This project has received funding from the European Union's Seventh Framework Programme
for research, technological development and demonstration under grant agreement no 266800

FESSUD

FINANCIALISATION, ECONOMY, SOCIETY AND SUSTAINABLE DEVELOPMENT

Working Paper Series

No 107

Survey on economic policies during the crisis

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ISSN 2052-8035

This project has received funding from the European Union's Seventh Framework Programme
for research, technological development and demonstration under grant agreement no 266800

Survey on economic policies during the crisis

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Abstract: The Global Financial Crisis has meant for developed countries to return to an economic situation similar to that experienced during the Great Recession. At the root of the crisis, again, is the financial system. Financial innovation, combined with stringent regulatory failures and with an overly loose monetary policy, allowed to expand private credit disproportionately, fuelling a speculative bubble that, when it burst, generated a demand shock that eventually turn a financial crisis into an economic crisis with lasting consequences.

This work attempts to examine the economic policies implemented during the crisis. We focus exclusively on demand policies, with special attention to those implemented in the first phase of the crisis. The economic policy implemented to overcome the crisis has passed through different stages. In the first stage, the strategy was a combination of expansionary monetary and fiscal policies. In the second stage, the fiscal stimuli begin to be withdrawn, while an aggressive monetary policy to stimulate private credit through expanding the money supply is maintained. The third stage is scheduled to start in late 2014. This third phase would be characterized by the end of demand policies and the recovery of supply policies or structural adjustment policies, especially for the case of emerging economies as well as economies of southern Eurozone.

Key words: fiscal policy, monetary policy, Eurozone, emerging countries, developed countries, financial crisis

Date of publication as FESSUD Working Paper: April 2015

JEL Classification: E02, E52, E58, E62, F45

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Acknowledgments:

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 266800.

Website: www.fessud.eu

1. Introduction

In the introduction, written by Blanchard (2012) to the book "In the Wake of the Crisis. Leading Economists Reassess Economic Policy", which is a compilation of the papers presented at a conference organized by the IMF in March 2011, it can be read the following statement:" as a world economic crisis developed in 2008 and lasted longer than most economists predicted, it became increasingly clear that beliefs about macroeconomics and macroeconomic policy needed to be thoroughly examined. In the throes of the crisis, policymakers had to improvise" (emphasis added).

The financial system, and particularly, banks in developed countries, needed public aid to avoid bankruptcy. Capital and credit markets dried up and refinance loans in the wholesale markets needed the endorsement of governments. Credit to households and non-financial companies contracted and the resource to central banks increased. The reference rates were brought down, while central banks began to develop heterodox policies to increase liquidity in the system. The economic growth rates plummeted. Fiscal policy was introduced to contain the fall in aggregate demand. All these measures were indeed improvisations, at least if one judges them according to the policy recommendations from the "Macroeconomic new consensus" that had dominated in the Economics manuals previous to economic crisis. The "Great Moderation" was broken by the link that less could be expected according to their economic models: the financial system.

As the initial panic was being diluted, however, "improvisations" began to be led back to the recommendations of the theory. Despite having observed that fiscal multipliers increased in times of crisis, fiscal stimuli were abandoned. Although monetary policy has remained expansionary, there have been voices recommending a rapid return to "normality" to prevent the formation of new bubbles. The structural adjustment policies, as an antidote to retrieve a sustained long-term growth, have returned to play a central role in the agendas of governments, parallel to the loss of enthusiasm for demand policies.

The Eurozone countries, meanwhile, have been facing a double crisis. On one hand, the global financial crisis and, on the other, their own crisis: the sovereign debt crisis. The lack of fiscal risk sharing mechanisms, along with fiscal adjustment policies implemented since 2010, has strengthened monetary policy as the only instrument for crisis management for all the Eurozone countries. However, considering the fragmentation of the financial system that has occurred in the Eurozone, the measures taken by the ECB are proving insufficient to overcome the crisis.

In the following pages, we attempt to explain in more detail the general ideas that we have presented on the economic policies during the crisis. We focus exclusively on demand policies, with special attention to those implemented in the first phase of the crisis. The next section presents an overview of the policies that have been followed until the present time. The third section explains the policies developed in both advanced and a selected group of emerging economies. The final part is devoted to the problems faced by the Eurozone as well as to show the inability of monetary policy to fight the twin crises suffered by the countries that made up the euro.

2. An overview

After seven years of the subprime mortgage crisis in USA we are still suffering the aftermath of the financial crisis. The economic situation of the Euro zone countries remains stagnant. In the case of the US economy, although it seems that the worst of the crisis has been overcome, yet doubts persist about its resilience when the Fed monetary stimulus is withdrawn. Emerging economies, despite having shown an initial resilience unknown until the current crisis, have started to show signs of slowing in their growth rates. There is a widespread perception, or at least this is what emerges from reading the latest reports from international agencies, that the global economy may enter a situation of low economic growth in the coming years.

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How has this situation come about? Have the economic policies and especially the macroeconomic policies been the right ones? Have fiscal stimulus lacked intensity? Has international cooperation been inadequate? Are the slow structural reforms hampering economic growth? These are some of the big questions that the current situation of the world economy is posing and for which there is no convincing answers.

The origin of the crisis was the disproportionate private credit expansion since the beginning of the century. This credit expansion favoured the growth of consumption and private investment above the disposable income growth in developing countries. Rates of household and companies debt grew significantly. Private debt, moreover, was channelled not so much towards investments aimed at improving productivity and potential growth, as towards speculative investments. The final result was the formation of financial and real estate bubbles which eventually burst and caused the financial crisis[1].

The exhaustion of the debt cycle and the beginning of the process of deleveraging in the aftermath of the crisis led to a negative demand shock that eventually turn a financial crisis into an economic crisis with lasting consequences. In the first phase of the crisis, the economic policy strategy in emerging and in developed economies was to sustain aggregate demand through a combination of fiscal and monetary stimuli. In a second phase when it was believed that the most traumatic effects of the crisis had been overcome, the idea that the time to remove fiscal stimuli began to take hold. The limit may be dated in 2010. In the Fiscal Monitor of November, 2010 the IMF refers to the change in the fiscal strategy as follows: "fiscal policy is beginning a gradual shift from supporting demand to reducing deficits, but at different speeds depending on country circumstances". The expansionary monetary policy, therefore, became the dominant strategy to combat the effects of the crisis. While the stance of monetary policy in the euro area and the USA has been the same, the implementation and the intensity have differed considerably.

In the one case as in the other, monetary policy has been aimed at stimulating the supply of credit by reducing interest rates and implemented balance sheet policies. Although the pace of rate cuts followed by the ECB has been slower than that driven by the Fed, finally they have come to converge to close to zero. The most significant difference between the two central banks has occurred, however, in the balance sheet policies. The Fed has expanded its balance sheet through direct purchases of American Treasury bonds and mortgage securities. The ECB has expanded its balance primarily through long-term refinancing operations by providing liquidity to banks for three years. In other words, the Fed has directly and permanently injected liquidity into the markets of public and private debt through buying assets while the ECB has made available to the euro zone banks ample liquidity hoping to increase the bank credit.

The results achieved with this mix of restrictive monetary and fiscal policies are disappointing, at least in the European case. The Eurozone countries are facing a problem of deflation. The fiscal adjustment policies have had a negative impact on economic growth (Attinasi and Klemm, 2014). Cutting interest rates and the unconventional policies of ECB did not result in the growth of credit to households and non-financial corporations. The annual growth of credit in real terms (mid-2014) still remains at negative rates.

The US economy, meanwhile, seems to show a better performance than the Eurozone, although US still has to face the issue of tapering. Furthermore, the withdrawal of monetary stimulus by the Fed may have potential negative consequences beyond its borders. These stimuli have helped to generate a high level of global liquidity which has kept interest rates in emerging economies below the equilibrium rates in addition to helping to appreciate the real exchange rates in these economies. These exceptionally low interest rates have fuelled a process of debt, especially in corporations in emerging economies, which could end up becoming a new debt crisis in these economies when interest rates rise as a result of the withdrawal of stimuli of the Fed. These fears were partially endorsed with the first announcements relating to tapering of asset purchases in

2013 (Mishra et al., 2014). The pace, therefore, at which these stimuli should be removed pose a risk to the financial stability for emerging countries, especially for those countries where debt has increased rapidly in the years following the crisis.

Emerging economies, meanwhile, although they have shown greater resilience than developed economies in the crisis, they are beginning to show clear signs and deceleration. Monetary and fiscal policies that were implemented in the first phase of the crisis positively contributed to mitigate the effects of the financial crisis in these countries. The capacity shown by this group of countries to develop anti-cyclical policies is undoubtedly one of the most remarkable aspects of the current crises. The effectiveness of the implemented policies, moreover, is also closely related to the situation in which they entered into the crisis. The financial crisis reached these countries, at first, through the financial channel in the form of net capital outflows and, later, through the trade channel. The economic growth prior to the crisis, however, did not rely on firms and households debt. The experience of past financial crises (the Debt Crisis and Asian) served to contain debt levels, creating buffers that have proven essential to the management of the current crisis.

In any case and once fiscal stimuli were withdrawn, emerging economies began to show lower rates of economic growth. The weakness of the developed economies is partially responsible for what occurs in emerging economies. The model of growth in these countries is export-driven, so that their growth is still dependent on export demand from developed economies. Moreover and as already noted, in some of these countries, particularly in China the domestic monetary stimulus and the global liquidity injected by the Fed have fuelled a process of households and corporations debt which poses a new threat to global economic stability.

The fact that the policies implemented so far, at least in developed economies, have failed to overcome the crisis is helping to set up a new public policy framework in which other dimensions of the crisis, which had been ignored until now. Although it could also be said that this new framework, rather than illuminate a new economic policy, provides an explanation of some of the causes that impede policies to overcome the economic stagnation. It is not so obvious, however, that their policy proposals will make it possible a quick recovery.

The deleveraging of households and corporations started in the aftermath of the crisis plays a significant role in this review. This process limits the options available to the monetary policy, since the expansion of aggregate demand is contained not so much because of the lack of supply of credit, but because of the anaemic credit demand. The monetary stimulus, therefore, aimed at expanding the private credit would have little room. As it will be discussed when we will refer to the situation in the Eurozone, this issue is clearly present, especially in countries that, such as Spain entered the crisis with high levels of debt. The problem to be solved, then, would be how to speed up the process of deleveraging of households and companies, about which nothing has been said. In this new framework this process has its own times, and the possibilities of intervention from public authorities are very limited.

Stimulus policies based on the credit expansion, on the other hand, are seen as potentially dangerous. Access to cheap credit may induce an inefficient allocation of resources. "A key source of hysteresis is the misallocations of credit and resources (capital and labour) that built-up during the unsustainable boom and may worsen during the bust. Given debt overhangs, in crisis-hit economies the allocation of credit matters more than the total amount of credit extension for the recovery and medium-term growth" (Caruana, 2014). Central banks therefore should remove policies of cheap credit and stimulate credit allocation to activities which improve productivity. The last decision of the ECB to link the availability of liquidity to expand loans to families and non-financial corporations (not intended for house purchase or sovereign bonds) is a paradigmatic example of this kind of selective monetary policy.

The reallocation of productive factors from the leading activities before the crisis (housing sector) to sectors with more capacity to increase the growth potential (the manufacturing sector, for example) also needs structural adjustment policies aimed at minimizing the transition costs. These policies are, first, the reform of the labour market and, in general, all measures designed to ease the functioning of markets.

In this new framework of economic policy, however, fiscal policy is not seen as a tool that has to be recovered. There are two arguments that they adduce to maintain the current path of fiscal adjustment (Caruana, 2014). First, the problem of long-term sustainability of debt and second the futility of fiscal stimuli during the process of deleveraging. Any tax cuts, it is claimed, would not go for consumption, but for saving and/or accelerating debt reduction. Nothing, however, is said about the ripple effects that can be achieved by stimulating public spending.[2]

In short, demand policies must give way to supply policies. The way out of the crisis that is emerging with this policy strategy is slow and with low growth rates, at for the duration of the deleveraging. Economies must "digest", before thinking about growing, the excesses of the past. Economic policy should be limited to create better environmental conditions to, once solved these excesses, achieve that the recovery of the credit demand that enable more balanced growth than the one in the years before the crisis. On the basis of the new recommendations that are emanating from the international institutions (Tressel et al, 2014; Cubeddu et al, 2014) this may be the new direction of economic policy in the coming years.

3. Monetary and fiscal policies in the crisis

3.1. Some economic data

Figure 1 shows the evolution of the economic growth rates during the last two decades for all the Advanced Market Economies (AMs) and for the group of Emerging and Developing Economies. In the years prior to the crisis, this second group of countries shows rates of growth significantly higher than those achieved in the previous years. The growth gap between these countries and the AMs also increases considerably.

Insert Figure 1

The Global Financial Crisis (GFC) cut the path of growth in both groups of countries, although the gap in economic growth between them narrows compared to previous year is still higher to what happened during the decade of the nineties of the last century. Since the beginning of the crisis, moreover, both groups of countries have parallel growth paths.

At the beginning of the crisis, debate focused on whether the emerging economies would follow the advance economies into a recession or whether decoupling would help lessen the impact of the recession. The increases in trade among emerging and developing economies, as well as increases in productivity growth and domestic incomes, led to believe that the impact of the financial crisis in these countries would be negligible. Even though commercial and financial relations between these countries have increased, and that in some of them the relevance of domestic demand has increased, it is true that data do not support the hypothesis of decoupling. The crisis also had clear effects on these economies, and though they have shown greater resilience than AMs, the decline in economic growth rates observed during the crisis is no stranger to the economic stagnation found in AMs.

The average rate of economic growth for the AMs between 2000 and 2007 was 2.4%. In 2008 this rate had fallen to 0% and in 2009 to -3.6%. In the group of Emerging Market Economies (EMs), the average growth rate was 6.2% in the years preceding the crisis. This rate fell to

5.3% in 2008 and 0.9% in 2009. The Low-Income Economies have suffered the least from the crisis due to their lower economic and financial integration with those countries in the epicenter of the crisis. The average economic growth rate of these countries between 2000 and 2007 was 6.9%. In 2008 this rate was 6.2%, and 4.8% in 2009. The best performance in the Emerging and Developing Economies in the early years of the crisis (shown in Figure 1) is mainly due to lower decline in growth rates in Low-Income Economies than in EMs.

To achieve a better understanding of the impact of the crisis in the EMs, Figure 2 displays the evolution of growth rate for a selected group of EMs of Asia and Latin America and China. The growth rate in China fell from 14% in 2007 to 9.6% in 2008 and 9.2% in 2009. After a slight recovery in 2010, growth rates slowed again. In the selected group of Latin American and Asian countries the behavior is very similar to that described for the Chinese economy. In 2009 the growth rate was 0.6%, that is, five points lower than in 2007. If we look at each of the countries that make up this group we can better appreciate the intensity of the recession for these countries. Between 2008Q4-2009Q2 the Mexican economy suffered a decline in GDP of 11.9% and 4.4% Chile and Brazil of 4.4% and 4%, respectively. Among the members of the ASEAN-5 block only Vietnam and Indonesia achieved positive growth rates in 2009. Also in 2009, Malaysia and Thailand suffered a decline of 1.7% and 2.2%, respectively.

Insert Figure 2

Figure 3 shows the evolution of the economic growth rate in the Eurozone and the US. From the beginning of the century, the growth rates in the Eurozone were weaker than in the USA. This tendency reverts in the years immediately before the crisis, when the US economy begins to show the first signs of exhaustion of the cycle of indebtness. With the onset of the crisis, the dynamics of these two economies starts to diverge again. In 2009 the growth rate of the Eurozone -4.4%, whereas in USA this rate was -2.8%. However, the most relevant fact of this differential performance occurs in subsequent years. While the U.S.

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economy does not slip back into the recession, the countries of the euro zone, after achieving modest growth rates in 2010 and 2011 (1.9% and 1.6%, respectively), again fall into recession in 2012 and 2013 (-0.7 and -0.5%, respectively).

Insert Figure 3

The data indicate different behaviors which are worth mentioning. First, data suggest a relative better performance of the EMs than AMs during the crisis. Second, they show higher resilience in the US economy than in the Eurozone. The problems faced by the euro zone will be discussed in other section of this document. Now, it is worth analyzing the first of the features mentioned above, as it is one of the novelties observed in this crisis compared to the previous financial crisis.

Figure 4 shows the evolution of the gross domestic product based on purchasing-power-parity per capita for the group of emerging countries under analysis, as well as China, USA and the Euro area. During the global financial crisis, Latin America and Asia had a recession, but the recovery was fast. Moreover, excluding China, output per-capita in Asia and in Latin America had very similar patterns of recovery. Per-capita GDP of USA and Eurozone have to similar patterns but the growth has been more slowly than in the emerging economies.

Moreover, the evolution described contrasts markedly with what happened in previous financial crises (Asian Debt Crisis and Crisis). The impact of these crises on the AMs was significantly lower than in the current crises. But what is more significant is that for the first time, emerging economies show a pattern of recovery as the current one. In the previous crises the average recovery time of the GDP per-capita was significantly higher than that shown on this occasion (Alvarez and de Gregorio, 2013)

Insert Figure 4

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3.2. The debt problem

What factors explain the good performance of the emerging countries during the global financial crisis? Why AMs have now exhibit a lower resilience to the crisis than EMs? The answer to these questions requires develop arguments in several different directions, which, although interconnected, each one brings a set of information needed to get the right answers. The aspects we will refer to are the following. First, it is needed to take into account the factors that have determined, in each of the different groups of countries under study, the entry into the crisis as the severity of the crisis may be related to those factors. Second the effectiveness of macroeconomic policy to correct the effects of the crisis. This effectiveness is also conditioned by the factors underlying the crisis and, of course, by the monetary and fiscal space that provides countries with what is generically known as fundamentals.

In relation to the first of these issues, the available empirical research is conclusive. By relating the severity of the crisis with the financial market macroeconomic conditions prevailing before the crises in different countries, a positive relationship with the pre-crisis loan growth has been found (Berkmen et al., 2012; Lane and Milesi-Ferretti, 2011; Giannone et al., 2011; Feldkircher, 2014.). In focusing on the role of market freedom indicators Giannone et al. (2011) take a different tack from the above studies, suggesting that policies favouring liberalization in credit markets (a factor commonly associated with good regulatory quality before the crisis) exacerbated damage to the real economy. Furthermore, Giannone et al. (2011) lend empirical support to the importance of financial variables (high net interest margins, financial leverage, and overhead costs of the banking sector) in shaping the response of the real economy to the global crisis. These results are also extended to emerging countries (Abiad, 2012).

The first difference between AMs and EMs in the recent crisis is found in this point. The financial crisis, for AMs, is an endogenous shock induced by an excessive debt. The financial crisis, for EMs, however, is an external shock coming from the AMs through the financial channel and the trade channel. The first impact of the crisis is felt in the form of capital outflows from EMs to the AMs and subsequently of a relative decline in exports. For the first time in this crisis, EMs have no banking crises (Laeven and Valencia, 2013). The experience of past financial crises, and especially of the Asian Crisis, helped develop macroprudencial tools to avoid behaviours not compatible with economic stability of financial agents (Lim et. al, 2011; Corbo and Schmidt-Hebbel, 2013).

The main result of the controls to which the financial system was submitted in these countries was that the debt ratio remained at substantially lower levels than those of the AMs during the pre-crisis year. In 2007 the total debt in emerging economies (excluding financials) was approximately equivalent to 120% to GDP. This ratio for developed countries country was approximately equivalent to 250% to GDP (Buttiglione et al., 2014).

The financial sector stability in emerging economies can be understood as a necessary but not sufficient condition for macroeconomic policies to be effective during the current crisis. One of the novelties of EMs in this crisis is that, for the first time, have been able to implement countercyclical policies. These policies are the result of a set of structural and institutional reforms that had been developing since the late nineties of the last century. While there are differences between, on the one hand, the emerging economies of Asia and those of Latin America and, on the other, within the economies that make up each of these blocks, the orientation of these reforms were intended to achieve the same goals.

The experience of past crises had shown the risks associated with the excessive dependence on external financial resources and the constraints for conducting countercyclical policies stemming from neither having the exchange rate as a tool to cushion the external effects of the crisis nor sufficient fiscal space (measured by the rate of public debt). However, emerging economies had been achieving these goals by different paths. External vulnerability had been contained through accumulating reserves and through actions aimed at changing the composition of the external capital flows. In Latin America, furthermore, the adoption of inflation targeting strategies allowed emerging economies to move towards more flexible exchange rates. Fiscal discipline had also allowed these countries to maintain low levels of public debt (see Figure 5). This objective was achieved, in some countries like Chile, by establishing fiscal rules, but in most countries, by implementing discretionary actions designed to maintain a balanced budget.

Insert Figure 5

In short, at the beginning of the crisis this group of countries shared common attributes with the AMs: low inflation, tax surpluses or small deficits, low or relative low public debt and credibility to central Banks. The truly significant distinctive feature was the health of the financial system in emerging economies and the subdued rate of household and corporations´ debt.

3.3. Macroeconomic policies

3.3.1. Monetary policy

The crisis led to severe liquidity problems, both in domestic financial markets and international money and capital markets. Central banks, therefore, were compelled to intervene actively in two directions. On the one hand, they turned to cover liquidity shortfalls, which in theory would help to restore the credit channel. On the other hand, they implemented actions aimed at stimulating aggregate demand through aggressive cuts in interest rates and the implementation of budgetary policies.

3.3.1.1. Liquidity support

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In the first months of the crisis the main feature of the international financial crisis was the severe disruption in international, especially US dollar-denominated, money and capital markets. The lack of liquidity in dollars pushed up financing costs faced by borrowers, which force central Banks, both in AMS and EMs, to take measures to give the liquidity in dollars that financial markets needed

In the case of the EU, the lack of dollar liquidity was particularly problematic. European banks had been financing the purchase of assets in USA by borrowing in the US money markets. The maturity of these loans at a time of dollar shortage, could further stress the AMs financial markets (.McGuire and von Peter, 2009). To avoid these stresses, the Fed enabled swap lines with the ECB and, later, with the central banks of other developed countries.

In the case of EMs, the Fed only provided dollar liquidity swap lines with the Central Bank of Brazil and Mexico. The EMs therefore had to develop their own mechanisms to provide dollars to the market. The use of reserves accumulated during the years of economic expansion was the mechanism chosen (Dominguez, K., 2012). The foreign reserve holdings fell significantly compared to mid-2008 levels before recovering- in Asia by as much as 15-30%, in Latin America by 7-15% and in other EMEs by as much as 25-35%. Central banks replenished as soon as their reserves the opportunity arose, particularly as the capital flows recovered sometime after March 2009 (Moreno, 2010).

The crises led to disruptions in domestic financial markets, forcing central banks to provide liquidity in domestic currency. The instruments used by the monetary authorities to provide this liquidity responded to the peculiarities of the different national financial systems. In any case, at the risk of oversimplification, one might say, first, that the central banks of both in AMs and EMs implemented a set of relatively similar operations, such as (i) expand the range of assets accepted as collateral in open market operations and their maturity; ii) strengthen discount window lending; iii) create special financing facilities.

The main difference in the operations of central banks is related to the use of reserve requirements in the EMs (Filardo, 2012). As is well known, domestic bank reserve requirements have traditionally been used as a monetary policy tool in countries with less developed financial markets. Central banks lacking government securities for open market operations still use reserve requirements to sterilize the impact of foreign exchange market intervention. However, the crisis highlighted the role of reserve requirements in supplying liquidity during periods of financial turmoil. For example, in Brazil, reserve requirements were used with a great deal of flexibility. Reduced reserve requirements released an estimated R$ 116 billion, or 4% of GDP (Bumachar and Goldfajn, 2013; Moreno, 2010)

3.3.1.2. Monetary policy aimed at supporting demand

In response to the financial crisis central banks have implemented, on the one hand, a classical monetary policy, consisting of lower interest rates. On the other hand, they have developed what is known as unconventional monetary policy o balance sheet policies. The first strategy has been implemented by the central banks of both the AMs and EMs. The second strategy, however, has been exclusive of the central banks of the AMs. In Latin America, however, the central bank of Chile, in 2009, did adopt measures to expand its balance sheet.

In the initial stages of the crisis interest rates cuts were primarily in North America. This reflected a belief that the problems were primarily in the USA. This changed after the Lehman bankruptcy and October 8, there was a concerted ½ percentage point cut in policy rates by the Fed, ECB and other central banks of AMs.

The interest rate reduction process, however, had different paces in this group of countries, reflecting the tensions or indecision of policymakers of the respective financial systems. The Fed has cut its policy rate in December 2008. The ECB has maintained a more restrictive cut policy rate. As a result of the concerted action just noted, the interest rate was set at 3.75 in October 2008. In September 2014, in the light of the sluggish economies in the euro zone, the ECB approached its rate to the Fed level, leaving the rates at 0.05.

It took long for the EMs to use rate cuts as countercyclical tool. In the months prior to the crisis, emerging economies of both Latin America and Southeast Asia were facing inflationary pressures. Moreover, the capital outflows encouraged by the restructuring of the balance sheets of the international banks, at a time of rising tension in the capital markets, had caused depreciation and high volatility of most of these countries´ currencies. The fall in rates, therefore, could strengthen both inflationary pressures and volatility in rates. These fears, of course, only make sense if we acknowledge that during the first months of the crisis there was great uncertainty about the magnitude of the impact of the problems in the US financial market on the economic activity of these countries

In late December 2008, however, central banks in emerging economies began cutting interest rates. The central banks of the EMs of Latin America undertook grater reductions than their Asian counterparts. Between January and December 2009, the Chilean central bank had cut rates by 780 basis points, Colombia by 600 and Brazil and Peru by 500. Mexico cut by 380 basis points. In the Ems of Asia cuts were more moderate. The Indonesian central bank also cut, by 175 basis points in the same time period. The Thailand's central bank cut, by 150 basis points. In China, the cut was moderate and occurred between September and December of 2008. During this period, the Chinese Central Bank reduced the interest rate by 200 points, approximately. However, it should be bear in mind that the Bank of China also deployed other monetary measures which had the same effect as cutting interest rates as to set bank lending rates directly (Moreno, 2010).

As far as balance sheet policies is concerned and taking as examples those that provide the Fed and the ECB, one may say that two strategies for expanding central bank balance sheets have been observed during the crisis. On the one hand, the strategy implemented by the Fed based on expanding its balance sheets through direct assets´ purchases (quantitative easing (QE) assets). The American Treasury bonds and mortgage-backed assets have concentrated these purchases. The ECB, meanwhile, has expanded its balance sheet through long term refinancing operations (VLTRO, Very Long Term Refinancing Operations) which provides 3-years liquidity to banks. The Fed, therefore, has directly injected durable liquidity into the markets of public and private debt. The ECB, however, has just made available to banks in the euro zone abundant liquidity. These differences are related to specific restrictions of the ECB (non-existence of national sovereign bonds and the prohibition on monetizing government debt), but most of all, they are related to the dominant position that banking credit intermediation still has.

The expansion of credit to companies and households which was intended with this monetary stimulus was uneven across countries. The monetary stimuli in EMs had an immediate and rapid effect on credit growth that prompted an increase in private demand and GDP (IMF, 2014). Although the pace of credit growth began to slow in late 2009, it still grows faster than the GDP. The high elasticity of credit demand to variations in the types reflects something that has been stated in previous pages. Companies and families in EMs entered the crisis with low debt ratios. Besides, the transmission of monetary policy through the credit channel was not conditioned by balance sheets problems in the banking sector in these countries. Although the foreign bank did reduced the volume of credit extended, both public and private banks offset this contraction (Chen and Wu, 2014)[3].

In the US, credit recovery took some time to occur. The annual growth rate of the "Commercial and Industrial Loans", which had fallen by 20 points in 2009, showed negative growth in 2010. In 2011, it began to change the negative sign, and since that date the credit growth rate has remained positive. In the Eurozone, the evolution of loans to the private sector still has an anemic performance. The annual growth rate of credit to the private sector, which increased slightly between 2010 and 2011, returned to negative rates in 2012. This average growth, however, hides significant heterogeneity within the euro area. In those countries most affected by the debt crisis, the credit growth rates are more depressed than in the entire Eurozone (ECB, 2014).

Both for the Eurozone and the US, weak credit reflects the balance sheet repair process across the financial and non-financial sectors. This process explains, first, the anaemic credit demand by households and companies and, second, the tightening of credit supply as banks repaired their balance sheets. The actions of central banks have partially helped to eliminate supply constraints. The demand for credit, however, will take time to recover, at least in the Eurozone.

The Eurozone households entered the crisis with a debt ratio of 90% of disposable income and, in 2013 this rate for the entire area had increased slightly to values close to 100% of disposable income (ECB, 2014). In the US, however, the process of household deleveraging is progressing faster. In 2013 the ratio of household debt to disposable income had decreased by 25 percentage points compared to 2007. Two factors explain this deleveraging of household in US. First, the recovery in economic activity, which has displayed greater dynamism than the average of the advanced economies and, second, the high level of loan provisioning, provided by the regulations governing the treatment of insolvency. As far as non-financial corporations are concerned, the balance sheet repair is being faster in the EU than in the US. Between 2009 and 2013 debt levels in the Eurozone countries reduced by 5.6 percentage points of GDP, while the US there was not any variation (IMF, 2014).

3.3.1.3. Fiscal policy

As we have noted in the previous pages, in the first phase of the crisis, the use of fiscal stimulus to contain the fall in aggregate demand was a widely accepted economic policy by

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governments in both AMs and EMs. From 2010, these stimuli started to be removed. Two arguments were used to justify this new strategy. First, the problem of sustainability of long-term debt. Second, there was the belief that fiscal adjustment policies have expansionary effects on economic growth.

Figures 6 and 7 show the evolution of fiscal policy in AMs and in the selected group of EMs from 2007 to 2013. The fiscal stimulus policy occurs in the first years of the crisis (2008-2009). From 2010, fiscal adjustment policies start to be generalized. These two periods are observed in both AMs and EMs. As regards the selected countries within AMs, it can be seen that the highest tax incentives were implemented by the US and Japan. The Euro zone injected the lowest fiscal stimulus among the advanced economies. Overall, the fiscal stimulus in AMs was equivalent to 4.1% of GDP. Among the selected EMs, Latin American economies implemented the highest fiscal stimulus. During the period 2007-2009 these stimuli were equivalent to 9.6% of GDP. The fiscal stimulus introduced by the emerging economies of Asia included in Figure 7 was 6.9% of GDP. In the case of China was equivalent to 3.5% of GDP.

Insert Figure 6

Insert Figure 7

The fiscal adjustment policies initiated in 2010 were particularly restrictive in the Euro zone. Between 2010 and 2013 the Euro area had a policy of fiscal restraint equivalent to 3.7% of GDP. In US where the fiscal stimulus had been equivalent to 5.4% of GDP, the adjustment has been smoother (3.2% GDP) as well as in Canada. In all the AMs displayed in Figure 6 adjustment policies developed up to 2013 amounted to 1.7% of the total GDP of these countries.

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Fiscal adjustments have also been milder in emerging economies (relative to the intensity that stimuli had been given in these countries). In Latin America fiscal restraint has been equivalent to 6.8% of GDP. In Asian economies the restraint has been equivalent to 0.8% and in China to 2.8%. Ultimately, and with the exception of the Euro area, the intensity of the fiscal adjustment policies has been lower than that of the stimuli introduced.

The analysis by countries provides some additional information that may be relevant. In Figure 8 the evolution of fiscal policy in the Eurozone and the US year by year is presented. The US economy was already introducing small fiscal stimulus in 2007. In 2008 and 2009 the bulk of the stimuli are concentrated in both areas (US and Eurozone). The intensity of the stimulus, however, is significantly different. In the first of these years, the fiscal stimulus in the US is more than twice that introduced by all countries of the Monetary Union: 2.3% of GDP as compared to 0.9%. The same is true in 2009: 3.1% in the UE versus 1.8% in the Eurozone. The intensity of fiscal adjustment, with the exception of 2013, is also more intense in Europe than in the US. As already noted, in these three years the Eurozone applied fiscal adjustments higher that the stimuli that had introduced.

Figure 9 and 10 shows the evolution of fiscal policy country by country of the emerging economies of Latin America and Asia, respectively. As for the first group of countries, Chile introduced the most intense fiscal stimulus. Between 2007 and 2009 the stimuli were approximately 4% of GDP. Brazil was the least fiscally stimulated economy. However, the quasi-fiscal incentives granted in Brazil were of considerable proportions. These stimuli were performed by means of increasing private credit through state-owned commercial banks. The adjustment fiscal policies implemented in these countries were also less intense than those used to stimulate the economy.

For emerging economies of Asia, it was the Chinese administration which introduced the strongest fiscal stimulus, equivalent to 3.5% of GDP. The intensity of the stimuli in other countries was relatively equivalent to 2% of their respective GDP. Again, and as we have seen in the case of Latin America, the withdrawal of the stimuli was undertaken more slowly than in the Eurozone. Between 2009 and 2013 only Thailand and Indonesia continued implementing an expansionary fiscal policy.

Insert Figure 8

Insert Figure 9

Insert Figure 10

The impact of the automatic stabilizers, along with fiscal stimulus, increased the financing needs of the public sector in all economies. For the Eurozone-12 countries, the debt ratio increased by 28 points, from 65.7% of GDP in 2007 to 93.9% in 2013. In countries that have been most affected by the debt crisis, this increase has been even greater. In Greece, for example the rate increased from 103.1 to 174.9, in Portugal, from 68.4% to 128, and in Spain, over 35.5% ratio to 92.1%, over the same years.

In the US, the debt ratio rose by 41 points of GDP, from 64 percent in 2007 to 107.7 percent in 2013. The size of the increase in UK has been higher, 43.6 points. In 2007 the ratio of public debt amounted to 43.6 percent of GDP and to 87.2 percent in 2013. In Japan, the increase was 61 points over the same years. The rate rose from 183 points to 244. In the emerging countries, the evolution of debt has been more moderate. Thus, in the case of China, the debt ratio stood at 39.4 of GDP in 2013, that is, 8 points higher than in 2008. In Brazil and Mexico, the increase was 2.7 and 3.6 points of GDP between 2008 and 2013, respectively[4].

The withdrawal of the fiscal stimulus has not been accompanied by an increase in economic growth, at least in the AMs, as had initially been planned. Rather, what has been noticed is a slowdown in growth rates and, in the case of the euro, a recession in 2012 and 2013. The rates of public debt also continued an upward trend, partly as result of the slowdown of the economic growth. A paradigmatic example of the negative effect of fiscal adjustment policies in increasing public debt is provided by the Eurozone economies with higher financial stress. In Greece, the debt ratio by almost 30 points of GDP increased between 2010 and 2013. An increase substantially similar to that occurred between 2008 and 2010. In Portugal and Spain the increase was 35 and 32 percentage points of GDP, respectively, about 10 percentage points higher than the increase observed during the first years of the crisis.

The re-examination of the value of the multiplier, especially in times of crisis, together with the depressive effect of fiscal adjustment strategies, has placed the dominant discourse on fiscal policy in a relatively ambiguous situation. From reading the latest (October 2014) Fiscal Monitor of the IMF, it is not easy to obtain a clear conclusion about the direction that should be taken according to the IMF. On one hand, this institution maintains that "further fiscal adjustments are needed in most advanced economies to bring down debt ratios to safer levels" but, simultaneously, it is stated that we cannot ignore the negative effects that this strategy can have on economic growth. Therefore, the "issues of pace and composition should increasingly take center stage" (chapter 1, p.8). Some possible interpretations of these recommendations are: first that the pace of fiscal adjustment needs more time and, second that it should be prioritized public spending with direct effects on the potential growth over the remaining entries. The third pillar of this strategy is a traditional recommendation to governments to contain the ripple effect on spending which is expected as a consequence of aging: insisting on structural reforms, in this case, of social security systems to limit the future growth of pension expenditure. Future borrowing needs, therefore, will be contained which would soften the current pace of fiscal adjustment without fear of excessive debt accumulation in the future.

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4. The economic policy in the monetary union

The financial crisis has affected the entire Eurozone, though with heterogeneous intensity in each country. Considering the first twelve countries that adopted the single currency, we observe that they had not yet reached the pre-crisis GDP in 2013. The countries that have most felt the negative effects are the southern European ones. Thus, the value of GDP in Greece, Italy and Portugal had fallen back (in 2013) to previous values of 2005. Spain and Ireland, meanwhile, were slightly above the values reached in 2005. The performance in Netherlands and Finland, though somewhat more positive than in the economies of the South, had also failed to reach the pre-crisis values in 2013. The remaining countries (Germany, Austria, Luxembourg, Belgium and France), by contrast, did show in 2013 a value superior to that achieved in the years before the crisis GDP.

The above mentioned heterogeneity is the result of idiosyncratic factors, the institutional design of the Eurozone and, of course, of the asymmetric effects that the one macroeconomic policy had in the different countries. Since 2010, when the process of fiscal consolidation stars in the Euroarea (Ferreiro et., al., 2014), the management of the crisis has been conducted almost exclusively by monetary policy. The ECB has been forced to manage, on one hand, the effects of the Global Financial Crisis and, on the other, the financial stress suffered by the countries as a result of the sovereign debt crisis started in 2011.

In previous pages we have noted that the key features of the monetary policy implemented by the ECB. Now we intend to discuss some of the difficulties that the ECB has found to stimulate bank lending through expanding the money supply. The fragmentation of the financial system in the Eurozone and the anemic loan demand are the two main problems faced by the ECB. The fragmentation of the financial system is not a problem exclusively caused by the financial crisis. This fragmentation was already present during the growth period before the crisis and it stems from the institutional design of monetary union. This design is also at the root of the debt crisis. The next section, therefore, is dedicated to expose the origin of the internal imbalances of the Union which ended in the sovereign debt crisis.

4.1. The institutional framework of the Monetary Union

Countries that became part of the monetary union had very different structural characteristics and levels of competitiveness. The convergence criteria established, however, overlooked these differences, focusing on the fulfilment of some macroeconomic conditions which, as has been shown, failed to account properly for the inequalities of the economies. In other words, the Eurozone was foreshadowed from the beginning as a non-optimal currency area.

The process of European monetary integration, on the other hand, is unique in the history of monetary unions since it rests on a centralized monetary policy and a decentralized fiscal policy, although subject to certain restrictions in the form of fiscal targets (limits on deficit and public debt). This singularity is an endogenous source of problems, since it limits the possibilities to share idiosyncratic risks that countries of the Eurozone could face. Indeed, the stability of a monetary union rests on the ability to manage the idiosyncratic shocks affecting its member countries in the absence of independent monetary policy and the rate of change. As the monetary union was designed, the risk sharing mechanisms among the residents of different countries exposed to idiosyncratic shocks were limited to those that could be obtained through the financial integration that should accompany the monetary union, that is, through the credit and capital markets.

The explicit waiver, moreover, to create fiscal income redistribution mechanisms across countries to address potential asymmetric shocks forced the states to exercise a very strict anti-cyclical fiscal policy, especially in times of economic expansion. Without control over monetary policy, fiscal policy is the only macroeconomic instrument to contain inflationary pressures arising from idiosyncratic economic growth above potential. Structural reforms affecting both factor and products markets were the other way that could be explored to contain these tensions. With fiscal rules established at the beginning of the process of monetary union, designed to avoid excesses, rather than as anti-cyclical mechanism, the European Commission was who most strongly encouraged the adoption of the structural reforms.

The relevance of idiosyncratic risk sharing mechanisms within a monetary union was well known before the establishment of the Eurozone. For instance, in their seminal paper, Asdrubali et al. (1996) find that in the US, 75 percent of shocks to per capita gross state product is smoothed by federal tax-transfer and grant system and by capital and credit markets. These results were amply confirmed by Athanasoulis and Van Wincoop (2001) some years later. With the institutional design selected, and as we have already noted, the financial system (credit and capital markets) was left as a fundamental mechanism to share idiosyncratic risks. The integration of the different national financial systems into a single financial system was presented as a necessary objective for both the transmission of monetary policy and to share the above-mentioned risks[5].

Before the crisis, it could be said that the process of financial integration in the EMU showed clear signs of fragmentation. The integration has made progress in the wholesale markets, especially in the money and long-term bond markets including corporate debt. The process, however, was much slower in the capital markets (Jappeli and Pagano, 2008) and in the segment of short-term securities. Retail activity, moreover, was very fragmented. This is due, in part, to the national character of the regulatory framework of banking activity, as well as the importance of proximity to the customer for exercise. To this fragmentation of retail activity also contributed, at least in some countries of the Union, a political bias towards keeping under national control the financial system. A proof of this bias is the low presence of foreign banks in the countries of the euro area, especially in the larger ones (Sapir and Wolff, 2013). Bank mergers and acquisitions that occurred in the different countries, took place within the same country.

The financial integration that has been achieved allowed the national banks to have access to credit from wholesale markets and to lend it in their national retail markets afterwards. This model of integration significantly limited the possibilities of risk-sharing between countries since capital markets were insufficiently developed. The degree (and model) of financial integration reached before the crisis, was influenced by national political biases as well as by the central role of the banking system in credit intermediation. Capital markets in Europe have not the same central role than that observed in the USA.

This model of financial integration, however, allowed the southern countries to finance the growth expectations, which have been proved wrong. The process of monetary integration significantly decreased the cost of financing for the group of least developed countries in the euro area (Greece, Portugal, Spain and Ireland). Access to cheap credit, along with the belief that economic integration necessarily would trigger a catching-up process within the Eurozone generated a strong flow of capital from surplus economies of the North to Southern economies. The "internal global imbalances" that were built-up were considered as temporary, insofar as it is thought that they were a manifestation of the process of real convergence that was expected to occur. The truth, however, is that these capital flows were not channelled into productive investments aimed at improving productivity. In other words, these flows did not allow to expand the growth potential of the economies of the South, a necessary condition to generate incomes to pay back the funds received (Giavazzi and Spaventa, 2010).

Access to cheap credit for these economies of the Eurozone meant an expansion of speculative activity in addition to an increase in aggregate demand which was above the supply and pushing up prices and wages. The rise in wages, along with the absence of productivity gains, pushed up unit labor costs, aggravating the problem of internal imbalances (Carrasco and Peinado, 2014).

The institutional design of the monetary union, therefore, is at least partly, responsible for the internal imbalances occurred in the Eurozone in the years before the crisis. National governments may have contributed to these imbalances, particularly through a more countercyclical fiscal policy (Serrano, 2010). However, the monetary union tax rule put in place, as already noted, did not urge in this direction. Structural reforms to provide flexibility of prices and wages were not strongly implemented, not least because of the specific economic expansion that characterized the early years of monetary union. Ultimately, national governments did not feel pressured to contain internal imbalances that built-up in the Eurozone.

The growth of debt, however, was not just a problem in the less developed economies of the Eurozone. A characteristic feature (to which we referred in the previous pages) of the period prior to the crisis was the considerable accumulated debt by companies and households in developed economies. In economies characterized by a housing boom (Ireland and Spain in the Eurozone) this debt was more intense. For all Eurozone countries the household debt-to-gross disposable income was close to 90%. In Ireland, this ratio was 200% and in Portugal and Spain stood at around 125%. Dutch families had the highest debt ratio of 225%. The corporate debt-to-GDP for all the countries in the monetary union was near 100%. Corporations in Portugal and Spain had higher values than the mean (130% GDP).

In short, the financial crisis hits a Eurozone characterized by: i) a financial system that still showed signs of fragmentation; ii) strong internal imbalances; iii) high levels of indebtedness among households and non-financial companies; and iv) lack of fiscal risk-sharing mechanisms between countries.

4.2. The limits of the monetary policy

Other FESSUD documents (Rodriguez and Carrasco, 2014) have already noted the chronology of monetary policy of the ECB regarding both the standard interest rate policy and the balance sheets policies. Therefore, we do not return to these aspects. Furthermore, in previous pages we have already mentioned the anti-cyclical impulse that has received the monetary policy since the beginning of the crisis, both in advanced and emerging economies. What we are trying to point out are the problems that have arisen in the transmission of monetary impulses from the ECB to the real economy. Our ultimate goal is to show the limits faced by the monetary policy designed by the ECB to stimulate economic.

In the Eurozone economies strongly banked, the GDP growth goes hand in hand with the growth of bank credit. The monetary policy of the ECB, therefore, has been aimed at achieving renewed economic growth by stimulating the money supply. Data that are available so far, however, show that the aim of expanding credit has not been achieved. The growth of credit in real terms still remains in negative rates in mid 2014. Why credit has not been stimulated? What determines the evolution of credit? To answer these questions it is pertinent to separate between elements of demand and supply of credit.

The data provided by the Bank Lending Survey (BLS) of ECB show that, since the beginning of the crisis, the aggregate demand for loans to non-financial corporations shows a decline (decrease in demand) of 200 % compared to 2008. In the case of households the decrease is somewhat lower, between 120 and 150 percent, depending on whether the demand is for consumption or house purchase. As regards the supply of credit, tightening the conditions for access to credit has been ongoing since the beginning of the crisis. The cumulative changes revealed by the BLS points to an increase (higher cost) of 250% since 2008 for nonfinancial corporations and 180% (consumer loans) and 240% (housing loans) for households.

The decline in demand for credit by both households and non-financial companies is directly related to the process of cleaning up their balance sheets. As already noted, debt levels had risen significantly in the phase of economic growth. With the crisis, this macroeconomic imbalance has entered a correction phase, in which agents try to rebalance the relative weight of their own and external resources in financing its spending plans. The rate of correction of these imbalances, for all the countries in the monetary union, is still slower than that observed in the economies of the euro area that entered into the crisis with higher debt ratios (Spain and Ireland mainly)[6].

A second factor that helps explain the behaviour of the demand for credit, especially for households, is the uncertainty about the future development of their incomes. The purchasing power of European households has declined since 2008, at a value close to 5%. The unemployment rate has risen from 7.6% in 2008 to 11.9% in 2013. The expected evolution of this rate is not very optimistic as for the year 2016 a slightly lower rate than the current rate is expected (10.7%).

The evolution of these two demand factors is very heterogeneous across the countries that make up the Eurozone. Neither they entered the crisis with identical rates of indebtedness, nor are they having similar behavior in the labor market and in the wage income. This heterogeneity contributes, in turn to induce heterogeneity in the behavior of the demand for credit in different countries of the monetary union. While the common feature is, as already noted, a significant drop in demand for loans to households and non-financial companies, that feature presents different intensities and rhythms depending on the country.
Factors that have contributed to the tightening of the credit supply can be clearly seen if we study separately the two sub-channels (Bernanke and Gertler, 1995) that make up the credit cannel of monetary policy (the bank lending channel and the non-financial borrower channel). As regards the first of these two channels, the supply of credit may have been affected by the financial position of the banks, its liquidity, the cost of financing and the market concentration. The creditworthiness of the borrowers and the collateral value are

the two key factors affecting the second channel. In the crisis, it could be said, that all these problems were present, undermining the effectiveness of monetary policy to stimulate the supply of credit.

Initially, the bank lending channel was affected by the balance sheets problems of banks. As we have discussed on previous pages, European banks were active agents in the US derivatives market, obtaining credit in money markets to invest in this kind of financial products. The crisis of these products directly affected its financial position, forcing governments to activate different bank bailouts with public funds to bail out their banks that had been affected by the crisis. In the countries of southern Europe, especially in Spain, the balance sheets problems of banks were related to their high exposure to mortgage credit. The restructuring of the banking assets side has been undertaken at different stages in different countries, so that this problem, with varying intensity depending on the country and the time, was present in all the years of the crisis, affecting the channel of bank credit.

The financial crisis had a severe impact on the interbank market. The institutions were reluctant to lend to each other due to the ignorance that they had on the financial and solvency situation of the banks participating in this market. The lack of liquidity created by this fragmentation of the interbank market increased the recourse of banks to the Euro system finance. The liquidity provided by the ECB grew around 80% in the second half of 2008. During this first stage of the crisis, national governments also offered government guarantees to refinance the bank debt and the ECB introduced the first program of purchases of covered bonds (Rodriguez and Carrasco, 2014). It could be argued that liquidity problems have been solved by the ECB through the various policies of balance that have been implemented.

The sovereign debt crisis, especially since August 2011, contributed to further fragmentation of the Eurozone banking market. At the root, this crisis is the result of a radical change in the expectations about the nature of the internal imbalances that had arisen during the economic expansion that preceded the crisis, and to which we have referred previously. Doubts about the countries of southern Europe pushed up risk premiums on sovereign bonds and, by extension, the financing costs of their national banks. The rise of these costs is passed on to end customers through higher interest rates. Thus, interest rates applied by banks in France and Germany, on new non-financial corporations´ operations stood at around 3% in mid-2014. In the case of Italy and Spain, however, these rates ranged between 4 and 4.5%.

The particular configuration of banking markets, and especially the degree of banking concentration reached in each country in the Eurozone, is another factor that may be influencing the transmission of monetary impulses to the credit to households and companies (De Santis and Surico, 2013; Creel et al, 2014). "More precisely, if banks have positive net interest-sensitive positions, lowering the central bank interest rate will lower their profitability. If average returns affect bank's marginal decisions, this will reduce net lending, (partially) offsetting the positive stimulus stemming from the interest rate reduction" (Creel et al, 2014, p.6)

As regards the second sub-channels that make up the credit channel, the non-financial borrower channel, the answers provided by the banks in the BLS suggest that the tightening of the conditions of access to credit for non-financing corporations and households is associated with a higher risk perception and a deterioration of the quality of the collateral. The tightening of the conditions was significantly greater to small and medium-sized enterprises (SMEs) than to large firms.

As was the case with the demand for credit, the two sub-channels through which monetary stimulus is amplified via credit supply, present some heterogeneity across countries in the Eurozone. Ciccarelli et al. (2013) analyzed empirically the role played by each of these two sub-channels in the transmission of monetary policy, distinguishing between the countries under financial stress (i.e. those most affected by the crisis of sovereign debt) and the remaining countries. They show that the transmission mechanism of monetary policy has changed with the crisis. The bank balance sheet problems might have been partly mitigated (and the bank-lending channel partly "neutralized") by the ECB interventions – which have targeted almost exclusively banks' liquidity – while the non-financial borrower balance sheet channel is still significant, especially in financially distressed countries.

In short, the ECB monetary impulses to stimulate credit may be neutralized by both the demand side and the supply side of credit. In the latter case, and in accordance with the findings of Ciccarelli et al. (2013), due to the remaining balance problems of borrowers, or according to Creel et al. (2014), due to the market power that has the banking sector to maintain its margins. In the one case as in the other, the remarkable thing is that monetary policy is not delivering the expected results.

The start of the Banking Union in late 2014 may help to overcome the fragmentation issues that still persist in the credit markets. The rate differentials that still exist between the countries under financial stress (i.e. the most affected by the sovereign debt crisis) and the rest of countries could be narrowed. The Banking Union, however, is not the remedy to the problems faced by the Eurozone now. Credit demand will still be anemic as a result of deleveraging of companies and households. Negative expectations on the evolution of wage incomes continue to adversely affect consumer demand and, as a corollary, investment. Expectations of low economic growth, in turn, contribute to tighten the conditions for the supply of credit. In short, the Eurozone seems to have entered a deflationary environment which monetary policy cannot fight it alone.

5. Summary and conclusions

The Global Financial Crisis has meant for developed countries to return to an economic situation similar to that experienced during the Great Recession. At the root of the crisis, again, is the financial system. Financial innovation, combined with stringent regulatory failures and with an overly loose monetary policy, allowed to expand private credit disproportionately, fuelling a speculative bubble that, when it burst, generated a demand shock that eventually turn a financial crisis into an economic crisis with lasting consequences.

The economic policy implemented to overcome the crisis has passed through different stages. In the first phase, the strategy was a combination of expansionary monetary and fiscal policies. In a second phase, whose onset could be dated in 2010, the fiscal stimuli begin to be withdrawn, while an aggressive monetary policy to stimulate private credit through expanding the money supply is maintained. The third phase, considering as reference the withdrawal of quantitative easing by the Fed, is scheduled to start in late 2014. The third phase would be characterized by the end of demand policies and the recovery of supply policies or structural adjustment policies, especially for the case of emerging economies as well as economies of southern Eurozone.

Emerging economies are precisely those that have shown greater resilience in the crisis. Two are essentially the factors that help to explain this resistance.

On the one hand, the financial crisis, for AMs, is an endogenous shock induced by an excess of debt. The financial crisis, for EMs, however, is an external shock coming from the AMs through the financial channel and the trade channel. For the first time in this crisis, EMs have no banking crises. The experience of past financial crises, and especially of the Asian Crisis, helped to develop macroprudencial tools to avoid behaviors not compatible with economic stability of financial agents. The result of the control to which the financial system was submitted in these countries is that the debt ratio remained at substantially lower levels than those of the AMs during the pre-crisis years.

On the other hand, EMs, for the first time, have been able to implement countercyclical policies. These policies are the result of a set of structural and institutional reforms that had been developing since the late nineties of the last century. While there are differences between, on the one hand, the emerging economies of Asia and those of Latin America and, on the other, within the economies that make up each of these blocks, the orientation of these reforms were intended to achieve the same goals. The experience of past crises had shown the risks associated with the excessive dependence on external financial resources and the constraints for conducting countercyclical policies stemming from neither having the exchange rate as a tool to cushion the external effects of the crisis nor sufficient fiscal space (measured by the rate of public debt). External vulnerability had been contained through accumulating reserves and through actions aimed at changing the composition of the external capital flows. Furthermore, the adoption of inflation targeting strategies allowed emerging economies to move towards more flexible exchange rates. Fiscal discipline had also allowed these countries to maintain low levels of public debt.

The Eurozone, however, is showing the greatest difficulties to overcome the crisis. There are several factors that may explain these difficulties.

First, it should be noted that the Eurozone countries have faced the effects of, on the one hand, the global financial crisis and, on the other, the sovereign debt crisis which is triggered, first in Greece and from mid-2011 in the rest of the southern countries of the Eurozone. This crisis reflects a radical restructuring, on behalf of the financial agents, of the expectations of real convergence of these countries to the hard core of the Eurozone countries which were created during the early years of the single currency.

Second, the process of European monetary integration is unique in the history of monetary unions since it rests on a centralized monetary policy and a decentralized fiscal policy, although subject to certain restrictions in the form of fiscal targets (limits on deficit and public debt). This singularity is an endogenous source of problems, since it limits to credit and capital markets the possibilities to share idiosyncratic risks that countries of the Eurozone could face.

The fragmentation, however, of these markets has prevented them from acting as a risk sharing mechanism. This fragmentation, as far as the capital market is concerned, existed before the financial crisis. The latter has contributed mainly to fragment the wholesale credit market. The implementation of monetary policy by the ECB has faced serious challenges to stimulate credit in the area. The fiscal adjustment policies and the absence of community fiscal mechanisms, moreover, has forced countries that have been most badly affected by the debt crisis to make strong fiscal adjustments which have aggravated their already difficult economic situation.

Countries that make up the Eurozone and the remaining countries that are part of the EU, and to a lesser extent US, face a slow economic recovery induced by deleveraging of households and non-financial companies. This process, along with unclear expectations about income growth is slowing the growth of private demand. The monetary stimuli to boost credit are limited by an anaemic demand for credit which is also due to these two causes. The fiscal adjustment policies promoted since 2010, moreover, limit the possibilities of expanding demand by the public sector. The potential for growth that the foreign sector can provide is also reduced, in part, by the slowdown in emerging economies, and in part, by the growth pattern of these economies which is still based on exports rather than on the expansion of domestic demand.

Until formulas are found to accelerate the process of deleveraging of the private sector, or until fiscal adjustment policies are removed, particularly in the Eurozone countries, it should not be expected a solid economic recovery to generate job growth and decrease unemployment rates.

[1] Credit expansion is associated with excess liquidity in the financial markets about whose origins there are still discrepancies. Some of the causes that contributed to this liquidity excess are clearly identified, as it is

the case of financial innovation and monetary easing policies pursued by the central banks of Europe and USA since the beginning of the previous decade. Others, however, are still subject to controversy. This is the case of the "global imbalances". Their relationship with the financial crisis, which at first was considered to be the main triggers, is becoming less relevant as information about the origin of capital flows coming into the American financial market expanded. Carrasco and Serrano (2014) provide a critical review on the relationships between the financial crisis and the "global imbalances" problem.

2 In a recent article Summers (2014) warns about the risk of a "secular stagnation" if the public does not actively contributes through public investment to generate a sufficient level of demand to achieve full employment.

3 The confluence in time of stimuli driven by central banks in EMs, with the entry of foreign capital has helped fuel a process of borrowing, especially of corporations, which could be a problem when the Fed begins to withdraw stimuli and rates start to rise (IMF, 2014; Buttiglione et al, 2014).

4 A part of the increase in public debt AMs must to support financial sector. In the IMF Fiscal Monitor of October 2014 updated data at the end of 2013 on the relative weight of this component of the debt are presented. With the exception of Ireland and Greece, debt ratios attributable to this goal are not very significant in the remaining advanced economies. In the case of Greece, the support to the financial sector still equals to 25.7% of GDP. In Ireland this rate is 33.4%.

5 A financial market is considered to be fully integrated when the agents, regardless of their nationality or residence, have access to it on equal terms. To capture the degree of financial integration typically cross-border capital flows, differences in the price of financial instruments with similar characteristics or composition of the portfolios of agents are observed. The more integrated the market is found, the greater the capital flows between countries, the lower the differences in prices and the bias of the portfolios of investors towards domestic assets.

6 In the FESSUD studies in Financial Systems can be found all the data on the evolution of debt on which the arguments which will be discussed in these pages are based.

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This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 266800

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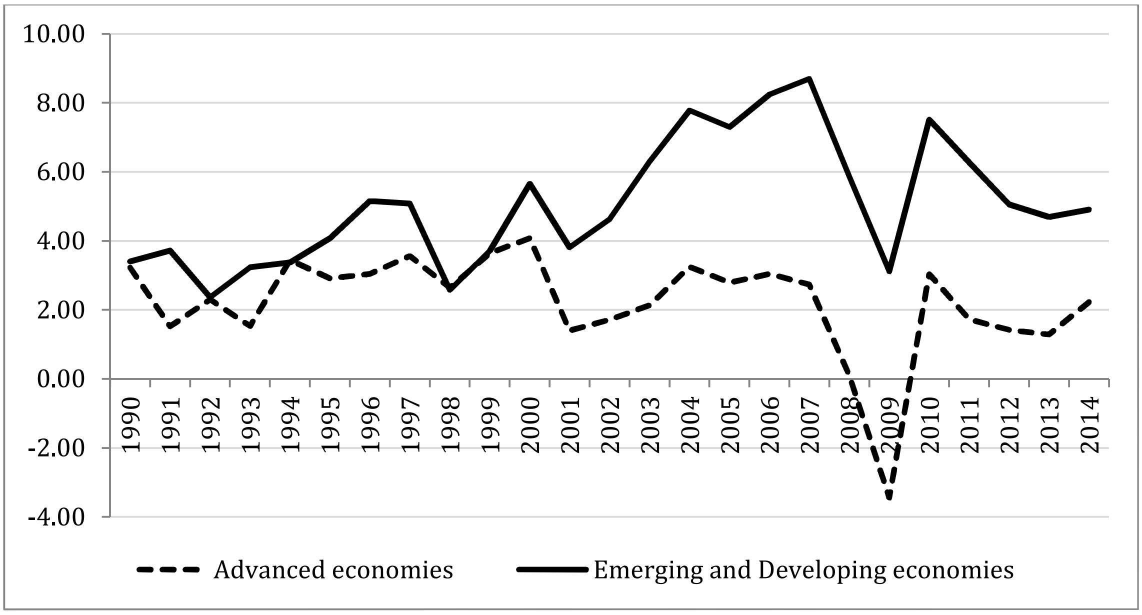
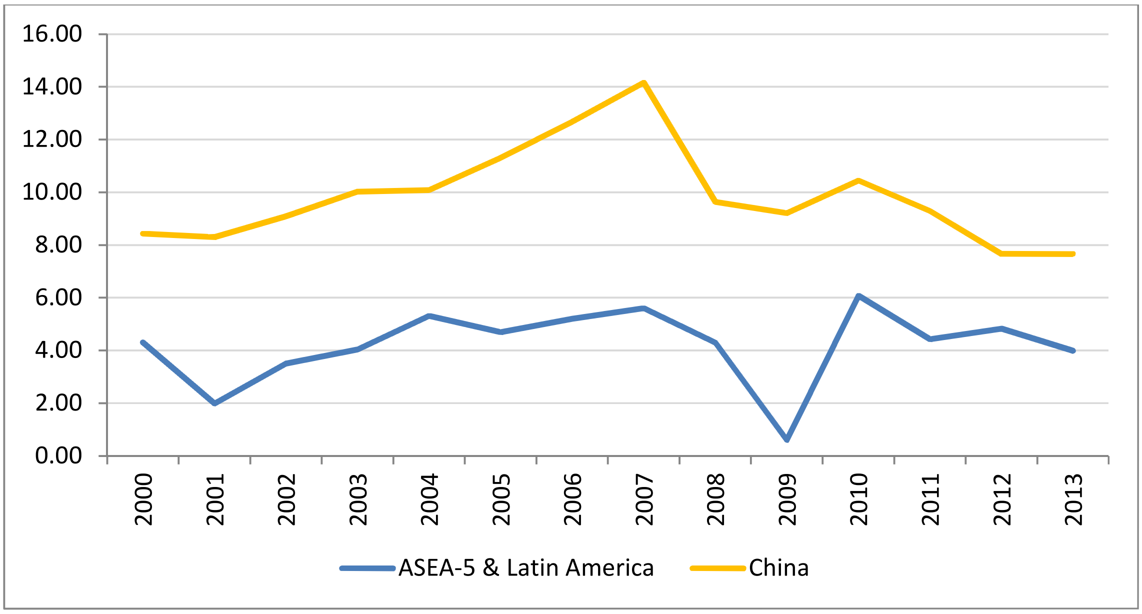
Figure 1. Rate of Grow of GDP



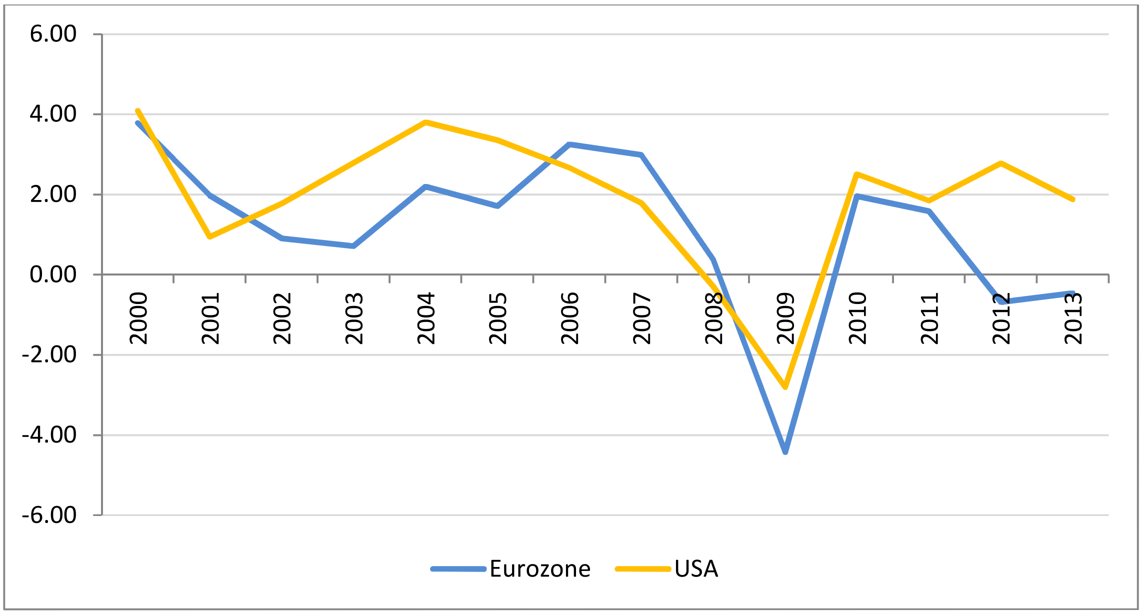
Source: IMF and own elaboration

Figure 2. Gross domestic product, constant prices



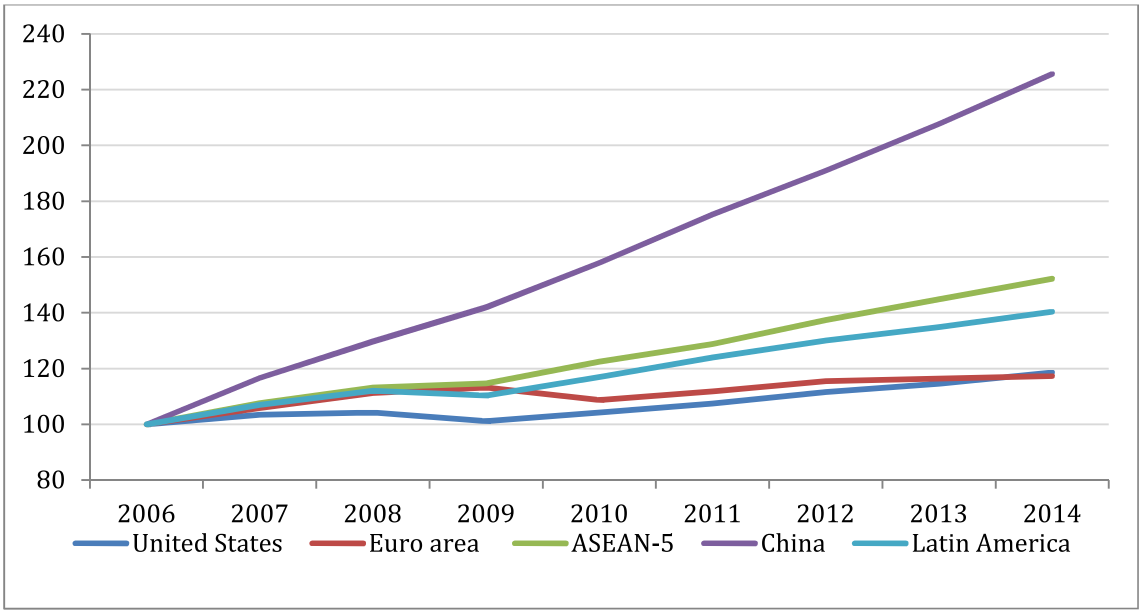
Source: IMF and own elaboration

Figure 3. Gross domestic product, constant prices



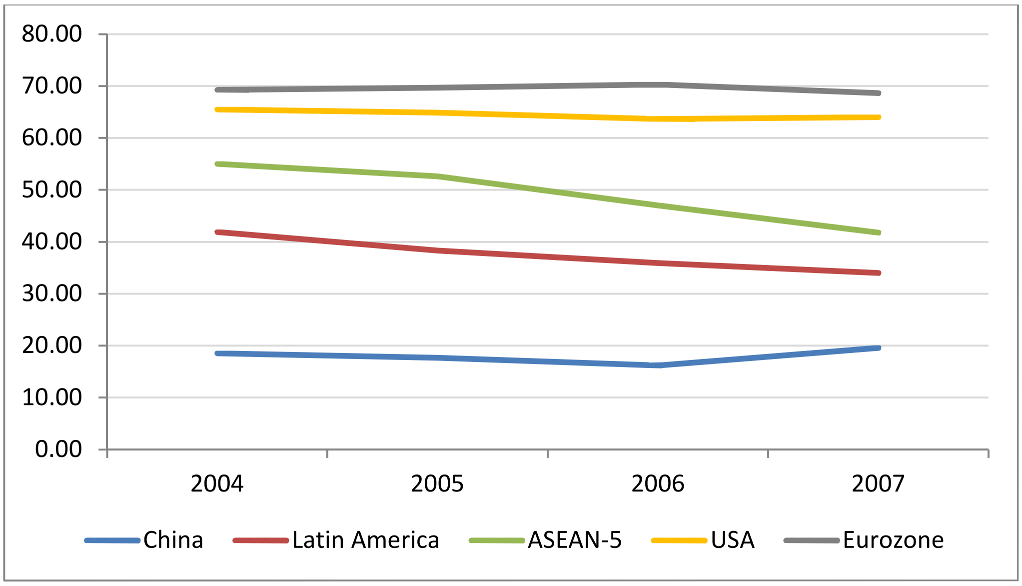
Source: IMF and own elaboration

Figure 4. Gross domestic product based on purchasing-power-parity (PPP) per capita GDP



Source: IMF and own elaboration

Figure 5. General government gross debt, Percent of GDP



Source: IMF and own elaboration

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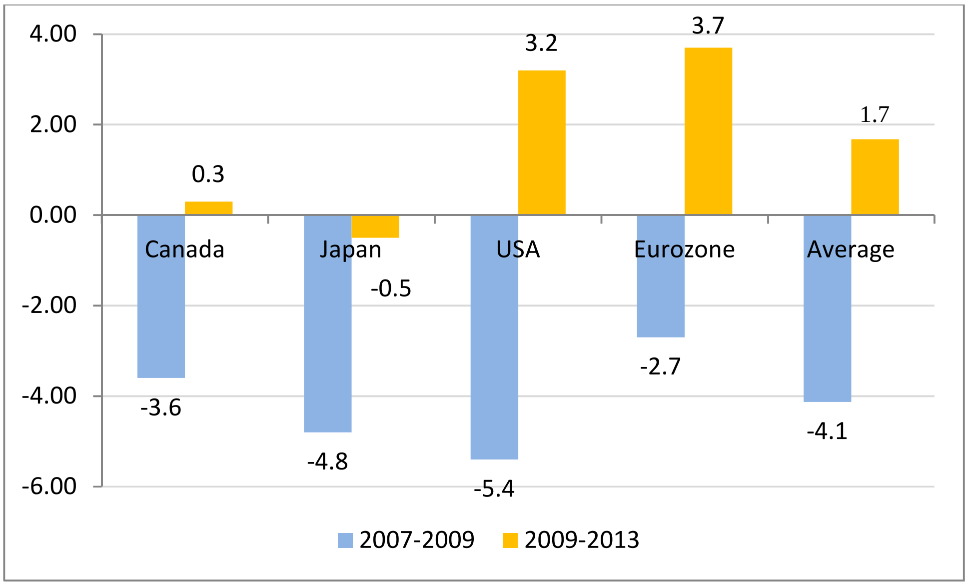
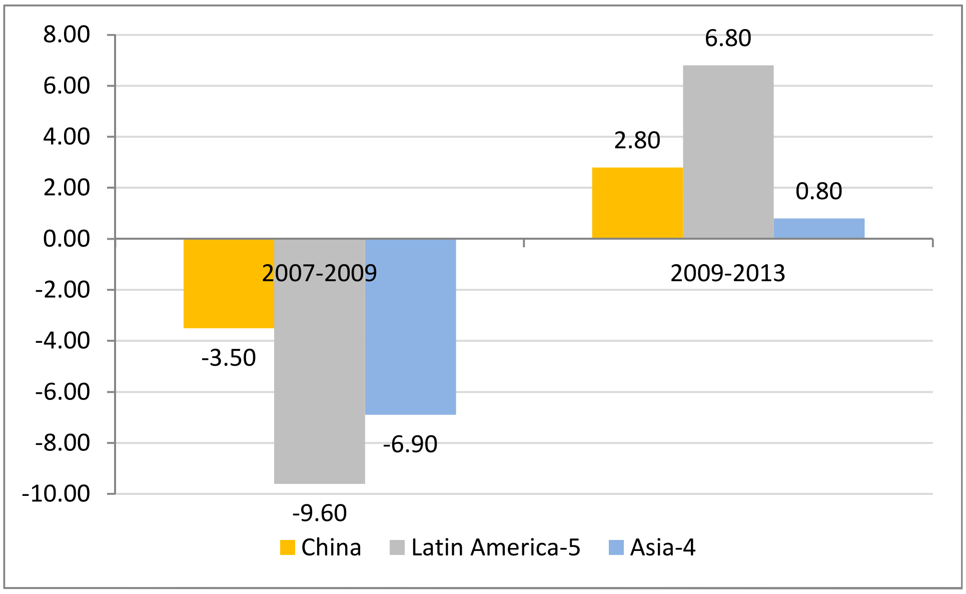
Figure 6. Fiscal impulses in selected AMs



Source: IMF and own elaboration

Figure 7. Fiscal impulses in selected EMs (Latin America-5 includes: Brazil, Colombia, Chile, Mexico and Peru and Asia-4 includes: Indonesia, Malaysia, Philippines and Thailand)



Source: IMF and own elaboration

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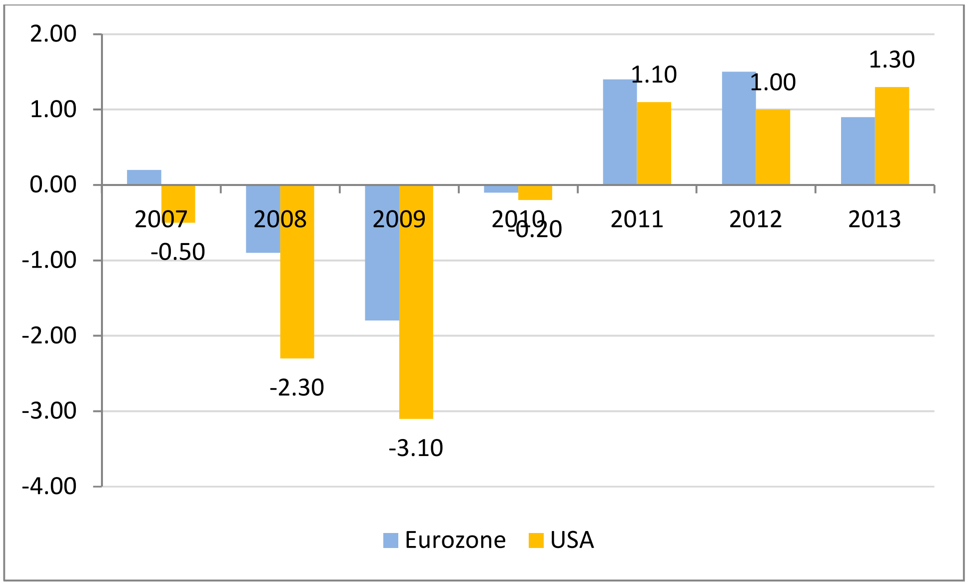
Figure 8. Fiscal impulses in the UE and the Eurozone, 2007-2013



Source: IMF and own elaboration

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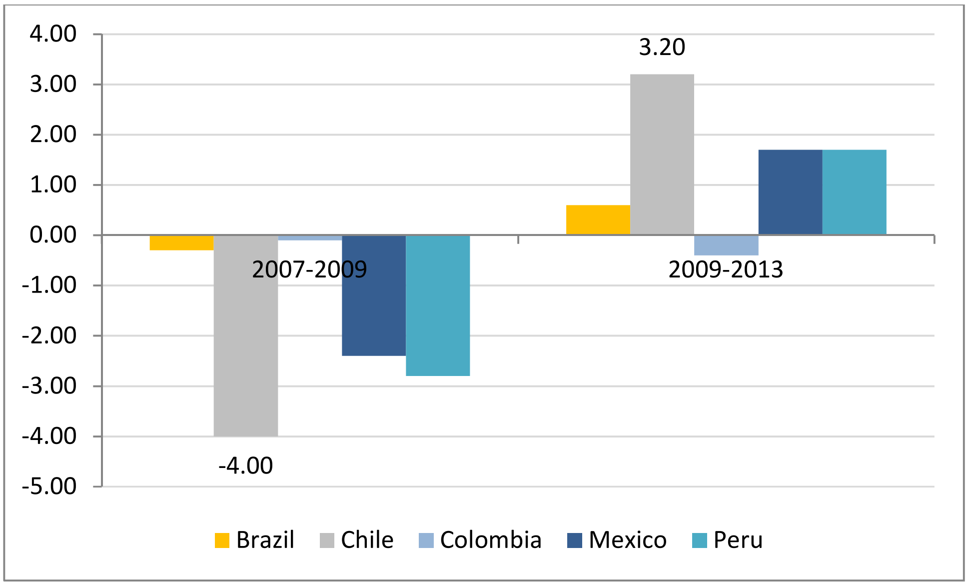
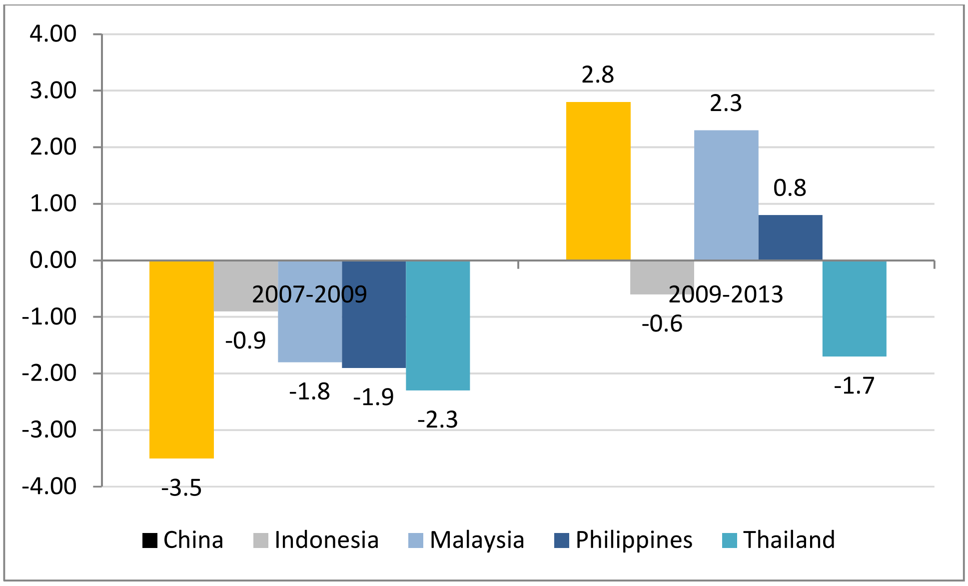
Figure 9. Fiscal impulses in emerging countries of Latin America



Source: IMF and own elaboration

Figure 10. Fiscal impulses in emerging countries of Asia



Source: IMF and own elaboration

Financialisation, Economy, Society and Sustainable Development (FESSUD) is a 10 million euro project largely funded by a near 8 million euro grant from the European Commission under Framework Programme 7 (contract number : 266800). The University of Leeds is the lead co-ordinator for the research project with a budget of over 2 million euros.

THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?'

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THE PARTNERS IN THE CONSORTIUM ARE:

Participant Number	Participant organisation name	Country
1 (Coordinator)	University of Leeds	UK
2	University of Siena	Italy
3	School of Oriental and African Studies	UK
4	Fondation Nationale des Sciences Politiques	France
5	Pour la Solidarite, Brussels	Belgium
6	Poznan University of Economics	Poland
7	Tallin University of Technology	Estonia
8	Berlin School of Economics and Law	Germany
9	Centre for Social Studies, University of Coimbra	Portugal
10	University of Pannonia, Veszprem	Hungary
11	National and Kapodistrian University of Athens	Greece
12	Middle East Technical University, Ankara	Turkey
13	Lund University	Sweden
14	University of Witwatersrand	South Africa
15	University of the Basque Country, Bilbao	Spain

Published in Leeds, U.K. on behalf of the FESSUD project.