Considerations on the Impact of the Global Financial Crisis on Economies from Eastern Europe

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Abstract

The paper investigates the causes and consequences of the 2007-2008 global financial crisis on five Eastern European countries, namely the Czech Republic, Hungary, Poland, Romania and Russia, with the purpose of identifying the common points and the differences between these economies in terms of crisis impact, with an accent on their capital markets. Our findings indicate that although the countries under scrutiny have displayed somehow different paths of economic development before the crisis, they were affected, to a higher or smaller extent, by the financial crisis. Also, the crisis was felt in these countries, at least in terms of impact on capital markets, with different lags: in some of these countries the crisis hit at beginning of 2008, while in others signs of the crisis were visible only towards the end of 2008.

Key words: Eastern Europe, crisis, stock market, volatility
J.E.L. classification: F00, G01, G15

1. Introduction

The emerging economic and financial globalization in recent years has been much more rapid that our understanding of all ingredients associated with this phenomenon of globalization. Today, all individual markets are more and more interconnected and integrated, and this is the reason why the term "global market" is becoming more relevant day by day. This reasoning is also valid for capital markets worldwide. The integration of financial markets has become a major subject for contemporary economists that consider that the phenomenon of globalization and integration is best illustrated in these markets. The subprime crisis that emerged in 2007 in the United States of America rapidly burst into the worst global financial crisis after the Great Depression, affecting countries worldwide. This paper investigates the causes and consequences of the crisis on five Eastern European countries, namely the Czech Republic, Hungary, Poland, Romania and Russia, with the purpose of identifying the common points and the differences between these economies in terms of crisis impact, with an accent on their capital markets.

2. An overview of crisis in Eastern European countries

Eastern European countries that are members of the European Union (EEC) – namely the Czech Republic, Hungary, Poland, and Romania - have pursued a distinctive model of development since the beginning of their transition. Their approach has been based on political and economic integration with the EU, including institutional development, trade integration, financial integration and labor mobility. The low level of physical capital, the prospect of eventual EU integration and the related improvement in the business climate, the generally highly educated labor force and low level of wages, and finally, the low level of domestic credit offering the potential for substantial credit expansion were the main supply-side factors for capital flows into these countries. Capital inflows have indeed exploited and also fuelled the economic growth potential of these countries

and consequently Eastern European countries have reached high levels of integration.

This development model has led to a remarkable increase in total factor productivity (TFP). Total factor productivity growth in these countries during 1995-2005 was faster than in any other region of the world although it slowed during 2005-08. While the development model of these countries had many common features, when considering various indicators different groups within the region can be identified. In Poland and the Czech Republic the average current account deficit has remained reasonably low in the run-up to the crisis despite the existence of a strong negative relationship between GDP growth and current-account imbalances before the crisis. In contrast, the current account deficit in Romania and Hungary was very high (Darvas, 2010).

There are many other factors that differentiate between countries in the region (Becker et al., 2010, and Darvas, 2010). Specifically, external indebtedness in Romania rose much faster than in Poland or the Czech Republic owing to the accumulation of large current account deficits; capital inflows into real estate and financial services were dominant in Romania, while investment in manufacturing was much more significant in the Czech Republic, Hungary, Poland; gains in export market share was more pronounced in Poland, the Czech Republic, Hungary than in other countries; inflation was higher in Romania and Hungary than in the remaining two countries; real interest rates were lower in countries with higher inflation rates; credit growth was much faster and the composition of credit was highly biased in favor of foreign currency loans in Romania and Hungary than in the other two countries; housing price booms emerged in Romania, while housing price increases were modest in the other three countries; the real exchange rate appreciation rose strongly in Romania, and less in the other three countries. Similarly, nominal interest rate convergence and higher inflation pushed down real interest rates in all Eastern European countries, but again with large variation across the countries. Low and even negative real interest rates in Romania likely contributed to the unsustainable credit and housing booms in this country, in addition to supply side factors related to foreign bank ownership and the improved legal environment due to EU admission (Darvas 2010).

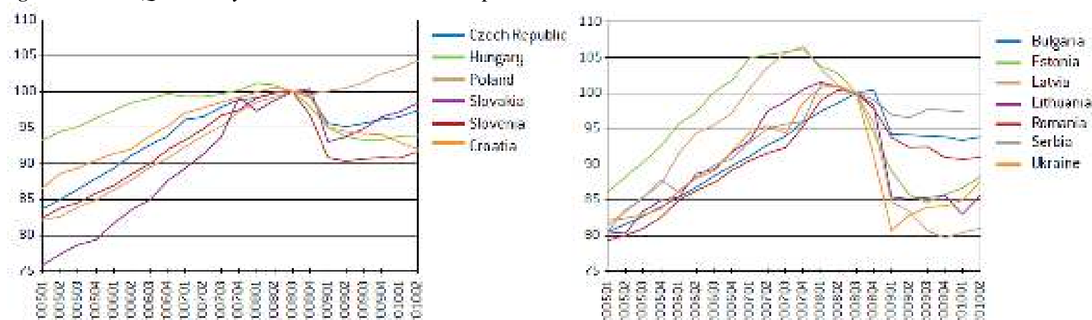
As a consequence of these developments, and in particular of high external indebtedness and large current account deficit, Romania entered the crisis more vulnerable than many other emerging countries, including the largest economies in the region, Poland and the Czech Republic. Hungary was also vulnerable due to low confidence in its economic policies, high external debt, large foreign currency loans, and slow economic growth since the mid 2000s. Exchange rate policy had also a crucial importance. Fiscal policy was less of a cause, even though most countries followed pro-cyclical policies before the crisis. In many countries, expenditure was growing very rapidly driven by demand-boom fueled revenue surge (Darvas, 2010). Domestic financial regulation and supervision may have not been cautious enough before the crisis, but there is anyway little room for domestic regulatory measures in a financially integrated environment (Becker et al., 2010). The sometime reckless lending practices of banks certainly had played a role.

Until the third quarter of 2008 - the collapse of Lehman Brothers, no Eastern European country was hit by the crisis (see Figure 1), but the disruption of financial markets after the collapse of Lehman Brothers, the rapid collapse in global trade and the bearish market sentiment, sent most of the world's economies into a slide. This region was particularly hit: in fact it was the hardest hit (along with former Soviet countries). The economic outlook was revised downward many times and GDP fell substantially in several Eastern European countries. The depth of the output fall and the shape of the subsequent recovery in the Eastern European countries were remarkable. Poland has avoided a recession, but in other countries in the region the speed of recovery was either modest or had not yet started by the first quarter of 2010.

Eastern European countries have been generally badly affected by the global financial crisis and economic downturn in 2008. The impact on growth has varied but weak demand for commodities and exports, as well as the drying-up of international liquidity had its repercussions. As elsewhere in the world, businesses and consumers faced challenging times. The scale of the financial crisis of 2008 and the subsequent recession are clearly evident from the data presented in Table 1. This shows dramatic falls in GDP in Hungary and Romania, significantly above the EU average of 4.2 percent, although Poland and the Czech Republic saw slight increases in their GDP. At the same time, in all four CEE countries government deficit was higher compared to the EU average, and unemployment rose to higher levels compared to EU in Hungary and Poland and remained at

values below the EU average, but still high, in Romania and Czech Republic.

Figure no. 1. Quarterly GDP in Eastern European countries, 2005-2010



Source: Becker et al., 2010

The crisis hit the Central and Eastern European countries in the EU through two channels. A massive contraction of lending was triggered in financial institutions exposed by toxic debts, which, with the crash of property prices in some host countries, reduced the willingness of financial markets to finance sovereign debt (Mitra et al., 2009). The subsequent recession reduced demand for exports in Western Europe, having a negative impact on production and employment in small economies like the Czech and Slovak Republics, and Estonia and Hungary where exports accounted for 70 and 80 percent of GDP in 2008. To a lesser extent, this was also the case for the larger economies of Poland and Romania.

One of the impacts of integration with the EU and global economy was the domination of the banking systems of CEE by mainly Western European or US banks and finance companies. Capital inflows were larger in this part of Europe and fell more severely during the crisis. Therefore risk was transferred from Western European parent banks to affiliates in countries of CEE. The growth of credit was driven by households borrowing excessively trying to boost their living standards, and fuelled by the ability to borrow in foreign currency with a lower interest rate and longer payback period than local finance. The period from 2003 to 2006 was a period of historically high global liquidity. Lending to ordinary people in these economies in foreign currencies was analogous to lending to poor people in the US—the so-called subprime market—where banks built up profits by lending to people irrespective of whether they could repay their debts.

Table no. 1: Selected economic indicators, 2009/2010

Country	Real GDP growth percentage (2009)	Government deficit as percentage of GDP (2009)	Unemployment (Q1, 2010)
Hungary	-6.3	-4.0	10.4
Czech Republic	-4.1	-5.9	7.4
Poland	+1.7	-7.1	9.6
Romania	-7.1	-8.3	7.4
EU 27 average	-4.2	-3.9	8.9

Source: http://ec.europa.eu/eurostat

In general the integration of these economies with the European and global economies has shaped the nature of their vulnerability, but in the same way that the crisis has unfolded in different ways in economies of Western and Southern Europe, its scale and nature have been different in the former Communist countries of the EU.

Previously we have considered the case of the countries belonging to the European Union, excluding Russia. The economic and financial crisis that raged across the globe in 2008–09 hit the Russian economy hard too. Hailed as an economic miracle until 2008, the country saw its GDP tumble by 8 percent in 2009 and the stock market plunge by 80 percent from May to October 2008. A sharp decline in the price of oil and other commodities as well as capital outflows put the economy in a tailspin. Since the global crisis hit, some of Russia's largest companies have gone bankrupt, Russia has spent $200 billion of its foreign currency reserves to stabilize the ruble, and

unemployment has surged (Aslund et al., 2010).

Regarding Russia's economy, Gaddy and Ickes (2010) grouped in three main categories the main elements leading to the Russian financial crisis. First, the crisis has reminded the world of how deeply dependent Russia is on oil and gas. Looking at the period before the crisis, during the crisis, and now in the rebound, the picture is unambiguous. Very few important developments, positive or negative, cannot be traced back to fluctuations in the volume of wealth—the rents—that accrue to Russia from these resources. Second, Russia is addicted to the resource rents. The concept of addiction means more than dependence alone: addiction refers to a specific condition in which there is an imperative to allocate rents to the backward production structure that Russia inherited from the Soviet Union. Addiction's most significant feature is that it is self-reinforcing, which means that it continually deepens and reproduces backwardness and inefficiency in the Russian economy. Third, Russia, like all resource-abundant economies, has a specific system of management of its resource rents. Because of the overwhelming importance of the rents in Russia, the rent management system is the key to the entire political economy. Fundamental changes in the political economy of Russia are necessarily changes to the rent management system.

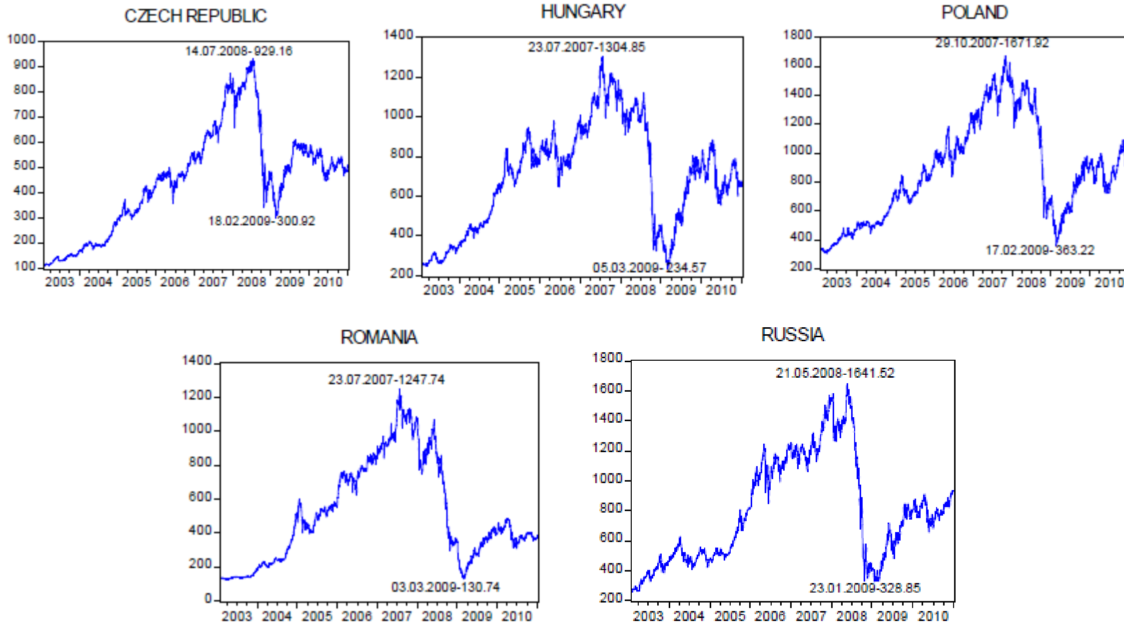
3. Financial crisis impact on capital markets

When we consider the crisis impact on financial markets in the region, the simplest and quickest way to observe it is to take a look at stock market indices and returns before and after the crisis. Figure 2 presents the evolution of indices for the five countries analyzed in our study, from 2003 to 2010. We also take a look at a major sign of crisis in capital markets: an increase in volatility.

All the indices values were provided by Morgan Stanley Capital International, except for Romania, where the Bucharest Stock Exchange BET index was used. The indices are denominated in US dollars and cover the January 31st 2003- January 3rd 2011, counting 2067 observations for each country. A visual description of the data is synthesized in Figure 2.

The five selected East-European countries' capital market indexes have been appreciating on a merely constant trend until the crisis. Hungary and Romania attained a maximum price for 2003-2011 first, in July 2007, being followed by Poland in October 2007, Russia in May 2008, and by the Czech Republic in July 2008. These countries were affected by the global financial crisis, which raised concerns about the sustainability and desirability of their unique pre-crisis growth model, primarily based on deep financial and trade integration (excluding Russia). But a closer look at these countries suggests that there is considerable heterogeneity within the region: in some of the countries pre-crisis growth was characterized by the buildup of a strong tradable sector, but in other countries investments were biased toward non-tradable sectors, and in particular, toward the real estate sector, and growth was accompanied by growing internal and external imbalances.

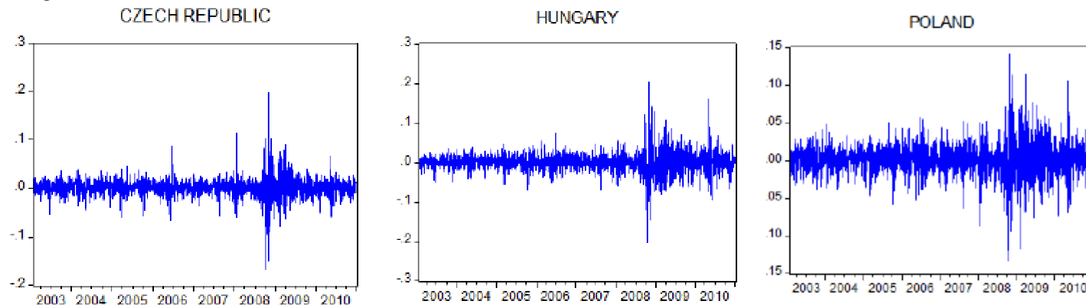
Figure no. 2: Stock market indices in Eastern Europe, 2003-2010

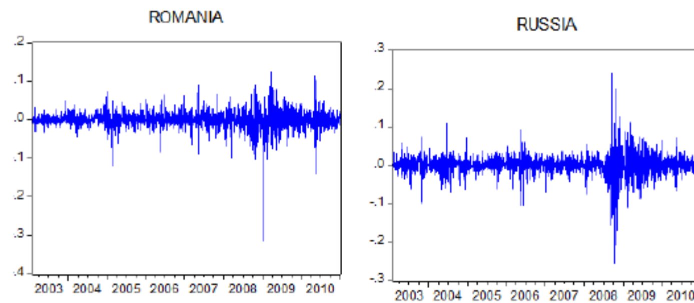


All countries have been affected by the crisis in the same period – 2nd and 3rd trimester of 2008 - a year distance from the emerging of the subprime crisis in the USA. Russia is the first country to hit bottom rock, in January 2009, its stock market index reaching almost the value of the beginning of 2003, depreciating by approximately 500%. Next are Poland and the Czech Republic, in February 2009. An important thing to be kept in mind is that within the five countries selected, the Czech Republic was the least affected by the crisis, as pointed by the graph. It is the only country that has seen its capital price index to depreciate only by 300%. Hungary and Romania attained their minimum in which is considered the stock index in March 2009, the prices reaching a value smaller than the ones in the beginning of 2003.

Figure 3 illustrates the logarithmic returns of the stock market indexes for Romania, Hungary, Poland, the Czech Republic and Russia. As expected, returns during the crisis have been accompanied by an increase of volatility starting with the end of 2008 until the end of 2010 - beginning of 2011 when they adjusted to fit the pre-crisis trend. The graphs emphasize the fact that the Czech Republic was the least affected by the crisis and was the first to start recovering from the global financial crisis.

Figure 3: Stock market returns, 2003-2010





4. Conclusions

Our paper investigated the main features of the financial crisis on five Eastern European countries - Czech Republic, Hungary, Poland, Romania and Russia, with the purpose of identifying similarities and differences between them in terms of crisis impact, with a focus on their capital markets. We also observed increases in returns' volatilities as a major sign of crisis in capital markets. Our findings indicate that although these countries have pursued somehow different paths of economic development before the crisis, they were affected almost simultaneously by the financial crisis. Also, the crisis was felt in these countries, at least in terms of impact on capital markets, with different lags: in some of these countries the crisis hit at beginning of 2008, while in others signs of the crisis were visible only towards the end of 2008.

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