

UTICAJ STRANIH INVESTITORA NA SRPSKO TRŽIŠTE AKCIJA

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Rezime

Za granična tržišta kapitala (eng. Frontier Markets) kao što je Srbija, koja se nalaze u ranim fazama razvoja, karakterističan je veoma nizak nivo likvidnosti, odsustvo poštovanja pravila korporativnog upravljanja i izveštavanja javnosti, nedovoljno razvijena regulativa, kao i značajno učešće stranih portfolio investitora u prometu. Obično se radi o inostranim investicionim fondovima specijalizovanim za rizična ulaganja u takva tržišta, koji primenjuju princip geografske diversifikacije portfolija u svojoj investicionoj politici. Na Beogradskoj berzi su strani investitori prisutni u trgovini akcijama od 2002. godine i oni su u periodu rasta berzanskih indikatora od 2002-2007. godine imali veliko učešće na strani kupovine akcija, da bi u periodu krize srpskog tržišta kapitala od 2008-2010. godine došlo do značajnog rasta učešća stranih investitora na strani prodaje akcija i povlačenja sa Beogradske berze. Ovakvo ponašanje inostranih ulagača je bilo inicijalno podstaknuto lokalnim faktorima, ali je intenzivirano uticajem globalne finansijske krize i biće predmet analize ovog rada.

Ključne reči: strani investitori, akcije, Beogradska berza, globalna finansijska kriza

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THE IMPACT OF FOREIGN INVESTORS ON THE SERBIAN STOCK MARKET

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Summary

Frontier markets, such as Serbia, which are at the early stages of development, are characterized by very low level of solvency, absence of corporate management rules and reports to the public, insufficiently developed regulations, as well as significant participation of foreign portfolio investors in the exchange. Those are usually foreign investment funds specialized in risky investments at such markets; they apply the principle of geographic portfolio diversification in their investment policy. At the Belgrade Stock Exchange, foreign investors have been present at the stock market since 2002 and they participated in high volumes in stock buying during the stock market growth in the period from 2002 to 2007, whereas during the crisis at the Serbian capital market from 2008 to 2010 there was a significant increase in foreign investors' participation on the selling side and a withdrawal from the Belgrade Stock Exchange. Such behavior of foreign investors was initially prompted by local factors, but was intensified by the global financial crisis and will be analyzed in this paper.

Keywords: foreign investors, stocks, Belgrade Stock Exchange, global financial crisis

JEL: G01, G11

Uvodna razmatranja

Tržište kapitala u Srbiji se u periodu od 2001-2007. godine razvijalo u uslovima visoke međunarodne likvidnosti i globalnog rasta interesovanja za investiranje u tzv. tržišta u razvoju (eng. Emerging Markets) i granična tržišta kapitala (eng. Frontier Markets). Poslije višedecenijske pauze, trgovina akcijama u Srbiji ponovo počinje tek sa donošenjem Zakona o privatizaciji (2001.), čijim odredbama sva akcionarska društva postaju obavezna da se listiraju na Beogradskoj berzi. Broj listiranih kompanija počinje ubrzano da raste, a strani investitori postaju sve prisutniji na našem tržištu kapitala, kako u pogledu brojnosti, tako i po učešću u ukupnom prometu akcijama, koji se na našoj berzi meri indikatorom učešća stranih investitora u berzanskom prometu. Zahvaljujući u najvećoj meri stranim investitorima, cijene akcija kao i indeks najlikvidnijih akcija na Beogradskoj berzi BELEX15 beleže skoro konstantan rast od svog uvođenja 2005. do 2007. godine. Međutim, u periodu kada su se u SAD počeli pojavljivati prvi znaci finansijske krize i Beogradska berza počinje da se suočava sa padom cena koji je u narednom periodu poprimio razmere kolapsa berzanskog tržišta. Strani investitori, koji su na ovo tržište došli u potrazi za visokim stopama prinosa, počeli su da rasprodaju svoje portfelje i napuštaju naše tržište kapitala, što je dovelo do drastičnog pada cena i prometa akcija na Beogradskoj berzi, od koga se ona do danas nije oporavila.

Iako su pojava globalne finansijske krize i aktivnosti stranih investitora bili jedan od ključnih razloga kolapsa tržišta kapitala u Srbiji, ovaj rad će ukazati i na uticaj lokalnih faktora koji su pokrenuli negativni trend kretanja cena akcija na Beogradskoj berzi u periodu od 2007-2010. godine.

Karakteristike globalne finansijske krize

Globalna finansijska kriza je opšteprihvaćeni naziv za finansijsku krizu iz 2008-2009. godine koja je bila izazvana pucanjem balona na hipotekarnom tržištu sa SAD, i koja se velikom brzinom proširila po celom svetu. Ogromna

ekspanzija drugorazrednih hipotekarnih kredita u SAD, koja je rezultirala učešćem ovih kredita u ukupnom hipotekarnom tržištu u SAD od 23,5% (Financial Crisis Inquiry Report, 2011), došla je kao posledica više faktora: visokog nivoa globalne likvidnosti (posebno u Aziji i SAD), razvoja sekjuritizacije i tržišta hipotekarnih derivatnih instrumenata u SAD, ukidanja zabrane američkim investicionim bankama da se bave komercijalnim bankarstvom, političkim pritiskom Vlade SAD za povećanjem obima odobrenih kredita marginalnim kategorijama stanovništva sa niskim kreditnim rejtingom, kao i niskog nivoa kamatnih stopa u SAD.

Pored ovih faktora, veoma važnu ulogu su imali i faktori vezani za ponašanje učesnika na finansijskom tržištu SAD, koji se objašnjavaju pojmom "iracionalna euforija" (eng. Irrational exuberance), koji je prvi put upotrebio 1996. godine tadašnji predsednik Federalnih rezervi SAD (eng. Federal Reserve - FED) Alan Greenspan, koji je istakao da posle perioda visoke likvidnosti i drastičnog rasta cena imovine, učesnici na finansijskom tržištu ulaze u stanje iracionalne euforije, posle koga neminovno sledi pad vrednosti imovine i pojava krize (Greenspan A., 1996). Ove faze kriznog ciklusa su teorijski objašnjene kod Mishkin & Eakins (2000), Nanto (2009) i kod Kindleberger & Aliber (2005), u okviru Kindelberger-Minsky teorije koja navodi sledeće faze finansijske krize:

Slika 1. Faze finansijske krize



Finansijska kriza, koja je eskalirala sa povećanjem broja nenaplaćenih drugorazrednih hipotekarnih kredita, prelila se preko tržišta hipotekarnih derivata na hipotekarne finansijske institucije, kao i na investicione banke i osiguravajuća društva koje su kupovala ili garantovala za te hartije od vrednosti. Kolaps američkog finansijskog tržišta se najčešće povezuje sa bankrotstvom investicionih banaka Bear Stearns (preuzeta od strane JP Morgan) i Lehman Brothers (najveći bankrot u istoriji u visini od 691,1 milijarde USD). Procene ukupnog gubitka privrede SAD idu do visine od 40-90% jednogodišnjeg bruto društvenog

Introductory discussion

Between 2001 and 2007, the capital market in Serbia was developing in the conditions of high international solvency and global growth of interest in investments into the so-called emerging markets and frontier markets. After a break that lasted for several decades, the stock trade in Serbia started to develop again only after the Privatization Law was adopted (2001), which obligated all joint-stock companies to be listed at the Belgrade Stock Exchange. The number of listed companies started increasing rapidly, and foreign investors increased their presence at our capital market, both in terms of their numbers and their participation in stock trade, which is measured at our stock exchange by the indicator of foreign investors' participation in stock exchange turnover. Mostly due to the foreign investors, the stock prices, as well as the index of most solvent stocks at the Belgrade Stock Exchange, BELEX15, have been almost constantly increasing since their introduction from 2005 to 2007. However, in the period when the USA started showing first signs of the financial crisis, the Belgrade Stock Exchange also started facing a price drop, which in the following period turned into a stock market collapse. Foreign investors, who came to this market searching for high revenue rates, started selling out their portfolios and leaving our capital market, which led to a drastic drop both in stock prices and turnover at the Belgrade Stock Exchange, which it is still recovering from.

Even though the global financial crisis and foreign investors' activities were some of the key reasons for the Serbian capital market's collapse, this paper will also point to the influence of local factors that started a negative trend of stock prices at the Belgrade Stock Exchange between 2007 and 2010.

Characteristics of the global financial crisis

Global financial crisis is a general term for the financial crisis in 2008-2009, which was caused by the USA mortgage market bubble burst. It rapidly spread throughout the whole world. Huge expansion of subprime mortgage loans

in the USA, which resulted in the share of such loans in the total mortgage market in the USA of 23.5% (Financial Crisis Inquiry Report, 2011), came as a consequence of several factors: high level of global solvency (especially in Asia and the USA), development of securitization and market of mortgage derivatives instruments in the USA, lifting of the ban for American investment banks to do commercial banking, political pressure of the US Government to increase the amount of approved loans for marginal categories of the population with low credit scores, as well as low interest rates in the USA.

Besides these factors, an important role was played by the factors related to the behavior of the participants at the USA financial market, which are explained by the term 'irrational exuberance', which was used for the first time in 1996 by Alan Greenspan, the Chairman of the Federal Reserve at the time, who pointed out that after a period of high solvency and drastic increase in property prices, participants in a financial market enter a state of irrational euphoria, after which always comes a decrease in property prices and emergence of a crisis (Greenspan A., 1996). These stages of a crisis cycle were theoretically explained in Mishkin & Eakins (2000), Nanto (2009) and in Kindleberger & Aliber (2005), within Kindleberger-Minsky theory which gives the following stages of a financial crisis:

Picture 1. Stages of a financial crisis



Source: Kindleberger & Aliber, 2005

Financial crisis, which escalated with the number of uncollected subprime mortgage loans, overflowed, through the market of mortgage derivatives, onto the mortgage financing institutions, as well as investment banks and insurance companies which bought or endorsed those securities. The collapse of the American financial market is most often connected to the bankruptcy of investment banks Bear Stearns (overtaken by JP Morgan) and Lehman Brothers (the biggest bankruptcy ever amounting to 691.1 billion USD). The estimates of total losses for the USA economy go up to 40-90% of the annual US gross domestic

proizvoda SAD, što predstavlja iznos od 5,8 do 13,2 triliona USD (ekvivalentno iznosu od 50.000,00 do 120.000,00 USD po domaćinstvu u SAD) - Atkinson et all (2013). Finansijska kriza se iz SAD, kao najvećeg finansijskog tržišta na svetu, proširila na sve kontinente, izazivajući potrese u globalnom bankarskom sistemu i međunarodnom tržištu kapitala, pri čemu ni Srbija nije ostala pošteđena.

Beogradska berza u uslovima globalne finansijske krize

Ako posmatramo promet akcijama na Beogradskoj berzi od početka trgovine 2001. godine do 2010. godine, vidimo da je taj promet dostigao svoju maksimalnu vrednost u toku 2007. godine (Tabela 1.).

Tabela 1. Ukupan promet na Beogradskoj berzi i promet akcijama (2001-2010. godina)

Godina	Ukupan broj transakcija	Promet akcijama (evro)	Promena u odnosu na prethodnu godinu	Učešće trgovine akcijama u ukupnom prometu, %
2001.	46.073	1.611.628,00	-	0,2
2002.	83.952	115.302.382,00	7.054,40%	6,8
2003.	127.786	459.981.093,00	198,93%	32,4
2004.	138.842	347.406.489,00	-24,47%	62,4
2005.	173.545	470.805.643,00	35,52%	80,9
2006.	141.499	1.051.756.732,00	133,95%	86,9
2007.	301.210	1.852.631.344,00	76,14%	89,9
2008.	119.001	816.913.329,00	-55,90%	92,6
2009.	77.215	387.855.121,00	-52,52%	87,7
2010.	725.550	177.015.081,00	-54,35%	79,5

Izvor: Beogradska berza, www.belex.rs

Posle perioda konstantnog rasta prometa, za svega godinu dana od 2007-2008. godine, promet akcijama je pao za 55,9%. Silazni trend prometa se nastavio i u 2009. godini, kada je vrednost prometa akcijama pala za dodatnih 52,5%. U 2010. godini promet akcijama je izgubio novih 54,3%. Promet akcijama je 2010. godine iznosio svega 9,6% od rekordnog prometa u 2007. godini ili 23,0% od prosečnog prometa akcijama na Beogradskoj berzi u periodu od 2004-2009. godina, dok je ukupni promet na berzi svim hartijama od vrednosti u 2010. godini iznosio 10,8% od vrednosti prometa iz 2007. godine odnosno 21,8% za period od 2004-2009. godine. U periodu posle 2010. godine, promet i dalje stagnira i kreće se u rasponu od 133-252 miliona evra (promet u 2015. godini

je bio za svega 22,9% viši od prometa u 2002. godini, kada je trgovina akcijama bila na svom početku).

Kada posmatramo kretanje indeksa BELEX15 i BELEXline u tom periodu, dobijamo još jasniji uvid u dubinu i intenzitet krize na srpskom tržištu kapitala. BELEX15 je reporni indikator koji je uveden u oktobru 2005. godine sa namerom da preciznije prati kretanja na Beogradskoj berzi. U sastav indeksne korpe ulazi 15 odabranih kompanija kojima se kontinuirano trguje, koje imaju „visok stepen redovnosti u trgovanju, odnosno imaju najmanje 80% dana sa zaključenom berzanskom transakcijom u prethodnih šest meseci. Indeks je ponderisan tržišnom kapitalizacijom akcija u slobodnom prometu (eng. free float), i na njega ne utiče isplata dividende“ (Beogradska berza, 5. jun 2016.).

Njegov sastav je podložan promenama putem redovnih i vanrednih revizija. Od prvog objavljivanja korpe BELEX15 u oktobru 2005. godine do danas, samo su Energoprojekt Holding, Metalac, Imlek, Sojaprotein i Messer Tehnogas bili sastavni članovi ovog indeksa tokom čitavog perioda. U okviru same korpe, menjaju se kompanije koje ga čine (na dan 5. juna 2016. godine, u BELEX15 je ulazilo 12 kompanija), kao i procenti „free floata“ i procenti sa kojim određeni emitent učestvuje u formiranju indeksa (maksimalno jedan emitent može da ima 20% učešća u korpi). BELEXline je sveobuhvatniji indeks, koji prati oko 80% tržišne kapitalizacije Beogradske berze. Ovaj indeks se izračunava od septembra 2004. godine i danas njegovu indeksnu korpu čini 38 odabranih kompanija sa Beogradske berze.

Visoke stope rasta vrednosti indeksa Beogradske berze od 2004. godine, dostigle su svoj maksimum u periodu berzanske euforije koji je trajao devet meseci, od juna 2006. do marta 2007. godine (u tom periodu, rast cena je iznosio 326,0%, što konformnom metodom obračuna prinosa daje rezultat ekvivalentan svakodnevnom rastu vrednosti indeksa u tom periodu za 0,56% - Tabela 2.).

product, which is about 5.8 to 13.2 billion USD (equal to 50 000.00 to 120 000.00 USD per US household), according to Atkinson et al (2013). The financial crisis spread from the USA, as the biggest financial market in the world, to all continents, causing shocks in the global banking system and international capital market. Serbia was not exempt either.

Belgrade Stock Exchange in the conditions of the global financial crisis

If we look at the stock trade at the Belgrade Stock Exchange from the start of the trade in 2001 until 2010, we can see that the trade reached its maximum value during 2007 (Table 1.).

Table 1. Total turnover at the Belgrade Stock Exchange and stock market (2001-2010)

Year	Total number of transactions	Stock market (Euro)	Change compared to the previous year	Share of the stock market in total turnover, %
2001	46,073	1,611,628.00	-	0.2
2002	83,952	115,302,382.00	7,054.40%	6.8
2003	127,786	459,981,093.00	198.93%	32.4
2004	138,842	347,406,489.00	-24.47%	62.4
2005	173,545	470,805,643.00	35.52%	80.9
2006	141,499	1,051,756,732.00	133.95%	86.9
2007	301,210	1,852,631,344.00	76.14%	89.9
2008	119,001	816,913,329.00	-55.90%	92.6
2009	77,215	387,855,121.00	-52.52%	87.7
2010	725,550	177,015,081.00	-54.35%	79.5

Source: Beelgrade Stock Exchange, www.belex.rs

After the period of constant turnover growth, in only one year, from 2007 to 2008, stock trade decreased by 55.9%. The decline continued in 2009, when the value of stock trade decreased by additional 52.5%. In 2010, stock trade lost a new 54.3%. Stock trade in 2010 was only 9.6% of the record trade from 2007, or 23.0% of the average stock trade at the Belgrade Stock Exchange between 2004 and 2009, while the total stock exchange trade of all securities in 2010 amounted to 10.8% of the trade from 2007, i.e. 21.8% for the period between 2004 and 2009. In the period after 2010, the trade still stagnated and was between 133-252 million Euros (trade in 2015 was only 22.9% higher than the trade in 2002, when the stock trade was at its beginning). The number of transactions in 2010 reached a record value thanks to the listing of Naftna

industrija Srbije (Oil Industry of Serbia).

If we look at the fluctuation of BELEX15 and BELEXline indices during that period, we can get an even clearer insight into the depth and intensity of the crisis at the Serbian capital market. BELEX15 is a benchmark indicator introduced in October 2005 with the intention to follow fluctuations at the Belgrade Stock Exchange more precisely. The index basket includes 15 chosen companies that are continuously traded, that have a 'high degree of regularity in trading, i.e. they have at least 80 days with a closed stock exchange transaction in the previous six months. The index is a free-float market capitalization weighted index and it is not influenced by dividend payout' (Belgrade Stock Exchange, June 5, 2016).

Its composition is changeable through regular and special revisions. Since the first introduction of BELEX15 basket in October 2005 until today, only Energoprojekt Holding Beograd, Metalac Gornji Milanovac, Imlek Beograd, Sojaprotein Bečej and Messer Tehnogas Beograd have been the members of this index the entire time. Within the basket itself, the companies have been changing (on June 5, 2016 BELEX15 included 12 companies), as well as the percentage of 'free float' and percentage of participation of an issuer in the index formation (maximum one issuer can have 20% participation in the basket). BELEXline is a more comprehensive index, which follows about 80% of the market capitalization of the Belgrade Stock Exchange. This index has been calculated since September 2004 and today its index basket includes 38 selected companies from the Belgrade Stock Exchange.

High growth rates of index value at the Belgrade Stock Exchange since 2004 reached its maximum in the period of stock exchange euphoria which lasted for nine months, from June 2006 to March 2007 (in that period, price growth was 326.0%, which, according to the comfort method for calculating yield, gives a result equivalent to a daily increase in index value in that period of 0.56% - Table 2.).

Tabela 2. Kretanje berzanskih indeksa BELEX15 i BELEXline (2004 - 2010. godina)

Godina	BELEX15	Godišnja promena, %	BELEXline	Godišnja promena, %
2004.	n.a.	n.a.	1.161,30	16,1
2005.	1.060,21	60,21	1.954,35	68,3
2006.	1.675,20	58,01	2.658,16	36,01
2007.	2.318,37	38,39	3.830,84	44,12
2008.	565,18	-75,62	1.198,34	-68,72
2009.	663,77	17,44	1.311,84	9,47
2010.	651,78	-1,81	1.282,66	-2,22

Izvor: Beogradska berza, www.belex.rs

Međutim, taj skoro okomiti rast se završio sunovratom cena u naredne dve godine, kada su panika i strah od berzanskih gubitaka, zajedno sa niskom likvidnošću, doveli do kolapsa Beogradske berze (Grafikon 1.). Prema Reinhart & Rogoff (2009), prosečan pad berzanskih indeksa tokom finansijskih kriza u svetu iznosi 55,9%, a prosečna dužina trajanja krize, do zaustavljanja silaznog trenda, iznosi 3,4 godine. U slučaju Beogradske berze, pad berzanskog indeksa BELEX15 je iznosio 89,6% (za 33,7 procentnih poena iznad proseka), dok je trajanje krize, od maksimalne do minimalne vrednosti u posmatranom periodu, iznosilo 1,8 godina. Činjenica da se kriza u Srbiji pokrenula dosta ranije nego u SAD, potvrđuje tezu da ona nije bila inicijalno izazvana globalnom finansijskom krizom, već prevashodno lokalnim faktorima. Radilo se o pucanju balona berzanskih cena, koji je prošao početne faze rasta i euforije i koji je, dostigavši svoj maksimum, skliznuo ka fazi uzimanja profita i veoma brzo, paničnom prodavanju akcija.

Kada uporedimo kretanje BELEX15 indeksa i repernog svetskog indeksa koji prati tržišta u razvoju MSCI EM čija kapitalizacija iznosi 3,6 triliona USD (koji čine 836 kompanije iz 23 zemlje u razvoju i koji pokriva oko 85% tržišne kapitalizacije u tim zemljama - Rusija, Kina, Brazil, Indija, Južna Afrika, Češka, Mađarska, itd.), možemo da zaključimo da postoji sličnost u kretanju u periodu od 2005-2015. godine. U periodu pre izbivanja globalne finansijske krize, BELEX15 je imao značajno više stope godišnjeg rasta u odnosu na MSCI EM indeks, Međutim, već u 2007. godini je primetna značajna korekcija vrednosti oba indeksa, da bi pad u 2008. godini na Beogradskoj berzi bio viši za 20 procenta poena. Kao posledica tako velikog pada, oporavak indeksa BELEX15 je bio drastično manji nego kod indeksa MSCI EM. Ključni faktor za takvu razliku je bio stepen razvijenosti lokalnog tržišta kapitala, pošto indeks MSCI EM sačinjavaju kompanije koje dolaze i iz nekih od najvećih svetskih ekonomija (zemlje BRICS-a, pre svih), koje imaju znatno razvijeniju privredu, kao i finansijski sistem i tržište kapitala. (Grafikon 2.).

Grafikon 1. Kretanje indeksa BELEX15 (2006-2010. godina)



Izvor: Beogradska berza, www.belex.rs; Wise broker, wisebroker.rs

Table 2. Fluctuation of stock exchange indices
BELEX15 and BELEXline (2004 - 2010)

Year	BELEX15	Yearly change, %	BELEXline	Yearly change, %
2004	n.a.	n.a.	1,161.30	16.1
2005	1,060.21	60.21	1,954.35	68.3
2006	1,675.20	58.01	2,658.16	36.01
2007	2,318.37	38.39	3,830.84	44.12
2008	565.18	-75.62	1,198.34	-68.72
2009	663.77	17.44	1,311.84	9.47
2010	651.78	-1.81	1,282.66	-2.22

Source: Beelgrade Stock Exchange, www.belex.rs

However, that almost vertical growth ended with plummeting prices in the next two years, when panic and fear of stock exchange losses, together with low solvency, caused the Belgrade Stock Exchange to collapse (Graph 1.). According to Reinhart & Rogoff (2009), the average drop of stock exchange indices during the financial crises in the world is 55.9%, and the average length of a crisis, from the maximum index value to the end of the downward trend, is 3.4 years. In the case of the Belgrade Stock Exchange, the drop of BELEX15 index was 89.6% (33.7 percentage points above average), while the crisis lasted for 1.8 years, from the maximum to the minimum value in the observed period. The fact that the crisis in Serbia started much earlier than in the USA confirms the assumption that it was not intially caused by the global economic crisis, but, above all, the local factors. The stock exchange price bubble at the Belgrade Stock Exchange burst; it went through the initial stages of boom and euphoria and, reaching its maximum, it slipped towards the profit taking stage and, very soon, to the panic sellout of stocks.

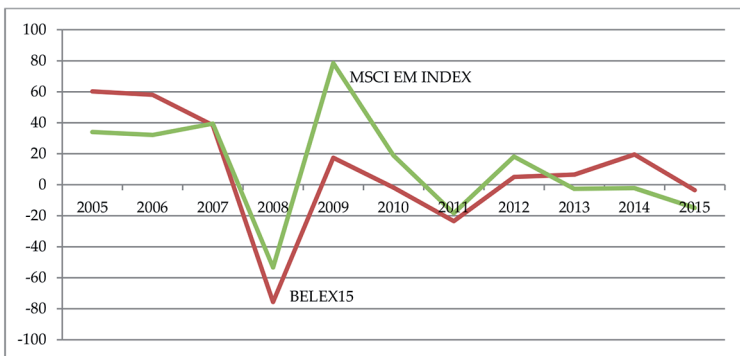
When we compare the fluctuation of BELEX15 and the benchmark world index that follows the emerging markets, MSCI EM, whose capitalization is 3.6 billion USD (made of 836 companies from 23 developing countries and covering about 85% of market capitalization in those countries - Russia, China, Brasil, India, South Africa, Czech Republic, Hungary, etc.), we can conclude that there is similarity in the fluctuation between 2005 and 2015. In the period before the global financial crisis, BELEX15 had significantly higher annual growth rates compared to MSCI EM. However, as soon as 2007, there was a noticeable correction of the value of both indices; the drop in 2008 was higher by 20 percentage points at the Belgrade Stock Exchange. As a consequence of such a large drop, the recovery of BELEX15 was drastically lower than with MSCI EM. The key factor for such difference was the degree of development of the local capital market, since MSCI EM is made of companies that also come from some of the biggest world economies (BRICS countries, above all), which have significantly better developed economies, as well as financial systems and capital markets (Graph 2.).

Graph 1. Fluctuation of BELEX15 (2006-2010)



Source: Belgrade Stock Exchange, www.belex.rs; Wise broker, wisebroker.rs

Grafikon 2. Uporedno kretanje indeksa BELEX15 i MSCI EM indeksa (2005-2015. godine)



Izvor: MSCI, www.msci.com; Beogradska berza, www.belex.rs

Strani portfolio investitori u Srbiji u periodu globalne finansijske krize

Portoflio investicije prema Narodnoj banci Srbije predstavljaju „ulaganja u vlasničke ili dužničke hartije od vrednosti koje nisu obuhvaćene stranim direktnim investicijama i rezervnom aktivom“ (Narodna banka Srbije 5. jun 2016.). Ove investicije su u ukupnom iznosu značajno manje u odnosu na visinu direktnih stranih investicija, ali su sa aspekta tržišta kapitala bile ključne za njegov razvoj. Kao strani investitori na Beogradskoj berzi bili su prisutni u najvećoj meri inostrani investicioni fondovi, dok su u manjem procentu bili prisutne off-shore kompanije i strana fizička lica (uglavnom sa prostora bivše Jugoslavije). Investicioni fondovi imaju unapred definisanu investicionu strategiju (izloženost prema određenim sektorima ili kompanijama, rokove u kojima investiraju, geografsku izloženost, itd.) i u tim okvirima moraju da posluju (uz privremena kratkoročna odstupanja).

Ključni motivi portfolio investitora za dolazak za srpsko tržište kapitala bili su:

- diversifikacija portfolija
- ostvarivanje veće profitne stope
- smanjenje rizika putem disperzije.

Da bi strani portfolio investitor došao na neko novo tržište, mora da ima dobro poznavanje bitnih činjenica o lokalnom tržištu (dubina, učesnici, volatilnost, likvidnost, regulativa, poštovanje prava malih akcionara, poreski tretman), kao i o povezanosti lokalnog sa drugim tržištima kapitala. Ovi investitori su obično bili spremni da preuzmu do 10% kapitala u domaćim firmama, već prema svojim

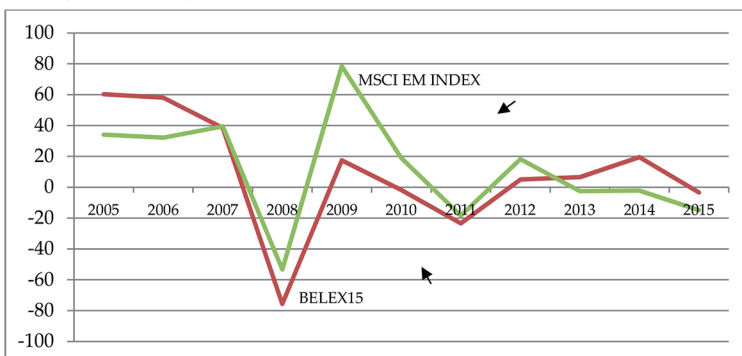
unapred definisanim pravilima investiranja. Najčešće su predmet investiranja bila vodeća preduzeća iz konkurentnih industrijskih sektora poput banaka, pivara ili farmaceutskih kompanija. Ipak, budući da je srpsko tržište kapitala po prometu i likvidnosti bilo veoma nerazvijeno, investicioni fondovi koji su ulagali na Beogradsku berzu su to radili putem svojih regionalnih fondova, koji su uključivali pored Srbije i

tržišta kapitala u Sloveniji, Hrvatskoj, Bosni i Hercegovini, Crnoj Gori, Makedoniji, Rumuniji, Bugarskoj, a često i Grčkoj i Turskoj, bez obzira što su ona (posebno Turska) značajno veća i razvijenija od ostalih tržišta kapitala na Balkanu.

U strukturi stranih portfolio investitora u Srbiji u periodu od 2002-2010. godine, možemo da razlikujemo nekoliko grupa investitora, koji su dolazili na naše tržište vlasničkih hartija od vrednosti u više talasa:

- prvi talas stranih investitora činila su fizička lica iz Slovenije, koji su imali iskustvo u berzanskoj trgovini akcijama iz procesa privatizacije u Sloveniji i Hrvatskoj. Veoma brzo, za njima su iz Slovenije došli i investicioni fondovi, brokersko-dilerske kuće, banke i druga pravna lica (Publikum, KD, Ilirika, AC naložbe, GBD, A banka, Poteza, Medveščak Pušnik, Aktiva, itd.)
- drugi talas su činili investitori iz Hrvatske, predvođeni brokerskom kućom FIMA, koja je imala svoje filijale i u zemljama bivše Jugoslavije, zatim su došli Privredna banka Zagreb, HPB, investicioni fond Aureus, InterCapital, itd.)
- najveći uticaj na srpsko tržište kapitala su imali investicioni fondovi iz Evropske Unije (sa prostora Skandinavije i Baltika) koji su došli u Srbiju 2002. godine, pre svih švedski East Capital, koji je upravljao sa 2 milijarde evra kapitala i koji je imao poseban fond za investicije u zemlje Balkana, kao što su ga imali i Danske Capital Finland, Danske Invest Copenhagen, Gustavia iz Švedske, Hansapank i Trigon iz Estonije, kao i Julius Bear iz Švajcarske
- ubrzo poslije investitora iz Zapadne Evrope,

Graph 2. Comparative fluctuation of BELEX15 and MSCI EM (2005-2015)



Source: MSCI, www.msci.com; Belgrade Stock Exchange, www.belex.rs

Foreign portfolio investors in Serbia in the period of the global financial crisis

Portfolio investments, according to the National Bank of Serbia, represent 'investments in equity or debt securities that are not included in foreign direct investments and reserve assets' (National Bank of Serbia (June 5, 2016)). These investments, in total, are significantly lower compared to direct foreign investments, but from the aspect of the Serbian capital market they were crucial for its development. Foreign investors at the Belgrade Stock Exchange were mostly foreign investment funds, while off-shore companies and foreign natural persons (mostly from former Yugoslavia) were present to a lower degree. Investment funds have a pre-defined investment strategy (exposure towards certain sectors or companies, investment horizon, geographic exposure, etc.) and they have to do their business within those limits (with temporary short-term deviations).

The key motives of portfolio investors to enter the Serbian capital market have been:

- portfolio diversification
- achieving higher profit rate
- risk decrease through dispersion.

In order for foreign portfolio investors to come to a new market, they have to have good knowledge of important facts about the local market (depth, participants, volatility, solvency, regulations, respecting rules of small shareholders, tax treatment), as well as about the connections between the local and other capital markets. These investors were usually prepared to take over up to 10% of the capital in

domestic companies, according to their own previously defined investment rules. Most often the subjects of the investments were leading companies from competitive industrial sectors, such as banks, beer factories or pharmaceutical companies. Still, since the Serbian capital market was very underdeveloped in its turnover and solvency, investment funds that invested into the Belgrade Stock Exchange did that through their regional

funds, that included, apart from Serbia, capital markets in Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Macedonia, Romania, Bulgaria, and often Greece and Turkey as well, regardless of the fact that those (especially Turkey) are significantly larger and more developed compared to other capital markets in the Balkans.

In the structure of foreign portfolio investors in Serbia in the period between 2002 and 2010 (according to the reports by the Belgrade Stock Exchange, Central Securities Depository and Clearing House and the author's data), we can distinguish between several groups of investors who entered our equity securities' market in several waves:

- the first wave of foreign investors included natural persons from Slovenia, who were experienced in stock exchange trade from the privatization processes in Slovenia and Croatia. Very soon, they were followed by investment funds, brokerages, banks and other legal persons from Slovenia (Publikum, KD, Ilirika, AC naložbe, GBD, A banka, Poteza, Medveščak Pušnik, Aktiva, etc.)
- the second wave brought investors from Croatia, headed by FIMA brokerage, who had its branches in the countries of former Yugoslavia; they were followed by Privredna banka Zagreb, HPB, Aureus investment fund, InterCapital, etc.
- the biggest influence on the Serbian capital market was by the investment funds from the European Union (from Scandinavia and the Baltics) who came to Serbia in 2002, above all East Capital from Sweden, who managed 2 billion Euros worth of capital

na srpsko tržišta kapitala došli su i američki investicioni fondovi, za čije je prisustvo veliku ulogu odigrala brokerska kuća iz SAD Auerbach Grayson koja je bila posrednik ka tamošnjim investicionim fondovima, i koja je dovela nekoliko velikih investitora (Everest, Falcon Family, Raffles, Aberdeen Asset Management, Morgan Stanley Asset Management).

Može se reći da je prvo ozbiljnije trgovanje stranih portfolio investitora na našoj berzi bila kupovina 4,4% akcija Apatinske pivare od strane engleskog investicionog fonda Salford u 2002. godini. Posle ove transakcije, ostali inostrani fondovi su počeli da aktivnije dolaze u Srbiju i odlučuju se za investiranje na Beogradskoj berzi.

Pored toga što su strani investitori doneli značajan rast likvidnosti i cena na Beogradsku berzu, oni su značajno doprineli i transferu znanja i iskustava vezanih za funkcionisanje tržišta kapitala, kao i za principe samog investiranja. Iskustvo sa kojim su domaći investitori i brokeri dočekali početak berzanske trgovine akcijama, bilo je veoma skromno i uglavnom se zasnivalo na trgovini kratkoročnim hartijama od vrednosti u periodu 1993-2001. godine. Značajan doprinos ovih investitora je bio i u transferu iskustava vezanih za korporativno upravljanje i poštovanje prava malih akcionara od strane listiranih kompanija. Naime, prvi kontakti domaćih kompanija sa stranim portfolio investitorima bili su zbunjujući za obe strane, pošto su zahtevi za uobičajenim poslovnim informacijama koje su ovi investitori tražili, dočekivani sa visokim nivoom odbijanja i ignorisanja od strane menadžmenta domaćih kompanija (čak i onih najvećih i najlikvidnijih), iako se radilo o investitorima koji su već postali akcionari. To je sigurno jedan od razloga zašto su strani portfolio investitori ostali brojčano malobrojni, pošto su u Srbiju došli samo oni investitori koji su bili spremni da ponovo prođu početna negativna iskustva sa berzi iz Centralne i Istočne Evrope i koji su imali iskusne kadrove koji su pokrivali celi region i koji su, zbog niske likvidnosti na pojedinačnim tržištima kapitala, pravili portfolio od više akcija sa različitih tržišta, koje su bile lideri na svojim berzama (srpske akcije su predstavljale obično između 10-20% njihovog portfolija).

Veliki rast cena akcija krajem 2004. i u prva četiri meseca 2005. godine, umnogome je opredelio dalji pravac razvoja Beogradske berze. Prvi metod trgovine akcijama na Beogradskoj berzi bio je metod preovlađujuće cene, koji je bio vrsta aukcije akcija preduzeća koje su se dešavale, u početku, na svakih nekoliko dana, a kasnije svakodnevno. Berzanska cena za taj trgovački dan bila je ona koja je omogućavala da se ostvari najveći promet akcija. Ukoliko je više investitora ponudilo istu cenu, prednost je imao ovaj sa većim nalogom, što je male investitore često ostavljalo bez obavljene kupovine. Ovaj metod nije ni odgovarao stranim investicionim fondovima, koji su imali visoke troškove transfera novca i kastodi banaka, i kojima je bio veoma visok rizik da možda neće moći da kupe zadovoljavajuću količinu akcija (dešavalo se da fond koji upravlja sa stotinama miliona evra kupi akcije za svega par stotina evra na Beogradskoj berzi).

Veliki iskorak u drugoj polovini 2004. godini predstavljalo je uvođenje kontinuiranog metoda trgovanja, koji je počeo da funkcioniše 15. oktobra 2004. godine sa akcijama Energoprojekt Holdinga, Hemofarma, Toze Markovića i Metalca (do kraja godine su se listirali još i Granexport, Pupin Telekom i Alfa Plam). To je bio metod koji je odgovarao kako malih domaćim investitorima, tako i stranim investicionim fondovima, koji su mogli da sa većom sigurnošću računaju da će obaviti berzanske kupovine, pošto su imali mogućnost davanja maksimalne cene u svojim nalozima kupovine za taj dan, koja je bila definisana kao maksimalan rast cena akcija od 20% od prethodne cene sa zatvaranja. Zbog toga, skoro sve akcije kojima se trgovalo ovim metodom, zabeležile su veliki rast u narednih šest meseci. U tom periodu rasta, učešće stranih investitora je bilo u januaru 2005. godine 48%, uz berzanski promet od 32 miliona evra, u februaru 62% uz promet od 49 miliona evra, u martu 42% uz promet od 60 miliona evra i u aprilu 47% uz promet od 20 miliona evra. Očigledno je da su strani investitori bili izuzetno spremni za početak agresivne kupovine na Beogradskoj berzi, budući da je investiranje u akcije u zemlji koja je tek nedavno krenula u tranziciju predstavljalo veliki rizik, i to svega nekoliko nedelja pošto je počela trgovina kontinuiranim

and who had a special investment fund for Balkan countries, just like Danske Capital Finland, Danske Invest Copenhagen, Gustavia from Sweden, Hansapank and Trigon from Estonia, as well as Julius Bear from Switzerland;

- soon after the investors from Western Europe, the American investment funds also came to the Serbian capital market; their presence was greatly helped by the US brokerage Auerbach Grayson, who was the intermediary towards the American investment funds, and who brought several big investors (Everest, Falcon Family, Raffles, Aberdeen Asset Management, Morgan Stanley Asset Management).

It can be said that the first serious trade by foreign portfolio investors at our stock exchange was the purchase of 4.4% of Apatinska pivara shares by the English investment fund Salford in 2002. After this transaction, other foreign investment funds started coming to Serbia and decided to invest heavily at the Belgrade Stock Exchange.

Besides bringing a significant increase in solvency and prices to the Belgrade Stock Exchange, foreign investors significantly contributed to the transfer of knowledge and experience related to capital markets, as well as the principles of investing itself. The experience with which domestic investors and brokers launched the stock exchange trade was very modest and mostly based on trade of short-term securities in the period between 1993 and 2001. Significant contribution of foreign investors was also reflected in the transfer of experience in corporate management and respect for the rights of small shareholders by the listed companies. Namely, the first contacts of domestic companies with foreign portfolio investors were confusing for both parties, since demands for usual business information that these investors asked for were met with a high level of rejection and were ignored by the management of domestic companies (even the biggest and most solvent ones), even though those were the investors that had already become shareholders. That is certainly one of the reasons why there were only few foreign portfolio investors, since the investors who came to Serbia were only the ones ready to go

again through the negative initial experiences from the stock markets in Central and Eastern Europe and who had experienced fund managers covering the whole region and who, due to the low solvency in some capital markets, created portfolios from several shares from different markets that were leading at their own stock exchanges (Serbian shares usually made between 10% and 20% of their portfolio).

A big increase in share prices at the end of 2004 and the first four months of 2005 largely decided the direction of development of the Belgrade Stock Exchange. The first method of stock trade at the Belgrade Stock Exchange was the market price method, which was a type of an auction of companies' shares which, in the beginning, took place every few days, and later every day. The stock exchange price for that trading day was the one that enabled the highest share turnover. If several investors offered the same price, the one with the higher order had the advantage, which often left small investors with no purchase. This method was also not suitable for foreign investment funds who had high expenses for money transfers and custodian banks, and who had a high risk of not being able to buy a satisfactory amount of shares (there were cases that a fund that manages hundreds of millions of Euros buys shares for a few hundred Euros at the Belgrade Stock Exchange, while the expenses for such transactions were higher than the value of the transaction itself).

A big change in the second half of 2004 was the introduction of the continuous trade method, which was implemented on October 15, 2004 with the shares from Energoprojekt Holding Beograd, Hemofarm Vršac, Toza Marković Kikinda and Metalac Gornji Milanovac (by the end of the year Granexport Beograd, Pupin Telekom Beograd and Alfa Plam Vranje were listed as well). That was a method suitable both for small domestic investors and foreign investment funds, who were able to count on stock trade with higher certainty, since they were able to offer a maximum price in their purchase orders for that day, which was defined as the maximum increase in the share price of 20% from the previous closing price. Due to that, almost all shares that were traded by this method noted a big jump in the following six months. In that growth period, the participation

metodom. Rast prometa i cena akcija omogućili su stranim investitorima kupovinu većih paketa akcija, pošto je prosečan dnevni promet akcijama Hemofarma u 2004. godini bio oko 110.000,00 evra, Energoprojekt Holdinga 45.000,00 evra a Metalca iz Gornjeg Milanovca oko 20.000,00 evra.

Očigledno je da je talas rast prometa i berzanskih cena izazvan aktivnom ulogom stranih investitora, koji su u ranoj fazi berzanske trgovine kupovali značajne pakete akcija, računajući da će u budućnosti moći da prodaju svoje udele strateškim investitorima ili drugim fondovima. Posle šest meseci velikog rasta vrednosti indeksa i berzanskih cena, od oktobra 2004-aprila 2005. godine, i kratke pauze tokom letnih meseci 2005. godine, ponovo kreće rast prometa i cena na berzi. Ovoga puta, kao investitori se uključuju i američki fondovi, ali i veliki domaći investitori koji kupuju preko offshore kompanija, zbog poreskih ušteda, ali i da bi izbegli obavezu davanja ponude za preuzimanje akcija, koje su bile obavezne u situacijama kada jedan vlasnik kontroliše više od 25% upravljačkih akcija kompanije (Tabela 3).

počinju da prodaju svoje akcije, ali uglavnom zbog političke nestabilnosti u Srbiji, zbog najavljenog priznavanja Kosova i vanrednih parlamentarnih izbora. Ipak, u 2007. godini, strani investitori su investirali za čitavih 89,2% više sredstava u apsolutnoj vrednosti nego u 2006. godini.

Strani investitori su u 2008. godini zabeležili rast učešća od 8% u ukupnom berzanskom prometu, ali taj, u principu, pozitivan podatak dobija drugačije svetlo kad se sagleda učešće u kupovini i prodaji akcija. Dok je nivo kupovine od strane ovih investitora pao za 2,5% na 51,9%, učešće u prodaji akcija je skočilo sa 29,7% u 2007. godini na 48,3% u 2008. godini. Upravo ovaj rast prodaje akcija od strane stranih investitora, bio je pokretač silaznog trenda berzanskih cena u Srbiji u narednim godinama. Budući da su strani investicioni fondovi trpeli velike gubitke na svim tržištima na kojima su bili prisutni, oni su pokušavali da smanje izloženost na srpskom tržištu prodajući svoje akcije i prebacujući realizovana sredstva za pokriće gubitaka na drugim tržištima. Ovi fondovi su imali veliki pritisak i od strane svojih

Tabela 3. Učešće stranih investitora u prometu na Beogradskoj berzi (2005-2010)

Godina	Učešće u ukupnom prometu (FIT)	Učešće u trgovini akcijama (FIS)	Učešće u trgovini akcijama - kupovina (b-FIS)	Učešće u trgovini akcijama - prodaja (s-FIS)	Učešće u trgovini obveznicama (FIB)
2005.	44,6	52,7	n.a.	n.a.	14,3
2006.	48,0	54,6	n.a.	n.a.	11,4
2007.	39,2	42,0	54,4	29,7	14,3
2008.	47,3	50,1	51,9	48,3	12,5
2009.	42,3	46,9	25,2	68,6	9,4
2010.	33,6	38,2	48,7	27,8	15,3

Izvor: www.belex.rs

U toku 2006. godine, sa rastom učešća stranih investitora u trgovini akcijama, po prvi put se registruje i veće učešće domaćih malih investitora, koji su krajem 2006. godine učestvovali sa 20% u ukupnoj trgovini akcijama. Tokom 2007. godini, strani portfolio investitori su ostvarili neto priliv na Beogradsku berzu u visini od 500 miliona evra. Njihovo učešće u ukupnom prometu je u nominalnom smislu značajno poraslo, ali je veliki rast koji su domaći mali investitori napravili na strani kupovine uticao da procenat učešća ostane na 54%. U drugoj polovini godine, strani investitori

akcionara koji su povlačili novac iz njihovih balkanskih fondova, budući da su i oni bili izloženi gubicima i na domaćem tržištu, tako da su fondovi, koji su bili glavni generator likvidnosti i rasta cena na srpskom tržištu akcija, morali da zatvaraju svoje pozicije na Beogradskoj berzi, što je predstavljalo veliki pritisak na strani ponude.

Do polovine 2009. godine, nastavljena je veća prodajna aktivnost stranih investitora u odnosu na kupovine, da bi se u drugoj polovini godine učešće u kupovini ponovo podiglo iznad polovine prometa. Visoko učešće u ukupnoj prodaji na kraju godine od 68,6% i nisko na strani kupovine od 25,2% došlo je kao posledica jedne blok transakcije u kojoj je prodat paket akcija Apatinske pivare (koji je činio 39,2% ukupnog berzanskog prometa za 2009. godinu), i ukoliko bi se ona isključila, strani investitori bi učestvovali sa 43,3% i 39,9% u u kupovini odnosno prodaji akcija na berzi (Tabela 4.).

of foreign investors in total shares turnover, in January 2005, amounted to 48% with the nominal stock exchange turnover of 32 million Euros, in February to 62% with the turnover of 49 million Euros, in March to 42% with the turnover of 60 million Euros and in April to 47% with the turnover of 20 million Euros. It is obvious that foreign investors were extremely prepared for the start of the aggressive buying at the Belgrade Stock Exchange, since investing in shares in a country that only recently started its transition presented a great risk, and only a few weeks after the continuous method trade had been launched. Increase in turnover and share prices enabled foreign investors to purchase bigger share packages, since the average daily turnover of Hemofarm shares in 2004 was around 110.000 Euros, Energoprojekt Holding 45.000 Euros and Metalac from Gornji Milanovac around 20.000 Euros.

It is obvious that the wave of turnover and stock exchange price growth was caused by the active role of foreign investors, who were buying significant share packages in the early stage of stock exchange trade, counting that in the future they would be able to sell their share to strategic investors or other funds. After six months of big growth in indices and stock exchange prices, from October of 2004 to April of 2005, and a short break during the summer of 2005, stock exchange turnover and prices started rising again. This time, American funds were included as investors, as well as big domestic investors who were buying through off-shore companies, for the purpose of tax savings, but also to avoid the obligation to give offer to take over 100% of outstanding ordinary shares, which was obligatory when one owner controlled more than 25% of ordinary shares of a company (Table 3).

During 2006, along with the increase of foreign investors' participation in stock trade, for the first time there was also higher participation of small domestic investors, who participated with 20% in the total stock trade at the end of 2006. During 2007, foreign portfolio investors achieved net cash flow of 500 million Euros at the Belgrade Stock Exchange. Their participation in the total turnover increased significantly in the nominal terms, but the large growth achieved by small domestic investors on buying side influenced the participation percentage to remain at 54%. In the second half of the year, foreign investors were starting to sell their shares, but mostly due to political instability in Serbia, announced recognition of Kosovo and non-scheduled parliamentary elections. Still, in 2007 foreign investors invested as much as 89.2% more funds in absolute terms compared to 2006.

In 2008, foreign investors recorded a participation growth of 8% in the total stock exchange turnover, but that, essentially positive information, becomes different when it is viewed in the light of participation in buying and selling of shares. While the level of buying by these investors decreased by 2.5% to 51.9%, their participation in selling of shares jumped from 29.7% in 2007 to 48.3% in 2008. This very increase in share sales by foreign investors presented a strong impulse for the downward trend of the stock market prices in Serbia in the following years. Since foreign investment funds recorded big losses at all their markets due to the increasing influence of the global economic crisis, they tried to decrease their exposure at the Serbian market by selling their shares and transferring the obtained funds to cover losses at the other markets. These funds were under strong pressure from their domestic shareholders who were withdrawing money

from their Balkan funds, given that they were also exposed to losses at the domestic market, so that the funds, which were the main generator of solvency and price increase in the Serbian stock market, had to close their positions at the Belgrade Stock Exchange, which exerted a strong pressure at the selling side.

Table 3. Share of foreign investors in the Belgrade Stock Exchange turnover (2005-2010)

Year	Share in total turnover (FIT)	Share in stock trade (FIS)	Share in stock trade - buying (b-FIS)	Share in stock trade - selling (s-FIS)	Share in bonds trade (FIB)
2005	44.6	52.7	n.a.	n.a.	14.3
2006	48.0	54.6	n.a.	n.a.	11.4
2007	39.2	42.0	54.4	29.7	14.3
2008	47.3	50.1	51.9	48.3	12.5
2009	42.3	46.9	25.2	68.6	9.4
2010	33.6	38.2	48.7	27.8	15.3

Source: www.belex.rs

Tabela 4. Uporedni prikaz kretanja indeksa BELEX15 i učešća stranih investitora u prometa na Beogradskoj berzi (2005-2010. godina)

Godina	Promena indeksa BELEX15	Učešće stranih investitora u trgovini akcijama
2005.	60,2%	52,7%
2006.	58,0%	54,6%
2007.	38,4%	42,0%
2008.	-75,6%	50,1%
2009.	17,4%	46,9%
2010.	-1,8%	38,2%

Izvor: Beogradska berza, www.belex.rs

U 2010. godini, strani investitori su se fokusirali na druga tržišta i njihovo učešće od 33,6% u ukupnom berzanskom prometu je bilo najmanje od kada se meri ovaj indikator. Pad je bio najviše izražen u segmentu prodaje akcija, dok je dostigao najveću vrednost u istoriji u trgovini obveznicama sa 15,3%. Odnos između aktivnosti u kupovini i prodaji akcija, koji je bio u korist kupovine, ukazivao je na rast interesovanja za ulaganje u srpske akcije.

Velike kompanije, koje su krajem 2007. godine imale tržišnu kapitalizacije veću od 100 miliona evra, većinom su bili i u sastavu BELEX15, i to su bile kompanije u koje su pretežno investirali strani investitori. Sa eskalacijom krize, ove kompanije su pretrpele znatno veći pad vrednosti akcija u odnosu na prosek za Beogradsku berzu, budući da su one na početku krize zadržale određeni nivo likvidnosti, koji su stranci iskoristili da prodaju svoje akcije. Berzansko tržište Srbije je u uslovima krize postalo tržišta kupaca, koji su diktirali uslove, posebno kod kupovine većih paketa akcija. Posebno su na udaru bile akcije banaka, koje su predstavljale najinteresantnije akcije na Beogradskoj berzi. Listirane na berzi zbog zakonske obaveze za sva akcionarska društva, pošto nisu bile predmet podele besplatnih akcija, imale su svoje zlatno doba od 2004-2007. godine (akcije Agrobankе su skočile tri puta u toku 2006. godine), a upisivana su od 5-10 više sredstava za njihove dokapitalizacije od visine emisija, bez prevelikog analiziranja ekonomskih performansi ili poslovnih rezultata. One su bile veoma atraktivne stranim investitorima, pošto su imale veliki *free float* i likvidnost, i zato je i njihov pad bio veći od proseka berze (za period od 2007-2008. godine, pad cene akcija je iznosio od 67% kod JUBMES

banke do 88% kod Privredne banke Beograd i Metals banke Novi Sad).

Drastičan pad berzanskih indeksa na Beogradskoj berzi, pri čemu su najveći pad imale cene akcija velikih kompanija i banaka, predstavlja glavni pokazatelj kod merenja dubine finansijske krize u Srbiji. Gubitak vrednosti indeksa BELEXfm od -83,2% i BELEX15 od -89,6% od svojih maksimalnih vrednosti u 2007. godini do minimalnih u maju 2009. godine, predstavlja neke od najvećih svetskih gubitaka u toku 2008. godine. Ako posmatramo samo 2008. godinu, Beogradska berza je imala pad od -75,62%, najveći u regionu posle Sofije sa -79,71%, dok su ostale berze bile u rasponu od 53% - 74% (-60.78% je iznosio pad indeksa Banjalučke berze, -72,92% Makedonske berze, -74,16% Montenegro berze, -66,09% Ljubljanske berze, -67,12% Zagrebačke berze, -53.34% Budimpeštanske berze i -69,60% berze u Bukureštu).

Glavni svetski indeksi su u 2008. godini imali značajne gubitke: Dow Jones Industrial Average -30,7%, NASDAQ -44,8%, DAX (indeks Deutsche Boerse) -39,5%, FTSE 100 (Indeks Londonske berze akcija) -30,9%, Pariz -42,70%, Mumbai -51,9%, Singapur -49,2%, Sidnej -41,3%, Hong Kong -48,3%, Šangaj -65,2%, Tokio -42,1%. Kumulativna promena od vrha do dna tržišta u periodu od 2007-2009. godine dovela je do pada od -53,9% za DJIA i -54,9% za NASDAQ, najveći pad DAX-a u periodu od 2007-2009. godine je iznosio 54,89%, dok je FTSE100 za period 2007-2009. godine, najviše bio u minusu od -47,04%. Kriza je izazvala mnogo veći berzanski pad u zemljama Centralne i Istočne Evrope nego na najrazvijenijim berzama. Berze u SAD, gdje je hipotekarna kriza i stvorena i koje su imale značajan, ali ipak manji pad nego tržišta zemalja u tranziji u CIE i Balkanu, a posebno u odnosu na Srbiju.

Bez obzira da li su dolazili iz Skandinavije, SAD, Slovenije ili Hrvatske, za investitore inostranstva je karakteristično da su kupovali srpske akcije već od samih početaka trgovine akcijama 2002. godine (iako se zvanično učešće stranih investitora u berzanskom prometu računa od 2005. godine). Od 2005. godine imamo egzaktnе podatke o prilivu stranih portfolio investicija na Beogradsku berzu, koji imaju više od polovine prometa u periodu najvećeg rasta od 2005-2007. godine. Već u

Until mid-2009, the higher selling activity by foreign investors, compared to buying, continued. In the second half of the year, participation in buying raised again to above half of the turnover. High participation in total sales at the end of the year of 68.6% and low buying of 25.2% came as a consequence of one block transaction in which a share package of Apatinska pivara was sold (which was 39.2% of total stock exchange turnover in 2009), and if that one had been excluded, foreign investors would have participated with 43.3% and 39.9% in buying and selling of shares at the stock exchange (Table 4).

Table 4. Comparative overview of BELEX15 fluctuation and participation of foreign investors in the turnover at the Belgrade Stock Exchange (2005-2010)

Year	Change in BELEX15	Participation of foreign investors in stock trade
2005	60.2%	52.7%
2006	58.0%	54.6%
2007	38.4%	42.0%
2008	-75.6%	50.1%
2009	17.4%	46.9%
2010	-1.8%	38.2%

Source: Belgrade Stock Exchange, www.belex.rs

In 2010, foreign investors focused on other markets and their participation of 33.6% in total stock exchange turnover was the lowest since this indicator has been measured. The drop was most prominent in the share selling sector, while it reached the highest value ever in total bonds trade at 15.3%. The activity ratio in share buying and selling, which was in favor of buying, pointed to the increased interest in investments into the Serbian shares.

Large companies, which at the end of 2007 had market capitalization higher than 100 million EUR, were mostly also included in BELEX15, and those were the companies in which foreign investors mostly invested. With the escalation of the crisis, these companies had significantly higher decrease in share value compared to the average at the Belgrade Stock Exchange, since they kept a certain level of solvency at the beginning of the crisis, which the foreigners used to sell their shares. The stock market in Serbia, during the crisis, became the market of buyers, who determined the conditions, especially when buying larger share packages. The stock market

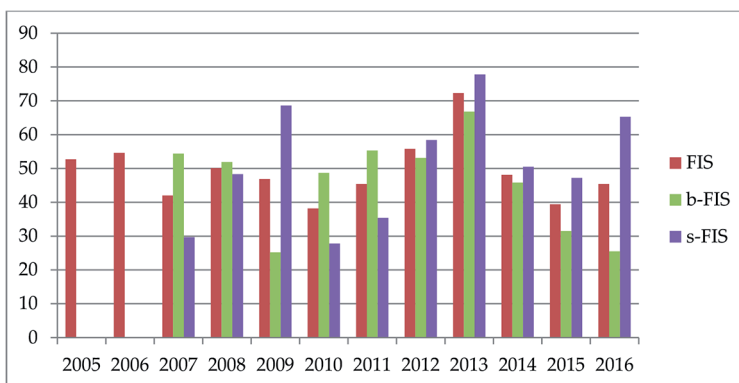
shock most fiercely hit the bank shares, which were the most solvent shares at the Belgrade Stock Exchange in the previous period. Bank shares were listed at the stock exchange due to the legal obligations for all joint-stock companies, since they were not included in free shares distribution; they had their golden period between 2004 and 2007 (Agrobanka shares jumped three times in 2006), and oversubscription for additional capitalizations 5-10 times higher than the value of shares issuance, without much analysis of economic performances or business results of the banks. They were also very attractive for foreign investors, since they had high free float and solvency, and that is why their drop was higher than the stock exchange average (in the period of 2007-2008 the share price decrease ranged from 67% at JUBMES bank to 88% at Privredna banka Beograd and Metals banka Novi Sad).

A drastic drop of stock exchange indices at the Belgrade Stock Exchange, the biggest drop being in the prices of shares of large companies and banks, presents the main indicator when measuring the depth of the financial crisis in Serbia. The losses in the value of BELEXfm index of -83.2% and BELEX15 of -89.6% compared to their maximum values in May 2007 and to their minimum values in March 2009 present some of the biggest losses in world stock exchanges in 2008. If we look only at 2008, the Belgrade Stock Exchange recorded a drop of -75.62%, the highest in the region after Sofia with -79.71%, while other stock exchanges had losses between 53% and 74% (-60.78% was the drop of the Banja Luka Stock Exchange index, -72.92% of the Macedonian Stock Exchange, -74.16% of the Montenegro Stock Exchange, -66.09% of the Ljubljana Stock Exchange, -67.12% of the Zagreb Stock Exchange, -53.34% of the Budapest Stock Exchange and -69.60% of the Bucharest Stock Exchange).

The main world indices also recorded significant losses in 2008, but lower than the stock exchanges in the region and in Serbia: Dow Jones Industrial Average -30.7%, NASDAQ -44.8%, DAX (Deutsche Boerse index) -39.5%, FTSE 100 (London Stock Exchange index) -30.9%, Paris -42.70%, Bombay -51.9%, Singapore -49.2%, Sidney - 41.3%, Hong Kong -48.3%, Shanghai -65.2%, Tokyo -42.1%. The cumulative change from the top to the bottom of the market in the period between 2007 and 2009

drugoj polovini 2007. godine, a pogotovo u periodu od 2008-2009. godini, značajno raste prodajna aktivnost ovih investitora i njihovo povlačenje sa srpskog tržišta kapitala (Grafikon 4). Zahvaljujući tome što su akcije srpskih kompanija i banaka kupovali kad su bile i po nekoliko stotina procenata jeftinije nego kada je kriza počela, oni su mogli sebi da priušte prodaju po veoma niskim cenama kad je krenula kriza, često i dosta nižim od trenutne tržišne cene zbog velikih paketa koje su nudili na prodaju (Grafikon 3.).

Grafikon 3. Kretanje učešća stranih investitora u prometu akcija (2005-2016. godina)



Izvor: Beogradska berza, www.belex.rs

Prva korekcija cena na Beogradskoj berzi se desila u maju 2007. godine, kada je zbog političkog razloga BELEX15 za tri dana izgubio 11,4% svoje vrednosti. Taj pad je pokazao da se medeni mesec na Beogradskoj berzi završio i bez obzira što se berza posle dva dana potpuno oporavila, naveo je strane investitore da počnu sa prodajom svojih portfelja u Srbiji. Pored političke nestabilnosti, koja je pratila Srbiju u periodu od 2003-2008. godine (ubistvo premijera Zorana Đinđića, jednostrano proglašenje nezavisnosti Kosova i Metohije, česti prevremeni parlamentarni izbori), činjenica je da je rast berzanskih cena u Srbiji dostigao svoj maksimum u maju 2007. godine. Poslovni rezultati kompanija i banaka koje su bile listirane na Beogradskoj berzi, nisu pratili očekivanja investitora, koji su plaćali cene tih akcija mnogo iznad regionalnih proseka, ako posmatramo uobičajene parametre poput odnosa cena akcija i dobiti kompanija (eng. P/E ratio) i odnos tržišne kapitalizacije i ukupnih prihoda kompanija (eng. P/S ratio).

Period euforije na Beogradskoj berzi je prošao i nastupila je faza korekcije cena i pada vrednosti kompanija i berzanskih prometa (zbog izuzetno niske likvidnosti).

Najveći talas povlačenja stranih investitora sa Beogradske berze se desio sa eskalacijom krize hipotekarnog tržišta u SAD u 2008. godini, kada su ovi investitori počeli da panično prodaju svoje portfelje. U Srbiji se nije na vreme formirao dovoljno snažan sloj domaćih institucionalnih investitora (prvi domaći investicioni fond je počeo sa radom tek u decembru 2006. godine),

koji bi mogao da odgovori na rast ponude sa kupovinom paketa akcija koji su držali strani investitori. Domaći investicioni fondovi su na kraju i platili visoku cenu pogrešnog momenta kada su osnovani, pošto su počeli sa investiranjem u periodu kada se kriza zahuktavala, da bi bili prisiljeni da prodaju veoma brzo svoj portfelj, zbog zahteva za povlačenjem novca od strane svojih investitora. Domaća fizička lica, koja su postala sve brojnija kao investitori u toku 2006-2007. godine, sa prvom korekcijom

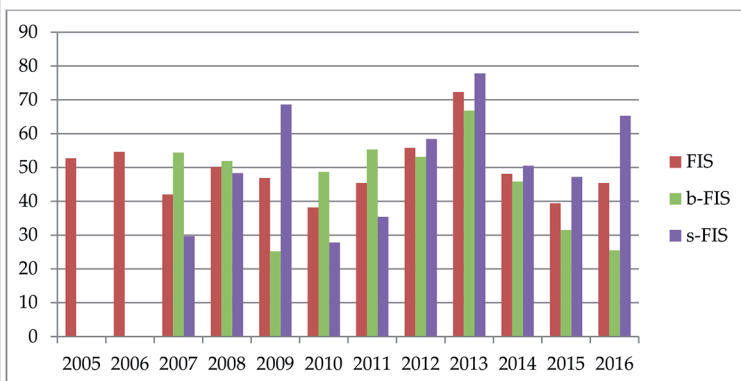
cena na berzi, počeli da prodaju svoje portfelje čime su dodatno oborili cene.

Odlaskom stranih investitora sa Beogradska berze, pojavio se berzanski vakuum na strani tražnje koji malobrojni i nedovoljno kapitalizovani domaći ulagači nisu mogli da pokriju i krah je bio neminovan. Nelikvidnost na Beogradskoj berzi je dodatno proširila paniku, investitori su mogli da prodaju samo male količine akcije po tržišnim cenama i bili su prisiljeni da pristaju na velike diskonte da bi prodali značajnije pakete akcija. Jednom izgubljeno poverenje da berza može da obezbedi formiranje fer tržišne cene, dovelo je do smanjenog investiranja, što je dovelo do još nižeg nivoa likvidnosti i daljeg pada cena. Ta spirala koju su izazvali strani investitori je povukla sa sobom domaće investitore i investicione fondove, ali i ugrozila temelje i budućnost tržišta kapitala u Srbiji. Na žalost, za tržišta kapitala u regionu, koja su pretrpela ogromne gubitke, nije postojala Bečka inicijativa kao za bankarski sektor iz januara 2009. godine,

resulted in the drop of -53.9% for DJIA and -54.9% for NASDAQ, the biggest drop of DAX in the period between 2007 and 2009 was 54.89%, while FTSE100 for the period of 2007 to 2009 had the biggest stock exchange loss of -47.04%. The crisis caused a much bigger stock exchange drop in Central and Eastern Europe compared to the most developed stock exchanges. Stock exchanges in the USA, where the mortgage crisis was created, had a significant, but lower drop compared to the emerging markets in Central and Eastern Europe and in the Balkans, and especially compared to Serbia.

Regardless of whether they came from Scandinavia, the USA, Slovenia or Croatia, foreign investors typically bought Serbian shares from the very beginnings of stock trade in 2002 (even though the official participation of foreign investors in the stock exchange turnover has been counted since 2005). Since 2005, there have been official data by the Belgrade Stock Exchange on participation of foreign portfolio investors in the Belgrade Stock Exchange turnover; they participated in more than half of the stock exchange turnover in the period of the largest growth between 2005 and 2007. Already in the second half of 2007, and especially in the period between 2008 and 2009, there was a significant increase in sales activity of these investors and their withdrawal from the Serbian capital market (Graph 4). Due to the fact that they were buying shares of Serbian companies and banks when they were up to a few hundred per cent cheaper compared to the start of the crisis, they could afford to sell at very low prices when the crisis started, often much lower than the current market price, due to the large packages that they offered for sale (Graph 3 - FIS: participation of foreign investors in total shares turnover, b-FIS: participation of foreign investors on the purchasing side in the shares turnover, s- FIS: participation of foreign investors on the selling side in the shares turnover).

Graph 3. Fluctuation of participation of foreign investors in the stock trade (2005-2016)



Source: Belgrade Stock Exchange, www.belex.rs

The first price correction at the Belgrade Stock Exchange happened in May of 2007, when due to political reasons BELEX15 lost 11.4% of its value in three days. That drop showed that the honeymoon at the Belgrade Stock Exchange was over and, regardless of the fact that the stock exchange completely recovered two days later, and it prompted foreign investors to start selling their portfolios in Serbia. Apart from political instability, present in Serbia in the period between 2003 and 2008 (the assassination of Zoran Đinđić, the Prime Minister, unilateral proclamation of Kosovo and Metohija independence, frequent non-scheduled parliamentary elections), the fact is that the growth of stock exchange prices in Serbia reached its maximum in May of 2007. Business results of companies and banks that were listed at the Belgrade Stock Exchange did not meet the expectations of investors, who were paying for those shares much more than the regional average, if we look at the usual parameters such as the P/E ratio and P/S ratio. The period of euphoria at the Belgrade Stock Exchange had passed and was followed by the price correction stage and a drop in company value and stock exchange turnover (due to the extremely low solvency).

The biggest wave of withdrawal of foreign investors from the Belgrade Stock Exchange happened with the global escalation of mortgage market crisis in the USA in 2008, when these investors anxiously started selling their portfolios. In Serbia, a strong enough layers of domestic institutional investors which could respond to the growing offer of shares by

koja bi postigla smirivanje situacije i ostanak stranih investitora na srpskom tržištu kapitala.

Zaključak

Upoređujući sa referentnim tržištima kapitala u regionu i podacima sa Beogradske berze, može se potvrditi teza da su razlozi početka krize na Beogradskoj berzi u velikoj meri lokalne prirode, a da ih je globalna kriza i ponašanje stranih investitora samo učinila intenzivnijom i dugotrajnijom. Činjenica da je globalna finansijska kriza po svim parametrima imala drastičnije manifestacije na Beogradskoj berzi nego na drugim berzama sa kojima je upoređujemo, može se objasniti fazom razvoja u kojoj se nalazila naša berza 2007-2008. godine. Sa svega tri godine iskustva u trgovini akcijama (od uvođenja kontinuiranog metoda trgovine 2004. godine), sa malobrojnih domaćim investicionim fondovima koji su tek počeli sa poslovanjem, nedovoljno edukovanim malim investitorima, slabom korporativnom kulturom listiranih kompanija, nedovoljno osposobljenim berzanskim posrednicima, prisutnoj insajderskoj trgovini, srpsko tržište kapitala se nalazilo u veoma osetljivoj fazi, ali na žalost, nije dobilo priliku da ojača u narednih nekoliko stabilnih berzanskih godina, već se potpuno nespremno veoma brzo suočilo sa najvećom finansijskom krizom u istoriji.

Činjenica da se kriza u Srbiji pokrenula ranije nego u SAD, potvrđuje tezu da globalna finansijska kriza nije izazvala krizu tržišta kapitala u Srbiji, ali jeste direktno uticala na njen intenzitet i na ponašanje stranih investitora, koji ne bi tako panično reagovali na korekciju cena na Beogradskoj berzi, da nije bilo globalne krize tržišta kapitala. Ako analiziramo period od 3. maja 2007. godine, kada je Beogradska berza dostigla svoj istorijski maksimum, do 15. septembra 2008. godine, kada je Lehman Brothers objavio svoje bankrotstvo u SAD, u tom intervalu BELEX15 je već bio izgubio 61% od svoje vrednosti, dok je DJIA za isti period izgubio 17,7%.

Niska likvidnost je, u periodu rasta berzanskih indeksa, bila prouzrokovana slabom ponudom hartija, što je u uslovima rastuće tražnje dovelo do visokog rasta cena akcija. Pored toga, veliki uticaj na srpsko tržište kapitala je imao i izabrani model privatizacije koji je forsirao prodaju preduzeća van berze putem ponuda za preuzimanje firmi, kao i nepoštovanje obaveze objavljivanja bitnih poslovnih podataka od strane listiranih kompanija. Takođe, izostale su i inicijalne javne ponude, kako privatnih, tako i državnih kompanija, kao dokaz zrelosti našeg tržišta kapitala. Iako su ovi problemi i dalje prisutni na Beogradskoj berzi, strani investitori su zadržali visoko učešće u prometu akcijama i u periodu posle 2010. godine (u maju 2016. godine, učešće stranih investitora u ukupnom prometu akcija iznosi 44,8%, na strani kupovine akcija iznosi 41,9%, a na strani prodaje akcija 47,6%), ali se sada radi o veoma malim apsolutnim vrednostima, u poređenju sa periodom pre krize.

Najveći gubitnik ove krize definitivno je srpsko tržište akcija. U zemlji koja je u periodu od 2002-2008. godine bila još uvek na raskršnici u društvenim, političkim i ekonomskim odnosima i sa svega nekoliko godina tranzicionog iskustva iza sebe, tržište kapitala i Beogradska berza su mogli da imaju veoma važnu ulogu, kao što se to desilo u Poljskoj, Češkoj, Rumuniji. Iako su berzanski podaci iz 2007. godini o više od 2.000 listiranih kompanija, 16 milijardi evra tržišne kapitalizacije i više od 2 milijarde evra prometa bili izuzetni za srpske, pa i regionalne uslove, oni nisu bili zasnovani na realnim temeljima. Ovaj rast berzanskih pokazatelja nije bio posledica velikog napretka srpske privrede, rasta stranih investicija, izvoza, zaposlenosti ili kvaliteta tržišta kapitala u Srbiji, već je bio uglavnom zasnovan na špekulativnim aktivnostima stranih portfolio investitora, praćenih sa euforijom i entuzijazmom nedovoljno iskusnih i slabo kapitalno sposobnih domaćih investitora, što je i dovelo do kraha srpskog tržišta akcija.

buying share packages from foreign investors was not created on time (the first domestic investment fund started only in December 2006). At the end, domestic investment funds paid the highest price for the wrong moment in which they were founded, since they started investing in the period when the crisis was gaining momentum, and then they were forced to sell their portfolios very soon at lower prices, due to the demands from their investors to withdraw money. Domestic natural persons, whose numbers and presence as investors were increasing during 2006 and 2007, started selling their portfolios in panic with the first price correction at the stock market, which additionally lowered the prices.

After foreign investors left the Belgrade Stock Exchange, there was a stock exchange vacuum on the demand side which could not be covered by few insufficiently capitalized domestic investors and the crash could not be avoided. Low solvency at the Belgrade Stock Exchange additionally spread the panic, investors could only sell small quantities of stocks at market prices and they were forced to agree to large discounts in order to sell significant share packages. Once lost trust that the stock exchange can provide a fair market price resulted in decreased investments, which led to an even lower level of solvency and a further price drop. That spiral caused by foreign investors involved domestic investors and investment funds, but also jeopardized the foundations and the future of the capital market in Serbia. Unfortunately, for the capital markets in the region, which suffered huge losses, there was no Vienna Initiative like for the banking sector in January 2009, which would have calmed down the situation and kept foreign investors at the Serbian capital market.

Conclusion

Comparing the data from the reference capital markets in the region and the data from the Belgrade Stock Exchange, it can be confirmed that the reasons for the outbreak of the crisis at the Belgrade Stock Exchange are largely local, and that the global crisis and behavior of foreign investors made them long-standing and more intense. The fact that the

global financial crisis in all parameters had a more drastic manifestation at the Belgrade Stock Exchange compared to other stock exchanges we compared it to, can be explained by the development stage in which our stock exchange was in 2007 and 2008. With only three years of experience in the stock trade (since the introduction of the continuous trade method in 2004), with only few domestic investment funds that had just started operating, insufficiently educated small investors, weak corporate culture of the listed companies, insufficiently trained stock exchange brokers, insider trading, the Serbian capital market was at an early and sensitive development stage, but, unfortunately, it was not given an opportunity to become stronger in the following few stable stock exchange years, but it faced the biggest financial crisis in history as underdeveloped and fragile.

The fact that the crisis in Serbia started before the crisis in the USA confirms the thesis that the global financial crisis did not cause the crisis of the capital market in Serbia, but it did directly influence its intensity and behavior of foreign investors, who would not have reacted so anxiously to the price correction at the Belgrade Stock Exchange if there had not been for the global crisis of capital market. If we analyze the period between May 3, 2007, when the Belgrade Stock Exchange reached its historic maximum and September 15, 2008, when Lehman Brothers announced their bankruptcy in the USA, in that interval BELEX15 had already lost 61% of its value, while DJIA, in the same period, lost 17.7%. This is an additional proof that the Belgrade Stock Exchange had already started its correction long before it showed in all its force at the global capital market.

Low solvency was, in the period of increase of stock exchange indices, caused by low supply of securities, which in the conditions of increasing demand led to a big increase in the share prices. Besides that, the chosen privatization model which favored the sale of companies outside the stock exchange through take-over offers, had a large influence on the Serbian capital market, as well as the listed companies not fulfilling their obligation to publish important business information. Also, there were no initial public offers from either

Literatura / References

1. Atkinson T., Luttrell D. & Rosenblum H. 2013. *How Bad Was It? The Costs and Consequences of the 2007-2009 Financial Crisis*, Dallas: Federal Reserve of Dallas, Staff Papers, No. 20, p. 19
2. Auerbach Grayson, (5. jun 2016.), www.agco.com
3. Banjalučka berza, (5. jun 2016.), www.blberza.com
4. Beogradska berza, (5. jun 2016.), www.belex.rs
5. Bloomberg, (2. jun 2016.), www.bloomberg.com
6. Bucharest Stock Exchange, (2. jun 2016.), www.bvb.ro
7. Budapest Stock Exchange, (2. jun 2016.), www.bse.hu
8. Deutsche Boerse, (2. jun 2016.), www.deutsche-boerse.com
9. East Capital, (2. jun 2016.), www.eastcapital.com
10. Financial Crisis Inquiry Commission. 2011. *Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States*, Washington DC: Financial Crisis Inquiry Commission, p. 70
11. Greenspan A. 1996. *The Challenge of Central Banking in a Democratic Society*, The Annual Dinner and Francis Boyer Lecture of The American Enterprise Institute for Public Policy Research, Washington, DC: Federal Reserve. www.federalreserve.gov
12. Kindleberger C. P. & Aliber R. Z. 2005. *Manias, Panics, and Crashes*. Hoboken, New Jersey: John Wiley and Sons, p. 25-30
13. London Stock Exchange, (2. jun 2016.), www.londonstockexchange.com
14. Ljubljana Stock Exchange, (5. jun 2016.), www.ljse.si
15. Makedonska berza, (5. jun 2016.), www.mse.mk
16. Mishkin F. S. & Eakins S. G. 2000. *Financial Markets and Institutions*. Reading: Addison-Wesley, p. 409-418
17. Montenegro berza, (5. jun 2016.), www.mnse.me
18. MSCI, (5. jun 2016.), www.msci.com
19. Nanto D. K. 2009. *The Global Financial Crisis: Analysis and Policy Implications*, Washington, DC: Congressional Research Service, 7-5700, RL34742, p. 8-16
20. Narodna banka Srbije, (5. jun 2016.), www.nbs.rs
21. NASDAQ, (2. jun 2016.), www.nasdaq.com
22. New York Stock Exchange, (2. jun 2016.), www.nyse.com
23. Reinhart C. M. & Rogoff S.K. 2009. *The Aftermath of Financial Crisis*, Cambridge: VBER Working Paper Series, WP 14656, p. 6
24. Sofia Stock Exchange, (5. jun 2016.), www.bse-sofia.bg
25. Vienna Initiative (6. jun 2016.), www.vienna-initiative.com
26. Zagrebačka berza, (5. jun 2016.), www.zse.hr
27. Zakon o preuzimanju akcionarskih društava (2. jun 2016.), Centralni registar hartija od vrednosti Republike Srbije, www.crhov.rs
28. Zakon o privatizaciji (2. jun 2016.), Ministarstvo privrede Republike Srbije, www.priv.rs

private or state companies, as a proof of the maturity of our capital market. Even though these problems are still present at the Belgrade Stock Exchange, foreign investors have kept a high participation in the stock trade in the period after 2010 (in May 2016 the participation of foreign investors in the total stock turnover was 44.8%, in share buying it was 41.9%, and in share selling it was 47.6%), but those are now very low absolute values compared to the period before the crisis.

The biggest loser in this crisis is definitely the Serbian stock market. In the country which, in the period between 2002 and 2008, was still at the crossroads in social, political and economic terms and with only a few years of transition experience behind it, the capital market and the Belgrade Stock Exchange could have had a very important role, as it was the case in Poland,

Czech Republic, and Romania. Even though the data from the Belgrade Stock Exchange from 2007, according to which over 2 000 companies were listed at our stock exchange with 16 billion Euros of market capitalization and more than 2 billion Euros turnover, were exceptional not only for Serbian, but also regional conditions, they were, nevertheless, not based on real foundations. This growth of stock exchange indicators was not a consequence of a big improvement in the Serbian economy, an increase in foreign investments, export, employment or the Serbian capital market quality, but was mostly based on speculative activities of foreign portfolio investors, followed by euphoria and enthusiasm of inexperienced domestic investors, which altogether led to the crash of the Serbian stock market.