CAPITAL FLOWS AND THEIR SECTORAL DESTINATIONS

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Since 2003, New European Union Member States have made large capital inflows, which led to a credit crunch and recession. Whether they are foreign direct investment, or banking flows, capital inflows ultimately affect GDP, depending on how they are invested.
In the specialty literature, analysis of capital flows was done especially in terms of their structure, with a lack of analysis in terms of final destination of capital inflows. Therefore, we analyzed the effect of capital inflows on GDP in the New Member States of the European Union (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia) over the last economic cycle. Based on experiences of the new Member States during the recent boom and crisis, the paper studies the impact of capital inflows on GDP growth, inflows channeled to economic sectors, such as real estate and corporate investment sector.
The results of this research tries to highlight the extent to which the final destination of capital flows is important for the evolution of GDP.

Keywords: capital flows, gross domestic product, sectors, Euro zone, loans.
JEL Classification: F21, F32, F34.

I.Introduction

Crisis of the new European Union member states shows that sectors where there is capital flows are very important. While many factors have influenced GDP growth during episodes of crisis, growth and sharp decline in capital inflows in new EU member states seems to coincide with GDP growth and sharp decline.
In the last decade before the crisis, capital flows have focused particularly on areas with limited impact on export capacity, leading to economic development focused on sectors producing non-tradables goods, such as: trade, real estate sector, construction. This was a feature specfica for countries in Central and Eastern Europe, especially for new EU member states.
The effect of capital inflows on GDP was influenced by several factors. According to Rodrik and Velasco (1999) and Allen et al. (2002), the major influencing factors were: maturity, currency capital flows, size of capital flows and their transmission channels. Studies of crisis in the new EU Member States indicate that capital inflows into the banking system led to a generous offer of credit and then domestic demand has exploded, which led to large increases in GDP, but these increases were collapsed, with the sudden slowdown in capital inflows.
However, credit growth is not always directly proportional to GDP growth. For example, compared to Romania, Bulgaria had a much higher growth of loans relative to GDP, but the GDP evolution of the two countries was similar, suggesting that other factors may play a role. Capital inflows have led to significant changes in other economic sectors. For example, capital in the real estate market fueled speculative attacks, resulting in high economic growth until the bubble exploded and followed a severe recession.
Whether they are foreign direct investments or banking flows, capital inflows ultimately affect GDP, depending on how they are invested. Foreign capital channeled to the corporate sector affect GDP differently than when it is channeled into real estate sector.

II.Literature review

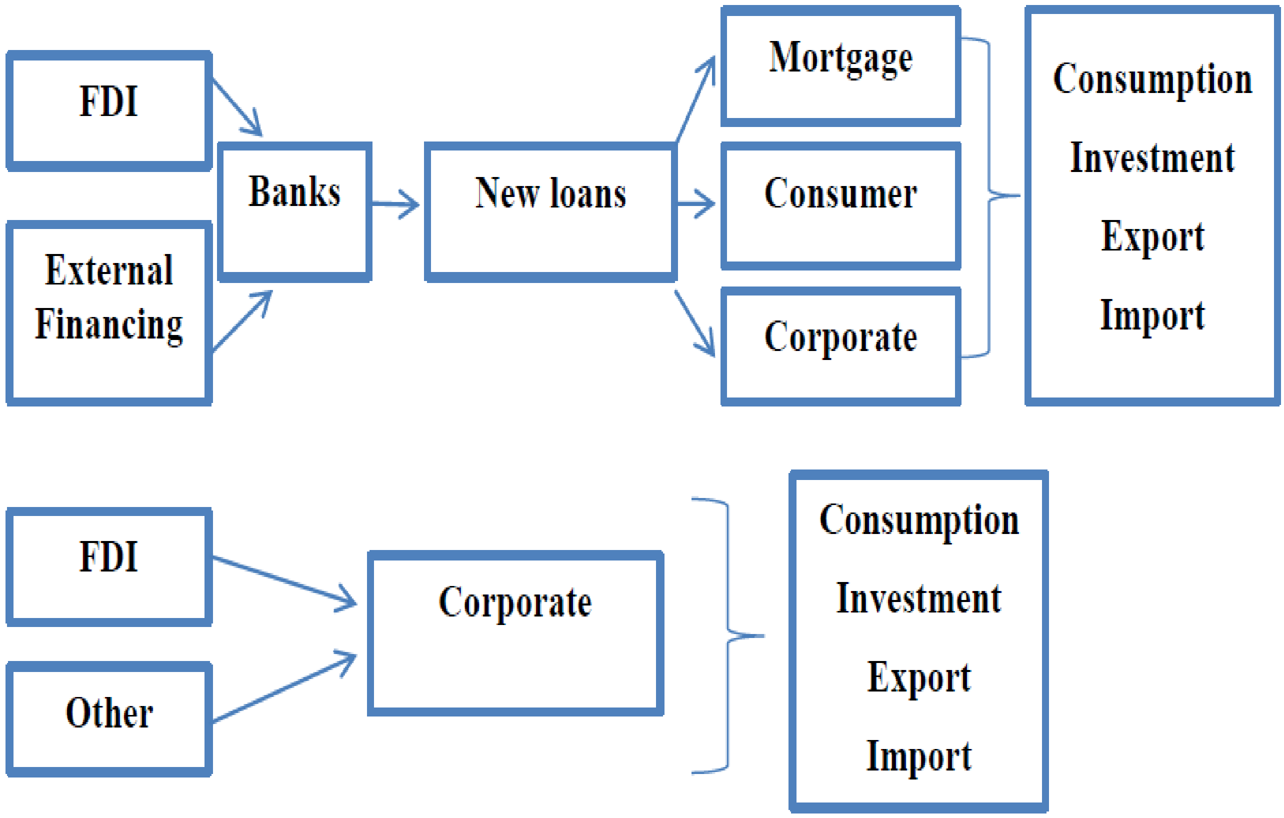
So far, the role of economic sectors, in which capital flows occur, had a limited analysis in empirical research, in financial literature. The positive influence of financial development (often measured as a function of the stock of credit) on GDP is presented in Levine (2005) and Khan and Senhadji (2003). In recent years, the literature has focused on the impact of credit flows (as opposed to stocks) on GDP.

Cappiello et al. (2010) found a positive relationship, not insignificant, between increased credit flows and GDP growth for the euro area, as opposed to Driscoll (2004), which didn't found similar evidence for the United States of America. From Borensztein et al. (1998), many studies have also found a positive relationship between FDI and economic growth, as summarized in the work of Ozturk (2007). This study contributes to the literature by examining the importance of sectors where there are inflows of bank credit and foreign direct investment.

III The results of the research

Capital inflows have impact on GDP by draining in the economic sectors that affect consumption, investment, exports and imports (Figure 1).

Figure 1. *The impact of capital flows on GDP*



Source: Mitra, 2011;

The presumption is that capital inflows are directed to:

- Households, through banks, that is offering mortgages and household consumption, so the consumption increase, and therefore GDP. Capital inflows through banks may take the form of FDI, foreign loans and deposits (often the parent bank) in local banks. These flows may have a positive impact on investment - for example, when real estate stocks increase to meet the growing demand in the real estate market.
- The real estate properties of the corporate, through bank loans or through foreign direct investment, supporting investment. For example, corporations that build vacation homes, targeting foreigners, have a direct effect on investment, but not on consumption.

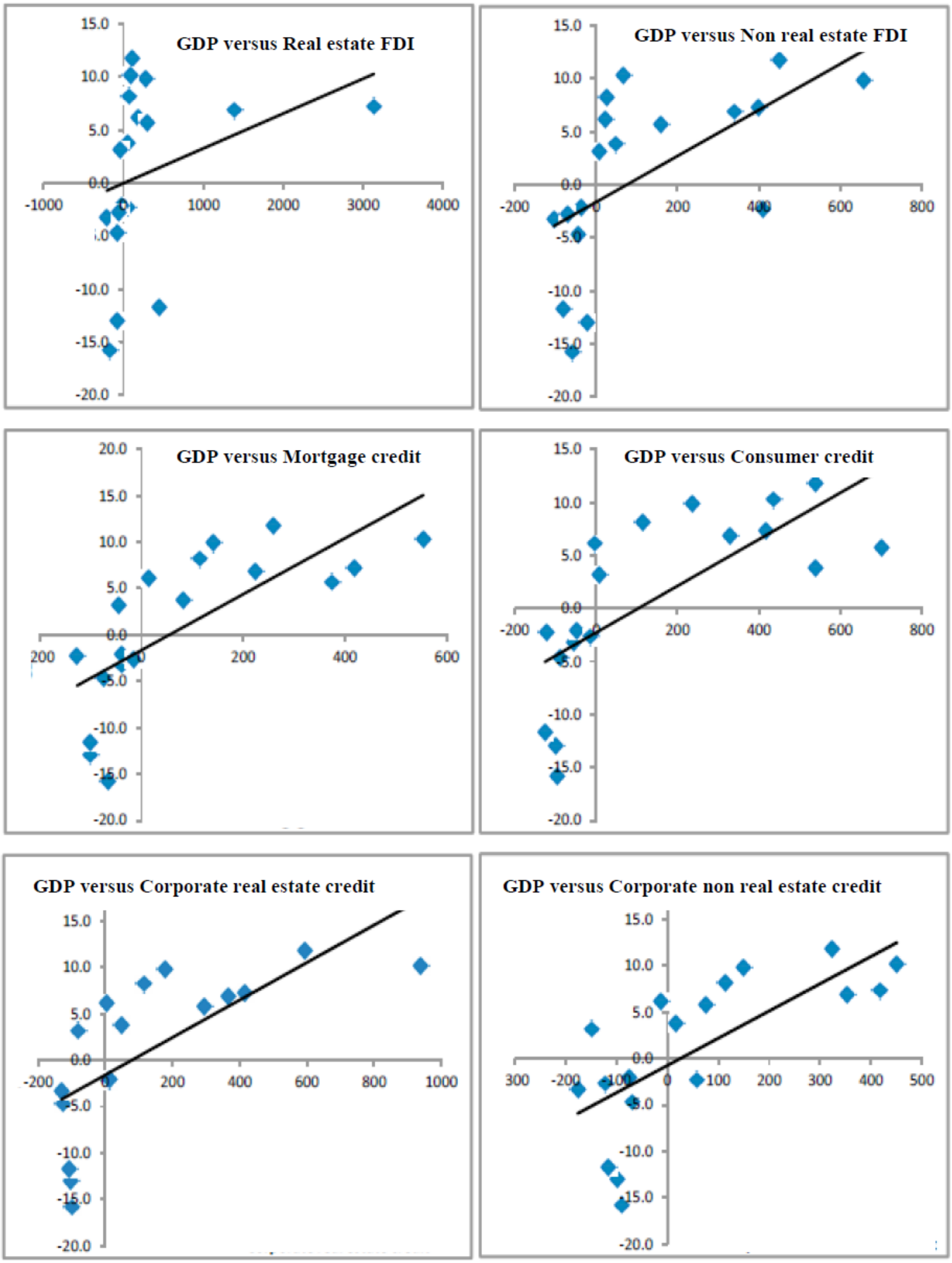
- Outside the corporate real estate sectors, both through bank credit and foreign direct investment, increasing investment. Also, exports are positively affected when capital inflows supports investment in export industries (figure 2).

In the analysis, we can detach a few main ideas. Crisis of the new EU member states shows that the sectors where there are capital flows have of great importance. After analyzing the degree that economic sectors, supported by capital flows, had or didn't had an impact on GDP, we noted that large swings in capital inflows in the new Member States coincide with large fluctuations of GDP, there is a proportional relationship . However, these relations depends on the sectors in which there are capital inflows.

Capital inflows in real estate sector seem to have a greater impact on GDP, than in other sectors. In the past seven years, GDP in the new EU member states has been strongly influenced by fluctuations in capital inflows. Most capital inflows consisted of FDI or capital in the banking system, thus fueling credit growth. However, GDP growth is strongly influenced by the destination of capital flows, than by the form of capital inflows.

The empirical analysis shows that capital inflows have been directed towards the real estate sector (in particular through mortgage flows and real estate FDI flows) have the greatest impact on GDP growth. However, this impact is more significant than the impact of capital inflows on growth. However, non-real estate FDI flows have the greatest impact on any single variable. This may reflect one or both FDI flows in non-negotiable, such as restaurants, hotels and retail, which are cycles of consumption or negotiable FDI flows. As the new wave of capital inflows were directed to emerging markets, attention to policies that support flows to production and attention to supporting the growth sectors of the economy, can be useful. Lessons, learned from the recent economic cycle in the new EU member states, can be applied to other emerging markets that have experienced large capital inflows. Although empirical evidence shows that to the capital inflows, fiscal policies have a direct reduced impact on GDP growth, strong fiscal and financial sectors were the key to overcome the experience well from the crisis and to maintain exchange rate stability (Mitra, 2011).

Figure 2. The growth of GDP, credit and FDI flows, during the recent economic cycle, from 9 new EU member states countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia



Source: Mitra, 2011;

In conclusion, there are sectors where capital flows are very important. After analyzing the degree that economic sectors, supported by capital flows, had or didn't had an impact on GDP, have the following results, which we present in the correlation order:
- Highly significant positive correlation between GDP and real estate capital flows;
- Significant positive correlation between GDP and FDI flows in sectors not related to real estate;
- Positive correlation, but less significant flows between GDP and corporate loans and consumer loans;
- Taking into account only the control parameters of the policy, fiscal policy didn't had a significant impact during the recent episode of the economic cycle;
- The exchange rate has no significant impact on GDP growth nor enhances the effects of credit flows and FDI flows on GDP in a given sector.

To reduce fluctuations in GDP growth and to ensure a sustainable growth trend, I think that would be beneficial policies that focus on areas (such as infrastructure and education) to enhance the attractiveness of tradables for capital inflows. Strengthening financial sector supervision and corporate governance in emerging market economies, could also help this process.

IV. Conclusions

Large oscillation in capital inflows in the new EU Member States coincide with large fluctuations of GDP, beeing a proportional relationship. However, these relations depends on the sectors in which there are are capital inflows.

Capital inflows in real estate seem to have a greater impact on GDP than in other sectors. In recent years, GDP in the new EU Member States was strongly influenced by fluctuations in capital inflows. Most capital inflows consisted of foreign direct investment or capital in the banking system, thus fueling credit growth. However, GDP growth is strongly influenced by the destination of capital flows, than by the form of capital inflows.

Capital inflows that have been directed towards the real estate sector have the greatest impact on GDP growth.

V. Bibliography

1.Allen, Mark C.; Rosenberg, Christoph B.; Keller, Christian; Setser, Brad and Roubini, Nouriel. A Balance Sheet Approach to Financial Crisis, , International Monetary Fund, Washington. Working Paper Nr. 02/210 (2002).

2. Borensztein, Eduardo; De Gregorio, Jose şi Lee, Jong-Wha. "How Does FDI Affect Economic Growth?". Journal of International Economics. Vol. 45. Nr. 1 (1998): 115–135.

3. Cappiello, Lorenzo; Kadareja, Arjan; Kok, Sorensen Christoffer şi Protopapa, Marco. "Do Bank Loans and Credit Standards Have an Effect on Output? A Panel Approach for the Euro Area". ECB Working Paper Nr. 1150 (2010), Frankfurt.

4. Driscoll, John. C. " Does Bank Lending Affect Output? Evidence from the U.S. States". Journal of Monetary Economics. Vol. 51. Nr. 3. (2004): 451–471.

5. Khan, Moshin şi Abdelhak, S. Senhadji. "Financial Development and Economic Growth: A Review and New Evidence", Journal of African Economies. Vol. 12. Nr. 2. (2003): 89–110.

6. Levine, Ross. "Finance and Growth: Theory and Evidence" in Philippe Aghion and Steven Durlauf. eds. Handbook of Economic Growth. Elsevier Science. (2005).

7. Mitra, Pritha. "Capital Flows to EU New Member States: Does Sector Destination Matter?". FMI Working Paper. Vol. 11. Nr. 67. (2011).

8. Ozturk, Ilhan. " Foreign Direct Investment - Growth Nexus: A Review of the Recent Literature". International Journal of Applied Econometrics and Quantitative Studies. Vol. 42 (2007).

9. Rodrik, Dani şi Velasco, Andres. "Short-Term Capital Flows", NBER Working Papers, No. 7364, Boston, Massachusetts (1999).