach the level of competitiveness indicators they had before the crisis in 2013. Even seventeen countries of the European Union recorded a lower the GCI score in 2013 compared to 2007. This fact is valid for Serbia as well.

Table 1: The GCI score in the EU member countries and Serbia during the period 2007 - 2013

Country	2007	2008	2009	2010	2011	2012	2013	Change 2013/2007
Austria	5.23	5.23	5.13	5.09	5.14	5.22	5.15	-0.08
Belgium	5.10	5.14	5.09	5.07	5.20	5.21	5.13	0.03
Bulgaria	3.93	4.03	4.02	4.13	4.16	4.27	4.31	0.38
Croatia*	4.20	4.22	4.03	4.04	4.08	4.04	4.13	-0.08
Cyprus	4.23	4.53	4.57	4.50	4.36	4.32	4.30	0.07
Czech Republic	4.58	4.62	4.67	4.57	4.52	4.51	4.43	-0.14
Denmark	5.55	5.58	5.46	5.32	5.40	5.29	5.18	-0.38
Estonia	4.74	4.67	4.56	4.61	4.62	4.64	4.65	-0.09
Finland	5.49	5.50	5.43	5.37	5.47	5.55	5.54	0.05
France	5.18	5.22	5.13	5.13	5.14	5.11	5.05	-0.13
Germany	5.51	5.46	5.37	5.39	5.41	5.48	5.51	0.00
Greece	4.08	4.11	4.04	3.99	3.92	3.86	3.93	-0.15
Hungary	4.35	4.22	4.22	4.33	4.36	4.30	4.25	-0.10
Ireland	5.03	4.99	4.84	4.74	4.77	4.91	4.92	-0.10
Italy	4.36	4.35	4.31	4.37	4.43	4.46	4.41	0.05
Latvia	4.41	4.26	4.06	4.14	4.24	4.35	4.40	-0.01
Lithuania	4.49	4.45	4.30	4.38	4.41	4.41	4.41	-0.08
Luxembourg	4.88	4.85	4.96	5.05	5.03	5.09	5.09	0.21
Malta	4.21	4.31	4.30	4.34	4.33	4.41	4.50	0.29
Netherlands	5.40	5.41	5.32	5.33	5.41	5.50	5.42	0.02
Poland	4.28	4.28	4.33	4.51	4.46	4.46	4.46	0.17
Portugal	4.48	4.47	4.40	4.38	4.40	4.40	4.40	-0.08
Romania	3.97	4.10	4.11	4.16	4.08	4.07	4.13	0.15
Slovak Republic	4.45	4.40	4.31	4.25	4.19	4.14	4.10	-0.34
Slovenia	4.48	4.50	4.55	4.42	4.30	4.34	4.25	-0.23
Spain	4.66	4.72	4.59	4.49	4.54	4.60	4.57	-0.09
Sweden	5.54	5.53	5.51	5.56	5.61	5.53	5.48	-0.06
Ukraine	3.98	4.09	3.95	3.90	4.00	4.14	4.05	0.08
United Kingdom	5.41	5.30	5.19	5.25	5.39	5.45	5.37	-0.05
Serbia	3.78	3.90	3.77	3.84	3.88	3.87	3.77	-0.01

\* Croatia became the EU member in July 2013.

Source: World Economic Forum, <http://www.weforum.org/issues/competitiveness-0/gci2012-data-platform/>.

### 3 Informational Basis, Research Methodology and Research Questions

The subject of research is to assess the scope of intervention in the form of state aid to the financial sector in the period of the global economic crisis in the European Union and Serbia, as well as the effects of these interventions. The aim is to evaluate and grade the appropriateness of using the state aid as an anti-crisis instrument.

In accordance with these purposes of research, the paper starts from the following research questions:

- State aid to the financial sector was an important anti-crisis instrument in the EU and Serbia;
- State aid to the financial sector did not adversely affect the level of concentration of the financial sector and the movement market capitalization of leading financial institutions in the EU and Serbia.

Research methods applied in this paper are the method of analysis and synthesis. The method of analysis is used for consideration of situations in terms of allocation of anti-crisis state aid in the EU and Serbia. The efficiency of using state aid was evaluated by the method of synthesis. The data of the European Commission represent the empirical basis of research for part of the researching scope and impact of state aid in the EU. The information from the official website of the Government of the Republic of Serbia and the information of the National Bank of Serbia (NBS) are the empirical basis for part of the researching scope and impact of state aid in Serbia.

## 4 Research Results and Discussion

### *4.1 Analysis of the Anti-Crisis Interventions in the Financial Sector Organizations in the European Union*

Given that the roots of the global financial crisis originated from the financial sphere, the developed countries had a wide range of measures to recover the financial sector. The state intervention and help the financial sector during the crisis is essential to prevent the collapse of the country's economy. Banks and financial institutions have a tendency towards stricter credit standards and credit contraction during the crisis, which is the channel for the transmission of the crisis on the real sector of the economy. Hence, the European Union envisaged and implemented significant volume of measures to help the financial sector. The financial sector was the central focus on such intervention, and the EU Member States used unprecedented amounts of state aid to this sector (Musetescu, 2012, p. 176).

Table 2 shows the amount of the approved anti-crisis state aid to the financial sector of the European Union during the period 2008 - 2012.

The most extensive responses to the crisis were recorded in 2008, when the scope of the anti-crisis state aid to the financial sector was even 27.6% of the GDP of the European Union. The approved amount of anti-crisis state aid to financial sector quite varied in member states, but its extremely high values were recorded in 2008, particularly in Ireland (202.5%), Denmark (250.9%) and Belgium (83.9%).

Back then, the approved state aid as a percentage of GDP assumed modest proportions. The amount of approved anti-crisis state aid decreased with each coming year of the crisis, in total and by the member countries. However, Ireland had the highest percentage of participation in 2010 and 2011, namely 75.4% and 42.7%. Five mem-

bers of the European Union did not use this anti-crisis instrument in any year of the crisis (Bulgaria, Czech Republic, Estonia, Malta and Romania).

*Table 2: The approved amount of anti-crisis state aid to the financial sector as percentage of GDP in the EU Member States (2008 – 2012)*

Country	Year				
	2008	2009	2010	2011	2012*
Belgium	83,9%	10,1%	0,7%	7,4%	1,6%
Bulgaria	0%	0%	0%	0%	0%
Czech Republic	0%	0%	0%	0%	0%
Denmark	250,9%	6,4%	0,2%	0%	5,2%
Germany	22,2%	2%	0,8%	0,9%	0,1%
Estonia	0%	0%	0%	0%	0%
Ireland	202,5%	7,6%	75,4%	42,7%	0%
Greece	11,5%	0%	21,7%	14,2%	9,4%
Spain	21,0%	0%	10,1%	0%	22,2%
France	17,6%	0,3%	0,1%	0,8%	0,2%
Italy	1,3%	0%	0%	5,1%	1,9%
Cyprus	0%	17,7%	0%	0%	10,1%
Latvia	32,3%	0,6%	6,8%	0%	2,4%
Lithuania	0%	0%	5,3%	0%	0,0%
Luxembourg	18,8%	1,1%	0%	3%	0,8%
Hungary	0%	6,9%	3,9%	0%	0%
Malta	0%	0%	0%	0%	0%
Netherlands	38,1%	4,0%	10,8%	0%	0%
Austria	31,9%	0,4%	0%	0,1%	1,0%
Poland	0%	3%	0%	0%	15,8%
Portugal	9,6%	2,7%	0%	15,8%	17,3%
Romania	0%	0%	0%	0%	0%
Slovenia	32,3%	0%	0%	0,7%	1,1%
Slovak	0%	5,5%	0%	0%	0%
Finland	26,9%	2,3%	0%	0%	0%
Sweden	47,8%	1,6%	0%	0%	0%
United Kingdom	25,9%	23,5%	0,8%	0%	1,3%
EU-27	27,6%	4,6%	3,1%	2,2%	3,4%

\* Percentage of state aid in the 2012, calculated in relation to GDP from 2011

*Source:* European Commission, [http://ec.europa.eu/competition/state\\_aid/studies\\_reports/expenditure.html](http://ec.europa.eu/competition/state_aid/studies_reports/expenditure.html).

The approved anti-crisis state aid was not totally used. Table 3 shows the amount of used state aid by the financial sector in the period of the global economic crisis in the EU as a whole and by the Member States.

Regardless of the rather high level of anti-crisis state aid approved in 2008, the used aid was 5% of GDP. The largest proportion of aid was used in 2009 (9.04%) and declined gradually in the forthcoming years. Ireland, Denmark, Belgium, United Kin-

gdom and Latvia stood out among the EU countries according to the highest amount anti-crisis state aid used in the crisis period. In addition to the after mentioned five countries in which the anti-crisis state aid was not approved, Lithuania, Poland and Slovakia did not use this anti-crisis instrument in any year of the crisis as well.

*Table 3:* The used amount of anti-crisis state aid to the financial sector as percentage of GDP in the EU Member States (2008 – 2012)

Country	Year			
	2008	2009	2010	2011
Belgium	7,46%	16,44%	8,32%	4,71%
Bulgaria	0%	0%	0%	0%
Czech Republic	0%	0%	0%	0%
Denmark	63,28%	7,38%	10,65%	9,71%
Germany	2,76%	7,94%	6,67%	1,51%
Estonia	0%	0%	0%	0%
Ireland	97,05%	180,54%	152,09%	81,24%
Greece	0,19%	4,01%	14,59%	30,43%
Spain	0,21%	5,4%	8,19%	7,84%
France	1,80%	5,41%	4,74%	3,02%
Italy	0%	0,27%	0%	0,69%
Cyprus	0%	3,29%	16,13%	15,91%
Latvia	4,15%	10,37%	9,08%	2,58%
Lithuania	0%	0%	0%	0%
Luxembourg	8,71%	4,98%	3,86%	2,96%
Hungary	0%	2,4%	1,07%	0,72%
Malta	0%	0%	0%	0%
Netherlands	5,4%	12,52%	9,07%	6,13%
Austria	1,86%	7,85%	7,01%	4,14%
Poland	0%	0%	0%	0%
Portugal	0,71%	4,46%	4,54%	5,67%
Romania	0%	0%	0%	0%
Slovenia	0%	2,87%	5,98%	5,06%
Slovak	0%	0%	0%	0%
Finland	0,06%	0,03%	0%	0%
Sweden	0,85%	5,05%	5,75%	3,62%
United Kingdom	4,92%	13,54%	11,71%	5,05%
EU-27	5%	9,04%	7,97%	4,72%

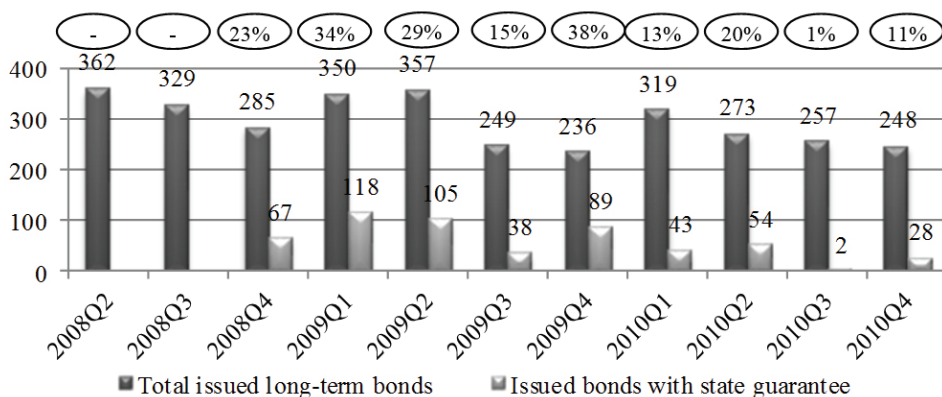
*Source:* European Commission, [http://ec.europa.eu/competition/state\\_aid/studies\\_reports/expenditure.html](http://ec.europa.eu/competition/state_aid/studies_reports/expenditure.html).

Instruments for granting anti-crisis state aid to the financial sector of the European Union were: guarantee, recapitalization measures, restructuring of the financial sector and asset support measures (European Commission, 2008). The European Commission detailed rules for granting any form of anti-crisis state aid. Guarantees had to be a temporary measure, in terms of the needs of Member States to receive approval from the European Commission for approving guarantees every six months. User payment

for guarantee had to be close to the market price as much as possible (European Commission, 2010). According to the regulations of the European Commission, approving of state aid for recapitalization needs special caution. In fact, there is a danger that this type of anti-crisis state aid could lead to a “race with subsidies” between member countries and could provide unjustified advantages to banks with low performance (European Commission, 2009a). State aid for restructuring could be granted for maximum five years, with the participation of beneficiaries in restructuring costs. In addition, the user had to submit a restructuring plan and establish the long-term ability of the business in the changing macroeconomic conditions (European Commission, 2009b). Support asset measures meant the use of state aid in order to free the banks of assets whose value had been diminished, the so-called toxic assets (European Commission, 2009c).

Implemented anti-crisis measures aimed to the financial sector, had significant practical effects. Figure 1 presents a comparative view of long-term bonds issued by financial institutions in the EU during the period 2008 - 2010 and issued bonds with a state guarantee, as well as the percentage of participation issued bonds with state guarantee in total.

Figure 1: Evaluation of gross emissions of long-term bonds by financial institutions in the EU between October 2008 and December 2010 (billion euro)



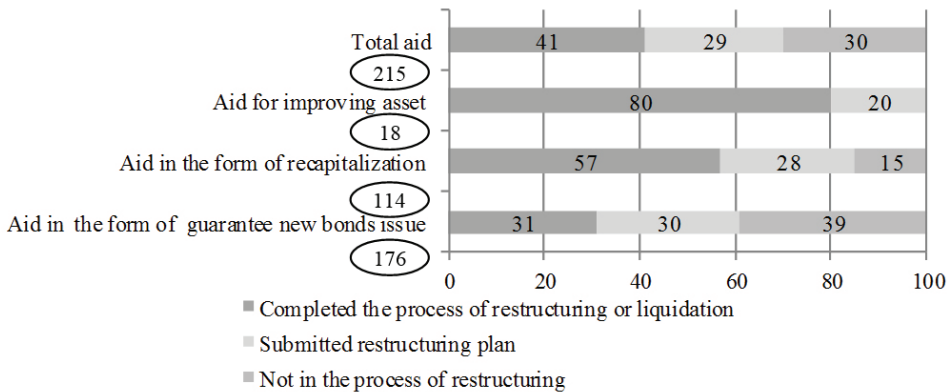
○ - Share of the value of bonds with state guarantee in total

Source: European Commission, [http://ec.europa.eu/competition/state\\_aid](http://ec.europa.eu/competition/state_aid).

The highest percentage of bonds with government guarantees was issued in the first and the fourth quarter of 2009, when the negative effects of the crisis were most pronounced. In the second half of the 2010, their share in the total number decreased. This talks about the respect of the temporary nature of anti-crisis measures.

Approval of state aid to overcome the negative effects of the crisis was conditioned by the existence of a restructuring plan, to ensure the recovery of the financial institutions in the long term and the ability to go back and survive in market conditions without the support of the state. Figure 2 shows the relationship between the process of restructuring financial institutions and forms of allocation of anti-crisis state aid.

Figure 2: The link between the process of restructuring and state aid instruments between October 2008 and December 2010



○ - total number of users

Source: Source: European Commission, [http://ec.europa.eu/competition/state\\_aid](http://ec.europa.eu/competition/state_aid).

State aid for improving asset was fully conditioned by the restructuring plan and process, so that 80% of beneficiaries had completed the process of restructuring (or liquidation), and the remaining 20% submitted a restructuring plan in the period 2008 – 2010. When it comes to state aid in the form of recapitalization, 85% of users had completed the restructuring process and submitted a restructuring plan, while the remaining 15% was in the process of restructuring. The situation was somewhat different for state aid in the form of a guaranteed new bond issues, so that even 39% of beneficiaries was not in the process of restructuring.

Table 4 shows the closed case of restructuring or liquidation of the financial sector organizations in the European Union in the period of the global economic crisis.

The European Commission adopted more than 30 decisions of approving the restructuring plan of concrete banks and 17 decisions of approving the plan of liquidation up to October 2012. The European Commission also adopted a negative decision requiring the return of illegal granted state aid (in the case of Portuguese bank VRR - Banco Privado Portugues).

Approval of the anti-crisis state aid given to the financial sector of the European Union is characterized by selectivity and concentration of state aid to particular, a small number of users (which needed the aid). This type of distribution carried risk of distortion of competition between the banks or financial institutions that receive and those who do not receive state aid. In order to analyse the potential implications of this kind of distribution of state aid, we observed the movement of the concentration indicator in the banking sector of the European Union in certain periods. In fact, concentration indicators can be used as an indicator of the intensity of competition in the financial market of the European Union.



Table 4: Closed cases of restructuring and liquidation (up to October 2012)

<i>EU member countries</i>	<i>Bank/Insurance</i>	<i>Type of decision</i>
Austria	BAWAG	restructuring
	Kommunalkredit	restructuring
	Volksbank	restructuring
Belgium	KBC	restructuring
	Ethias	restructuring
Belgium/Luxembourg/Netherlands	Fortis Bank Belg. And Lux.	restructuring
Denmark	Fionia	liquidation
	Roskilde	liquidation
	EIK	liquidation
	Amagerbanken	liquidation
	Max Bank	liquidation
Finland	Kaupthing Finland	liquidation
Germany	WestLB	liquidation
	Sachsen LB	restructuring
	IKB	restructuring
	LBBW	restructuring
	HSH Nordbank	restructuring
	Hypo Real Estate	restructuring
	Sparkasse Köln-Bonn	restructuring
	BayernLB	restructuring
	NordLB	restructuring
Commerzbank	restructuring	
Greece	T-Bank	liquidation
Hungary	FHB	restructuring
Ireland	Anglo Irish & INBS	liquidation
	Bank of Ireland	restructuring
	Quinn	restructuring
Latvia	Parex	restructuring
Luxembourg	Kaupthing Luxembourg	liquidation
Netherlands	ABN Amro/Fortis Nederlands	restructuring
	Aegon	restructuring
Portugal	BPP	negative decision
	BPN	restructuring
Spain	CCM	liquidation
	Caja Sur	liquidation
	UNNIM	liquidation
	CAM	liquidation
Sweden	Carnegie	restructuring
United Kingdom	Bradford & Bingley	liquidation
	RBS	restructuring
	Lloyds Banking Group	restructuring
	Northern Rock	restructuring
	Dunfermline	liquidation

Source: European Commission, [http://ec.europa.eu/competition/state\\_aid](http://ec.europa.eu/competition/state_aid).

The increase in the value of an indicator of concentration talks about reducing the intensity of competition and vice versa. Table 5 shows the values of the two most commonly used indicators of concentration (Herfindahl-Hirschman Index - HHI and Concentration Ratio - CR) for the banking system of the European Union in the period 2001 - 2009.

Table 5: The movement of the values of concentration indicators of the EU banking system

Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009
HHI	504	520	545	567	614	592	596	665	632
CR5	38%	38%	40%	41%	43%	42%	42%	45%	44%

Source: European Commission, [http://ec.europa.eu/competition/state\\_aid](http://ec.europa.eu/competition/state_aid).

The global economic crisis, as well as the granted state aid, did not significantly affect the level of concentration of the EU banking sector, due to the movement of the indicators values. Certain percentage increase of indicators in 2008 (CR5 for 7% and HHI for 10%) was not held in the 2009 and hence, it was not a trend. Granted anti-crisis state aid to the financial sector did not significantly distort competition on the financial market of the European Union.

While market concentration, as a measure of the competition intensity in the European financial market had not changed significantly, there had been a change in the market capitalization of the leading banks. Some changes, not significant, were observed in the structure of the largest 20 banking institutions in the period before and the period after the global economic crisis (Table 6).

Although there were not some significant changes of market leaders in the EU banking sector before and after the global economic crisis, certain movements are still observed. The top three banking institutions maintained their leading position before and after the crisis. Three Belgian banks (Ageas, KBC Groep NV, Dexia SA) and one Greek bank (National Bank of Greece) belonging to the group of the 20 largest European banks at the beginning of 2008, lost their positions at the end of 2010. Instead, one Polish, one Austrian and two Swedish banks were in the 20 largest European banks at the end of 2010. Of the 20 leading European banks seven were restructured or were in the process of restructuring at the end of 2010 (ING, RBS, Ageas, Lloyds, KBC, Dexia and the National Bank of Greece). Three restructured banks are still among the twenty largest banks. Banks that lost their market capitalization significantly during the crisis, but they are still in the group of twenty leading banks are UniCredit SpA (- 47%), ING Groep NV (- 48%) and Intesa Sanpaolo SpA (- 55%). The restructured bank Lloyds Banking Group PLC was the leader in the percentage growth in market capitalization in the 2008 in relation to the 2010 (+ 61%).

Table 6: The market capitalization of the leading European banks

20 leading EU banking institutions before the crisis		20 leading EU banking institutions after the crisis		Rang evolution	Change in market capitalization.
Institution	Market capitalization	Institution	Market capitalization		
	billion euro: 2008		billion euro: 2010		
HSBC Holdings PLC	124	HSBC Holdings PLC	134	=	9%
Banco Santander SA	79	Banco Santander SA	66	=	-16%
BNP Paribas	58	BNP Paribas	57	=	-1%
Intesa Sanpaolo SpA	57	Lloyds Bank.Gr. PLC	52	↑	61%
UniCredit SpA	57	Royal Bank of Scot.	50	↑	18%
ING Groep NV	53	Stand. Chartered PLC	47	↑	55%
Banco Bilbao V. Arg	52	Barclays PLC	37	↑	-1%
Royal Bank of Scot.	42	Deutsche Bank AG	36	↑	-5%
Deutsche Bank AG	38	Banco Bilbao V. Arg	34	↓	-35%
Ageas	38	Nordea Bank AB	33	↑	24%
Barclays PLC	37	Societe Generale	30	↑	-17%
Societe Generale	36	UniCredit SpA	30	↓	-47%
Credit Agricole SA	33	ING Groep NV	28	↓	-48%
Lloyds Bank.Gr. PLC	32	Intesa Sanpaolo SpA	26	↓	-55%
Stand. Chartered PLC	31	Credit Agricole SA	23	↓	-30%
KBC Groep NV	29	Svenska Handelsbanken AB	15	new ins.	29%
Nordea Bank AB	27	Skandinaviska Enskilda B	14	new ins.	21%
Dexia SA	21	Powszechna Kasa Oszczedn	14	new ins.	7%
Danske Bank A/S	16	Danske Bank A/S	13	=	-18%
Nat. Bank of Greece	16	Erste Group Bank AG	13	new ins.	2%
Restructured institutions outside the top 20 in 2010		Restructured institutions in the top 20 in 2010			

Source: European Commission. (2011). The effects of temporary State aid rules adopted in the context of the financial and economic crisis. Commission Staff Working Paper, p. 12.

#### *4.2 Analysis of the Anti-Crisis Intervention in the Organization of the Financial Sector in Serbia*

In Serbia, unlike the EU countries, the state did not have to directly intervene in the financial sector, however, through the financial sector, the state did provide easier access of the real sector to funding sources. Underdevelopment of the banking sector, especially low average debt of banks and citizens, somewhat reduced the direct impact of the global economic crisis. European Union countries introduced temporary measures to assist both, real and financial sector. In Serbia, measures of the National Bank of Serbia (NBS), as well as the Government's measures were aimed primarily at facilitating access to finance and mitigate the negative effects of the recession in the real sector of the economy.

The most important instrument of response to the crisis in Serbia was the policy of subsidized loans. Due to the weak development of the system of state aid control in Serbia, these measures are not qualified as state aid and were not under the supervision of Commission for state aid control of the Republic of Serbia (Krstić, Stanišić, 2013). However, these loans were the state aid at all its features. The government adopted a program to support the economy at the beginning of 2009, which subsidized: liquidity loans in the amount of 40 billion RSD, investment loans with involvement of the Development fund and state guarantees in the amount of 17 billion RSD and consumer loans in the amount of 20 billion RSD. State provided 2 billion RSD for subsidizing interest of liquidity loans in 2010, in order to banks placed about 50 billion RSD of short-term liquidity loans to the economy (local currency or foreign currency).

When talking about investment loans, 535 million RSD was planned for the subsidizing interest, in order for banks to place more than 15 billion RSD to the economy (Serbian Government, 2010). It was planned that the state sets aside 1 billion RSD for subsidizing interest rates on consumer loans in order for banks to lend about 25 billion RSD to the citizens. Government adopted the Program of stimulation of the economy and employment for 2011 in January 2011. Seven billion RSD was allocated from the budget of the Republic of Serbia for implementation of this program in 2011. Funds to subsidize interest rates on liquidity loans and working capital earmarked 1.4 billion RSD. Funds of 700 million RSD were separated from the budget of the Republic of Serbia to encourage investment for 2011 (Serbian Government, 2011).

Due to the above arrangements of subsidized loans, where not all banks in Serbia were included, it is important to examine how the crisis and the anti-crisis measures have taken effect on concentration and competition on the banking market in Serbia. Table 7 shows the value of the Herfindahl-Hirschman Index (HHI) of concentration of the banking sector (the sum of squared share of individual banks in total banking sector assets) and the value of the CR5 (the sum of the percentage share of the top five banks in total banking sector assets) in Serbia for the period from 2008 to 2011.

HHI recorded the lowest value in 2008. During the observed period, the maximum value of HHI was recorded in 2009. Although there was a slight increase in concentration after 2008, HHI was not above the level of 1000 in any year during the observed period, which would indicate the existence of only moderate levels of concentration.

Table 7: HHI and CR5 of banking sector in Serbia in the period 2008 - 2011

Indicator	2008	2009	2010	2011
HHI	622	645	634	642
CR5	46	46.2	46	45.5

Source: National Bank of Serbia, <http://www.nbs.rs/>.

Also, a significant increase of concentration of the banking sector in Serbia cannot be inferred according to percentage share of the top five banks in the total assets of the banking sector. Even the lowest concentration ratio (CR5) in the observed period was recorded in 2011.

Special aspect of the analysis is to determine the changes in the group of the ten largest banks in the period of the global economic crisis. Table 8 shows the top banks in Serbia, according to the criterion of total assets in 2009 and 2011.

Table 8: Ten the largest banks in Serbia, according to the criterion of total asset

Ten the largest banks in Serbia (2009)			Ten the largest banks in Serbia (2011)				
Institution	Total balance asset		Institution	Total balance asset		Rang evolution	Change of % share
	billion RSD	%		billion RSD	%		
Banca Intesa	307,9	14,3	Banca Intesa	392,3	14,8	=	+0,5%
Komercijalna banka	205,3	9,5	Komercijalna banka	275,5	10,4	=	+0,9%
Raiffeisen banka	193,5	9	Unicredit bank	198,6	7,5	↑	-1,5%
Eurobank EFG	146,8	6,8	Raiffeisen banka	194,1	7,3	↓	+0,5%
Hypo Alpe-Adria-bank	139,1	6,4	Societe Generale banka	189,3	7,1	↑	+0,7%
Unicredit bank	135,8	6,3	Eurobank EFG	160,5	6,1	↓	-0,2%
AIK banka	109,4	5,1	Hypo Alpe-Adria-bank	146,7	5,5	↓	+0,4%
Societe Generale banka	99,7	4,6	AIK banka	143,2	5,4	↓	+0,8%
Vojvodanska banka	87,1	4	Vojvodanska banka	92,5	3,5	=	-0,5%
Alpha bank	73,6	3,4	Alpha bank	85,2	3,2	=	-0,2%

Source: National Bank of Serbia, <http://www.nbs.rs/>.

Significant changes did not occur. According to the criterion of total assets, two leading banks were Banca Intesa and Komercijalna banka in 2009 and 2011. Banca Intesa was the largest bank in the banking system in Serbia, with total assets of 307.9 and 392.3 billion RSD and with share of 14.3% and 14.8% of the total assets of the banking sector in 2009 and 2011, respectively. Banka Intesa was followed by Komercijalna banka with 205.3, and 275.5 billion RSD of assets and share of 9.5% in 2009 and 10.4% in the 2011. Minor changes in the order of the ten largest banks in the observed period were still there. Positive changes were observed by Unicredit bank, which came from the sixth to the third place and by Societe Generale bank, which

came from the eighth to the fifth place. Raiffeisen Bank (from the third to the fourth place), Eurobank EFG (from the fourth to the sixth place), Hypo Alpe-Adria-Bank (from the fifth to the seventh place) and AIK Banka (from the seventh to the eighth place) recorded the decline in the range.

## 5 Conclusion

The global economic crisis had a significant impact on the functioning and stability of the financial sector in the EU Member States. Hence, there was a need for fast and coordinated actions of the state, in order to stabilize the financial markets. One way of response to the crisis was the state aid. The European Commission, as the monitoring authority, issued a set of guidelines that regulated the allocation of state aid during the period of the global economic crisis, for managing the crisis situation. The goal was to balance the goal of non-distortion of competition and the necessity for the use of anti-crisis state aid. Significant amount of anti-crisis state aid was approved and used at the EU level in the period 2008 - 2012. This assistance has contributed to the revitalization of the financial sector of the EU. The analysis showed that, in addition to small changes in the market capitalization of the leading European banks, anti-crisis state aid did not distort competition on the EU banking market.

Due to the underdevelopment of the financial markets in Serbia, any significant state intervention in the financial sector in the period of the global economic crisis was not necessary. However, banks were the channel through which the state has facilitated access to financing the real sector of the economy during the crisis. Serbia has provided a significant amount of subsidized loans, which were considered a state aid according to all its characteristic. Due to the fact that the arrangements of subsidized loans did not include all banks, however, there was a risk of distortion of competition in the banking market of Serbia. The analysis showed that there were some changes in the market capitalization of the leading banks in the period before and after the crisis in Serbia, but without the distortion of competition on the banking market.

*Dr. Bojan Krstić, dr Tanja Stanišić*

### **Analiza protikriznega posredovanja v finančnem sektorju EU in Srbije**

*Predmet prispevka je ocena obsega intervencij v obliki državne pomoči za finančni sektor v obdobju svetovne gospodarske krize v Evropski uniji in Srbiji, kot tudi posledice teh intervencij. Cilj je bil ovrednotiti in oceniti primernost uporabe državnih pomoči kot instrument boja proti krizi. V prispevku se osredotočamo na dve pomembni vprašanji. Prvo vprašanje se nanaša na to, ali je bila državna pomoč finančnemu sektorju pomemben instrument proti krizi v EU in Srbiji. Drugo vprašanje pa na to, ali je državna pomoč finančnemu sektorju negativno vplivala na raven zgoščenosti*

*finančnega sektorja in kapitalizacijo trga vodilnih finančnih institucij v EU in Srbiji. Raziskovalne metode, ki smo jih uporabili, so bile metode analize in sinteze. Glede na opredeljeni predmet in namen raziskave, je prispevek razdeljen v več segmentov.*

*V uvodnem delu je osvetljena možnost uporabe državne pomoči kot instrument boja proti krizi in referenca na literaturo, ki je v obdobju krize obravnavala to problematiko. Prvi del prispevka analizira konkurenčnost Evropske unije in Srbije, z namenom oceniti vpliv globalne ekonomske krize na raven konkurenčnosti. V drugem delu prispevka je analiziran obseg in učinek protikrizne finančne državne pomoči finančnemu sektorju Evropske unije, kot način odziva na krizo. Na podoben način, smo v tretjem delu prispevka še analizirali obseg in posledice protikrizne državne pomoči za finančni sektor v Srbiji.*

*Neprekinjen boj držav za ohranitev konkurenčnega položaja v okoliščinah obdobja svetovne gospodarske krize, ni izgubil na pomenu. Vse države v krizi se namreč soočajo s problemom upadanja konkurenčnosti. Prispevek ocenjuje raven konkurenčnosti Evropske unije in Srbije v obdobju pred, med, in po zadnji svetovni gospodarski krizi (2007-2013). Podatki kažejo, da je problem zmanjševanja ravni konkurenčnosti pomemben za vse države, ne glede na njihovo stopnjo razvoja. Najbolj negativni učinki krize na konkurenčnost analiziranih držav so bili zabeleženi v obdobju 2009-2011. Posledično se je pokazala potreba po različnih intervencijah vseh držav za ohranitev in izboljšanje konkurenčnosti.*

*Korenine zadnje svetovne gospodarske krize izhajajo iz finančnega sektorja, ki je deloval kot prehod, skozi katerega je bila kriza prenešana na realni sektor gospodarstva. Vlade številnih držav so poskušale intervenirati v različnih oblikah; najprej odpraviti vzroke krize in nato oživeti finančni sektor. Eden od načinov protikriznih ukrepov držav je bila dodelitev državnih pomoči za premagovanje negativnih učinkov krize. Nedavne izkušnje kažejo, da je ta način intervencije bil zelo popularen. Vendar pa je omogočal tudi možnost, da državne pomoči s povečanim obsegom okrnijo konkurenco na trgu, čemur je bilo potrebno nameniti posebno pozornost.*

*Prispevek opisuje področje in način dodelitve protikrizne državne pomoči za finančni sektor Evropske unije. Največji obseg protikrizne državne pomoči za finančni sektor (merjena v odstotkih BDP) v Evropski uniji je bila odobrena v letu 2008, na začetku svetovne gospodarske krize. Največji odstotek te pomoči je bil uporabljen v 2009, v kasnejših letih pa je odstotek začel upadati. Instrumenti za odobritev protikrizne državne pomoči za finančni sektor Evropske unije so bili: obveznice z jamstvom, dokapitalizacijski ukrepi, prestrukturiranje finančnega sektorja in podporni ukrepi za sredstva.*

*Dodelitev pomoči je bil pod nadzorom Evropske Komisije, kot organa, odgovornega za izvajanje sistema nadzora državne pomoči na ravni Evropske unije. Evropska Komisija je vsako kategorijo državne pomoči urejala po nujnih smernicah, ki pa so bile veljavne samo v obdobju globalne gospodarske krize. Imenovane smernice Evropske Komisije so predvidele manj stroga pravila dodeljevanja državnih pomoči, vendar niso prezrle najpomembnejši cilj evropskega sistema nadzora državne pomoči. Evropska Komisija tako ni imela lahke naloge pri uravnoteženju pozitivnih in negativ-*

nih učinkov državnih pomoči. Poleg neizpodbitnega vlaganja državnih pomoči v revitalizacijo finančnega sektorja, je bilo potrebno zagotoviti tako neokrnjenost konkurence med bankami in drugimi finančnimi ustanovami v enotnem evropskem trgu, kot tudi izogibanje tekmovanju držav za dodelitev subvencij in ostalih oblik državnih pomoči.

Prispevek torej analizira učinke uporabe protikriznih ukrepov za ožvitev finančnega sektorja Evropske unije. V prvem četrtletju 2008 in v zadnjem delu leta 2010, je revitalizacija finančnega sektorja potekala preko izdaje obveznic z jamstvom vlade. Rezultati analize so pokazali, da je bil najvišji odstotek izdanih obveznic z jamstvom vlade izdan v prvem in četrtem četrtletju leta 2009, ko so bili negativni učinki krize najbolj izraženi. V drugi polovici leta 2010 se je njihov delež zmanjšal, kar torej pričra o spoštovanju začasne narave protikriznih ukrepov.

Odobritev državne pomoči za premagovanje negativnih učinkov krize je bila pogojena z obstojem načrta za prestrukturiranje, da zagotovi dolgoročno obnovo finančnih institucij in njihovo sposobnost vrnitve in preživetja v obstoječih tržnih pogojih, ko več podpore države ne bo. Analiza je pokazala, da so bile državne pomoči za izboljšanje sredstev popolnoma pogojene z načrtom in procesom prestrukturiranja, tako da so upravičenci celoten proces prestrukturiranja (ali likvidacije) zaključili v obdobju 2008-2010, oz. predložili plan prestrukturiranja v določenem obdobju. Večina uporabnikov državne pomoči v obliki dokapitalizacije je končala proces prestrukturiranja in predložila plan prestrukturiranja pravočasno, medtem ko je ostalo le manjše število uporabnikov, ki so šele bili v procesu prestrukturiranja. Pri državni pomoči v obliki obveznic z jamstvom vlade, je bila situacija malce drugačna, saj kar veliko število uporabnikov ni doseglo procesa prestrukturiranja. Tako nadalje v prispevku predstavljamo zaključene primere prestrukturiranja ali likvidacije organizacij finančnega sektorja v Evropski uniji v obdobju svetovne gospodarske krize.

Zagotavljanje protikrizne državne pomoči v obdobju svetovne gospodarske krize je bilo okarakterizirano s koncentracijo pomoči na majhno število uporabnikov, ali na majhno število institucij, potrebnih pomoči. Zato je obstajala nevarnost onemogočanja konkurence med finančnimi institucijami na finančnem trgu EU. Tako prispevek govori še o stanju na področju konkurence trga EU v obdobju 2001-2009. Ustrezni kazalniki koncentracije so se uporabili kot merilo za intenzivnost konkurence. Analiza rezultatov je pokazala, da odobrena protikrizna državna pomoč za finančni sektor ni pomembno vplivala na konkurenčnost na finančnem trgu Evropske unije.

Nenazadnje, prispevek opisuje še vpliv protikrizne državne pomoči na tržno kapitalizacijo vodilnih evropskih bank. Analiza je pripeljala do ugotovitve, da so nekatere, sicer nepomembne spremembe, bile opažene v strukturi 20 največjih bančnih institucij v obdobju pred in po svetovni gospodarski krizi.

Uspešnost izvajanja protikriznih ukrepov finančnega sektorja na ravni EU, je bila odvisna od Evropske Komisije. Ukrepi Evropske Komisije so temeljili na jasnih pravilih, upoštevajoč smernice o državni pomoči, ne glede na izredne razmere. Prav tako pa je Evropska Komisija pri dodeljevanju državnih pomoči ukrepala hitro, imela je jasne cilje in spoštovala je omejeno časovno obdobje za izvajanje protikriznih ukrepov.



*V Srbiji ni bilo potrebno neposredno poseganje države v finančni sektor, vendar je skozi le-tega zagotovila lažji dostop realnega sektorja do virov financiranja. Nerazvitanost bančnega sektorja je nekoliko zmanjšala neposredni vpliv svetovne gospodarske krize. Da so lahko banke zagotovile subvencionirana posojila za gospodarstvo, je v Srbiji dodelitev sredstev (državne pomoči) bankam bila praksa tudi v obdobju svetovne gospodarske krize. Prav tako pa je naposled tudi tam takšna dodelitev državnih pomoči bila sredstvo za ublažitev negativnih učinkov krize v realnem sektorju in zagotovitev lažjega dostopa poslovanj do financiranja. Najpomembnejši instrument za odziv na krizo v Srbiji je bila politika subvencioniranih posojil. Zaradi šibkega razvoja sistema nadzora državne pomoči v Srbiji, ti ukrepi niso bili definirani in kvalificirani kot državna pomoč, zato tudi niso bili pod nadzorom Komisije za nadzor državne pomoči Republike Srbije, čeprav so posojila imela popolnoma vse značilnosti državne pomoči.*

*Najpomembnejši razlog dodelitve protikrizne državne pomoči v Srbiji je bil spodbuditi in podpreti banke, da so le-te odobrile subvencionirana posojila realnemu sektorju. Ti ukrepi države so povzročili ogromno število subvencioniranih likvidnostnih posojil, posojil za naložbe in potrošniških posojil. Glede na to, da takšna ureditev subvencioniranih posojil ni vključevala vse banke, se postavlja vprašanje, kako so ti protikrizni ukrepi vplivali na konkurenco na srbskem bančnem trgu. Posledično se prispevek navezuje tudi na posledice protikriznih državnih pomoči za koncentracijo in tržno kapitalizacijo bančnega sektorja v Srbiji, v obdobju pred in po krizi. Analiza je pokazala, da glede na kazalnike skoncentriranosti, pomembnega povečanja koncentracije bančnega sektorja v Srbiji ni bilo. Prav tako tudi ni bilo večjih pomembnih sprememb na področju tržne dokapitalizacije vodilnih srbskih bank.*

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