THE CONTAGION EFFECT AND THE RESPONSE OF THE EUROZONE TO THE SOVEREIGN DEBT PROBLEM

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Abstract: *This paper addresses a number of phenomena that characterize the euro area, one of them being the contagion effect. This is one of the mechanisms by which financial instability becomes so widespread that the crisis reached global dimensions. The following lines argue that contagion plays a crucial role in exacerbating the sovereign debt problems in the Eurozone. Consequently, the management of the crisis by the competent authorities should focus on policy measures that are able to mitigate the contagion. Therefore, many of the European Central Bank interventions (ECB) in the European Union were motivated by the need for understanding and mitigating the contagion phenomenon.*

Keywords: international financial contagion; crisis; macroeconomic indicators; fiscal policies; sovereign debts.
JEL classification: E44; F34.

INTRODUCTION

The contagion term refers to the way in which a crisis is transmitted from one economy to another, being a key player in spreading economic recessions of the past. It's amazing the way in which this phenomenon appears and develops or how the effects of an economic shock in one country can be felt in different markets around the globe, regardless of their size and structure. Sometimes the synchronicity and the virulence of the financial crisis seem unrelated to other internal market issues. However, history has shown us moments when the crisis caused massive failures of currencies without a visible connection between trade flows and involved capital markets. This type of phenomena has aroused an increased interest to investigate the economic contagion. Given the fragility of some emerging countries, including Romania, their analysis takes the form of a natural and necessary phase in order to reduce the negative effects of the economic contagion.

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1. THE EFFECTS OF THE CONTAGION PHENOMENON: DEFINING ELEMENTS AND TYPOLOGY

For many emerging countries structural crises with which they have confronted for a longer period of time were accompanied by a systemic crisis imported from the outside. This crisis began in the U.S. system (due to an almost continuous monetary expansion policy led by this country) and spread rapidly on the global level. The phenomenon of the spread or propagation of the crisis is known in the literature as the "contagion effect". The term "contagion" comes from the medical field and it was recently introduced into the economic literature. The interest of the economists for "the contagion phenomenon" of the financial crises started to grow only in the second half of the 90s when the crises propagation effects became more visible from one emerging country to another. Practically speaking, the crisis where the contagion effect was observed for the first time was in Thailand (July 1997) on the foreign exchange market when the Thai government decided to suspend the support of the dollar currency and adopt a free exchange rate of the national currency-Baht (the maintenance for a very long period of a fixed exchange rate encouraged lending from foreign sources and attracting foreign investment but, at the same time, the economy has been greatly exposed to the currency risk). Very quickly the crisis has spread to all the neighboring countries: the Philippines, Malaysia, Singapore, South Korea were among the most affected countries in the region. Then the crisis spread to Russia and Brazil. Even in developed countries from Europe and North America the effects of this crisis were felt and they had the effect of a "domino effect" for more and more countries as the time went by.

The introduction of the concept of contagion in the financial crises literature was based on the devastating effect that they have on the level of income and welfare of a large number of people and in a very short period of time (as it is the case of a massive epidemics). The concept of contagion not only takes into account the impact of the crises on the local level, but also the channels through which these crises are propagated at an international level. The contagion effect also refers to the spread of a crisis in some sectors of the economy (e.g., the crisis in the U.S. mortgage market began to gradually affect all sectors of the economy). In defining the contagion effect one has to take into consideration the existence of a direct or an indirect contact between the countries (or areas) affected by the crisis.

The contagion effect takes into account the emotional response of the investors and the consumers to the radical changes on the international markets reflecting thus a strong psychological and behavioral dimension. The imperfections of the international financial markets can generate speculative bubbles, an irrational behavior of market participants, speculative attacks, falling stock markets and other events of this kind. These imperfections that can cause major imbalances in the balance of external payments influence the fundamental macroeconomic indicators (inflation, exchange rate, interest rate, unemployment) in countries that initially seemed economically stable.

Currently one can operate with many definitions of the contagion effect of financial crisis:

- the general approach: contagion is the mechanism through which shocks are transmitted across countries, creating a globally domino effect. Contagion can occur both during economic growth and in times of crisis. This phenomenon is taken into account only when it comes to a crisis propagated on an international level (it is often forgotten that there is a "positive" contagion through which the economic growth or development is exported to other countries);

- the restrictive approach: contagion is the mechanism through which economic shocks are internationally transmitted or when there is a correlation between two or more countries, beyond any fundamental link between them and which are different from the common shocks of those areas. This definition refers to that additional training effect that arises between two or more countries and it is explained by specific behavioral attitudes at the investor or consumer level;

- the strict approach: contagion occurs when the correlation between two or more countries increases significantly during crisis times compared with periods of calm. The definition refers practically about the influence that a crisis may have upon the intensity of the relationship between two or more countries.

Most economists operate with a strict definition of the contagion phenomenon: "contagion is a fast growing link between various financial markets in times of crisis". A derivative form of the strict definition of the contagion effect is given by Kaminsky and Reinhart (Kaminsky and Reinhart, 1999) and Eichengreen and Rose (Eichengreen and Rose, 1998): "contagion effect is the situation in which information about the existence of a crisis in another country increases the probability of a crisis on local plan". A number of authors (Gertsman, 1998; MacMahon and Trichopoulos, 1996; Edwards, 1999) have restricted even more the contagion effect terminology: "Contagion is the situation where the magnitude and the extent of the transmission of the international shocks overcome the ex-ante expectations of the operators in the market".

2. THE GOVERNMENT DEBT CRISIS AND THE ECONOMIC EVIDENCE OF CONTAGION

We shall try to briefly expose the arguments that certify the current unfolding crisis at the sovereign level. When the crisis has become much more severe and Moody's downgraded Portugal, the key factor was the development of events in Greece. The international rating agency Moody's found that the contagious effect propagated by the Greek economy will cause a second round of funding. In addition, using Greece as a precedent, the Agency indicated that the second round of official financing would involve private sector participation of Portugal. Unfortunately, this was not the end of the story. The fact that Portugal has downgraded and most of all, the continuous fears about Greece's bankruptcy, have initiated a mass sale of government bonds from Spain and Italy. By that time there was no evidence to suggest that the economies of Italy and Spain or their budgetary situation were situated on a threatening position. Around July 2011, the yield of the Italian government securities had already increased by almost 100 % and by more than 80% the Spanish ones. What mechanism has caused these market movements? We think that a major role was played by the economic contagion. The initial increase of government bond yields can be explained by the growing concern over the extent of the phenomenon and the increased possibility of "bankrupting" the private sector in Greece. For this reason, some investors consider it rational to begin reducing the sovereign debt, while others simply believe that their exposure to countries from the monetary union must be reduced. Taking into consideration the high volatility, other investors may also prefer to withdraw from certain segments of the market.

3. THE EUROZONE ANSWER TO THE PROBLEM OF THE ECONOMIC CONTAGION

We shall turn our attention to political actions in the euro area, respectively, of anchoring the euro zone to the sovereign debt crisis issue. In this case, we shall begin by discussing the role of the European Central Bank and then we will analyze the responsibility of the other public authorities.

European Central Bank Policies

In order to ensure the functioning of the monetary policy transmission mechanism, it is essential for the European Central Bank to maintain the price stability on a medium term and thus the ECB has adopted a series of unconventional measures for monetary policy all along the financial crisis. The measures that were taken have helped not only to stabilize financial conditions and credit the economy but also to maintain price stability.

After the outbreak of the crisis in August 2007 and its aggravation in September 2008, the ECB has provided liquidity in various ways and for longer terms in order to correctly address to a fairly dysfunctional money market. The ECB also collaborated with other central banks to provide solutions for the international money market. Joint provision of liquidity in U.S. dollars to several central banks, including the ECB, has been labelled by some observers as a kind of "Plaza Accord" of the money markets. Following the bankruptcy of Lehman Brothers, the ECB has initiated a policy of "credit support". Concretely, the ECB provided a series of measures to improve the credit flow, thus the impact was more penetrating than it would have been by reducing the interest rate. These measures include providing unlimited liquidity through "fixed rate tenders with full allotment"; provision of cash with maturities extended to one year; providing greater amounts of liquidity into the currency of euro area banks and these, in turn, to offer euro liquidity to local banks; a program of purchases of guaranteed bonds. Since normally the banks may benefit from the liquidity provision from the ECB if they have sufficient warranties, the ECB has expanded the list of assets it accepts as warranties.

Taking into account the evolution of the market after the crisis, collateral eligibility criteria were adjusted in order to eliminate any inconsistencies and avoid possible abuses. The total amount of eligible collateral marketable instruments is very high, being approximately equal to 13,500 billion euros, an amount that represents approximately 150% of euro area GDP. Out of this amount, euro area banks have on their balance sheets, approximately 21 thousand billion euros already approved for use (including some guarantees of certain assets that are not traded). It therefore creates leeway in providing liquidity amounts to around 900 billion euros. In response to the repercussions of the government debt crisis in the euro area, the ECB established in May 2010 security markets' program (Securities Markets Programme - SMP). In the SMP, which supports the prohibition of monetary financing, the Eurosystem buys securities of dysfunctional segments of the government debt markets in order to correctly transmit monetary policy in all sectors of the monetary union. Contagion is one of the mechanisms that obstruct the transmission of monetary policies through the interest rate.

European debt crisis has reached new heights in the summer of 2011 and the ECB and the ECB has responded by resuming and implementation of security markets' program (SMP). The relative size of the program represents only 2.3 % of euro area GDP. By comparison, the amounts allocated to similar programs in England and the U.S. were 13.7% of GDP in the first case and 11.4 % in the second case.

On the Governing Council meeting of the 6th of October 2011, the ECB has taken a number of decisions in response to market pressure:

- to conduct two longer-term refinancing operations;
- to apply fixed procedures for the allocation of liquidities as long as necessary (at least until mid-2012);
- to engage itself in the second bond purchase program (Covered Bond Purchase Programme - CBPP2). The purpose is to absorb 40 billion euros over a period of one year since November 2011.

On the 30th of November, the banks of Canada, England, Japan, USA, Switzerland and the European Central Bank have initiated a coordinated action in order to ease the funding channels for the U.S. dollars. Therefore, the price of dollar liquidities was reduced by 50%. Moreover, temporary bilateral exchange agreements of liquidities (the swap type) were concluded, which allowed each central bank to provide for liquidities for the other participants' currencies. On the 8th of December 2011, the ECB decided to conduct two longer-term refinancing operations. These operations aim to reduce pressures facing banks when they need long-term funding. The first operation has attracted an unprecedented demand of about 489.2 billion euros, which underlines the usefulness of this measure.

Longer-term operations were supplemented by an increase of the reserve area of the eligible collateral. Although, on average, the eligible collateral area is very high, it is likely that individual banks do not have sufficient collateral to cover its financing needs. First, the rating threshold for certain asset-backed securities has been reduced. Second, the national central banks were allowed to temporarily accept credit claims as collateral. Moreover, the reserve ratio was halved from 2% to 1%, which increased the supply of liquidity in the banking sector to 100 billion euros.

Clearly, according to their goals, all of these actions have had positive effects. Looking at past experiences, the ECB measures have activated the monetary policy transmission mechanism, causing it to perform relatively well in the Eurozone. Given the fact that contagion is present in the Eurozone, one must recognize that the transmission mechanism still remains severely disrupted in some euro area countries.

Other European and national authorities' policies

The involvement of the European Central Bank was rapid, targeted and decisive, but could not undertake the task of solving all the problems by itself. Eurozone governments must take responsibility and this implies measures both for member states and for the euro area. It is extremely important that member states continue to implement policies that place public finances on a sustainable path. At the same time, it is necessary for member states to engage in structural reforms that increase the potential growth of the economy. In addition, clearly, the states that have joined the programs proposed by the EU /IMF must remain particularly attentive to their commitments.

Only in this way fundamental factors and imbalances from the root of the crisis can be removed. At the European level, the ECB encourages progress in redesigning the fiscal governance. Since the 9th of December 2011, the heads of state or government of the EU agreed upon a new fiscal pact that limited structural deficits to 0.5% of the nominal GDP. Contrary to the rules of the Stability and Growth Pact, this rule, of a balanced budget will eventually be inserted in the Community legislation. It is very important to note that this rule will provide automatic correction, if it is broken. The transposition into national legislation is subject to scrutiny by the European Court of Justice. Taken together, these measures strengthen in a significant manner the preventive component of the European fiscal governance framework and thus limit the emergence and development of a future sovereign contagion. Because anticipatory measures cannot cover all possible scenarios, it is important to have a protection, a shield that limits the risk of contagion between different EU markets. Following the increase of the public debt in the Eurozone, the member states have decided to create the European Financial Stability Fund (EFSF). EFSF allows state budgets that are in a difficult position in the Eurozone to receive funds and this funding is subject to conditions negotiated by a committee of the European Commission, IMF and ECB. The program improves the macroeconomic variables throughout time and thus the solvency problem is bettered, which provides countries with the opportunity to strengthen their domestic markets.

The European Central Bank considered auspicious the recent actions of the heads of state or government, which strengthened the position of the EFSF, as well as that of its successor, the European Stability Mechanism (ESM). In the first place, the Eurozone leaders have pledged to review the mechanisms of protection until March. In the second place, the ESM will enter into force by July 2012, earlier than it was originally planned. In the third place, the private sector's involvement in the Eurozone will use the established practices of the IMF, which will reinforce confidence among investors. Finally, it will be introduced a voting procedure for establishing emergency rules for MES, an action that will facilitate rapid decision-making in situations of economic crisis. However, it is important for the EFSF to be operational as quickly as possible. In order to achieve this, it was decided that the European Central Bank along with other central banks to act as a field agent for the EFSF, in its market implementation. Last but not least, it is essential that the affected governments will not try to implement new financial stabilization tools, but rather to provide support for the measures taken.

CONCLUSIONS

We conclude by reiterating some of the important information presented in this paper. First, historical experience suggests that central banks play an important role in creating financial stability, including reducing the risk of the economic contagion. They do this by creating price stability or providing liquidity as quickly and as widely widespread as possible during economic crisis. Second, taking into consideration that the European Central Bank supervises the phenomenon of the systemic risk, significant resources are being used, not only for an early detection of imbalances and negative changes in macroeconomic indicators, but also to identify and assess the risk of contagion.

No matter how difficult it is to collect relevant information and to shape the appropriate financial instruments, most evidence suggests the presence of a major risk of the sovereign and financial contagion in the Eurozone over the current crisis. In the third place, understanding the phenomenon of contagion is essential to overcome the present sovereign debt crisis in Europe. There would have been devastating effects, in terms of social and economic point of view, if the ECB and other competent authorities have not intervened immediately and decisively. In the fourth place, even if the ECB's actions were decisive and effective, this is not enough. All political parties must take responsibility. The cooperation between the heads of the state or government of the Eurozone and the EU institutions it is also a basic condition. Moreover, all the countries must meet their fiscal targets and introduce structural reforms to restore competitiveness and growth potential, elements that were lost in the last decade.

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