

The Channels of Contagion in the Global Crisis: The Case of the Southeastern Europe (SEE-7) Countries

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Abstract: *Prior to the global crisis, the SEE-7 had a strong growth performance through increasing in exports and capital inflows. However, they also, just like developing countries, suffered from the global economic crisis. The purpose of this paper is to analyze through what channels the global crisis had an impact on economic activity of the SEE-7. Initially, we reviewed literature about contagion, including its definitions and its channels. We used panel data regression to analyze the impacts of external variables on GDP. According to empirical findings obtaining from the panel regression results, until the global crisis, the external variables significantly promoted the abilities of their growth. However, the contributions of external variables on their growth rate reduced sharply with the global crisis.*

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Introduction

Before 1980, economists viewed financial crises as individual events. Thus, the channels of transmission between countries received little attention. With the 1990s the outbreak of several crises such as ERM (1992), Mexican crisis (1994-95) and the Asian crisis (1997-98) changed the perception that crises were individual events. These crises had systemic characteristics being quickly transmitted to other countries (Armada, Leitao and Lobao, 2008).

The crises emanating from the emerging markets in 1990s impaired many countries with similar characteristics. Even some countries, which had been praised by market analysts and the multilateral institutions because of having apparently healthy fundamentals and policies, suffered from the crisis (Edwards, 2000). Economists have been interested in contagious crises since the second half of the 1990s. Up to now, countless papers, both theoretical and empirical, about “contagion” have been studied (Bekaert et al, 2012).

With occurrence of the global crisis in 2007, the first major one since the Great Depression, the contagion of financial crises has reappeared as an important issue. Although the crisis initially erupted in specific section of US' credit market, the sub-prime mortgage market, it has rapidly spread from developed countries to developing ones since last quarter of 2008. At the beginning of 2009, the crisis had significant implications for many developing countries. As a result, once again it triggered the debate about the presence of contagion.

Since 2008, the global crisis has started to undermine the Southeastern Europe Countries (the SEE-7). The SEE-7 consists of a group of countries, including Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, Montenegro, Serbia and Slovenia. They have some common characteristics as economically and politically. Firstly, they are new independent countries. Most of them gained their independence in the mid-1990s after a violent war with destructive effects as economically. Secondly, their transitions from centrally planned to market economies occurred in the same period. In 1990s because of the conditions of war and transition, these economies had to struggle with both economic and politic distresses. Finally, after war, they reached a high level of economic and financial openness and thus exposed to the risk coming with the global crisis.

The main reason of economic contractions of the SEE-7 countries was the sharp reduction of their export capacities and foreign capital inflows (Cocozza et al., 2011). Firstly, reducing in import demands of the developed countries shortened the export capabilities of other countries. Especially, small open economies like the SEE-7 the export-oriented rapidly began to slump. Because the largest trade partner of the SEE-7 countries is European Union, they also incurred aftermaths of the global crisis.

Secondly, the turmoil in the global credit markets led disappearance of the SEE-7 countries' financial facilities. Diminishing in inflows of foreign direct investments, portfolio equity and contradiction in total reserves reduced their growth rates. As long as capital inflows diminished, the SEE-7 countries' growth rate having been fuelled by the credit boom decreased. In addition, as their exchange rates depreciated, their real burden of foreign currency loans increased. Both their external debt stocks and interest payments on external debts rapidly rose. The extent of openness to flows of foreign direct investment has been a major cause of the transmission of the effects of the crisis for the region (Bartlett and Prica, 2011).

The purpose of this paper is to analyze through what channels the global crisis had an impact on economic activity of the SEE-7. Although many economists have examined how the global crisis affected the economic performance of the SEE-7, these papers are not based on an econometric analysis. Therefore, the main aim of the paper is to fill this gap and provide empirical evidences. The study analyses the effects of external variables, which many of them are components of the balances of payments, on GDP growth rate of SEE-7 in 2000-2010. The paper examines these effects in two different periods. The first, from 2000 to 2007, consists of the period prior to the global crisis. 2007-2010 represents post-crisis period. The study uses panel data regression to analyze the impacts of external variables on GDP.

The paper is structured as follows: Section 2 reviews some related theoretical literature about contagion. Section 3 is about contagion channels of the global crisis in the SEE-7 countries. In fourth section, an econometric analysis identifies the effects of external variables on GDP growth rates of the SEE-7 economies. Section 5 includes conclusions.

Contagion: A Literature Review

The fact that the crises spread more rapidly has been an unavoidable fate of more integrated world (Stiglitz, 2010). Thus, after seminal work of King and Wadhvani (1990) following the global October 1987 stock market crash, many economics have studied how crises were spread from a country to another.

Current literature has focused on especially three issues about “contagion”. The first of them is interested in definition of contagion. The second has been what are the channels through which financial crisis is transmitted across countries (Edwards, 2000). While at first many economists focused on trade linkages and macroeconomic similarities between economies, analyses that are more recent have examined the role of common investors through financial capital movements (Kannan and Köhler-Geib, 2009). The third is about possible mechanisms of avoiding the contagion.

King and Wadhvani (1990) investigated why all stock markets having different economic circumstances suffered from the stock market crash of October 1987. They claimed that “contagion” was as a result of effort by rational agents to deduce from price changes in other markets. Thus, a mistake in a market can spread to other markets. According to them, the correlation between markets rises after the crash.

Eichengreen et al. (1996) investigated whether currency crises spread from one country to another or not. Using thirty years of panel data from twenty developed countries, they concluded that crises were more likely to spread to countries that tied trade than to countries in similar fundamentals.

Glick and Rose (1998) argue that currency crises tend to be regional. Thus, contagion is related to geographic proximity. They claims that there are at least two different sorts of contagion. The first relies on macroeconomic or financial similarity. A crisis may spread from the initial target to another if the two countries share various economic features. Initially, they, like many economists, adopted that trade was the most important channel for contagion. They showed that currency crises influenced countries strongly tied by trade. According to them, macroeconomic and financial similarities are not important in contagion of crises.

According to Fratzscher (2000), “contagion” is defined as the transmission of a crisis to a country because of its real and financial interdependence with countries already suffering from a crisis. Fratzscher (2000) adopts that there are three channels of contagion. The first of them is the real interdependence among economies through trade competition (Fratzscher, 2000). A crisis generally spreads from an economy to another if they are sides of bilateral trade or strong competitors in third markets. A second is the financial interdependence among countries competing for bank lending in third markets. The countries can have at least two different financial linkages. The first are direct financial linkages that financial institutions may have large cross-border holdings. The second are indirect financial linkages, including a common lender decisions by institutional investors. The common lender can call loans and reject to give new credit. Again, institutional investors may withdraw funds both from the country that occurred crisis and from other countries. The third channel is herd behavior that arises from exogenous shifts in investor beliefs. Shifts in investor beliefs are related neither to country-specific fundamentals nor to interdependencies across economies.

Pericoli and Sbracia (2001) analyzed possible channels of contagion. They reviewed contagion definitions and its channels in literature. They used a simple multi-country asset-pricing model to shed light the contagion discussion. Their model produced how crises can spread from a country to another.

Forbes and Rigobon (2001) analyzed whether bond and stock market crash in Latin America spread or not. They classified contagion channels as two groups: crisis-contingent and non-crisis-contingent channels. While the former can change during a crisis, the latter does not change both in crisis times and in tranquil times also. Their results confirmed that contagion occurred via non-crisis-contingent channels, such as trade.

Caramazza et al. (2004) examined contagion in four categories: common shocks, trade spillovers, financial linkages and changes in investor sentiment. Common shocks, such as a surge in world interest rates, a reducing in world aggregate demand, a decline in commodity prices, or changes in exchange rates can simultaneously lead to pressures on the countries’ currencies. As a result, because of interaction of a common shock and domestic fundamentals may induce the simultaneous crises. They asserted that if a country suffered from a crisis because of a depreciation of its currency, trade spillovers could damage its trade partners. According to them, financial linkages also can be a channel of contagion effects. The outbreak of a crisis

in one country may induce investors to rebalance their portfolios. Investors having positions in one country that occur a crisis will reduce their positions to avoid increased risk exposure and will sell assets. Because crises increase financial vulnerability and fragility, some countries may incur capital outflows without worsening their macroeconomic fundamentals. Camarazza et al. (2004) also claim that changes in investor feelings might also play a major role in the contagion of crises. A crisis can move investors to reconsider the situation of their portfolios in other countries.

Bekaert et al (2011) examine a number of contagion channels. The first channel includes international banking sector links at the country level and the role of various financial policies being implemented during the crisis. The second channel consists of trade and financial linkages as a measurement of being of integrated globally (globalization hypothesis). Third, the presence of crises may reduce asymmetric information, as investors focus on easily available public information. As a result, this case may increase correlations. Fourth, the occurrence of a crisis in one country means that new information may prompt investors to reassess the vulnerability of other countries. The fifth channel is herd behavior or investors' risk appetite so that contagion may occur without discrimination at all. Missio and Watzka (2011) investigated by dynamic conditional correlation models whether contagion effects were identifiable during the Euro crisis or not. In addition, they also analyzed whether EU countries' problems originated by their fundamentals or not. Their results showed the presence of contagious effects during the Euro Crisis. Especially, Greek financial problems were transmitted by contagion to other EU countries, such as Portugal, Spain and Italy.

The Contagion Channels of the Global Crisis in the SEE-7

From the beginning of 2000s to 2008, the SEE-7 had a strong growth performance. All the SEE-7 countries experienced rapid increase of economic output pre-crisis. The policies of economic stability and restructuring seriously contributed to this achievement (Nero, 2010). In addition, increasing in their exports and capital inflows integrated them into the global economic system and provided a significant contribution of their growth performances. As a result, during 2000-2007, they had an average growth rate about 4.9 % (Table 1). However, in 2008-2010, the same rate reduced 0.9 %. Investments, remittances, industrial production, foreign exchange reserves and employment rates have fallen sharply. As a result, growth has slowed down (Ismail and Sahin, 2009). Especially, Slovenia, Croatia and Montenegro further suffered from the global crisis.

Table 1. Growth Rates, (%)

	Bosnia and Herzegovina	Croatia	Macedonia	Montenegro	Serbia	Kosovo	Slovenia
2000	5.5	3.8	4.5	3.1	5.3		4.3
2001	4.4	3.7	-4.5	1.1	5.3	27.0	2.9
2002	5.3	4.9	0.9	1.9	4.1	-0.7	3.8
2003	4.0	5.4	2.8	2.5	2.7	5.4	2.9
2004	6.1	4.1	4.6	4.4	9.3	2.6	4.4
2005	5.0	4.3	4.4	4.2	5.4	3.8	4.0
2006	6.2	4.9	5.0	8.6	3.6	6.0	5.8
2007	6.8	5.1	6.1	10.7	5.4	6.3	6.9
2000-07	5.4	4.5	3.0	4.6	5.1	7.2	4.4
2008	5.4	2.2	5.0	6.9	3.8	6.9	3.6
2009	-2.9	-6.0	-0.9	-5.7	-3.5	2.9	-8.0
2010	0.8	-1.2	1.8	2.5	1.0	4.0	1.4
2008-10	1.1	-1.7	1.9	1.2	0.4	4.6	-1.0

According to Stiblar (2009), they were small and weak local capital markets, overdependence on capital inflows from Western Europe. They were highly dependent on external inflows of money, either capital investments or loans, and foreign financial aid. Sanfey (2010) argued that during the past decade, the SEE-7

has experienced a serious transformation such as economic development, democratic reforms, and integration into global economic and financial markets. On the other hand, the SEE-7 countries had huge current account deficits and thus needed foreign credit or investments (Gligorov and Landesmann, 2009).

Beltramello et al. (2009) described the global crisis as an “imported” crisis, because its origin was countries in Western Europe and North America. Due to falling demand from key EU trade partners, the region’s exports declined substantially. According to Risteski and Trpkova (2009), the main channels of the crisis were trade shocks, lower remittances and lower foreign direct investments. As a result, credit growth decelerated and domestic demand shrunk.

According to Jerger and Knogler, (2009), the first of contagion channel of the crisis was decline of export demand. Decline in export demand obviously became more painful for countries with high export dependence. Export of goods and services as a percentage of GDP in Slovenia, Macedonia and Croatia is respectively 67%, 50% and 42% in 2008. The second leading channel was a considerable amount of debt denominated in foreign currencies. The burden of this debt increased with devaluation of the domestic currency.

Bartlett and Monastiriotis (2010) claimed that as the SEE banking systems were not directly exposed to ‘toxic assets’, the crisis was transmitted to the region through a number of indirect channels. These included a contraction of international trade, a sudden stop to credit growth, a rapid fall in inflows of foreign direct investment. Over the last decade, foreign investors reached extensive opportunities, besides the banking sector, in telecommunications, energy and other sectors opened up by privatization.

According to IMF (2009), the SEE–7 suffered from the global crisis more than in previous ones, because they were more integrated with the global economy via trade, FDI, and remittances. The crisis significantly influenced these countries through reduced demand for their exports. Rising interest rates increased debt service costs. Increasing trade and financial links with the outside world also imply a greater dependence on external conditions. Because the slowdown in global growth reduced trade, remittances, foreign direct investment, these factors had a major impact on the SEE–7. Tightened global liquidity conditions adversely affected financing facilities.

The SEE-7 countries developed a model of growth dependent on capital inflows from abroad; with the global credit crunch undermined their ability to maintain this growth strategy (UN, 2009). The growth financed by short-term and external bank borrowing came to a sudden stop in 2008 (IMF, 2011).

Sewel (2011) argued that transmission mechanism of the crisis was not the banking and financial system. Rather the serious decline in export markets and the collapse of foreign direct investment that had the origin of recent growth and development in the region adversely affected their performance. Virtually all of the SEE-7 had current account deficits prior to the crisis. Generally, current account deficits are quite normal for such developing countries in the beginning of growth. The first growth spurt is frequently financed by inflows of investment, capital goods and equipment. Moreover, their physical capital legacy had already become old largely. Thus, they needed new enormous investment facilities as both physical and financial capital stocks (Gallego, 2010). Until the global crisis, the availability of export facilities and significant capital inflows for SEE-7 have helped finance their growth spurt (Sewel, 2011).

Jovicic (2009) studied the relationship between the degree of trade integration to the EU market and the timing and intensity of the onset of the crisis effects among the Western Balkan countries. She found that while those with a high degree of trade integration experienced the crisis sooner, those with a lower degree of integration experienced a larger decrease in production.

Econometric Model and Results

From 2000 to 2010, the dataset is composed of annual data for the SEE-7 countries. These countries are Croatia, Serbia, Montenegro, Macedonia, Kosovo, Bosnia and Herzegovina and Slovenia. Annual data obtained from the World Bank's World Development Indicators (WDI). The study using panel data regression analyzes the impacts of external variables on GDP during the global crisis and in pre-crisis period. To compare crisis period with the pre-crisis period it is analyzed 2000-2007 and 2000-2010 separately. The aim is to examine in both period data set.

Data set consists of 10 variables. The dependent variable is Gross Domestic Product (GDP) as a change of percentage. As a share of percent of GDP the independent variables are Foreign Direct Investment (FDI), Private Capital Flows (PCF), Portfolio Equity (POE), Total Reserves (TOR), Export of Goods and Service (EXP), Import of Goods and Service (IMP), Official Exchange Rate (OER), External Debt Stocks (EDS), and Interest Payments on External Debt (IPE).

The paper has four different models analyzing the impacts of external variables on GDP growth rate.

$$GDP_{it} = \alpha + \beta_0 + \beta_1 FDI_{it} + \beta_2 PCF_{it} + \beta_3 POE_{it} + \beta_4 TOR_{it} + \varepsilon_{it} \quad (2)$$

$$GDP_{it} = \alpha + \beta_0 + \beta_1 EXP_{it} + \beta_2 IMP_{it} + \beta_3 OER_{it} + \varepsilon_{it} \quad (3)$$

$$GDP_{it} = \alpha + \beta_0 + \beta_1 EDS_{it} + \beta_2 IPEIPE_{it} + \varepsilon_{it} \quad (4)$$

$$GDP_{it} = \alpha + \beta_0 + \beta_1 FDI_{it} + \beta_2 PFC_{it} + \beta_3 POE_{it} + \beta_4 TOR_{it} + \beta_5 EXP_{it} + \beta_6 IMP_{it} + \beta_7 OER_{it} + \beta_8 EDS_{it} + \beta_9 IPE_{it} + \varepsilon_{it} \quad (5)$$

To estimate models, it uses the OLS method. Firstly, to eliminate the problem of Poisson regression, unit roots are tested for each variable. Levin, Lin, Chu (*LLC*) and Im, Pesaran, Shin (*IPS*) unit root results are in Table 2. According to Table 2, all variables are stationary in the first level I (1).

Table 2. The Results of Panel Unit Root Test

Variables	Levin, Lin, Chu		Im, Pesaran, Shin	
	t statistic	Results	W statistic	Results
GDP	-1,734**	I(1)	-1,435*	I(1)
FDI	-4,056***	I(1)	-1,953**	I(1)
PCF	-3,065***	I(1)	-1,386*	I(1)
POE	-1,879**	I(1)	-2,372***	I(1)
TOR	-5,083***	I(1)	-2,471***	I(1)
EXP	-4,199***	I(1)	-1,825**	I(1)
IMP	-1,665**	I(1)	-1,206*	I(1)
OER	-5,298***	I(1)	-4,949***	I(1)
EDS	-3,044***	I(1)	-1,777**	I(1)
IPE	-5,331***	I(1)	-3,104***	I(1)

Secondly, it is investigated whether the problems of autocorrelation and heteroskedasticity. The availability of autocorrelation problem is tested by Wooldridge test; the availability of heteroskedasticity problem is analyzed by Wald test. In models it is implemented *Estimated Generalized Least Squares (EGLS)* to eliminate the autocorrelation problem. *White's cross section coefficient covariance method* is applied to eliminate heteroskedasticity problem.

Thirdly, it is determined the method (fixed effects or random effects) to estimate the models using the Hausman test. Finally, in estimating the models, it is analyzed two different periods (2000-2007 and 2000-2010) separately (Table 3).

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Table 3. The Results

Variables	2000-2007				2000-2010			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
FDI	-0.016 (-0.002)			3.864 (1.257)	21.648* (1.897)			5.240 (1.355)
PCF	4.933 (0.536)			-2.580 (-0.362)	- (-0.807)	18.975		1.366 (0.138)
POE	-8.658** (2.167)			- 5.199*** (-2.860)	- 29.576*** (-2.888)			- 16.367** (-1.097)
TOR	-8.248 (-1.565)			0.767 (0.133)	-21.425 (-1.255)			-8.099 (0.133)
EXP		-1.626 (-1.579)		-2.507** (-2.677)		19.800 (0.874)		11.939 (1.216)
IMP		-0.630 (-0.998)		-0.299 (-0.614)		- 3.283** (-2.290)		4.124 (0.758)
OER		-10.962 (-1.095)		-15.80* (-1.725)		- 22.307 (-1.463)		-9.734 (-1.288)
EDS			3.515 (1.228)	6.400** (2.187)			-7.444 (-0.960)	-5.511** (-2.063)
IPE			-1.493 (-0.202)	4.389 (0.985)			- 32.843 (-1.173)	-8.676 (-1.042)
R ²	0.813	0.809	0.803	0.873	0.177	0.187	0.145	0.452
Adj R ²	0.787	0.788	0.788	0.832	0.105	0.131	0.102	0.347
F statistic	0.000	0.000	0.000	0.000	0.043	0.015	0.024	0.000
N	42	42	42	42	63	63	63	63
D-W	2,079	2.108	2.217	2.225	2.194	2.147	2.029	2.021
Woolridge test	0,003	0,007	0,001	0,005	0,001	0,005	0,001	0,004
Wald test	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Hausman test	RE	RE	RE	RE	RE	RE	RE	RE

* Significant at 10%; ** significant at 5%; *** significant at 1%; t values in brackets.

Table 3 shows the results from panel OLS regressions for the SEE-7 countries in two different periods that are 2000-2007 and 2000-2010. It is estimated four models for each period. Model 1 includes four variables that foreign direct investment, private capital flows, portfolio equity and total reserves. Model 2 consists of three variables that are export, import and official exchange rate. Model 3 comprises only two variables that are external debt stock and interest payments on external debt. Model 4 have all variables in other models.

Although, for each variable, it is not obtained enough significant results from the panel regressions, these models reveal a striking empirical evident coinciding with a main hypothesis of this paper. Adjusted R^2 has higher values in 2000-2007 than 2000-2010 does. In other words, the models for 2000-2007 have more explanatory power than 2000-2010 do. The effects of external variables on GDP growth rate in the SEE-7 countries are further in the pre - crisis period. From 2000 to 2007, in other words until the global crisis, the external variables contributed to growth performances of these economies. However, the impacts of external variables on GDP growth rate naturally reduced sharply during the crisis. For example, in model 4 including all variables, while adjusted R^2 is 0.832 for 2000-2007, the same value is only 0.347 for 2000-2010.

Conclusions

With occurrence of the global crisis, the contagion of financial crises has reappeared as an important issue. The crisis has rapidly spread from developed countries to developing ones since last quarter of 2008. As a result, once again it triggered the debate about the presence of contagion.

Since 2008, the global crisis has started to undermine the Southeastern Europe Countries (the SEE-7). The impacts of the global crisis were transmitted across the SEE-7 countries by two different channels. The first of contagion channels of the global crisis is a deficiency of import demand of the developed countries shortening the export capabilities of other countries. The second of them is the disappearance of their financial facilities because of turmoil in the global finance and capital markets. Although many economists have examined how the global crisis affected the economic performance of the SEE-7, these papers are not based on an econometric analysis. The purpose of this paper is to analyze through what channels the global crisis had an impact on economic activity of the SEE-7. Initially, we have reviewed the theoretical and empirical literatures on contagion. Then, we used panel data

regression to analyze the effects of external variables on GDP growth rate in the SEE-7 in two different periods. 2000-2007 is the period of pre-crisis. 2007-2010 comprises the post-crisis period. Thus, it is possible to compare with two different periods with respect to impacts of external indicators. According to empirical findings from the panel regression results, until the global crisis, the external variables significantly contributed to growth performances of these economies. However, the impacts of external variables on GDP growth rate naturally reduced sharply during the crisis. Our evidence is consistent with the hypothesis that currency crises spread because of trade linkages.

References

- Armada, M. R., Leitao, J., & Lobao, J. (2008). The contagion effects of financial crises on stock markets of developed countries. *NEGE, Working Papers*.
- Bartlett, W., & Monastiriotis, V. (2010). South east Europe after the economic crisis: a new dawn or back to business as usual?, *London School of Economics and Political Science: LSE European Institute*, 242-251.
- Bartlett, W., & Prica, I. (2011). The variable impact of the global economic crisis in south east Europe, *Economic Annals*, Volume LVI, No. 191, 7-34.
- Bekaert, G., Ehrmann, M., Fratzscher, M., & Mehl A. (2011). Global crises and equity market contagion. *NBER, Working Paper No. 17121*.
- Beltramello, A., Cruickshank-Valencia, E., & Hengel E. (2009). The global financial crisis: preliminary evidence in south east europe and responses from governments, *SEE Investment Committee*, Tuesday, 7 April Brussels.
- Caramazza, F., Ricci, L., & Salgado, R. (2004). International financial contagion in currency crises. *Journal of International Money and Finance*, 51–70.
- Cocozza, E., Colabella, A., & Spadafora, F. (2011). The impact of the global crisis on south-eastern Europe, *IMF, WP/11/300*.
- Edwards, S. (2000). Contagion. *University of California, Los Angeles and National Bureau of Economic Research*.
- Eichengreen, B., Rose, A., & Wyplosz, C. (1996). Contagious currency crises. *NBER Working Paper 5681*.
- Ergin, I., & Sahin, S. (2009). Global financial crisis and its impact on Balkans, *1. International Symposium on Sustainable Development*, June 9-10, Sarajevo.

Forbes, K., & Rigobon, R. (2001). Contagion in Latin America: definitions, measurement, and policy implications. *Economia*, 1 (2).

Fratzscher, M. (2000). On currency crises and contagion, *The Institute for International Economics*, Number 00-9.

Gallego, S., Gardo, S., Martin, R., Molina, L., & Serena, J.M. (2010). The impact of the global economic and financial crisis on central eastern and southeastern Europe (CESEE) and Latin America, *Banco De Espano*, Documentos Ocasionales, No. 1002,

Glick, R., & Rose, A.K. (1998). Contagion and trade: why are currency crises regional? *Center for Pacific Basin Monetary and Economic Studies Economic Research Department Federal Reserve Bank of San Francisco*. Working Paper PB98-03

Gligorov, G., & Landesmann, M. (2009). What is to be done? a policy note, *The Vienna Institute for International Economic Studies*.

IMF. (2009). The implications of the global financial crisis for low-income countries, *IMF Multimedia Services Division*, March.

IMF. (2011). Republic of Slovenia: 2011 Article IV Consultation—Staff Report; Public Information Notice on the Executive Board Discussion; Staff Statement; and Statement by the Executive Director for Slovenia, May, *IMF Country Report* No. 11/121.

Jerger, J., & Knogler, M. (2009). The economic and financial crisis in southeastern Europe, *International Scientific Conference: Challenges of the World Economic Crisis*, Nis, October 15-16th.

Jovicic, M. (2009). The onset of the economic crisis in the west Balkans. *The conference on Economic Policy and Global Recession*. Belgrade, 25-27 September.

Kannan, P., & Köhler-Geib, F. (2009). The Uncertainty Channel of Contagion. *IMF*, Working Papers 219.

King, M.A., & Wadhvani, S. (1990). Transmission of volatility between stock markets. *The Review of Financial Studies*, Vol.3, No.1, 5-33.

Missio, S., & Watzka, S. (2011). Financial Contagion and the European Debt Crisis. *CESIFO*, Working Paper No. 3554.

- Nero, V.W. (2010) Economic and Labour Market Impacts of the Global Economic and Financial Crisis on the Countries of the Western Balkans and Moldova, March. http://www.ilo.org/public/english/region/eurpro/geneval/download/ecosoc_crisisimpact_wes tbalkan.pdf
- Pericoli, M., & Sbracia, M. (2001). A Primer on Financial Contagion. *BANCA D'ITALIA*, Temi di discussion. No. 407.
- Risteski, S., & Trpkova, M.Sc. M. (2010) Global Economic Crisis and its Impact on the Western Balkan Countries Labor Markets, *The Young Economists Journal*, Vol. 1, issue 15. 96-107.
- Sanfey, P. (2010). Southeastern Europe: lessons from the global economic crisis, *European Bank for Reconstruction and Development*, Working Paper No. 113.
- Sewel, J. (2011). The Balkan economies: regional roadblocks, European distractions and global crisis, *NATO Parliamentary Assembly*.
- Stiblar, F. (2009). *The Impact of the Global Crisis on Montenegro and the Western Balkans*, published by Central Bank of Montenegro.
- Stiglitz, J. E. (2010). Contagion, liberalization, and the optimal structure of globalization. *Journal of globalization and development*. Volume 1, Issue 2.
- UN. (2009). The global financial crisis: impact and response of the regional commissions. <http://www.un.org/regionalcommissions/crisis/global.pdf>.