



# International Journal of Sciences: Basic and Applied Research (IJSBAR)

ISSN 2307-4531  
(Print & Online)

<http://gssrr.org/index.php?journal=JournalOfBasicAndApplied>



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## The Flow of Capital and the Eurozone Crisis

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### Abstract

Historical experience shows that in the world of high capital mobility, sudden stops of capital inflows may occur, typically triggering financial crises. The latest financial crisis in the Euro zone (EZ) seems to support this point of view. Euro adoption encouraged a capital flow bonanza from the countries which constitute the center of the Eurozone, to the countries which make up the periphery of the Eurozone, where it was possible to obtain better returns, due to their less developed financial systems. This explains the large current account surplus in the Euro centre countries (like Germany and Netherlands) and the deficits in the Euro periphery countries (Greece, Portugal, Spain). The sudden stop which happened in 2009, made it difficult for periphery countries to roll over debt, and thus caused a crisis. This paper analyses the role of large capital inflows in generating the EZ crisis. We argue that the impact on capital flows within the Eurozone of financial deregulation and liberalization and of the adoption of the common currency was critical in exacerbating a growing competitiveness gap between core and periphery countries and explaining the evolution of the crisis.

**Keywords:** financial crisis; sudden stops; capital flows; Euro zone; recession.

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## **1. Introduction**

Capital flows represent a significant factor for rapid development of emerging markets. Also they can feed the boom and bust cycles, when money enter and exit countries with high speed. Indeed, on one hand capital inflows increase economic growth in emerging markets, on the other hand they cause growth of asset prices, credit expansion and growth of inflation rate. Capital flow “bonanzas” significantly raise the risk of financial crises, since such episodes systematically precede sovereign debt crises, for once the capital flow stops, the country on the receiving end is suddenly unable to roll over the debt it has accumulated [1]. Financial crises in the past two decades significantly changed the attitude of academic economists about financial globalization. Those crisis, beginning from the Mexican one, are so called “capital account crises”, and they are all characterized by unsustainable deficit of current account, financed on various modes [2].

The major feature of recent global crisis was the great volatility of capital flows. The reasons for great capital inflows in emerging market economies, starting from the beginning of this century, are due to the potentials for higher growth of these economies and higher expected returns of the invested capital. Simultaneously, the inflows were motivated by the financial stability, which in that period was typical for those countries [3]. This caused a large capital flow from Europe’s core to periphery, much like NAFTA helped to spark a surge in capital from US to Mexico in early 1990s. And the periphery countries, in turn, were able to benefit from tremendous influx of capital that reduced borrowing costs. Investors in the core were happy about the relatively high returns they were getting in the periphery and the periphery countries enjoyed an economic boom [4]. It is necessary to notice that big capital inflow before the crisis of 2007, were not unprecedented.

This is not the first time we’ve seen a dramatic influx of capital when countries break down economic and financial barriers. The same thing happened in Mexico following the creation of NAFTA in the early 1990s, and East Asia in the mid-to-late 1990s. Private capital inflows were of same size, if not even bigger in the last century 90s [5].

When less developed countries become more integrated with the rest of the world, investors typically try to take advantage by sending lots of capital their way. The problem is that such surges in capital flows depend on the whims of international investors, and therefore have a notorious tendency to come to a sudden stop if investor sentiment changes. And when that happens, severe financial crisis often follows [6].

## **2. The impact of capital flows on the recent Euro zone crisis**

Deeper analysis of the dynamics underlying the current Eurozone crisis shows that financial deregulation and liberalization was a major cause of the crisis in periphery countries in the Eurozone. Financial deregulation and liberalization encouraged the development of new financial instruments and derivatives and allowed banks in core Eurozone countries to increase leverage and boost loanable funds, spurring a real estate and consumption boom. This boom was also made possible by the adoption of the Euro in the context of greater European financial and economic integration, which lowered the currency risk in periphery countries and permitted interest rates to converge towards a much lower level in core countries. The interest rates in the Eurozone’s core

and periphery rapidly converged, and by 2004 there was no difference in interest rates of the periphery countries and that of Germany. Europe's common currency area caused the Eurozone periphery to incur large amounts of international debt. One of the principal goals of Europe's common currency has always been to promote greater financial market integration among member countries. It was expected that the common currency would make it easier for investors of certain Euro countries to find good investment opportunities in other Euro countries since they would no longer have to worry about fickle exchange rates. One of the perceived benefits of the Euro was to make it easier for capital to flow from countries with abundant capital, and thus relatively low returns on investments, to countries that were relatively capital-poor, and that therefore offered high returns on investments. In the case of Europe, the capital-rich countries were at the core of the Eurozone. The adoption of the Euro by periphery countries in 1999 allowed lenders in the Eurozone's core to take advantage of relatively high rates of return in the periphery [4]. These capital flows fueled a peripheral boom, and sharply rising wages and prices in the Eurozone's periphery relative to Euro zone core. The importance of the Euro can be demonstrated by differences in financial indicators between Eurozone countries on one hand and European countries on the other hand that did not use the Euro: Bilateral bank holdings and transactions among Eurozone countries increased by roughly 40 percent following the adoption of the Euro. In contrast, bank holdings and transactions only increased by 25 to 30 percent if the three countries that did not adopt the Euro (the United Kingdom, Denmark and Sweden) are included within the Eurozone countries. Thus, the increase of transactions was significantly smaller in countries which did not adopt the Euro, underscoring the impact of the common currency [7].

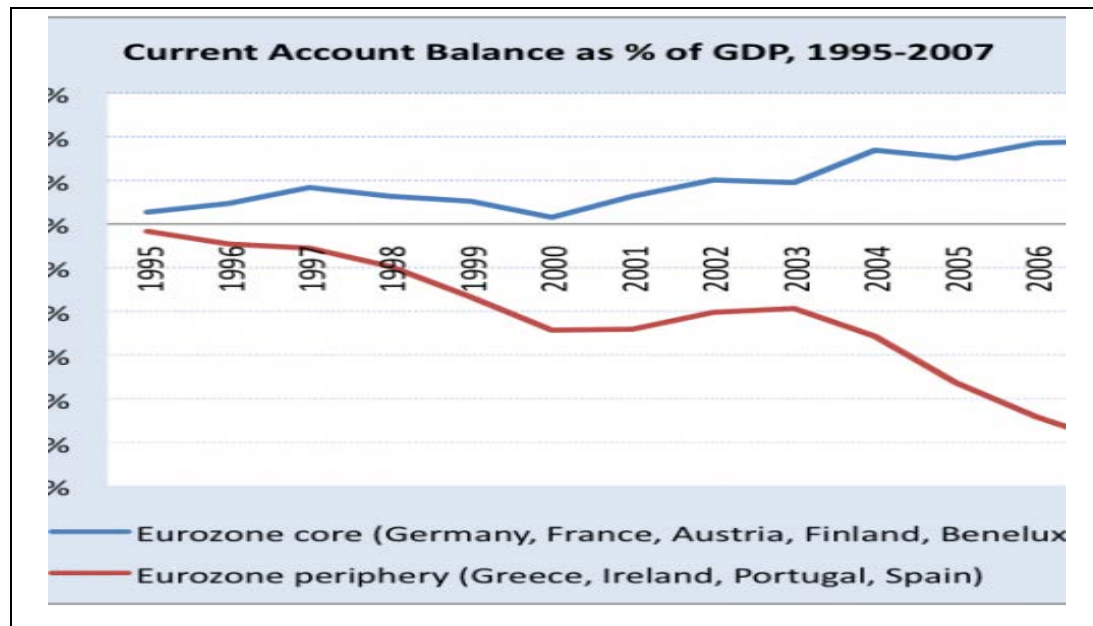
In this context we can summarize that both, financial deregulation and the fall in interest rates, contributed to large inflows of capital from core countries into periphery countries. Abundant credit from core countries triggered economic boom in periphery countries, driven largely by rising consumption. Yet, with rising wages and growth increasingly driven by unsustainably high domestic consumption, periphery countries lost export competitiveness and the manufacturing sector declined. At the same time, core countries' competitiveness and their external surpluses improved, as a result of wage restraint and the relative undervaluation of the Euro compared to the earlier national currencies [7].

The capital flows into a country is measured by its current account deficit - a negative current account deficit means that the country is the recipient of international lending, while a surplus indicates that capital is being invested abroad. As we can see on figure 1, current account deficits of the periphery countries grew enormously in the years following Euro adoption in 1999, while the core countries became substantial sources of capital outflows [4].

The beginning of the global financial crisis in 2008, despite the solid economic fundamentals in emerging market economies, for the lack of liquidity, made the international banks and investors to withdraw portfolio investments from these economies. The sudden stop which happened in 2009, made it difficult for these countries to roll over debt, and thus caused a crisis. Euro adoption made it impossible for the periphery countries to deal with sudden stop to capital flows. These countries could no longer issue sovereign debt in their own currency. Such circumstances made these countries vulnerable to changes in investor sentiment. Because of the common currency, periphery countries lacked the tools to manage their balance of payments [8]. Italy saw 160 billion

Euros exit in 2011, while Spain lost 100 billion Euros, in a mixture of bank withdrawals and sales of government and corporate bonds. Foreign bank deposits have fallen 64% in Greece, 55% in Ireland and 37% in Portugal; in Italy, the fall is 34% and Spain 13%. Foreign government bond holdings have dropped 56% in Greece, 18% in Ireland and 25% in Portugal; in Italy the fall is 12% and Spain 18%. Figure 2 reports for each month the countries found to be in a sudden stop.

**Figure 1:** Current Account Balance in the EZ countries (as % of GDP)



Source: [4].

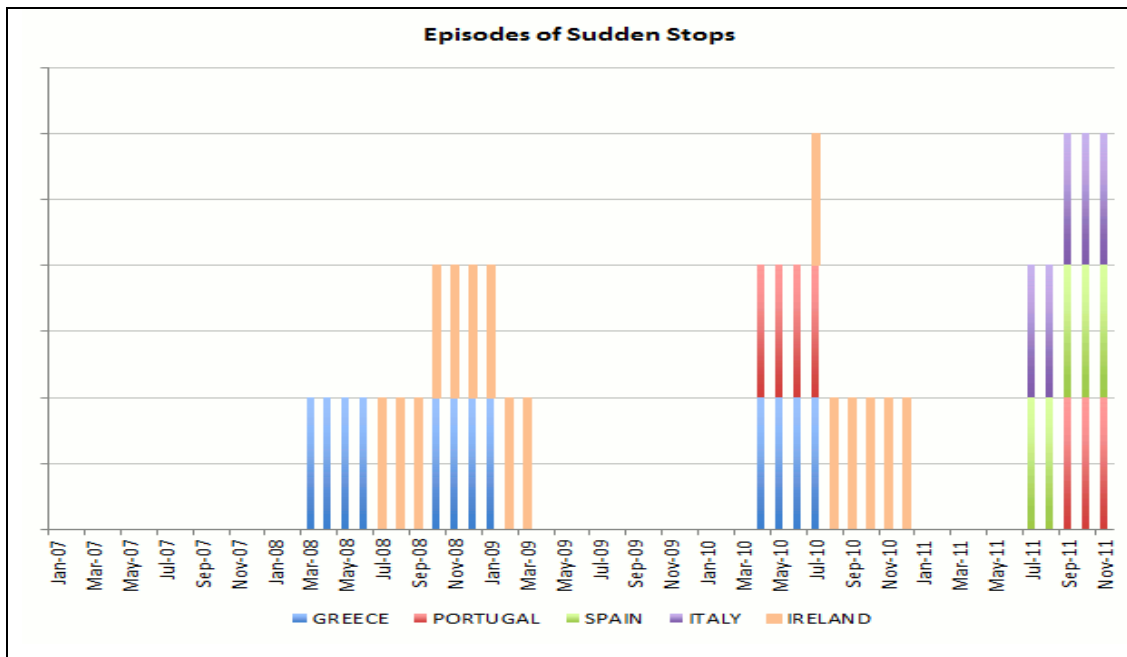
Table 1 presented budget balances and current account balances during the period after the adoption of the Euro and before the worldwide financial crisis, as % of GDP.

**Table 1:** Fiscal and current account balances as % of GDP in the EZ countries (2000-07 average)

Fiscal balance		CA balance	
Country	2000-07ave	Country	2000-07ave
Greece	-5,4%	Portugal	-9,4%
Portugal	-3,7%	Greece	-8,4%
Italy	-2,9%	Spain	-5,8%
France	-2,7%	Ireland	-1,8%
Germany	-2,2%	Italy	-1,3%
Austria	-1,6%	France	0,4%
Netherlands	-0,6%	Austria	1,6%
Belgium	-0,4%	Belgium	3,0%
Spain	0,3	Germany	3,2%
Ireland	1,5	Netherlands	5,4%
Luxemburg	2,3%	Finland	5,9%
Finland	4,1	Luxemburg	10,6%

Source: [4].

**Figure 2: Episodes of Sudden Stops**



Source: [8]

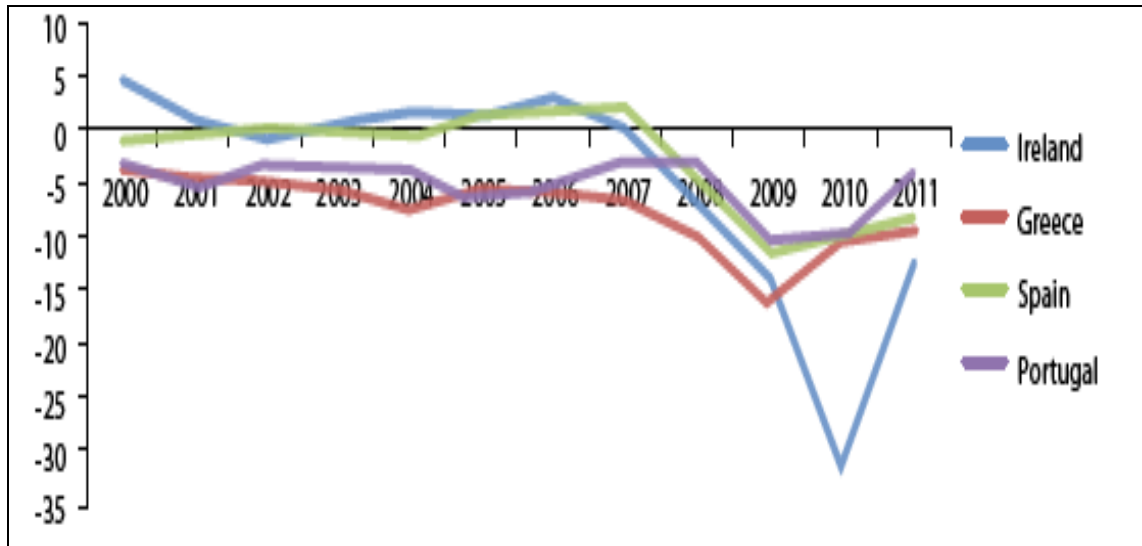
With the beginning of crisis, especially with the collapse of Lehman Brothers, financial institutions from developed countries stricken by the crisis, started to massively withdraw the capital from their affiliates located in emerging market economies, which caused a negative influence over the foreign exchange reserves and national currencies and even over the liquidity crisis in these economies. Euro area asset and liability financial flows fell sharply, from 20% of GDP in 2007 to less than 5% of GDP in 2008. Banks also decreased their assets held abroad. As a results of the liquidity shortage in the global banking sector, Euro area banks went from being net borrowers to being net lenders in last quarter of 2008 and for most of 2009 [9]. According to analyses, global crisis started because debt in the Eurozone's periphery became so large that investors feared that entire countries were at risk of default. Financial markets lost confidence in the creditworthiness of Greece and other periphery countries and interest rates on government bonds soared to levels that forced the governments of these countries to seek bailouts from international community, including the European Community and the IMF [7]. The increase of public debt which resulted from these bailouts was further compounded by the ballooning of government deficits resulting from the sharp fall in revenue as a result of the drop in output and the adoption of stimulus packages to counteract the impact of the crisis. Figure 3 show the evolution of public debt burden following the crisis.

### 3. Economic policy measures as prevention against future large capital inflows in the EZ periphery

Some believe that the crisis was fundamentally caused by irresponsible behavior by governments and individuals in EZ periphery-government deficit and debt in these countries were so large that once the Great Recession hit, investors lost confidence in the ability of those countries to remain solvent. So, they tried to dump the bonds from those countries, triggering the crises. Many analysts came to a conclusion that the crisis itself

was caused by fiscal profligacy in periphery countries. According to these analyses, fiscal discipline will allow Euro zone to regain strength, without further need for fiscal stimulus. We have to take into consideration that fiscal contraction during recession will typically fail to meet deficit reduction, because the austerity makes the recession worse.

**Figure 3:** Evolution of General Government Deficit (as percent of GDP) in some EZ countries (2000-2011)



Source: [7].

But, as it is shown in Table 1, the relationship between budget deficit and crisis is weaker. The factor that crisis countries have in common is that, without exception, they ran the largest current account deficits in the EZ during the period 2000-2007. The relationship between budget deficits and crisis is much weaker; some of the crisis countries had significant average surpluses during the years leading up to the crisis, while some of the EZ countries with large fiscal deficits did not experience crisis. Some of the crisis countries with large fiscal deficits did not experience crisis. So capital flow bonanzas and sudden stops, pushed periphery countries toward crisis [6].

Consequently many analysts and observers have put forward that the Euro crisis is a balance-of-payments crisis at least as much as a fiscal crisis [10]. Crisis in the Euro zone has not occurred only as a result of fiscal indiscipline of some member states, as it is usually believed, but has also been a result of external, systemic reasons, such as the large capital flows.

If the crisis is due primarily to local causes, than the best predictor of crisis is government deficit and debt. If the primary reason are large capital inflows, than a better predictor of the crisis would be large current account deficit, which necessarily happens when there is a capital flow bonanza.

If crisis is due to the irresponsible behavior of the periphery countries, than they must pay the price, because bailout of the periphery countries may encourage future irresponsible behavior. But if the crisis was mainly a result of forces outside the control of the EZ periphery countries, it is not appropriate to ask them for fiscal

restrictions. All of the members of the EZ have enjoyed the benefits of the common currency. The large capital flows from the EZ core to the periphery during the years 1999-2007 are evidence that investors in the core EZ countries enjoyed and took full advantage of the high returns they could get on new investment opportunities in the periphery. They have been able to enjoy significantly stronger exports for the past 10 years thanks to the Euro. Since all members benefit from the common currency, all will have to pay the price of dealing with its vulnerabilities.

It doesn't seem appropriate that the burden of solving the crisis should be placed on periphery countries, while the benefits of the common currency were shared by both the core and the periphery. In this context substantial assistance from the core to the periphery in response to the crisis can be viewed as the responsibility of the core EZ countries.

Confronted with a public debt crisis peripheral countries have been forced by the Euro zone to impose harsh austerity. Peripheral countries have been forced to accept IMF conditionality but without an IMF loan. Better policy alternatives are available, but they involve radical social and economic change. The first alternative available to peripheral countries is austerity accompanied with further liberalization. This means adopt austerity by cutting wages and reducing public borrowing requirements. This strategic alternative will achieve stabilization through recession, imposing huge costs on working people. It offers little prospect of sustained growth in the future.

The second alternative is radical reform of the Euro zone. It would involve greater fiscal freedom by member states, enlarged European budget, fiscal transfers from rich to poor, support for wages, protection for employment etc.

The third option is radical exit from Euro zone. The aim of this strategy is reintroduction of the national currencies and internal devaluation, which would revive export. But there would be losses for those servicing debt abroad, including banks, and workers would face wage declines. Devaluation requires a redistribution of spending, with the creditors spending more, while the debtors spend less. Second, it requires a real depreciation on the part of the debtors, a real appreciation on the part of the creditors, that is, wages and prices in the Eurozone's periphery must fall relative to those in Euro zone core [6].

If we suppose that Euro zone emerges from this crisis, and member countries still exclusively using the Euro. In this case there will once again be capital flows from the EZ core to the periphery. After few years investors will regain confidence and once more try to seek out the higher returns that are available in the periphery countries, and recipient countries will once again be vulnerable to a sudden stop. And they will once again lack policy tools to deal with it when it happens. In this context the question is: can anything be done to fundamentally make the Euro zone system more stable? What kind of measures of economic policy could act as prevention in a situation of reappearance of great capital inflows in the EZ periphery?

One of the reasons that this crisis has gotten so bad is that the EZ periphery countries lacked any tools to deal with it, largely because in common currency area they have no central bank to fall back on in the event of

liquidity crunch. This problem can be solved through number of steps, ex if ECB provide unlimited liquidity to any EZ country that need it.

The current crisis has led to significant changes in patterns of cross-border financial flows and has led to increasing attention being paid to cross-border financial flows and recognition of their importance for macroeconomic and financial stability [9]. It is well known that, countries with a very high degree of financial openness are more exposed to periods of higher tension in the financial markets, leading to repatriation of foreign investment capital. External financial flows can be volatile and easy reversible.

In this context it is necessary to emphasize that sudden stops may happen even when a country is following all the right macroeconomic policies. The Mexican and East Asian financial crises of the 1990s are good examples of that. In the case of the Eurozone, the sudden stop to capital flows in 2009 indiscriminately hit all of the periphery countries, regardless of how well they had managed their finances [4]. Greece, Italy, Ireland, Portugal, and Spain experienced significant private capital inflows from 2002 to 2007-9, followed by unambiguous and rather sudden outflows.

Global financial crisis also provided some lessons in macroeconomic discipline. Despite the undeniably beneficial effects of financial integration on growth and on general societal welfare, imbalanced capital flows imply significant risk for economies whenever they are coupled with unsustainable domestic policies. Balanced and sustainable macroeconomic policies are helps to enable countries to attract stable and balanced capital inflows, which are conducive in long-run growth of the economy [9].

Capital controls would also have to be imposed on the capital account to prevent outflow of capital. (ex. each international transaction to be subject to a small transaction tax). This will make investors think more careful and move more slowly both into and out of international capital markets. A significant number of studies confirm that capital controls represent a useful instrument in different situations: for stabilization of volatile short-term capital flows, for increasing the independance of monetary policy, for changing the composition of capital flows in favour of FDI, and for reducing the pressure on the exchange rate [3].

Since the introduction of single currency in 1999 European Monetary Union has played a key role in the process of financial integration in the global area. The global financial crisis (2007) interrupted the process of steady global integration.

According to some economists, the global economy is at a crossroads. One path leads to regulatory integration on a global scale, creating national economies with extremely close ties. The second path leads to a world where national economies are more isolated and rely on domestic consumption for growth countries would becomes isolationist, continuing to retreat from international capital markets and concentrate on domestic growth [11].

Global financial crisis actually presents crisis of globalization. Increased internationalization of capital flows, caused the effect of contagion, and raised the fears of possible reaction against financial globalization and integration.



### **3. Conclusion**

The root cause of the recent Eurozone crisis was unrestricted financial deregulation and liberalization. It is well known that in the world of high capital mobility, sudden stops of capital inflows may occur, typically triggering financial crises. The common currency promoted greater financial market integration between member countries, and pushed Eurozone peripheral countries to incur large amounts of international debt. Financial deregulation and the fall in interest rates encouraged large-scale capital flows from EZ core to periphery. Capital flows fueled a peripheral boom, and sharply rising wages and prices in the EZ periphery relative to EZ core.

With the beginning of the global financial crisis, international banks and investors from the EZ core, started massively to withdraw capital from the periphery countries, which had negative impact on the foreign exchange reserves in these economies. The sudden stop, which happened in 2009, made it difficult for the periphery countries to roll over their debt, and thus caused a liquidity crisis. These countries could no longer issue sovereign debt in their own currency. Such circumstances made these countries vulnerable to changes in investor sentiment.

According to some economists, the crisis was fundamentally caused by irresponsible behavior of the governments in periphery countries. But, if the crisis is due primarily to local causes (i.e. by fiscal profligacy), than fiscal discipline will allow the Eurozone to regain its strength, without further need for fiscal stimulus. However, we have to underline that fiscal consolidation and restriction during the recession, would make the recession even worse.

If the crisis is indeed the result of the irresponsible behavior of the periphery countries, than they have to be forced by the EU to impose harsh austerity, cutting wages and reducing public spending. Another possible option is exit from the EZ, reintroduction of national currencies and internal devaluation. Internal devaluation would revive exports in those countries, but they would suffer losses from servicing foreign currency debts. All these options have their serious drawbacks.

In this paper we argued that the EZ crisis has not occurred only as a result of fiscal indiscipline, but have also been a result of external, systemic reasons, such as the large capital flows. Euro-adoption not only set the stage for the crisis by encouraging a capital flow bonanza to the EZ periphery; it also made it impossible for the periphery countries to deal with the sudden stop to those capital flow.

An interesting question in the context of capital flows to periphery countries is what will happen in few years if investors regain confidence and once more try to seek out the higher returns that are available in the periphery countries. That means that recipient countries will once again be vulnerable to a sudden stop. Periphery countries have to increase their attention on international capital inflows and to recognize their impact on macroeconomic and financial stability. Sound macroeconomic and financial policies would help peripheral countries to attract stable and balanced capital inflows, which are sustainable in the long-run.

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