From credit boom to credit crunch in CESEE countries

DOI: 10.46932/sfjdv4n3-018

Received in: May 05th, 2023
Accepted in: June 06th, 2023

Rilind Ademi
PhD in Economics
Institution: University Mother Teresa Skopje, North Macedonia
Address: Mirce Acev, No. 4, Skopje, 1000
E-mail: rilind.ademi@unt.edu.mk

ABSTRACT
A development in the banking market and bank credit oriented towards the private sector is a key factor for the economic development of the country. Before the appearance of the financial crisis of 2008, credit growth in the CESEE countries was double-digit, raising the concern of an excessive credit growth which could cause the economy to overheat. The global financial crisis significantly reduced bank credit rates to the private sector mainly as a result of the reduction in capital movements that parent banks made to their subsidiaries in the CESEE countries. The purpose of the paper is to convey how these reductions in credit rates caused effects on important economic variables such as economic growth, inflation, non-performing loans. We also try to see what the response of the monetary authorities was during the crisis, where some countries also faced inflationary pressures.

Keywords: financial crisis, bank credit, CESEE countries, economic growth.

1 INTRODUCTION
In the spring of 2007, the crisis in the US subprime market, extended and quickly affected the world, especially in Europe. In an integrated financial world, where many assets are traded in the international markets, the infectious effects were immediate and significant. At its financial core, the crisis that erupted in 2007 had its origins in two important events: in the "American real estate bubble of the 2000’s and the colossal losses those financial institutions and US banks were due to the "subprime crisis". Its implication with the declining values in the stock exchange and the bankruptcy of many banks, insurance companies or other financial organizations, during six months of the second half of 2008 meant that the financial crash situation tumbled into a systemic crisis and economic recession that infected the entire world. The main burden of this crisis, evident in government strategies and policies that dealt with the crisis, fell on public finances, and this provoked deterioration of public deficits, consolidation of internal and external debts (Civici, 2011).

Even in Europe the crisis spread throughout many channels, most being closely related to cross-border financing and banking relationships. In this context, the liquidity channel was in critical condition, with loss of liquidity, driven by major global banks. There was a large drop in the movement of capital
compared to pre-crisis levels. There was also a decline of cross-border claims, and as a result, banks were ordered to somehow consolidate the domestic banking system.

Also in CEE (Central-East Europe) and SEE (South-East Europe) countries, the credit growth stages were brought to an end by the escalation of the global financial crisis, and in developed countries, as well as developing countries, the financial crisis had obvious repercussions. The credit growth dropped to very low levels, and in some countries resulted in negative values. The premise for credit risk rose, while important economic indicators, FDI inflows, industrial production and exports deteriorated. The economic activity contracted very quickly, with many countries from the region experiencing large declines in industrial production and bank lending weakened over time. The region grew by an average of 6% in real economic growth (Quarter 1 2005 to Quarter 3 2008) shaded are (figure 1, pink part). However, with the presentation of the financial crisis this growth was interrupted, especially after the collapse of the Lehman Brothers, the fourth largest US investment bank. The period from third quarter (Q3) of 2008 to the second quarter (Q2) of 2010 displayed negative economic growth, to -2.8% (blue shaded are, Figure 1). For this region, before the crisis, most countries had high deficits in current accounts, supported by capital inflows from abroad, and crediting was denominated in foreign currency with some banking systems of the Eurozone having a relatively large share in the region. With the crisis, which in the region occurred in the last quarter of 2008, the banking sector was affected by direct, indirect and secondary channels. Losses, as a result of the changes in costs of the "toxic" financial instruments, in the portfolios of financial institutions, as direct channels and transmitters of the crisis, were limited because the countries of the region lacked high level integration into global financial markets. In addition, these countries failed to reach a certain fulfillment of financial instruments to be traded. Nevertheless, the countries of the region were affected by indirect channels that were associated with developments in assets, goods and capital flows that led to the deterioration of skilled investors.

The loss of confidence by investors affected markets throughout international exchanges, and this had repercussions on the real economy through reduced consumption and investment activity. Also, local currencies were weakened, and this led to inflation, which was also a challenge for the banking systems of countries that had issued the highest credit value in foreign currency. In addition, the reduction (or termination) of capital flows affected corporations and banks that depended on foreign funds, while foreign banks began the process of delivering (reduction of the level of bank debts), and set the exposure to these markets. At the same time, banks reacted by strengthening their capital, reducing trading assets and excessive lending and focusing on key deposits as a funding source. The secondary effects pertained to the return of cycles of economic activity that had negative impacts on financial institutions through the deteriorating quality of loans, growth of non-functional loans, reduction of profitability, and problems in maintaining adequate capital (Gallego, 2010).
The purpose of this article is to see the channels of influence on the economy of the CESEE countries during the financial crisis of 2008, and on the other hand the study of the subsequent effects on the economy of these countries.

2 BANK CREDIT MARKET AND ECONOMIC VARIABLES

The credit growth rates fell several times. A growth rate of 31% on average in the region over 2008-2014 fell to an annual increasing rate in loans of only 3.38% (Table 1). An analysis of the quarterly biases, data showed that the average before the crisis was 6.62%, and with the occurrence of the crisis, the credit growth rate fell to 1% (Figure 5).

A study on the effects of the crisis in SEE countries (Barlett & Prica, 2012), explored the various institutional structures that were created during the transition period. The global financial crisis in different ways had an impact on countries in the region. The result of the analysis suggested those countries that had achieved greater progress in creating an institutional framework to support a market economy and private entrepreneurs, along with those which were more integrated with global and European markets were most affected by the crisis. Accordingly, countries such as Slovenia, Bulgaria, Romania and Croatia, which had a higher level of integration into the EU, were those with larger declines in GDP between 2009 and 2010 (Figure 1). This means that their progress towards a more integrated system with the EU increased their vulnerability to effects of the crisis. And these countries also had the biggest problems as a result of the crisis.

![Figure 1: GDP growth prior, during and after the crisis Q1, 2005 – Q4, 2011](source: IMF, International Finance Statistics)
Figure 2: Consumer Price Index (CPI) for some of the countries in CESEE, Q1, 2003-Q3, 2011

Source: IMF, International Finance Statistics

Figure 3: Basic Interest Rate of the Central Banks in CESEE, period 2002-2014*

Source: IMF, International Finance Statistics

*discount rate for countries: Croatia, Hungary, Macedonia, Romania

*Central Bank Rate for countries: Albania, Bulgaria, Moldova.
Figure 4: The correlation between the inflation, and the monetary policy behavior for the period Q1, 2005 – Q4, 2011, for the countries of the region *

*Graph is an average of the countries below
Croatia, Hungary, Macedonia, Romania, Albania, Bulgaria and Moldova.

Table 1: Credit growth during and after the financial crisis in CESEE countries, in percent

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>10.21</td>
<td>10.08</td>
<td>10.39</td>
<td>1.44</td>
<td>-1.42</td>
<td>2.07</td>
<td>5.46</td>
</tr>
<tr>
<td>B and H</td>
<td>-3.41</td>
<td>2.26</td>
<td>4.09</td>
<td>2.95</td>
<td>2.38</td>
<td>1.80</td>
<td>1.68</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3.52</td>
<td>1.21</td>
<td>3.69</td>
<td>2.66</td>
<td>0.14</td>
<td>-8.47</td>
<td>0.46</td>
</tr>
<tr>
<td>Croatia</td>
<td>-0.63</td>
<td>1.68</td>
<td>4.11</td>
<td>-3.93</td>
<td>2.73</td>
<td>-1.08</td>
<td>0.48</td>
</tr>
<tr>
<td>Czech R.</td>
<td>1.77</td>
<td>4.02</td>
<td>6.12</td>
<td>2.92</td>
<td>3.79</td>
<td>2.51</td>
<td>3.52</td>
</tr>
<tr>
<td>Hungary</td>
<td>-1.92</td>
<td>4.35</td>
<td>0.65</td>
<td>-12.45</td>
<td>-4.07</td>
<td>-0.02</td>
<td>-2.24</td>
</tr>
<tr>
<td>Macedonia</td>
<td>3.12</td>
<td>7.42</td>
<td>8.43</td>
<td>5.18</td>
<td>6.30</td>
<td>9.76</td>
<td>6.70</td>
</tr>
<tr>
<td>Moldova</td>
<td>-5.16</td>
<td>10.59</td>
<td>15.51</td>
<td>20.93</td>
<td>19.29</td>
<td>-4.60</td>
<td>9.43</td>
</tr>
<tr>
<td>Poland</td>
<td>6.17</td>
<td>9.17</td>
<td>14.28</td>
<td>1.39</td>
<td>3.64</td>
<td>6.06</td>
<td>6.79</td>
</tr>
<tr>
<td>Romania</td>
<td>1.34</td>
<td>5.31</td>
<td>6.23</td>
<td>1.62</td>
<td>-3.38</td>
<td>-3.66</td>
<td>1.24</td>
</tr>
<tr>
<td>Serbia</td>
<td>14.42</td>
<td>25.14</td>
<td>5.74</td>
<td>9.49</td>
<td>-4.81</td>
<td>0.56</td>
<td>8.42</td>
</tr>
<tr>
<td>Ukraine</td>
<td>-4.24</td>
<td>0.75</td>
<td>8.87</td>
<td>2.79</td>
<td>13.79</td>
<td>10.39</td>
<td>5.39</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3.13</td>
<td>5.92</td>
<td>8.13</td>
<td>3.27</td>
<td>4.59</td>
<td>6.48</td>
<td>5.26</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.94</td>
<td>2.70</td>
<td>-1.94</td>
<td>-5.25</td>
<td>-17.11</td>
<td>-13.88</td>
<td>-5.26</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.38</td>
<td></td>
</tr>
</tbody>
</table>


Source: International Finance Statistics, World Economic Outlook and authors calculations.
The decline in economic activity had obvious effects on other macroeconomic variables, such as inflation, budget deficits and current account deficits. Particularly, the level of inflation, became a serious problem for monetary authorities in mid-2008 (Figure 3), with double-digit figures for countries such as Bulgaria, Bosnia, Serbia and Moldova. In these times, when economic downturn, as a result of the global financial crisis and rising inflation from external pressures, were combined (with the increase in oil prices), the monetary authorities decided to increase the basic interest rate by taking measures to deal with the inflation (shown in Figure 4). We can see that we have correlation between the rate of inflation (measured by the CPI index) and the interest rate of the Central Bank (Figure 4) resulted in the monetary authorities tightening the monetary policy in 2008.

However, the reduction of domestic demand, combined with the significant decrease in the price of oil and other natural resources of 2008, contributed to the alleviation of inflationary pressures, which in 2009, the monetary authorities launched to reduce the level of the base interest rate (shown in Figure 4). Bulgaria had a two-digit inflation rate (13% in 2008), and then a low 2% in 2009 and 2010 (Figure 2). Macedonia, Moldova and Bosnia experienced deflation in 2009 (Figure 2). This, together, contributed to the reduction in inflation, easing the monetary policy and orientated the banks towards increasing the liquidity in the market, to assist in overcoming the financial crisis (Sanfey, 2011).

The deterioration of the economic ambience also boosted non-performing loans, and thus, banks started to respond with tighter criteria and a narrowing of credit supply. Previous studies show that rapid credit growth is an early indicator of credit risk formation (Maechler, Mitra & Worrell, 2010). Results by Foos, Norden and Weber (2010) suggested that credit growth represents a significant growth of banking risk, and Dell’Ariccia, Igan and Laeven (2012) presented evidence that rapid credit growth may be
associated with a decline in credit standards and loan performance problems. This is confirmed in data presented in Figure 7 which shows the correlation between the bank lending growth rates before the crisis (2005 to 2007) and non-performing loans during the crisis (2009 to 2012). The results indicate that the countries with the greater rates of credit growth before the crisis (such as Ukraine, Albania and Moldova) had a higher level of non-performing loans during the crisis.

The financial crisis especially affected capital flows from abroad that were transferred in cross-border forms of bank lending, in that the stress experienced by large international banks appeared to have limited the supply of cross-border lending. This finding is consistent with the general understanding that this period of financial crisis originated outside emerging markets. Cross-border bank lending was one of the channels through which the crisis affected emerging markets (Figure 6). Banks from developed countries, in some form or another, were ordered by authorities to suspend credit to countries where they had their affiliations. The Figure 6 shows that the reduction of cross-border bank lending from the third quarter of 2008 (red line) almost agrees with the trend in bank credit (green line).

However, the crisis in the CESEE countries did not extend to the same extent evident in the rest of Europe. These countries experienced a moderate reduction of capital flows compared to other regions of the developing world (e.g., African countries and developing countries in Asia and Latin America). Although there was a reduction in cross-border lending, it was not as substantial as result from the operation of banks through "affiliates" (Allen, Beck, Carletti, Lane, Schoenmaker & Wagner, 2011). Many foreign banks had provided long-term loans in those countries and these could not be revoked.

The characteristic and important feature for the region, during the financial crisis was there was no suppression of the major banks, as well as there were no significant problems such as devaluation of uncontrolled currencies, massive increases in unemployment, or disturbance of social order and no substantial slowdown of reforms in the region (Anastasakis, Bastian & Watson, 2011).

In response to the negative external impacts, that affected the region, countries began to use different mechanisms to increase economic activity. As a first step to improvement of competition, depreciation of the currency was implemented, although some places could not use that mechanism as a result of a fixed exchange rate (such as Bosnia and Herzegovina, Bulgaria and Macedonia), “euroization” (as in Montenegro), or where the currency of the Eurozone applied. Measures were taken by the monetary authorities to increase liquidity and credit growth, which was driven by the private sector, by lowering key interest rates, reducing reserves, reducing the auctions of open market operations, implementing credit growth policies especially in local currency, avoiding exchange rate risk, abolishing tax on interest earned on deposits or even in the last case of state intervention in the banking sector (as in Montenegro) for avoiding bankruptcy.
Nonetheless, looking at the steps in implementing monetary policy during the crisis, the state was more oriented towards achieving their primary aim, i.e., price stability, whereas as in 2008, there were inflationary pressures in a large part of the country. Central banks later found themselves in difficult situations due to a stimulus of consumption with lower interest rates, to prevent the devaluation of the local currency, may have aroused inflation. Therefore, at the end of 2009, countries with floating exchange regimes began monetary easing which lowered key interest rates, whereas for countries with fixed exchange rates, the central bank through open market operations, defended their currencies (Aslimoski, 2014).

Figure 6: Cross-border claims vis-à-vis banks and credit growth Q1, 2006-Q2, 2011.

Source: BIS, Locational Banking Statistics.

Figure 7: Credit growth before crisis and NPL during the crisis

Pre-crisis period coincides with the period during the years 2005-2007 and period during the crisis coincides during the years 2008-2010.

3 CONCLUSIONS

Before crisis till 2008 year growth of bank credit to private sector was 31% per year on average for CESEE countries. This has been a concern at the time regarding the possibility of an overheating of the economies during that period. Most studies say that this was a sign of convergence or catch-up process in relation to the most developed European countries. During the financial crisis credit growth slow down for several time, and between 2009-2014 felt to 3.38% per year on average for CESEE countries.

The financial crisis especially affected capital flows from abroad that were transferred in cross-border forms of bank lending, in that the stress experienced by large international banks appeared to have limited the supply of cross-border lending. This finding is consistent with the general understanding that this period of financial crisis originated outside emerging markets. Cross-border bank lending was one of the channels through which the crisis affected emerging markets. Banks from developed countries, in some form or another, were ordered by authorities to suspend credit to countries where they had their affiliations.

In response to the negative external impacts, that affected the region, countries began to use different mechanisms to increase economic activity. As a first step to improvement of competition, depreciation of the currency was implemented, although some places could not use that mechanism as a result of a fixed exchange rate (such as Bosnia and Herzegovina, Bulgaria and Macedonia), “euroization” (as in Montenegro), or where the currency of the Eurozone applied. Measures were taken by the monetary authorities to increase liquidity and credit growth, which was driven by the private sector, by lowering key interest rates, reducing reserves, reducing the auctions of open market operations, implementing credit growth policies especially in local currency, avoiding exchange rate risk, abolishing tax on interest earned on deposits or even in the last case of state intervention in the banking sector (as in Montenegro) for avoiding bankruptcy.

Nonetheless, looking at the steps in implementing monetary policy during the crisis, the state was more oriented towards achieving their primary aim, i.e., price stability, whereas as in 2008, there were inflationary pressures in a large part of the country.

The deterioration of the economic ambience also boosted non-performing loans, and thus, banks started to respond with tighter criteria and a narrowing of credit supply. The results indicate that the countries with the greater rates of credit growth before the crisis (such as Ukraine, Albania and Moldova) had a higher level of non-performing loans during the crisis.

These developments of the decrease in the double-digit rates of growth of bank loans to the private sector raised concerns about an overheating of economies which could cause distortions of various economic variables.
REFERENCES


