THE IMPACT OF NEW GLOBAL ECONOMIC CRISIS ON THE SOCIAL FUNCTION OF SPAS AND CLIMATIC RESORTS IN SERBIA

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Abstract: Noneconomic activities involve social work and social protection that besides health care take special care of individuals as members of the society. Rehabilitation and recreation funded by the Pension and Disability Fund and the Republic Fund for Health Insurance fall within such activities. The funds are financed mainly from the budget of the Republic of Serbia, reflecting the impact of global economic crisis, thus the allotted funds for rehabilitation and recreation are affected in the same way. The question arises about the size and form of such impact on the system

resembling communicating vessels and also its reflection on the social
function of spa/climatic resorts, and spa tourism indirectly on the territory
of the Republic of Serbia. Statistical method of correlation was applied to
data on annual series for the period 2008-2012, which covered the time
prior, during and after the global economic crisis.

1. Introduction

The latest financial crisis went global and transferred from financial sphere to real
sphere in most of the countries. It started in the first quarter of the year 2007 in the
USA at the real estate market and then transferred to bank sector in Europe in the
third quarter of the same year (*Filipović*, 2009). It reached its peak at the end of
third quarter of 2008 at the stock market, and in 2009 a significant fall in economic
activities was recorded and recession occurred in many countries of the world
(*Ćurković*, 2010). Global indicators of the global economy, such as GDP have been
showing negative trends since 2008, when 3% decrease was recorded compared to
2007, reaching its minimum value at the peak of 5.2% of the global economic crisis
in the year 2009, which is 15% drop compared to the previous year, then it
recovered and reached 11% in 2011 (*Garača, Ćurčić & Vukosav*, 2013).

United Nations estimate that financial and economic crises in the period 2008-
2009 led to global economic collapse and may be compared to the Great
Depression from 1930s (*United Nations*, 2011). Although it statistically appears
that the most difficult period of the crisis has passed, the road to recovery from the
crisis at the level of pre-crisis time in all probability will be a lengthy, painful and
uncertain process. (*Jurčić & Teodorović*, 2011). In that sense, the reconsideration
of basic principles (goals, roles, values, perspectives) of social work in times of
global economic crisis is in its essence a challenge for both social workers and the
society (*Jugović & Brkić*, 2013).

Firstly, economic crisis contributed to the increase of unemployment, to greater
poverty and, consequently, to larger population migrations in search of better
socio-economic conditions. The increase of economic insecurity led to a reduced
consumption and had an impact on labour market later on (*Jurčić*, 2010). Social
problems that social workers confront on a daily basis became more visible at that
time. Unemployment first struck male population in the European Union, since the
main strike hit the industry where majority of workers were male, (e.g. civil
engineering), then followed young and undereducated workers (*Bieling*, 2012).
Such processes may unexpectedly have a negative influence on mental and general
psychosomatic health of the population in question and result in higher

discrepancies between protected and unprotected population at social interaction level. The crises have a strong impact on social work activities, which take care of "the people in trouble, or causing trouble" (*Miljenović*, 2012).

Obviously, contemporary global economic and social crisis sets certain challenges at social work door, but there are no clear responses besides practical ones. Social work in its essence and character is the practice and science of crisis (*Longhofer & Floersch*, 2012), both at individual and social level. The ongoing economic crisis has contributed towards a number of social policy challenges, both at the global, European, as well as at the national level. As noted by *Farnsworth & Irving* (2010), the current economic crisis gave way to a new age of the welfare state – the age of austerity. In a critical analysis of the credit crunch and social policy responses, *Sinfield* (2010) emphasizes that while some have become more deprived and insecure and others better off, the governments have "exploited their rights and evaded their responsibilities".

In almost all parts of the Globe the countries face the pressure of social rights restriction (if developed at all) and obligations for the social state mechanism. Such processes started prior the crisis, but we can say that the crisis highlighted and intensified them. At the beginning of 1990s, social services were financed by stable absolute amount in Cuba, but with regard to the currency fall, financial support weakened (*Strug*, 2006). Similar restriction in government help occurred also in Hong Kong (*Yuen & Ho*, 2007), Australia (*Wallace & Pease*, 2011), many European countries (*Bieling*, 2012), with the accent on post-socialistic countries which experienced hard times of industrial transition alongside with unemployment and the increase of poverty (*Hegyesi, Talyigás & Fekete*, 2011).

In that sense, current social changes highlight individual responsibility of citizens for their life, development, achievements and security. Within this process, community is obliged to support the citizens, according to available resources. In concordance with these changes, social protection users are expected to, along with services offered, enhance their individual and family potentials while using services provided. The user should participate in protection process – one should undertake certain activities and accept responsibility for own social security. In this active manner, the user would improve personal welfare, as well as family members' welfare, especially of the dependants (*Puljiz*, 2005).

As it is clear that the global economic crisis affects, among other things, the social and health function of a society, the aim of this paper is to show the impact of the crisis on the social function of spas and climate health resorts and, indirectly, on the spa tourism in Serbia. In this regard, we set up an initial hypothesis:

H0 – Global economic crisis has a strong impact on the social and health function of spas and climate health resorts;

H1 – The crisis is affecting the quantity of service in spas and climate health resorts;

H2 – The crisis is affecting the quality of service in spas and climate health resorts;

H3 – The crisis is affecting the decline in spa tourism in Serbia.

2.   Literature review

The impact of the global economic crisis on the health care systems of many countries worldwide also affected the health system of Serbia. The European Observatory on Health Systems and Policies and the World Health Organisation with their Regional Office for Europe and with support of other offices all over the world, prepared case studies complement with broader analysis which summarizes official data sources and the results of a survey of key informants about the impact of the financial crisis on the health system (*Stamatović et al.*, 2010; *Jooma & Khan*, 2012; *Batenburg et al.,* 2014; *Nolan et al.,* 2014; *Taube et al.,* 2014; *Maresso et al.,* 2015). The impact of the economic crisis in Serbia is unambiguous as Bartlett (2009), Ćurković (2010) and Antevski (2010) argued and also it is clearly presented in Table 1, which refers to GDP, employment and unemployment rates. As we have previously referred to in the introduction of this paper, global economic crisis started in the first quarter of 2007 in the USA, at the real estate market, then transferred to Europe in the third quarter of the same year to the bank sector as Filipović (2009) shows. Ćurković (2010) indicate that the crisis reached its peak at the end of the third quarter of 2008 at the stock exchange, and in 2009 the decrease of agricultural activities and recession were recorded in many countries all over the Globe Coupled with inner economic crisis, which Bartlett (2009) described, Serbia felt negative effects of economic crisis during 2008 through smaller financial resources inflow; export and production decrease caused by fall in import demand in almost all European countries; direct foreign investments decrease; withdrawal of foreign capital from foreign commercial banks; decrease of crediting production and services; and retention of high unemployment as Antevski (2010) describes. In addition, Ćurković (2010) adds to that that there was 12.5% decrease in industrial production and civil engineering, and 16% decrease in trade in 2009.

   Lakićević & Gavrilović (2008) argued that the consequences of high level of unemployment, illiquidity and high inflation rate are the decrease of salaries, increase of living costs and their high share in total household expenditures, i.e. living standard decrease. Nominal salaries in 2009 increased compared to 2008 for 8.5%. However, real salaries showed decrease of 0.1%. Since 2008, for most of the households in Serbia the most important strategy skill has been how to survive and reduce the costs or prolong their payment. The households mainly postponed the consumption of all goods, except food. Empirical research results show that most of the population in Serbia gave up buying clothes, furniture; postponed health related expenditures, investments in family business, etc.

Ružica & Vidojević (2013) discussed that the changes that occurred in Serbia after the year 2000, as well as global economic crisis shattered the citizens' orientation, system of values and imposed the need to adjust to a new socio-economic environment. Permanent employment has become exclusive asset, social promotion uncertain and under changed rules; social rights are restricted and the gap between normative and real progressively increases. It all adds to the feeling of instability and insecurity, but opens the question of project legitimacy for capitalism revival. Jugović & Brkić (2013) conclude that basic manifestation of crisis in Serbia is reflected in the fact that one in ten citizens falls either into the group of very poor, and one in four citizens is unemployed, along with numerous structural problems of social transformations (transition).

Simić (2011), Ružica & Vidojević (2013), Đorić & Prodović-Milojković (2013) argued that social politics is conceptually reduced to "social sector", where all technical topics and issues are analysed and solved, most frequently within budget framework and restrictions. Hence, public programmes of social insurance, e.g. pension, health, unemployment with the underlining system of social protection, but the programmes are not observed integrally and conceptually within a broader social context. The Government of the Republic of Serbia is obviously facing constant demands for redistribution of budget and decrease of public programmes, cuts in subventions and continuation of privatization process, not only in economy, but also in social policy programme, due to the growing budget deficit, public and private debts and public saving that has already started.

Simić (2011) shows that it is well-known that systems of social safety are now more important than ever in softening the social impacts of the crisis. Budget ballast from the Fund of Pension Invalid Insurance (FPII) has been growing since the start of the economic crisis, due to constant unreal increase of pensions to provide social peace in return. Unreal balance between pensions and salaries lead to additional debts of Serbia in order to fill the budget hole, which emerged because of high pensions. Nevertheless, social help and protection funds in Serbia are substantially lower than in other countries in the region. In 2005, Serbia spent 1.4% of GDP on money allowances and social services and protection with additional 0.6% of GDP for allowances for war participants. Expenditure for material security of a family (social help) was only 0.14% of GDP (considered a low expenditure rate) in 2005. Comparatively, the expenditures in Croatia for similar purposes are 0.26% of GDP (with a planned increase), in Slovenia 0.6% of GDP, in Bulgaria 0.26% of GDP.

On the other hand, Gajić-Stevanović et al. (2012) discussed that health protection, as the most important and most sensitive sphere of human activities, has a socially significant function, and changes in this sector have implications on the total society. This also implies reduction of health system capacities, i.e. reduction of the scope and quality of health services offered. The study shows that global economic crisis stopped continuous economic growth of Serbia. The preliminary

results of various studies show that the crisis had negative impact not only on GDP growth rate, inflation and unemployment, but also on public health sector, work force, salaries and unemployment rate in the Republic of Serbia.

Šverko et al. (2004; 2006) paper also indicated that the unemployment issues are linked to bad indicators of mental health conditions with regard to the total population and more prominent in mean age groups. Moreover, financial instability combined with unemployment is connected to health conditions, both physical and mental illnesses (*Stanković & Pavlović*, 2005; *Stanković & Jovanović*, 2006).

Đorić & Prodović-Milojković (2013) argued that only healthy people may fully participate in community life; work, travel and communicate, and lead active social and political life. Bad health condition, however, reduces the opportunities at labour market and worsens material status of an individual and the family as well, leading to increased expenditures for both the family and the society (*Topalović*, 2013; *Garača et al.*, 2015). Health care systems apply various measures to maintain population health condition at satisfactory level, starting from immunization, preventive activities, healthy life style promotion, to adequate health protection. Marginalized social groups are a special challenge for their ill-health and poor access to health institutions (*Pavlović et al.,* 2009). Public health system in Serbia is financed from obligatory insurance of employees and budgetary dues, whereas the right to health insurance is guaranteed to employees, retired population and self-employed, including farmers. Since human health is very important for good and sustainable functioning of every society, especially for its prosperity and development, the subject of this research is the impact of global economic crisis on the social function of spa and climatic resorts in Serbia, as places (facilities) where patients are sent for rehabilitation, recovery from surgery or further medical treatment, after which they fully return to normal everyday activities. The aim of the research is to show indirect impact of reduced scope of financing PDI Fund and Republic fund for Health Insurance on turnover in spa tourism in Serbia and to offer schematic review of global economic impact on particular segments of social system in Serbia. The goal of the paper is to calculate and give qualitative description of the correlation strength, i.e. the impact of global economic crisis on the social function of spa and climatic resorts in Serbia.

3. Methods and data

The research process, besides collecting secondary database and its processing by application of synthetic, comparative, critical and descriptive method, statistical model was applied, as well as the method of schematic display of the phenomenon course. The statistical data collected in the first phase (desk research) were filed within twelve-year time series, covering the period 2004-2015 and enabling insight into phenomena that occurred prior to, during and after the global economic crisis. The data for the period 2008-2012 (the immediate impact of the crisis) were

processed by application of correlation analysis. In other words, the correlation between the observed phenomena will be investigated in two branches (WEC – GDP – Budget RS – Economic branches – Tourism – Spa tourism – Spa and climatic resorts on the one hand and on the other WEC – GDP – Budget RS – Non-economic branches – Social and health protection – Fund of Pension Invalid Insurance and Republic Fund for Health Insurance allowances for rehabilitation and recreation services– Number of patients/patient days – Spa and climatic resorts). Moreover, the spillover effects of the global economic crisis from one variable to the other will be examined, as well as the existence and quality of mutual impact, i.e. the impact of independent on dependant variable. The indicators of linear, i.e. Person's correlation are: determination coefficient, non-determination coefficient and correlation coefficient. The last one that used Yang at al. (2016) will be used for the purposes of this paper.

In statistical theory and practice there are four levels of correlation significant, we used them for calculations:

1. correlation is weak if $0.0 < |r_{12}| \le 0.5$,
2. correlation is significant if $0.5 < |r_{12}| \le 0.7$,
3. correlation is strong if $0.7 < |r_{12}| \le 0.9$,
4. correlation is very strong if $0.9 < |r_{12}| \le 1.0$.

Table 1. Indicators of Serbian economy in period 2004-2013.

Year	World* GDP growth (annual%)	Growth rate GDP in %	GDP per.cap in Euro in current prices	Employment rate in %	Unemployment rate in %
2004.	5,7	9,3	2526,81	62,1	28,6
2005.	3,2	5,4	2946,60	63,5	30,5
2006.	4,0	3,6	2813,45	63,0	31,3
2007.	6,1	5,4	3547,99	63,0	26,9
2008.	5,2	3,8	5013,09	63,9	25,5
2009.	-0,3	-3,5	3911,10	60,6	23,8
2010.	7,5	1,0	3887,23	58,8	24,2
2011.	2,7	1,6	4796,78	58,5	25,1
2012.	1,0	-1,5	4020,92	58,9	26,0
2013.	2,5	2,5	5912,82	59,2	26,8

* World Bank, World Development Indicators (WDI), December 2014

Table 2. General data about tourism and spa tourism in Serbia in period 2004-2015.

	Number of rooms		Number of beds		Arrivals*		Overnights*	
Year	Total	Spas	Total	Spas	Total	Spas	Total	Spas
2004.	36163	11898	85867	27078	1972	301	6643	2089
2005.	36644	12062	86731	27274	1989	303	6499	2012
2006.	37145	12008	88598	27967	2006	319	6592	2183
2007.	45009	15948	112708	41416	2307	384	7329	2335
2008.	46349	16120	116182	42243	2266	366	7334	2368
2009.	45356	14120	112815	36919	2018	358	6762	2286
2010.	48041	14339	119427	37306	2001	345	6414	2211
2011.	50755	14443	127664	37445	2069	375	6645	2308
2012.	46020	13686	113385	35543	2080	347	6485	2035
2013.	47125	13741	118873	35847	2192	406	6567	2135
2014.	43603	11126	102940	24399	2192	386	6086	1852
2015.	45396	11588	106102	25459	2437	427	6652	1855
Average	43861	13837	108225	34904	2090	350	6727	2196
Share	100%	31,5%	100%	32,3%	100%	16,8%	100%	32,6%

*Expressed in thousands

Source: Republic Statistical Office of Serbia, Statistical yearbook of Serbia (2004-2015)

Table 3. The structure and business of spas and climate resortsin Sebia 2004-2015.

Year	Number of rooms	Number of beds	Arrivals	Overnights	Turnovers in mil. (EURO)**
2004.	2875	6477	124000	1395000	17,8
2005.	2900	6385	131000	1333000	16,6
2006.	3006	6625	135000	1431000	19,5
2007.	2959	6514	147000	1454000	31,1
2008.	2959	6660	150000	1487000	39,6
2009.	2972	6646	143000	1489318	33,7
2010.	2978	6663	133882	1460839	26,7
2011.	2972	6616	125396	1452854	25,8
2012.	2813	6181	115012	1251735	22,2
2013.*	2985	6595	123553	1207079	22,1
2014.	2800	6203	94388	881610	-
2015.	2791	6207	94388	783661	-
Average	2941,9	6536,2	132784,3	1396182,5	25,5
Share***	21,30%	18,70%	37,90%	63,60%	-

* Internal data of Republic Statistical Office of Serbia

** Data on mean annual exchange rate of EURO: National Bank of Serbia

*** The percentage share of spas and climate resorts in spa tourism in Serbia.

Source: Republic Statistical Office of Serbia, Statistical yearbook of Serbia (2004-2015)

Spa and climatic resorts have crucial role in spa tourism of Serbia, which means that social-health function in this type of accommodation capacities is very prominent, if not critical, since its share is 63.6% of the total overnight stays (Table 3). This social-health function is realised through allowances from Fund of Pension Invalid Insurance (FPII) and Republic Fund for Health Insurance (RFHI) that send beneficiaries to rehabilitation and recreation. Social role of FPII is more prominent than that of RFHI, thus we speak of social-health and health-social function respectively.

On the one hand, FPII fund covers the social function by sending beneficiaries with lowest pensions to recreation. On the other hand, RFHI covers the health function by sending patients after medical interventions in primary or secondary health care to rehabilitation in order to return to normal social life afterwards. Altogether, the two functions are very important. Moreover, socialization segment, which is realized between patients and other visitors of spa and climatic resorts, highlights their social function as well. In that sense, the role of spa and climatic resorts may be called social and health without any restraints.

Table 4. The structure and business of special hospitals for rehabilitation in Sebia 2004-2015.

Year	Doct.	Other medical staff	Number of patient beds	Discharged patients	Patient days	Founds RFHI and FPII in thousend (EURO) for rehabilitation and recreation
2004.	143	714	2993	34443	882415	-
2005.	193	864	3681	50381	1070046	-
2006.	242	1013	4368	66318	1257676	-
2007.	239	1031	4067	65218	1208276	-
2008.	230	1059	4206	74459	1230146	29903,7
2009.	221	992	4103	69293	1177582	26781,9
2010.	213	959	4202	75221	1170737	26042,7
2011.	227	1068	4533	72696	1249148	29330,7
2012.	222	1043	4130	60407	1052689	24479,0
2013.	210	996	4057	59840	1143514	29005,9
2014.	212	986	3764	48301	909091	28187,4
2015.	209	980	3935	57378	949623	27967,4

Source: Health - statistical yearbook of Serbia (2004-2015), Financial Report of the National Health Insurance Fund (2004-2015).

Qualitative indicators of social function that FPII and RFHI realize through spa and climatic resorts can be observed in Table 4 in the number of doctors and other medical workers and beds involved in rehabilitation and recreation processes; then, in the number of patient days and the number of released reconvalescents and,

primarily, in the financial allowances provided by the two funds for these purposes. Obviously, all the indicators for the period 2004-2008 show constant increase, and for the observed period the increase is 40-60%. Interestingly enough, the number of patients in rehabilitation or recreation process increases for 116% and the number of patient days for 40%, which is in concordance with other parameters from Table 3. This indicates that the period of recovery from illness has been shortened from 25.6 days in 2004 to 16.5 days in 2008 on average, which indicates that the quantity of services decreased, inevitably coupled with quality decrease, since the number of patients increased for over 60%, compared to the number of doctors and other medical staff. The next period 2008-2012 brings recession and the fall of all parameters under the influence of global economic crisis. Thus, the number of doctors decreased by 7.4%, the number of other medical staff by 9.5%, the number of patient days for 5%, whereas the number of reconvalescents slightly increased and the number of beds remained unchanged during the peak of the crisis by the year 2010. This once again confirms the drop in quality and quantity of rehabilitation and recreation services in spa and climatic resorts under the impact of the global economic crisis. The following period, by the year 2012, showed certain improvements, but the values of indicators from Table 4 remained far from the values recorded in 2008, i.e. the largest differences are observed in the number of patient days that decreased for 14.5% and the number of reconvalescents decreased for 18.9% in the year 2012 compared to 2008.

Comparison of data from Table 3 and Table 4 reveals certain differences between all the observed parameters. Namely, the parameters for spa and climatic resorts are higher, compared to parameters for special hospitals for rehabilitation shown in Table 4. Please note that the same objects are in question, i.e. special hospitals for rehabilitation are in fact spa and climatic resorts. The factual differences only emerge with the Republic Statistical Office, tourism and catering sector, where under spa and climatic resorts all beds are recorded, no matter whether intended for patients/reconvalenscents or visitors not related to FPII or RFHI. On the other hand, Health-statistical yearbook (the data recorded in Table 4) records only patient beds, patient days, whereas financial turnover in this objects also shows certain differences, but in favour of special hospitals, due to RFHI's financial report where the funds intended for rehabilitation are listed, which implies medical and full board expenses, whereas turnover in Table 4 refers only to full board services.

4. Results and Discussion

The application of correlation method, i.e. the coefficient of linear correlation shows great impact of global economic crisis on all system components from GDP of the Republic of Serbia, FPII and RFHI, to spa and climatic resorts. Thus, it is possible to observe spillover effects of global economic crisis from one social function to

another and, in the end, discuss the effects on social and health function of spa and climatic resorts. The data in Table 4 show that the impact of the global economic crisis quickly spilled over to all social functions within the chain, from the state, to beneficiaries of social allowances. Besides a quick spill over, its effects were strong and powerful, especially on the society parts close to the end of the chain, and the beneficiaries of social programmes of rehabilitation and recreation financed by FPII and RFHI.

The fall of global GDP, which is considered the indicator of global economic crisis for the purposes of this paper and global economic crisis' impact on certain countries, such as Serbia, had a huge impact on the GDP of the Republic of Serbia (r_{12}=0.643). In general, the closer the effects to the chain end, i.e. the beneficiaries, the stronger the effects. It is logical, since the money mass to which the same factor has impact is smaller, but the factor's strength is unchanged. This is prominent in economic branches due to reversible effect; in this case of revenues in spa and climatic resorts on spa tourism, spa tourism on total tourism and finally tourism has a reversible effect on the total economy, which in return has impact on both the budget of the Republic of Serbia and GDP of the Republic of Serbia. Also, in case the wave was distant from the source, i.e. the longer the chain, the links closer to chain's end felt the consequences for a longer period of time, which means that the quantity and quality of global economic crisis have impact on beneficiaries of social programmes, i.e. social function of spa and climatic resorts in Serbia was greater, which is obvious in Figure 1, as in the direct results of the authors' research. The correlation between non-economic branches and budgetary allowances for health and social protection, with the coefficient r_{12}=0.007, which is a weak correlation, is almost non-existent. Actually, non-economic and economic branches are expressed through GDP that has an impact on social allowances, but highly depends on the allowances from the budget of the Republic of Serbia. On the other hand, the correlation between the budget of the Republic of Serbia and social and health protection is very strong (r_{12}=0.845) because of direct allowances from the budget. Also, the correlations in the second half of the Figure 1 are also specific, strong and very strong.

Mutual impact of economic branches on tourism is also emphasized (r_{12}=0.959), which reflects the business susceptibility of tourism to economic crises in general, the global economic crisis 2008-2012 not being the exception to the rule. The previous chapters have pointed out that spa and climatic resorts represent the key and carrying element of spa tourism in Serbia, which is also highlighted by the coefficient (r_{12}=0.920) of linear correlation which is very strong. The same is valid for the quality of correlation between the finances of FPII and RFHI for rehabilitation and recreation services and the number of patient days in spa and climatic resorts (r_{12}=0.922).

Table 5. Results of correlating dependent functions, where indicator coefficient is (r_{12})

| Num.	Correlation	Correlation coefficient (r_{12})
1.	World GDP/GDP R. Serbia	0,643
2.	GDP R. Serbia/Budget R. Serbia	0,824
3.	Budget R. Serbia/Economic branches	0,880
4.	Economic branches/Tourism	0,959
5.	Tourism/Spa tourism	0,706
6.	Spa tourism/Spa and climate resorts	0,920
7.	Budget R. Serbia/Non-economic branches	0,669
8.	Budget R. Serbia/Health and Social Protection	0,845
9.	Non-economic branches/Health and Social Protect.	0,007
10.	Health and Social Protection/FPII and RFHI	0,799
11.	FPII and RFHI/Number of patient days	0,922
12.	Number of patient days/Spa and climate resorts	0,870

The correlation is statistically significant if Sig <0,05.

Source: Own statistical research

Slightly lower quality of correlation (r_{12}=0.870) between the number of patient days and number of nights in spa and climatic resorts is the consequence of the fact that the resorts accept not only patients sent by Funds, but also other patients whose expenses are covered by unions (highly expressed social role) or individuals who cover their own expenses. The scope of the global economic crisis' impact in percentages of functions' decrease for the period 2008-2012 is presented in gray colour within the rectangles in Figure 1. Finally, the social function of spa and climatic resorts under the impact of the global economic crisis decreased for 15.8%, during the five year period of negative impact. Certain social elements from the chain in Figure 1 overcame the crisis in the period 2010-2012, which was not the case with all segments of tourism, or funds of FPII and RFHI intended for rehabilitation and recreation purposes. Nevertheless, the positive shift did not achieve the values prior to the global economic crisis in 2008.

Now, when we are familiar with the quality and quantity of the global economic crisis' impact on the social function of spa and climatic resorts, it is necessary to analyze the distribution of negative effects within the social and health system, namely special hospitals for rehabilitation and spa and climatic resorts. For the purposes of this analysis, another series of quality research have been conducted regarding the impact of funds intended for rehabilitation and recreation services on the one hand, and more or less dependent variables making the core of the services.

Figure 1. Chained overflow of quantitative and qualitative effects of World economic crisis
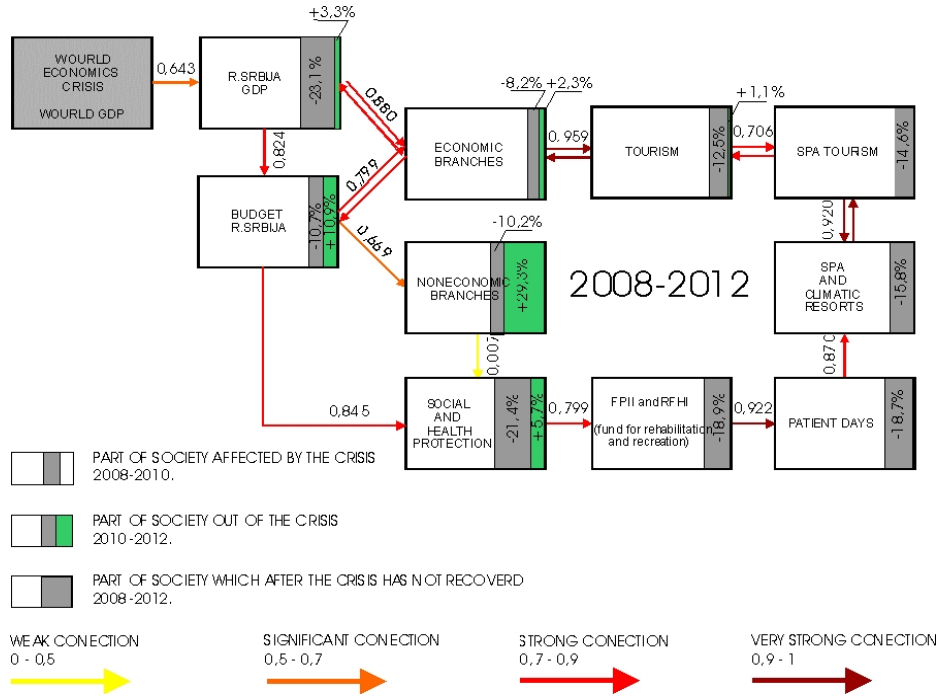
Source: Based on Yang, Mueller, Croes, 2016 model and own statistical research.

The obtained results of the correlation analysis from Table 6 that represent qualitative indicators are shown in Figure 2, together with the quantitative indicators of the observed elements of the system of rehabilitation and their fluctuation in percentages. It is clear that direct effects of financial funds by FPII and RFHI significantly affected the number of visitors, the number of beds, the number of discharged patients; the number of other medical staff ($0.528 \le r_{12} \le 0.696$) strongly affected the number of doctors ($r_{12}=0.723$) and the number of patient days ($r_{12}=0.922$).

The values are as expected, but the concerning issue is the lack of correlation of the system elements, which are positioned in Figure 2 within the inner ring coloured in yellow. The quality of correlation is very weak ($0.010 \le r_{12} \le 0.376$), which reflects the decrease of not only the quantity of services, but also the quality of services, where the number of medical staff and doctors is in disproportion with the number of patient days and the number of beds. It also indicates that global economic crisis impacts the drop of quality in the social function of spa and climatic resorts. The outer ring consists of elements related to spa and climatic resorts within the segment of tourism industry. Thus, apart from patient beds, there are beds intended for the visitors who arrive on their own expense or the expenses covered by the union organization.

Table 6. Results of correlating dependent functions within a system of spas and climate resorts

Num.	Correlation	Correlation coefficient (r_{12})
1.	FPII and RFHI / Number of patient days	0,922
2.	FPII and RFHI / Number of patient beds	0,596
3.	FPII and RFHI / Number of doctors	0,723
4.	FPII and RFHI / Other medical staff	0,528
5.	FPII and RFHI / Discharged patients	0,690
6.	FPII and RFHI / Incomes of SC resorts	0,642
7.	Number of patient days / Number of overnights in SC resorts	0,870
8.	Number of patient beds / Number of patient beds in SC resorts	0,269
9.	Discharged patients / Number of arrivals in SC resorts	0,669
10.	Number of overnights in SC resorts / Incomes of SC resorts	0,701
11.	Number of beds in SC resorts / Incomes of SC resorts	0,626
12.	Number of patient days / Number of patient beds	0,626
13.	Number of patient beds/ Number of doctors	0,376
14.	Number of doctors / Discharged patients	0,010
15.	Discharged patients / Other medical staff	-0,199
16.	Other medical staff / Number of patient days	0,213
17.	Number of arrivals in SC resorts / Number of beds in SC resorts	0,833
18.	Number of patient beds in SC res./Number of arrivals in SC res.	0,781

The correlation is statistically significant if Sig <0,05.

Source: Own statistical research

Relations between the FPII and RFHI, according to the same elements from the outer ring high impacts of the drop of financiers, has significant consequences on released patients and the number of arrivals, the value of which is fluctuating due to the arrival of the individuals not related to the funds. On the other hand, the correlation between the nights spent and patient days financed by the funds and the number of nights spent in spa and climatic resorts ($r_{12}=0.870$) is strong to very strong, and it results in higher number of patient days per patient, on average 18.1 days, whereas in spa and climatic resorts the average stay is 10.5 days, the difference being achieved by the individuals arriving on their own. The correlations on the outer ring are mainly strong ($0.701 \leq r_{12} \leq 0.833$), apart from the one referring to the turnover and the number of beds which is significant ($r_{12}=0.626$), since the number of beds and accommodation units hardly changes with the reference to the number of employees regardless the crisis. Similarly, the quantity of the global economic crisis impact clearly spills over from the potentials of the funds to spa and climatic resorts in all items.

Figure 2. Quantitative and qualitative effects of World economic crisis on the social function of spa and climate resorts
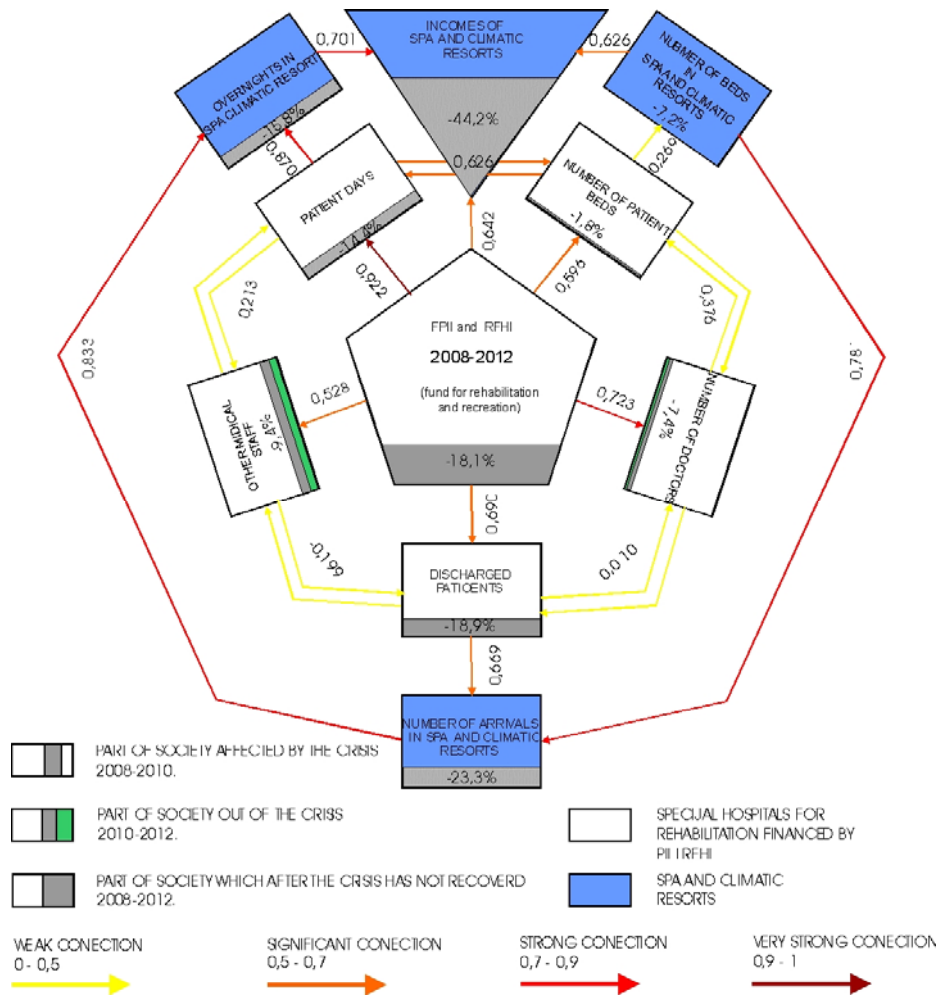
Source: Based on Yang, Mueller, Croes, 2016 model and own statistical research.

5. Conclusion

This research has proved the initial hypothesis on the global economic crisis impact on the social function of spa and climatic resorts (H0). However, such clearly visible impact on social functions of the society, especially the social function of spa and climatic resorts its quantitative (H1), and qualitative (H2) consequences of such negative impact have been clearly described, illustrated and interpreted for the

first time. Negative impacts of the global economic crisis have been expected, but not in such strength and form of spilling over the negative effects on each segment of social functions within the chain, from GDP of the Republic of Serbia to beneficiaries of social allowances, through services of spa and climatic resorts. Surprisingly enough, the quality of impact on the segments in the end-part of the chain, closer to beneficiaries of social services exposed was defined as strong or very strong. Furthermore, it is noticeable that the end segments of the chain remain longer under the influence of the global economic crisis, i.e. the recovery was noticed in 2013, when the values of the observed functions and variables returned to their vales from 2008, when the beginning of the crisis occurred. This paper has undoubtedly illustrated and proved the social function of spa and climatic resorts, but also the huge drop in quantity and quality, which is a concerning issue. Thus, besides shortening the period of rehabilitation and recreation process, i.e. the length of services offered, it has been noticed that the crisis caused that one doctor or medical staff member has more patients than before the crisis. The question arises whether the individuals in such rehabilitation process may receive proper treatment and full recover from the illness and later return to their normal social life in their environment, without consequences on their mental or physical health, which might be the subject of further research. Since spa and climatic resorts are a significant part of accommodation capacities and turnover in spa tourism of Serbia, weakening of their social function is proportionally connected with tourism and financial turnover of spa tourism in general, which makes spa tourism a collateral damage of the global economic crisis (H3).

In this sense, it can be said that all the hypotheses are confirmed and accepted. Finally, the question arises whether any social system, regardless of its orderliness and economic stability, can withstand such or similar global economic impact? Is it possible to build and provide an appropriate mechanism that would for some time protect the social and health function of the system, such as the function of spas and climate health resorts in Serbia? These are questions for another research, because such a mechanism is necessary for the permanent protection of the quantity and quality of this type of service, since this was neither the first nor the last world economic crisis.

References

Antevski, M. (2010). The World Economic Crisis and its Impact on the Serbian Economy, *Ekonomski horizonti*, 12 (1), 47-62.

Bartlett, W. (2009). Economic Development in the European Super-Periphery: Evidence from the Western Balkans, *Economic Annals*, 54 (181), 21–44.

Batenburg, R. et al. (2014). The impact of the global economic crisis on the health care systems of Belgium, France and the Netherlands: policy recommendations for the Republic of Korea, Geneve: World Health Organization.

Bieling, H. J. (2012). EU facing the crisis: Social and employment policies in times of tight budgets. Transfer: European Review of Labour and Research, 18 (3), 255-271.

Ćurković, V. (2010). World Financial Crisis and it's Influence on the Serbia, *Singidunum revija*, 6 (2), 259-269.

Đorić, G. & Prodović-Milojković, B. (2013). Socijalna zaštita u zemljama u tranziciji, *Socijalna misao*, 20 (4), 129-141.

Farnsworth, K. & Irving, Z (2010). Varieties of crisis within variable capitalisms: Contemplating the implications of economic crisis for social policy. Paper presented at the Social Policy Association Annual Conference University of Lincoln, 5-7. July 2010.

Filipović, S. (2009). Srpska privreda na udaru globalne ekonomske krize, Kopaonik bizinis forum, Beograd: Savez ekonomista Srbije i UKDS.

Gajić-Stevanović, M., Perišić-Rainicke, D., Dimitrijević, S., Teodorović, N. & Živković, S. (2012). Radna snaga u javnom sektoru zdravstvenog sistema Republike Srbije i svetska ekonomska kriza, *Stomatološki glasnik Srbije*, 59 (2), 71-82.

Garača, V., Jovanović, G., Ćurčić, N., Vukosav, S. (2015). Spatial Planning for Transit Tourism on the Highway: A Case Study of Highway E-75 Through Vojvodina (Horgoš-Belgrade Section), *Transylvanian Review of Administrative Scinences*, 44 (1), 126-143.

Health- statistical yearbook of Serbia, Belgrade: Institut za javno zdravlje Srbije "Dr Milan Jovanović Batut", (2003-2015) (in Serbian).

Hegyesi, G., Talyigás, K. & Fekete, O. (2011). An attempt to find new concepts of social work in the context of changes in social policy in Hungary and in the European Union. Revista de Asisten Social, 10 (3), 175-184.

Internal data of Republic Statistical Office of Serbia, (2013).

Jooma, R. & Khan, A.K.A. (2012). Protecting Pakistan's health during the global economic crisis. *East Mediterr Health Journal*, 18 (3), 287-293.

Jugović, A. & Brkić, M. (2013). Socijalni rad u Srbiji u kontekstu ekonomske krize i društvene transformacije, *Ljetopis socijalnog rada*, 20 (1), 91-112.

Jurčić, LJ. & Teodorović, I., (2011). The global crisis, the recovery and a changing world, Economic Review, Vol 62, No 5-6, 233-247 (in Croatian)

Lakićević, M. & Gavrilović, A. (2008). *Socijalni razvoj i planiranje*, Beograd: Fakultet političkih nauka.

Longhofer, J. & Floersch, J. (2012). The coming crisis in social work: Some thoughts on social work and science. Research on Social Work Practice, 22 (5), 499-519.

Maresso, A. et al. (2015). Economic crisis, health systems and health in Europe – Country experiences, Observatory studies series 41. European Observatory on Health Systems and Policies, Geneve: World Health Organization.

Miljenović, A., (2013). Ekonomska kriza – pokretač transformacije profesije socijalnog rada? Ljetopis socijalnog rada, 20 (1), 51-70

Nolan, A. et al. (2014). The impact of the financial crisis on the health system and health in Ireland. European Observatory on Health Systems and Policies, Geneve: World Health Organization.

Pavlović, M., Radivojević, N. & Lazić. J. (2009). Održivi razvoj banjskog turizma u Srbiji, *Industrija*, 37 (2), 37-57.

Puljiz, B. (2005). *Socijalna politika*. Pravni fakultet, Zagreb.

Republički zavod za zdravstveno osiguranje, *Finansijsji izvještaj*, (2008-2015).

Ružica, M. & Vidojević, J. (2013), Socijalna politika u novom socio-ekonomskom okruženju, *Moguća Srbija* http://www.mogucasrbija.rs/Oblast/100/Socijalna% 20politika/44/Socijalna%20politika%20u%20novom%20socio-ekonomskom%20 okru%C5%BEenju.html

Simić, V. (2011). Uticaj ekonomske krize na socijalnu politiku Srbije u periodu od 2008-2011, *Godišnjak Fakultet političkih nauka*, 6 (1), 507-520.

Sinfield, A. (2010). Credit crunch, inequality and social policy. Paper presented at the ESPAnet conference, Budapest, September 2010.

Stamatović, M. et al. (2010). The World Economic Crisis Impact od Serbia in the context of it's association with the European Union. *Facta Universitatis. Economics and Organization*, 7 (1), 1-15.

Stanković, S. & Jovanović, V. (2006). *Banje Srbije i njihov značaj za turizam*, Zbornik radova "Planiranje, uređenje i zaštita banjskih i klimatskih mesta Srbije", Beograd: Acocijacija prostornih planera Srbije i Geografski fakultet Univerziteta u Beogradu, 13-25.

Stanković, S. & Pavlović, S. (2005). Banjski i planinski turizam, *Zbornik radova Geografskog fakulteta*, 53 (1), 75-90.

Statistical yearbook of Serbia, Belgrade: Republic Statistical Office of Serbia, (2004-2015) (in Serbian).

Strug, D. (2006). Community-oriented social work in Cuba: Government response to emerging social problems. Social Work Education, 25 (7), 749-762.

Šverko, B., Maslić Seršić, D., & Galić, Z. (2006). Financijske prilike i zdravlje ezaposlenih u Hrvatskoj: Vodi li financijska deprivacija do lošijeg zdravlja?, *Revija za socijalnu politiku*, 13 (3), 257-269.

Šverko, B., Maslić Seršić, D., Galešić, M. (2004). Nezaposlenost i subjektivno zdravlje - Jesu li najugroženije nezaposlene osobe srednje dobi?, *Suvremena psihologija*, 7 (2), 201-213.

Taube, M. et al. (2014). The impact of the financial crisis on the health system and health in Latvia. European Observatory on Health Systems and Policies, Geneve: World Health Organization.

Topalović, S. (2013). Stanje i perspektive banjskog turizma u Srbiji, *Globus*, 38 (1), 123-134.

United Nations (2011). The global social crisis: Report on the world social situation. New York: United Nations-Department of Economic and Social Affairs.

Wallace, J. & Pease, B. (2011). Neoliberalism and Australian social work: Accommodation or resistance? Journal of Social Work, 11 (2), 132-142.

World Bank, *World Development Indicators (WDI),* December 2014.

Yang, Y., Mueller, N. & Croes, R. (2016). Market accessibility and hotel prices in the Caribbean: The moderating effect of quality-signaling factors, *Tourism Management*, 56 (1), 40-51.

Yuen, A. W. K. & Ho, D. K. L. (2007). Social work education in Hong Kong at the crossroads: Challenges and opportunities amidst marketization and managerialism. Social Work Education, 26 (6), 546-559.

UTICAJ NOVE GLOBALNE EKONOMSKE KRIZE NA SOCIJALNU FUNKCIJU BANJSKIH I KLIMATSKIH ODMARALIŠTA U SRBIJI

Apstrakt: Neekonomske aktivnosti uključuju socijalni rad i socijalnu zaštitu i pored zdravstvene zaštite, posebno brinu o pojedincima kao članovima društva. Rehabilitacija i rekreacija koje su finansirane od strane Fonda za penzijsko i invalidsko osiguranje i Republičkog fonda za zdravstveno osiguranje spadaju u takve aktivnosti. Sredstva se finansiraju uglavnom iz budžeta Republike Srbije, što odražava uticaj globalne ekonomske krize, tako da su dodeljena sredstva za rehabilitaciju i rekreaciju pogođena na isti način. U ovom radu postavlja se pitanje o veličini i obliku takvog uticaja na sistem koji liči na komunikacione sudove, kao i na njegov indirektni odraz na socijalnu funkciju banjsko-klimatskih odmarališta i banjskog turizma na teritoriji Republike Srbije. Statistička metoda korelacije primijenjena je na podatke u godišnjim serijama za period 2008-2012, a koje su obuhvatile vreme pre, za vreme i nakon globalne ekonomske krize.

Ključne reči: globalna ekonomska kriza, društvena funkcija, klimatska odmarališta, banjski turizam, Srbija.

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