

## The Monetary Policy and the Real Estate Market

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**Abstract.** *In this paper, we intend to study the connection between monetary policy measures and the boom and bust cycles of the real estate markets in different countries. Many recent articles consider that central banks had an important contribution in triggering the global crisis and the collapse of the real estate markets during 2007-2009 due to the low monetary policy rates and the inadequate regulation and supervision of the banking system. We consider the generalization of this idea is an error, as certain central banks like the National Bank of Romania (NBR) adopted prudent policies in the pre-crisis period.*

**Keywords:** monetary policy; real estate market; global crisis; developed countries; boom and bust cycles.

**JEL Codes:** E3, E5, O50.

**REL Codes:** 8A, 8J, 10A.

## Introduction

The construction sector was an important driver of economic growth in many countries during the economic boom. The global crisis has generated a significant drop in the volume of construction works in many developed countries due to the reduced access to liquidity and increased risk aversion. The volume of construction works in US, EU-27 and Japan amounted to approximately EUR 1,379 bn in 2007, representing 5.3 % of the total GDP of the regions. In 2010, the volume of construction works in the aforementioned regions fell at EUR 1,261 bn, down by 0.6 pps despite the fact the certain countries were not affected by the collapse of the real estate market (Japan and Germany). The developed countries that have a high share of construction works in total output like Ireland and Spain have been the most affected regions by the reduced demand of real estate. The collapse of the real estate market has increased the likelihood of systemic risk considering that the balance sheets of the major financial institutions in developed countries deteriorated mainly due to the credit risk. According to the Global Financial Stability Report (GFSR) published by IMF in April 2011, the financial crisis generated by the collapse of the housing market may be more severe and persistent than other types of crisis. Crisis triggered by the collapse of the housing market is not a new phenomenon in the economy as they affected many countries in the previous decades. IMF considers that periods of boom and bust on the housing market may be triggered by excessive competition between the financial institutions, inadequate regulation and supervision, massive flows of foreign capital, low monetary policy rates for long periods as well as the increase of the population's average revenues.

### 1. The real estate market in developed countries

The US subprime crisis has demonstrated that the burst of speculative bubbles on a large real estate market could trigger a crisis with global effects. The American crisis has certain features, being the first crisis of the originate-to-distribute model in developed countries. In 2007-2008, the collapse of the US housing market was not singular, as similar episodes occurred in Britain, Spain and Ireland. According to GFSR published in April 2011, there was a timing of boom and bust housing market cycles in some developed countries with disastrous effects on the economies affected. We consider that this synchronization is not a random phenomenon, but is the result of financial

globalization and securitization. The deepening of the social inequalities in the 1990s determined US authorities to adopt measures for households with lower income to have access to purchasing houses. Consequently, the lending conditions for the population were eased, while the financial companies offered attractive financial products.

After 1997, house purchases were tax exempted, stimulating the real estate transactions on the US market (Baugnet et al., 2011). Fed aggressively lowered the monetary policy rate from 6.50 % in December 2000 to 1.0 % in June 2003 in order to offset the negative effects of the dotcom crisis in US. Consequently, interest rates significantly were reduced, while the financial companies offered promotional products such as: i) mortgages with very low initial interest rates that grew later (teaser rates), ii) mortgage loans with initial interest payments only (interest only) iii), consumer loans guaranteed with real estate assets. Securitization appeared in US in 1970s and represents a way of finance (Jobst, 2008). Securitization requires an asset transfer to a special purpose vehicle in order to get cash. The special purpose vehicle purchases the assets using the financial resources obtained by issuing asset-backed securities (ABS). The debt securities are later traded by institutional investors. The main advantages of securitization are credit risk dispersion, lower costs compared to the issuance of bonds or bank credit and the lack of regulation (Jobst, 2008). The main disadvantage is that the risk is not eliminated, but transferred to the last purchaser of securities (Bal, 2009).

Spain is the country in euro area with the largest share of the construction sector in total output. In 2010, the construction works represented 10.2 % of Spain's GDP compared to 5.9 % euro area average and 3.4 % in US. The construction sector boom during 2003-2007 is due to several factors. The Mediterranean countries such as Spain, Portugal and Greece obtained financial resources at lower real interest rates due to the adhesion to the monetary union. The growth differential between Spain and other countries of the euro area permitted a significant increase in the average disposable income of the Spanish population. In addition, they have adopted certain measures which have significantly boosted the housing market. Mortgage loans could be granted for periods of up to 50 years and buyers were tax exempted. The value added tax for the acquisition of new houses was reduced at 7 %. The immigrant flows and the high demand for houses from high income non-residents generated a boom of the local real estate market. According to OECD, during 2003-2007 the average price of houses in Spain grew by 59.6 %.

During 1995-2007, Ireland registered the highest increases in house prices among OECD countries (McCarthy, McQuinn, 2011). The average annual real growth of house prices in Ireland was approximately 9 % during the aforementioned period despite the hike of supply (Baugnet et al., 2011). This was the result of the structural changes that affected the Irish economy over the past four decades. Ireland was called the “Celtic Tiger” because of the economic development in a very short period. In 2005, Ireland became one of the richest countries in euro area and in the world after a long period of poverty and famine in the nineteenth century and much of twentieth century. The creation of the monetary union eliminated the negative impact of exchange rate fluctuations and increased the degree of integration of financial markets of the member countries. The “Great Moderation” (Bernanke, 2004) and the creation of euro area allowed Ireland to attract cheap resources from financial markets, most of them directed towards the real estate market. In 1985, the total value of mortgage loans granted by the financial institutions was only EUR 6.5 bn, while in 2007 reached EUR 123 bn (McCarthy, McQuinn, 2011). The Irish housing market boom is due economic factors and social changes. The increase of the disposable income of young persons and the easing of the credit conditions determined them to live separately from their families (Baugnet et al., 2011). Bank’s excessive exposure on the real estate market could have lead to the collapse of the entire Irish financial market during the global crisis. The Irish government injected a huge amount of liquidity in the financial system in order to prevent the systemic risk. As a result, Ireland faced a public debt spiral, being forced to demand the help of EU and IMF. Ireland’s public deficit in 2010 reached its highest level in EU-27 (31.3 % of GDP), while the public debt amounted to 94.9 % of GDP as compared to 24.9 % in 2007.

## 2. The real estate market in Romania

The “irrational exuberance” of the population and the foreign capital inflows directed towards the construction sector generated a housing boom in Romania. According to Eurostat, between 2000 and 2008, the volume of construction works tripled, being the most spectacular growth in EU-27. In 2010 the construction sector represented around EUR 11 bn, dropping by 26.7% as compared to 2008. In Romania, the share of construction works in total output is among the highest in EU-27 and therefore our country is vulnerable to housing market shocks. The housing market boom was due to a

number of factors. During the economic boom, the financial companies with foreign capital attracted very cheap financial resources from international markets and made investments in the real estate market in Romania at high yields. This is not specific only to Romania, but also to other EU-27 countries like Spain and Ireland. During the economic boom, the supply was insufficient to meet the high demand for new houses and office buildings. Although NBR adopted a prudent monetary policy by keeping its main interest rate and the minimum reserve requirements at high levels, there was a significant increase of the lending because of the competition between banks and of the abundance of foreign currency liquidity attracted from the foreign markets. Recently, there was a synchronization of the boom and bust cycles on the real estate markets of many developed and emerging countries. However, the real estate market in Romania has certain distinct elements. Romania does not have a market of sophisticated financial instruments related to the real estate market. A financial market without sophisticated securities could be a great advantage. If the local banks had invested in toxic financial instruments, the Romanian financial system would have faced bigger challenges due to massive deterioration of banks' balance sheets. We consider that there is still enough room for a new period of boom in the construction sector in Romania, as the infrastructure is not sufficiently developed.

Another feature of the Romanian economy is that most foreign direct investments (FDIs) were directed towards a small area (Bucharest-Ilfov). In 2010, the foreign direct investment stock in Bucharest-Ilfov region amounted to EUR 32.7 bn, representing 62.2 % of the total FDIs attracted by Romania according to the survey made by NBR and the National Institute of Statistics. In 2010, FDI stock in construction and real estate amounted to EUR 4.7 bn, representing 9 % of the FDIs. Most real estate investments were made in Bucharest-Ilfov due to the large number of people on a small area, the high average income and the high flow of FDIs into various sectors.

### 3. Monetary policy and the real estate market

IMF considers that we can not accurately forecast the collapse of real estate market in a certain country. However, there are certain macroeconomic indicators showing this outcome. The lending boom, the widening of the current account deficit as well as the rapidly rising real estate prices show a possible housing crisis in the future according to IMF. We consider that there should be given a higher importance to the correlation between labor

productivity and price developments on the real estate market. An example is US economy, as during Q1 2004 – Q2 2007, the average house prices grew well above the labor productivity gains. A similar phenomenon occurred in Romania during Q1 2004 – Q1 2008, when real estate prices soared. We consider that the authorities must stop the rising prices on the real estate market if for two or three consecutive years real estate prices surpass the labor productivity growth. But those measures could negatively affect the economic growth and the welfare of the population. In conclusion, we can not predict the exact period of a housing market bust, but we can limit the negative effects of such episodes through appropriate monetary and government policies.

In the last four years, different studies show the Fed's monetary policy errors and the inadequate regulation and supervision generated the subprime crisis and the global liquidity crisis. Taylor (2007) considers that Fed kept the monetary policy rates at too low levels between 2001 and 2005. According to its calculations, the monetary policy rate has been well below the rate indicated by a monetary policy rule. Blanchard, Dell'Arricia and Mauro (2010) believe that the decrease or the increase of the monetary policy rate can not always solve problems such as excessive risk-taking and the high leverage of companies and households. Mishkin (2007) considers that Fed's monetary policy is not responsible for the financial crisis in US in 2007. According to Mishkin (2011), asset-price bubbles can be of several types. The most dangerous form is determined by the credit boom, the low interest rates and the lack of government regulation, the recent global crisis being the most eloquent example. Another form is caused by irrational exuberance bubble due to a technological shock (Mishkin, 2011). This occurred in the US in the 1990s. Thus, in 1997, the US unemployment rate was below the NAIRU, Fed expecting a rise in inflation. Although macroeconomic models indicated interest rate increases in order to temperate the inflationary pressure, Greenspan decided not to tighten the monetary policy as the American economy was influenced by a positive technological shock caused by IT. We consider that the global liquidity crisis was due to an international context that was favorable to a certain point for the developing economies. Globalization and the liberalization of capital accounts in many emerging countries allowed an increase of the financial flows to different regions during the "Great Moderation". Despite the fact that the monetary authorities in emerging countries have adopted prudent policies during this period, the dollarization or eurization of the economies reduced the effectiveness of the domestic

monetary policies. Therefore, the emerging countries have become more vulnerable to shocks on the international markets and changes in Fed's and ECB's monetary policy stance. A severe crisis on a major economy can globally spread through trade and financial links. The global crisis has mainly affected the construction and car manufacturing sectors as households' behavior has changed significantly. They have adopted a prudent behavior, reducing their expenses for the acquisition of large value assets like houses and cars. Although the main objective of central banks that have adopted inflation targeting is price stability, they have a rather "looking at everything approach" (Bernanke, Boivin, 2003). The monetary authorities monitor all macroeconomic indicators in order to take the optimal decisions of monetary policy. The developments of the real estate market are of great interest to the monetary authority, as any shock on this sector affects financial stability and output. Ireland is the most eloquent recent example. The Irish real estate market shocks could have led to the collapse of the entire financial system and could have generated the country's default without the intervention of the international financial institutions. Svensson (2009) believes that targeting assets' prices should not be an objective for the central banks because it is very difficult in some cases to quantify whether price increases are due to speculation or if there are economic fundamentals that have caused this trend (such as increased productivity).

We consider that in Romania, the main threat to the financial stability is the high share of foreign currency loans in total loans. In September 2011, non-government loans in foreign currency represented 63.6 % of the total loans granted. There is nearly a complete eurization of the Romanian real estate market as asset prices are published in euro while mortgage loans are mainly in euro. According to NBR's Monthly Bulletin published in September 2011, housing loans in foreign currency accounted for 95.2 % of the total loans. We consider that this is a natural process. Thus, the banking system in Romania is generally dominated by foreign-owned banks that had access to the cheap resources on the international markets during the pre-crisis period. Consequently, they invested the abundance of liquidities in foreign currency on the domestic market as NBR adopted a prudent monetary policy and, therefore, the access to resources in local currency was limited. Consequently, the eurization of the economy could be considered a direct result of the financial globalization. In Romania, the high share of foreign currency loans in banks' balance sheets negatively affects the monetary policy transmission mechanism. The importance of the interest rate channel has significantly

reduced as NBR's interest rate changes in influence to a lower extent credit costs in the Romanian banking system. We consider that the importance of the exchange rate channel increased. The adoption of inflation targeting as a monetary policy strategy determined NBR to mainly focus on maintaining price stability and not the targeting of the exchange rate level. Central bank independence and exchange rate flexibility are essential institutional requirements for the adoption of inflation targeting. Debelle et al. (1998) consider that although many emerging countries adopted flexible exchange rates, there is still a tendency to exercise the management of the exchange rate in the short term. In Romania, the monetary authority adopted a managed floating exchange rate regime. Thus, the central bank intervenes in the forex market in order to influence the exchange rate when it considers that the developments may affect price and financial stability. Many recent articles consider that central banks have played an important role in triggering the global crisis in 2007-2009 as they maintained the monetary policy rates low for a long period of time and there was inadequate regulation and supervision. We consider that the generalization of this idea is a major error, Romania being an eloquent example in this sense. During January 2003 and September 2008, NBR maintained a high monetary policy rate in order to temperate the inflationary pressures arising from excessive domestic consumption. The monetary policy rate was 10.25 % when the global liquidity crisis started in September 2008. The Romanian monetary authority maintained high minimum reserve requirements on foreign currency liabilities to slower credit growth in foreign currency. However, the rate of growth of the loans in foreign currency remained high. During 2005-2006, private banks directed part of the resources towards non-bank financial institutions. The financial institutions that were members of foreign groups tried to avoid central bank's prudential measures. In 2007, NBR has limited certain prudential measures, allowing private banks to set their own rules on lending to individuals. The abundance of financial resources from foreign parent banks and the high competition between banks led to an expansion of lending during 2007-2008. Therefore, domestic consumption increased, the current account deficit reached unsustainable levels and real estate asset prices continued the upward trend recorded in the previous years due to the aggressive lending policies of private banks and pro-cyclical government policies.



#### 4. Conclusions

The US subprime crisis has demonstrated that the burst of speculative bubbles on a large real estate market could trigger a crisis with global effects. During 2007-2009, real estate markets in many developed and emerging countries collapsed due to the global liquidity crisis. In US, the subprime crisis was mainly the result of a gradual easing of the monetary and fiscal policies in order to diminish the social inequalities that deepened after 1990. The boom of the real estate market in certain countries of the euro area like Spain and Ireland was mainly due to: 1) the adhesion to the monetary union and deepening of the financial markets which reduced significantly the financing costs, 2) higher economic growths as compared to Germany which led to a significant increase of the disposable income and 3) the abundance of liquidity on the international markets. Despite NBR's prudent monetary policy, the significant hike of real estate prices in Romania was mainly driven by: high inflows of foreign capital directed towards the real estate markets, high competition between private banks, pro-cyclical fiscal policies and, finally, the "irrational exuberance" of the population.

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