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## External financing in Central and Eastern European countries after the global financial crisis

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### ABSTRACT

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The aim of the paper is to analyse changes in the financial account of the balance of payments in 11 Central and Eastern European countries (CEE) during the years 2007–2017. The analysis comprises changes in the value of the financial account's components. The economic crisis reversed existing tendencies in net capital flows to CEE countries. They transformed from net recipients of capital to providers of capital to the rest of the world. This situation is completely different than the pre-crisis period when CEE countries experienced significant net inflows of mainly direct investment, with capital moving 'downhill', mostly from richer EU countries.

The fall in the surplus on the financial account of the balance of payments was determined mainly by a large drop in net other investments and even their outflow, especially during 2012–2015. The net outflow of capital was also caused by the accumulation of reserves by central banks. In relation to other transactions of the financial account, a slowdown in net capital inflows was recorded. The lowered surplus on the CEE countries' financial balances can have an effect on their external stability, however, they have seen a reemergence of inflows in recent quarters, including in non-FDI flows.

**Keywords:** balance of payments, financial account, net capital flows, Eastern and Central European Countries

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## Introduction

The benefits associated with net foreign capital flows are widely reported in the economic literature. Capital flows are traditionally viewed as the financial counterpart to savings and investment choices. According to the neoclassical theory, access to foreign savings can be an important factor in the economic growth of a country. Under the condition of capital accumulation gap, i.e. when the internal accumulation is insufficient for accelerating the economic growth, foreign capital inflow gives a possibility of increasing funds for financing investment [Waheed, 2004].

Therefore, the theory predicts that capital should flow from capital-rich countries to capital-poor ones, where capital per employee is lower, which means that capital is a rare resource in comparison to labour force. Hence, the rate of return on the invested capital ought to be higher in poorer countries than it is in developed ones, where capital is relatively abundant [Skopiec, 2016, p. 185]. In the literature, this direction of capital flow is defined as 'downhill capital flows' [Alfaro, Kalemli-Ozcan, Volosovych, 2014, p. 6]. Such a direction enables poor countries to accelerate their economic growth, as it supplements their own savings that are insufficient in relation to investment needs.

Increased investment should have a positive macroeconomic effect in the form of increased production and employment, and hence the improved living conditions of the population. Other advantages of foreign capital include technology transfer that accompanies foreign direct investment and the increased efficiency of the financial market, which should also contribute to faster economic growth.

For these reasons, many countries decided to introduce liberalization and deregulation of financial markets, based on the assumption that without rigid regulations the capital market functions effectively and has a positive impact on the economy. However, large capital inflows may expose countries to a number of risks by making them vulnerable to external shocks, heightening the risks of economic overheating and abrupt reversals in capital inflows, and facilitating the emergence of credit and asset price boom-and bust cycles.

With the globalization of financial markets, capital has become more mobile, which meant that countries with foreign debt became particularly vulnerable to risks associated with abrupt cessation of foreign capital inflow or its sudden outflow [Furceri, Guichard, Rusticelli, 2012]. Rapid changes in the directions of movement of capital bring about very serious consequences for the economy, especially the stability of the financial sector. They may cause changes in the level of foreign exchange reserves of the country, cause disruption in the process of money creation and large fluctuations in exchange rates. One of the most serious consequences of a sudden stop of capital inflows may be the financial crisis, be it a currency, banking, debt or financial crisis.

Empirical analysis carried out by the OECD for a large sample of mature and emerging-market economies shows that the probability of a banking crisis or sudden stop increases

after large capital inflows, particularly after large debt capital inflows. Moreover, debt-driven episodes of large capital inflows tend to have a stronger impact on domestic credit than when inflows are driven primarily by FDI or equity portfolio investment [OECD, 2011]. Hence, monitoring and assessing not only net, but also gross capital flows is crucial to understand sources of vulnerabilities for the economy.

Moreover, in contrast to theory, in reality capital does not always flow from rich to poor countries. The paradox related to the capital flow in a direction different from the one indicated in the theory of economics, i.e. from less developed countries to more developed ones, was signalled for the first time as early as in 1990 [Lucas, 1990]. A similar phenomenon in the last twenty-year period has been observed in the emerging and developing countries of other regions of the world, chiefly in Asian and oil producing regions. In the case of Asian countries, the situation was the result of changes that followed the financial crises in the 1990s. It remains relevant today, given that net financial inflows have receded substantially since the height of the financial crisis and ECC countries became net capital exporters.

The changes that occurred in the financial account of the balance of payments of Central and Eastern European (CEE) countries after the last global financial crisis were described in the article. The group of CEE countries that are members of the European Union includes 11 states: Bulgaria, Croatia, the Czech Republic, Estonia, Lithuania, Latvia, Poland, Romania, Slovakia, Slovenia and Hungary.

In line with a new standard of account statements defined by the IMF in the sixth edition of its textbook on the balance of payments, a consolidated financial account comprises foreign direct investments, portfolio and other investments along with net derivative financial instruments and reserve assets. Assets and liabilities are interpreted as net values (net acquisition of assets and net incurrence of liabilities). Thus, net financial account is interpreted as net lending to foreign countries (net capital outflow from a given country), if it is positive and as net borrowing from foreign countries (net capital inflow to a given country), if it is negative. The balance of the financial account is calculated as an investment value of national entities abroad decreased by the investments made by residents in the country [IMF, 2009].

Eurostat data were used in the article. The study was conducted for the period between 2007 and 2017. The selected period of time enabled analysing the changes caused by the global financial crisis. The analysis accounts for changes in the balances of the main components of the financial account, i.e. direct, portfolio and other investments as well as reserve assets (the balance of investments into derivative instruments was not taken into account due to the lack of data). It enabled defining the volume of net capital inflow/outflow within the scope of individual types of foreign investments. The employed research methods include literature analyses and statistical inference based on basic descriptive statistics.

## 1. Directions of capital flows in CEE countries after the global financial crisis

Over the last two decades the countries of Central and Eastern Europe (CEE) have based their development on described above model. Their economies feature a low savings rate and high investment needs. Owing to insufficient amounts of own capital, they have been intensively taking advantage of foreign capital since the mid-1990s, which has enabled the performance of multiple investments in those countries. Capital influx was supported by a progressive transformation of the economies and their integration with the EU. The integration with the common European market allowed them for an easier access to the financial resources of the richest member states, since one of the four fundamental freedoms of the internal market includes free movement of capital, which means that there are no limitations on capital flow between the member states. The inflow of capital (measured in relation to the GDP) to the CEE countries that acceded the EU over the course of 2004–2007 was higher than the capital flow to the South-East Asian countries prior to the Asian crisis of 1997/98 [Eller, Huber, Schuberth, 2016, p. 81].

After years of substantial foreign capital inflow supporting economic growth, the crisis revealed significant external imbalances. Its scale needed to be decreased, which required, *inter alia*, reducing current account deficits. Since 2012 none of the economies of that region has shown a current account balance exceeding the threshold of  $-4\%+6\%$  of GDP, which was defined by the European Commission in order to identify an external imbalance within the scope of a macroeconomic imbalance procedure [European Commission, 2016, p. 40]. However, an improvement in the current account balance was accompanied by a reduction in the net foreign capital flow, or even net investment outflow from CEE countries. Consequently, CEE countries were no longer such significant beneficiaries of foreign investment as had been the case prior to the crisis, but they actually became net exporters of capital.

As arises from the data presented in Table 1, before the crisis all of the CEE countries experienced a net foreign capital inflow (the financial account balance was negative). In 2007 the greatest inflow was registered in Bulgaria and it constituted approximately 32% of its GDP. Double-digit values of the financial account balance in relation to the GDP were also recorded in the Baltic States and Romania. In 2008, despite the crisis, an increase in the value of capital inflow in relation to 2007 was observed in several countries. However, in the following year the value of non-resident investments in all of the countries of the region decreased. In certain states net capital outflow occurred for the first time in the 21<sup>st</sup> century, which means that they became net exporters of foreign capital (the financial account balance was positive). In Latvia capital withdrawal was very substantial, since it amounted to about 11% of the country's GDP, in Lithuania and Estonia it reached approximately 6% of the GDP. It can be explained by a high degree of the external imbalance that the economies of those countries featured prior to the crisis. In the subsequent years the value of non-resident investments in the CEE economies

continued to dwindle. Since 2012 most of the analysed countries of the region have recorded a net foreign investment outflow.

**Table 1. Financial account of the balance of payments\* of CEE countries (% GDP)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bulgaria	-32.4	-29.0	-6.6	1.8	3.3	2.3	2.1	-0.7	6.6	8.4	4.4
Czech Republic	-2.9	-1.1	-1.8	-3.1	-1.9	0.3	1.7	1.5	3.8	2.5	2.3
Estonia	-14.5	-7.5	6.5	5.6	6.1	2.8	2.3	1.7	4.7	1.8	4.4
Croatia	-9.9	-11.6	-7.5	-3.0	-3.1	-1.0	-1.0	1.0	4.1	2.3	3.6
Latvia	-19.6	-12.6	11.9	6.0	-0.5	0.9	1.0	2.8	-0.6	1.8	0.7
Lithuania	-12.7	-11.6	6.4	3.0	-0.8	1.3	3.6	1.7	2.0	0.3	3.1
Hungary	-6.3	-8.0	0.1	1.1	0.7	4.7	6.2	4.1	5.9	3.3	1.8
Poland	-5.8	-7.8	-4.4	-6.4	-5.1	-2.3	-1.1	-1.1	0.1	-0.1	0.1
Romania	-13.1	-12.1	-4.5	-4.5	-3.5	-2.5	1.1	2.0	1.4	0.9	-1.8
Slovenia	-3.1	-8.9	-3.5	-4.0	-2.0	-0.4	2.8	6.0	4.4	2.9	4.1
Slovakia	-4.8	-9.1	-3.8	-3.6	-4.7	0.4	-0.7	-0.4	-0.6	-0.5	-4.5

\* including reserve assets

Source: own calculations based on Eurostat data.

Over the last 11 years the greatest drop in the value of allocated foreign investments occurred in Bulgaria. Although in 2007 the negative financial account balance constituted more than 30% of the GDP, in 2016 a surplus amounted to 8.4% of the GDP. In turn, Slovakia and Poland were the countries in which net foreign capital outflow was of the shortest duration in the analysed period, however, foreign investors' engagement following the crisis, similarly to the countries of the region, diminished significantly.

The role of external financing in the ECC economies decreased chiefly due to other investments (Table 2). Within the scope of this form of foreign investments, which comprises mostly bank loans and deposits as well as commercial loans, a total net outflow of over 200 bn EUR was recorded in the analysed period [Eurostat]. Investors' involvement in the form of other investments diminished in most states of the region as early as 2008, yet net capital outflow did not occur anywhere. The greatest decrease in the net inflows at the time was noted in Estonia and Latvia – in both of these countries by more than 10% of the GDP. In turn, in Hungary other investments rose by approximately 12% of the GDP in 2008 in relation to the previous year. In the subsequent years the influx of other investments was becoming increasingly smaller, while in many countries it turned into an outflow. It was caused by the limitations introduced in the crediting operations of international banks in response to the regulatory requirements implemented post-crisis, as well as the reduction of local banks liabilities towards foreign banks. In 2010 nearly half the banks of the analysed states experienced net capital outflow. The greatest net outflow of other investments took place in 2012. A reflux of nearly 42 bn EUR of this form of capital was recorded at the time, of which from Hungary and Slovakia in the amount of over 20 bn EUR (12% and 15% of the GDP, respectively). The only country in the

region which demonstrated a negative balance of other investments in its financial account at the time was Bulgaria. However, in the period of 2016–2017 the scale of capital outflow on the account of foreign credits clearly decelerated, while the number of states recording net inflow of capital in that form was gradually rising, though it was significantly less than it had been before the crisis. It was only in the Czech Republic in 2017 that an exceptionally high net inflow of this form of capital was observed, constituting nearly 14% of the GDP. It was the result of, above all, the loans contracted by the government and banking sector of the country [CNB, 2017].

**Table 2. Other investment in CEE countries (% GDP)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bulgaria	-17.3	-16.9	0.2	3.1	4.7	-2.3	5.8	0.1	4.8	4.1	0.8
Czech Republic	-0.1	-1.4	1.6	1.9	-0.2	2.9	-0.6	-0.3	-1.3	-2.1	-13.8
Estonia	-14.8	-4.2	-1.2	15.5	23.4	4.4	1.0	1.3	1.6	-6.8	-3.5
Croatia	-3.5	-7.0	-6.3	-0.7	-0.3	5.8	1.0	2.1	3.3	4.5	1.0
Latvia	-17.9	-7.2	9.0	0.8	7.2	5.1	1.0	4.1	-8.8	-3.2	-7.0
Lithuania	-12.9	-5.9	9.6	9.4	2.0	4.5	1.3	1.2	7.9	-10.6	-2.4
Hungary	-5.5	-17.4	-9.8	1.4	3.7	12.0	8.7	2.8	8.2	6.7	1.5
Poland	-6.6	-6.0	-3.1	-1.9	-0.6	1.2	-0.4	0.7	1.6	-2.9	3.5
Romania	-11.0	-6.4	-3.2	-4.6	-1.8	3.0	5.5	6.6	3.6	2.8	1.9
Slovenia	-10.8	-7.5	7.8	1.4	4.5	0.1	14.3	18.0	0.6	-6.8	-1.5
Slovakia	-6.5	-3.4	-6.3	-1.2	-2.7	14.9	7.3	0.3	-3.4	-6.3	-2.3

Source: own calculations based on Eurostat data.

The role of external financing diminished in the region also due to portfolio investments; however, they had a decidedly lower impact on shaping the financial account balance than other investments (Table 3). Furthermore, their balance featured greater variability than other forms of capital flows did, which proves the short-term nature of those investments. The engagement of portfolio investors had dwindled even before the crisis, i.e. during 2007 and 2008. In 2007 a net outflow of portfolio investments occurred in all the countries of the region, except for Croatia and Romania. The greatest amount of portfolio capital was withdrawn from Slovenia, i.e. 6.6% of the GDP. Yet, over the course of 2009–2012, monetary easing in the developed countries as well as a decrease in the aversion to risk led to another influx of portfolio capital into the region, although not to all the countries. In that period a highly substantial inflow of this form of capital occurred especially in Poland, where average annual net portfolio investments amounted to approx. 15 bn EUR. These were the amounts not seen since 2005 [NBP, 2010]. Foreign investors were interested, above all, in all central government debt instruments [OECD, 2014]. From 2014 a withdrawal of portfolio investors once more intensified on account of the expected rise of interest rates by the Fed. The engagement of portfolio investors decreased in nearly the entire region, to the greatest degree in Slovenia,

where a negative balance of portfolio investments amounting to over 11% of the GDP in 2013 turned into a surplus of over 12% of the GDP in 2016.

**Table 3. Foreign portfolio investment in CEE countries (% GDP)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bulgaria	1.6	2.0	1.7	1.7	0.9	2.1	0.3	-2.8	-1.3	-1.3	5.2
Czech Republic	1.5	0.2	-4.1	-3.8	-0.1	-1.4	-2.3	2.1	-3.6	-3.6	-5.1
Estonia	2.2	-3.2	10.1	2.9	-7.1	0.6	2.8	2.5	2.6	11.2	11.1
Croatia	-0.8	1.7	-1.0	-1.2	-1.4	-4.0	-4.4	1.7	-0.3	2.8	0.3
Latvia	2.2	-1.0	-0.7	1.7	2.3	-4.5	0.8	-0.2	8.7	3.7	8.3
Lithuania	0.8	0.0	-3.3	-5.7	-4.0	-2.8	4.1	-2.8	-0.3	9.0	3.6
Hungary	1.6	2.3	4.0	0.3	-6.3	-1.5	-3.0	3.0	5.1	4.3	3.1
Poland	1.5	0.5	-3.2	-6.1	-3.2	-3.9	0.0	0.4	0.7	-0.8	-0.9
Romania	-0.4	0.4	-0.4	-0.7	-1.3	-2.6	-3.8	-1.9	0.0	-0.6	-1.5
Slovenia	6.4	-1.6	-12.8	-5.4	-5.0	0.6	-11.5	-10.6	7.6	12.6	6.9
Slovakia	3.3	-0.1	2.8	-1.8	0.2	-11.3	-8.8	-2.4	2.4	4.9	-0.8

Source: own calculations based on Eurostat data.

The outflow of foreign capital from the CEE countries has also taken place due to the accumulation of foreign currency reserves (Table 4). Global financial crises occurring more and more often in the 21<sup>st</sup> century have persuaded the central banks of the ECC countries to expand their currency reserves as a safeguard against a speculative attack and a financial crisis in the future. Considering relatively high debt levels of the analysed countries, the risk of becoming cut off from external financing sources was fairly significant. An inflow of capital in the financial account, which before the crises had been bigger than sufficient to cover deficits in current accounts, was the source of an increase of currency reserves. From 2004 the accumulation of currency reserves was additionally facilitated by the payment of European Union funds, which became the source of capital inflows in the capital account of the countries in the region. The financial crisis put a stop to the trend of increasing foreign reserves in the region. In the period from March 2008 to June 2009 all the countries noted a drop in a quarterly value of their currency reserves [ECB, 2012, p. 16]. The greatest annual decrease in currency reserves was recorded in Lithuania in 2008 and it amounted to 2.4% of the GDP. In the following years the countries rebuilt their reserves. The country in which the reserves were replenished the fastest after the crisis was the Czech Republic. It was the result of monetary interventions carried out by the CNB in order to prevent excessive strengthening of the Czech crown [CNB, 2017]. In turn, the country that experienced a significant drop in reserves over 2015–2016 was Hungary. During this period, its reserves fell by nearly 10% of the GDP. According to the Hungarian Central Bank (MNB), a quick shrinkage of reserves in that period was chiefly the result of operations related to the currency conversion of the loans contracted by the Hungarians still before the crisis outbreak as well as to the changes



in the monetary structure of the public sector debt, aiming to increase the share of local banks and local retail investors in the financing of the public debt [MNB, 2017, p. 21].

**Table 4. Reserve assets in CEE countries (% GDP)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bulgaria	9.0	1.8	-1.7	-0.6	0.4	5.1	-1.3	4.2	8.2	7.2	-0.2
Czech Republic	0.4	1.0	1.5	1.1	-0.4	2.0	4.5	1.7	7.7	11.8	24.1
Estonia	0.6	3.0	0.0	-5.6	0.1	0.4	0.0	0.6	0.1	-0.2	-0.1
Croatia	1.6	-0.7	2.7	1.8	0.9	0.1	4.2	-1.2	1.7	-0.6	5.3
Latvia	3.2	-1.9	5.6	4.1	-4.5	3.6	1.7	-0.5	1.3	0.5	3.3
Lithuania	2.9	-2.4	-0.3	1.3	4.4	0.4	-1.2	3.4	-3.5	2.1	3.3
Hungary	-	-	-	-	3.9	-3.3	1.1	0.7	-4.4	-5.4	0.0
Poland	3.0	-0.7	3.3	3.2	1.2	2.2	0.2	0.1	0.2	4.8	-1.5
Romania	-	-	-	-	-	-	1.4	-0.9	-0.4	1.3	0.2
Slovenia		-0.1	0.1	-0.1	-0.2	-0.1	0.0	0.2	-0.3	-0.2	0.2
Slovakia	-	-	-0.9	0.0	0.1	0.0	0.1	0.6	0.3	-0.1	0.6

– not available

Source: own calculations based on Eurostat data.

The economic crisis has further contributed to reducing the inflow of foreign direct investments into the economies of the region (Table 5). In 2009 a decrease of this form of capital could be observed in the entire region (except for the Czech Republic) – the greatest drop was registered in Bulgaria (from 25% of the GDP in 2007 to 6.8% of the GDP in 2017). In certain countries net capital outflows occurred as well (in Lithuania, Slovakia and Slovenia), which had not taken place previously in the case of direct investments (except for Slovenia, where outflows of foreign direct investments had been recorded in 2007 and 2008).

**Table 5. Foreign direct investments in CEE countries (% GDP)**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bulgaria	-25.9	-16.0	-6.8	-2.4	-2.9	-2.5	-3.0	-2.1	-5.1	-1.5	-1.4
Czech Republic	-4.7	-0.9	-1.0	-2.4	-1.2	-3.0	0.2	-1.9	1.1	-3.9	-2.7
Estonia	-2.8	-2.8	-2.4	-6.9	-10.6	-2.2	-1.0	-2.3	0.6	-2.4	-3.4
Croatia	-7.2	-5.5	-2.9	-1.8	-2.5	-2.8	-1.9	-1.6	-0.6	-4.2	-2.4
Latvia	-6.3	-2.9	-0.6	-1.5	-4.9	-3.2	-1.6	-1.2	-2.6	0.0	-2.1
Lithuania	-3.5	-3.4	0.6	-2.2	-3.2	-0.7	-0.6	0.0	-1.9	-0.4	-1.3
Hungary	-1.8	-1.1	-0.5	-3.0	-1.6	-2.1	0.0	-2.7	-2.4	-2.3	-1.6
Poland	-4.1	-1.9	-1.8	-1.8	-2.6	-1.2	-0.8	-2.4	-2.1	-1.2	-0.7
Romania	-5.4	-6.2	-2.8	-1.8	-1.3	-1.9	-2.0	-1.8	-1.8	-2.7	-2.4
Slovenia	1.7	0.3	1.4	-0.3	-1.7	-1.3	-0.1	-1.6	-3.3	-2.1	-1.0
Slovakia	-4.3	-4.5	1.0	-0.9	-2.8	-3.2	0.3	0.5	-0.1	0.6	-2.0

Source: own calculations based on Eurostat data.



The main reason for the drop in the inflow of direct investments after the crisis was the tightening of credit conditions and the deterioration of enterprise balances. That is why many companies, including large international corporations, cancelled or suspended their projects [Poulsen, Hufbauer, 2011, p. 20]. A decreased inflow of net foreign direct investments was also the result of growing foreign investments of the entities based in CEE, which will be the focus of deliberations of the next paper. In the following years the value of direct investments in the economies of the regions was gradually rising, yet it was lower than before the crisis.

## Summary

From the conducted research it arises that after the crisis Central and Eastern European countries experienced a significant change in the direction of capital flow in the financial account of the balance of payments. After a period of substantial influx of net foreign capital lasting since the beginning of the century, a majority of the countries in the region have registered a decrease and then an outflow of net foreign capital. It means that after the crisis the CEE countries turned from net importers of foreign capital into its exporters. It was reflected in the balance of payments in the form of a reduction in the negative balance in the financial account, and then in the emergence of a surplus. It is a situation different from the one that had occurred at the beginning of the transformations, when foreign capital played an important role in the process of catching up with economic development.

A change in the previous trend resulted chiefly from a decelerated rate of other investment inflow, and then from its outflow during the years of 2015–2016. It was a result of deleveraging of Central European banking systems after the crisis and reducing local banks' liabilities towards foreign banks. However, the scale of capital outflow on that account slowed down noticeably in 2017.

A very substantial net capital outflow from the ECC countries in the analysed period additionally took place within the scope of reserve assets accumulation, which was to provide a safeguard against a sudden capital outflow. The prospect of tightening of the monetary policy and the related strengthening of the dollar additionally caused a withdrawal of gross portfolio capital from developing economies during 2012–2014, further intensifying the negative effects of decreased non-resident investments made in other forms. In turn, direct investments basically constituted the source of net foreign capital inflow; however, since 2012 it has been increasingly smaller.

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