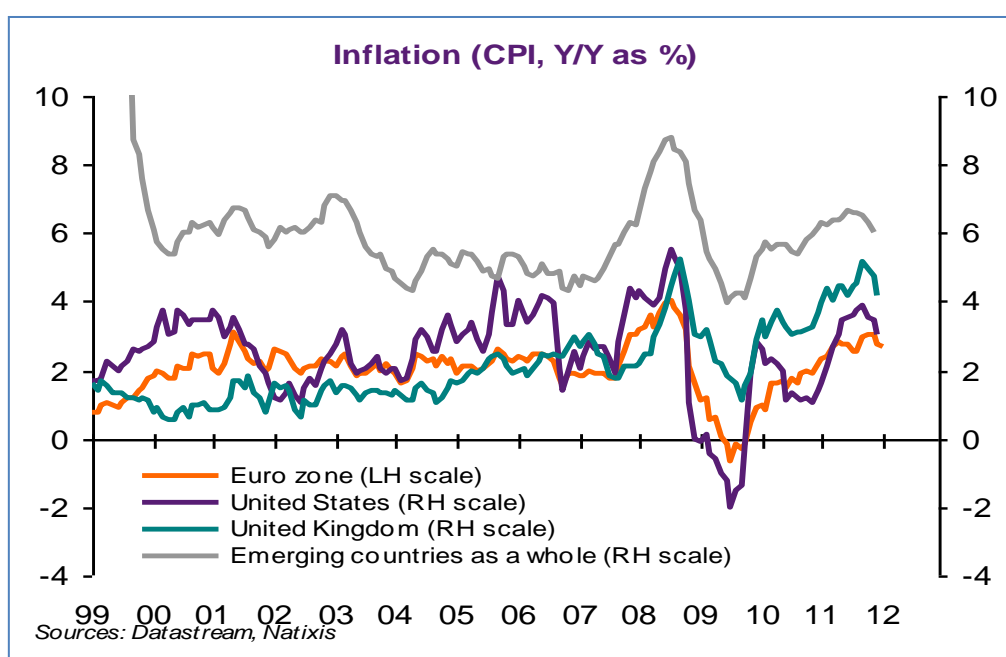


THE EURO CRISIS: LESSONS AND PERSPECTIVES

Edmond Alphan  ry*

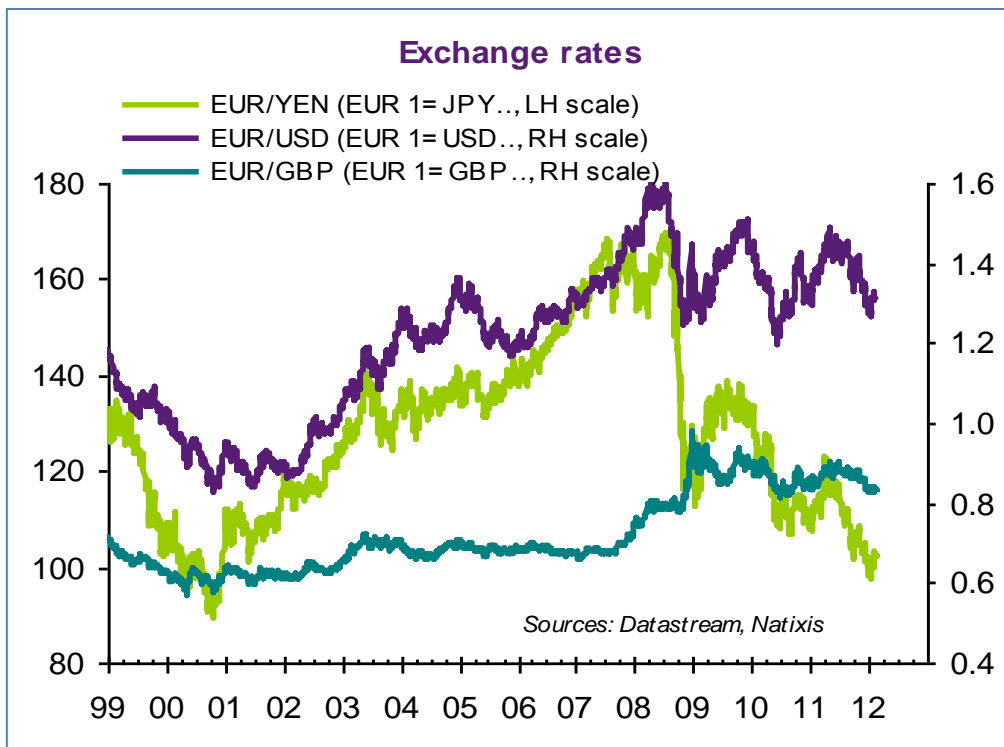
When one looks at the evolution of the Euro zone since the inception of the Euro in 1999, one cannot but be struck by the contrast between the first ten years (1999 – 2009), when the Euro seemed to perform remarkably well, and the last three years (from the end of 2009 up to now), which have been marred by a crisis which we have not yet fully overcome.

During its first ten years, the Euro zone was characterized by its stability: the price level remained stable (Graph 1) and the value of the Euro on the foreign exchanges remained strong (Graph 2). In terms of economic growth, the Euro zone economies compared favourably with those of the other OECD countries (Graph 3).

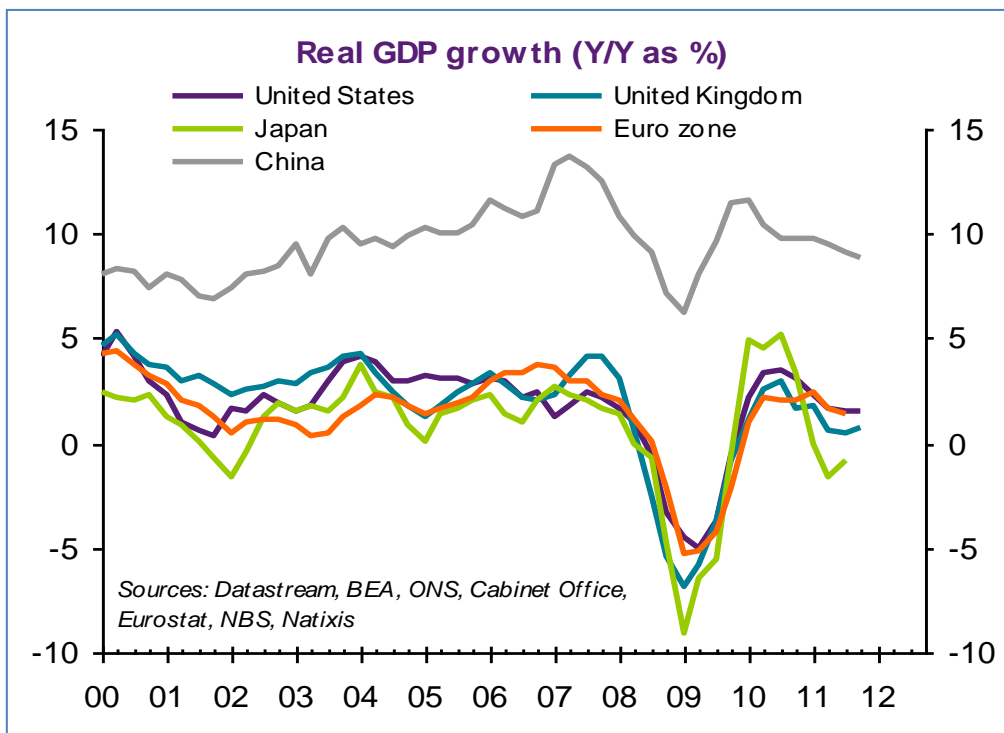


Graph 1

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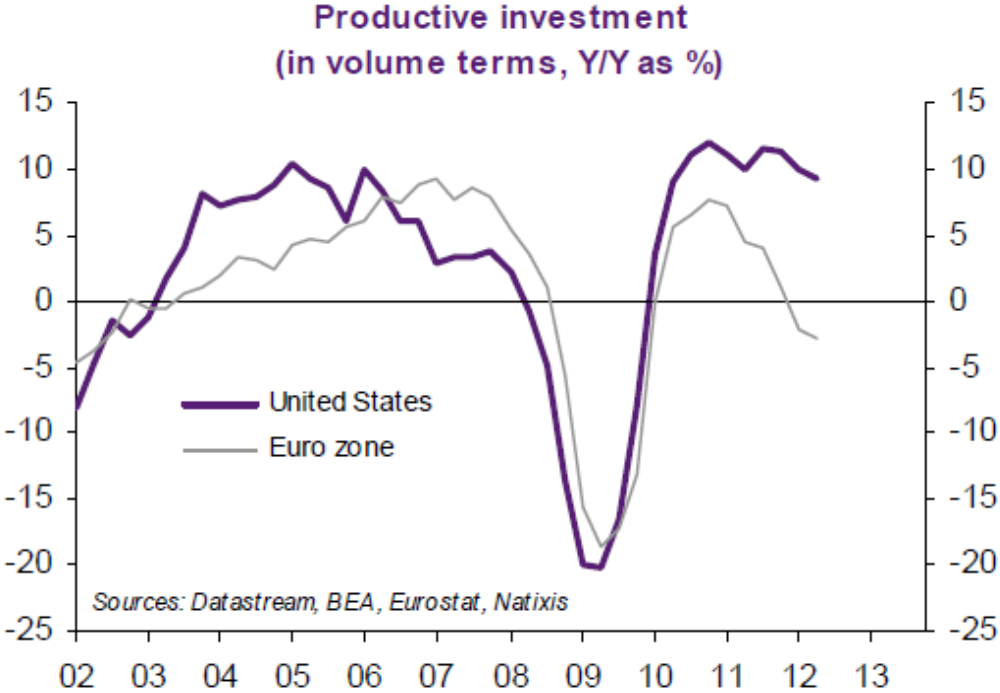
Graph 2



Graph 3

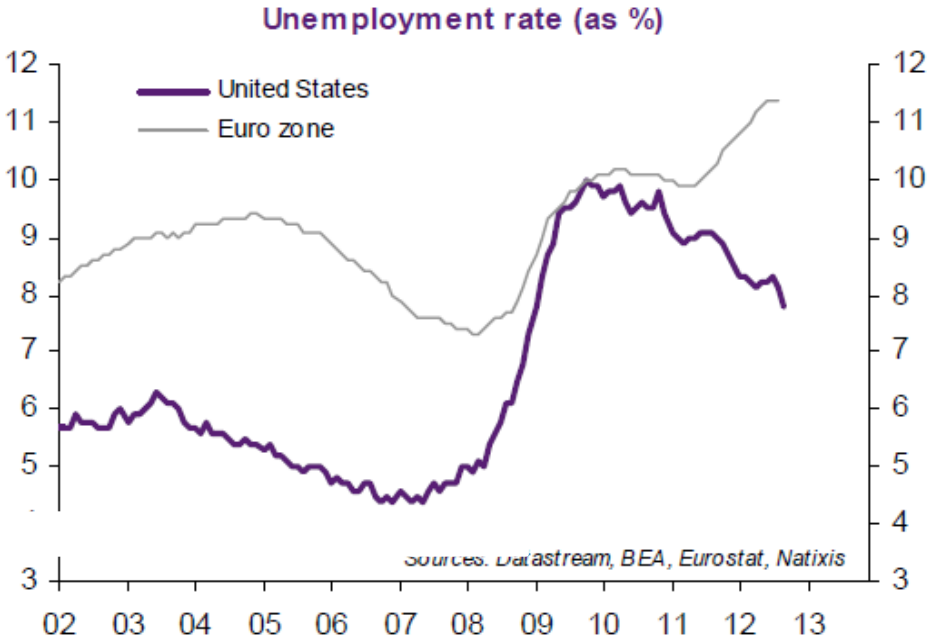
By contrast, over the last three years the performance of the Euro zone as a whole relative to the rest of the world has been poor in terms of economic growth and employment. Compared to the US, the underperformance of the

Euro zone economy appears in the following graphs showing the trend of productive investment,



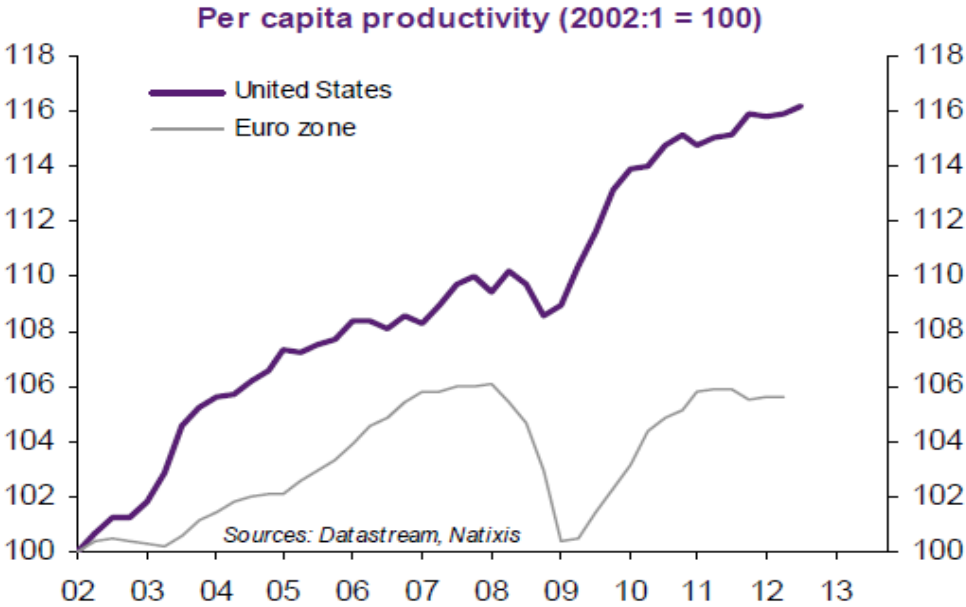
Graph 4

of unemployment,



Graph 5

and of productivity, where the gap with the US has been widening:



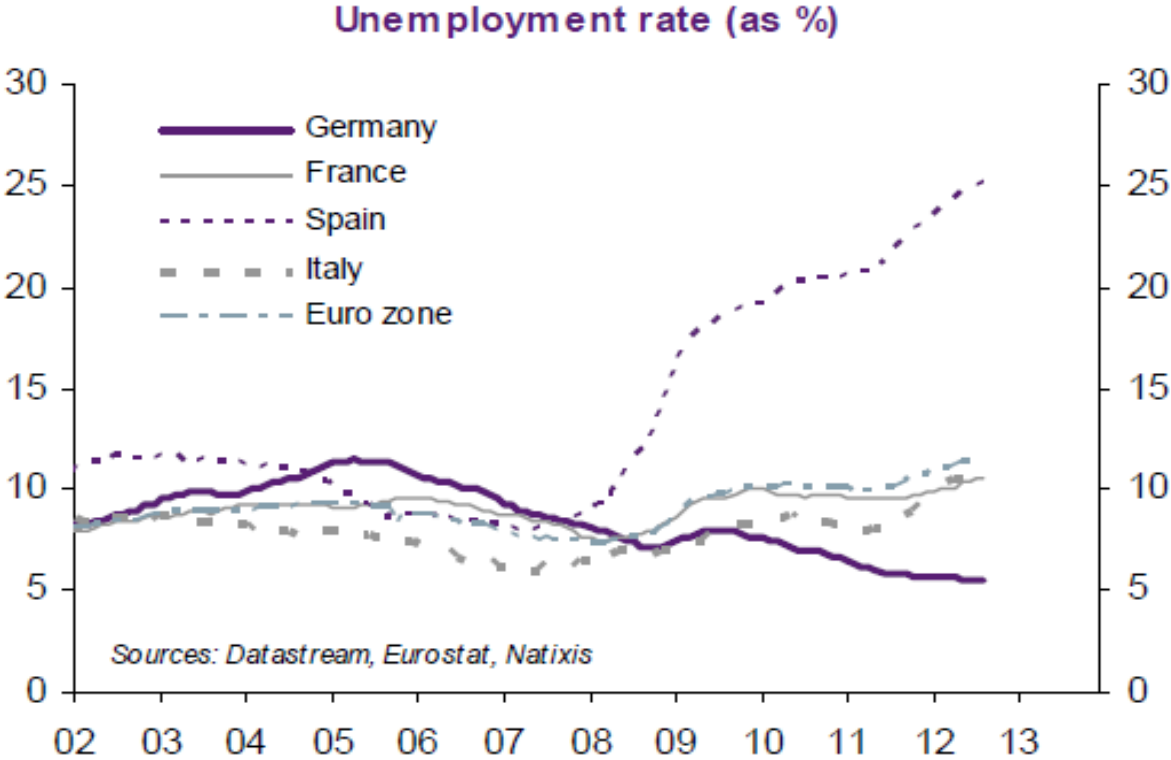
Graph 6

Furthermore, inside the Euro zone itself, divergences between the Member States have increased. You can see this on the graphs showing the evolution of economic growth in Germany, France, Spain and Italy (Graph 7),



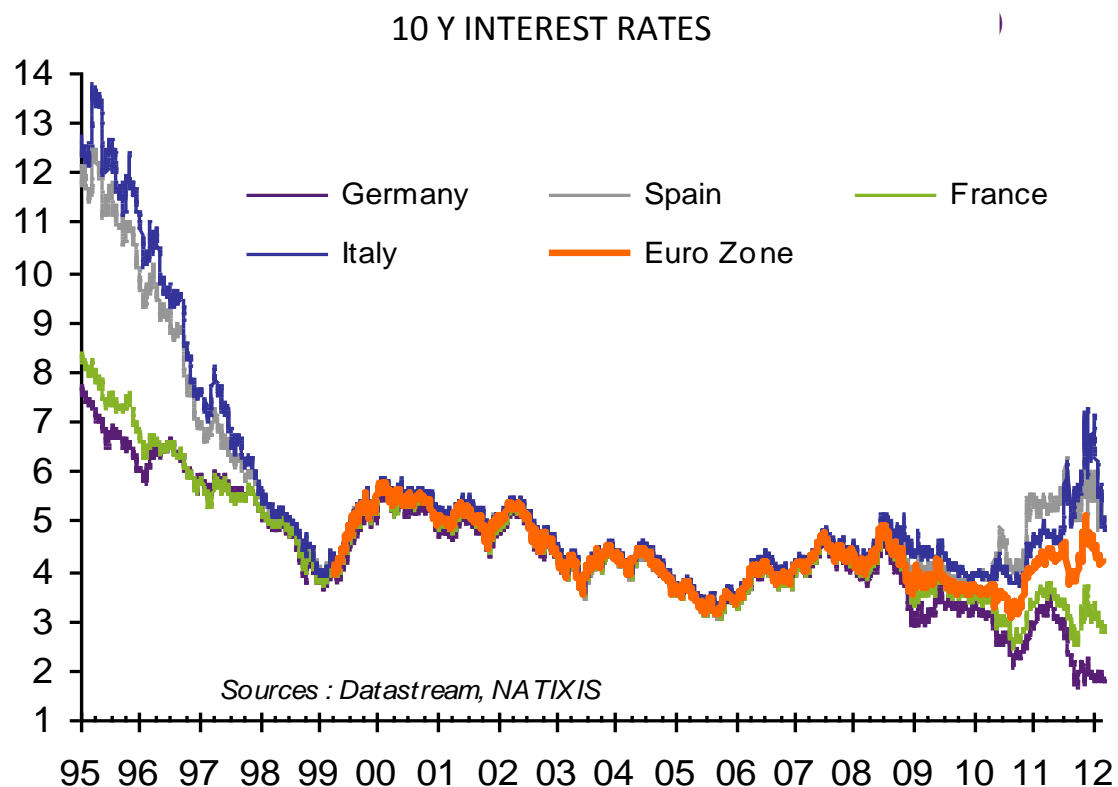
Graph 7

and their rates of unemployment (Graph 8).



Graph 8

During the first ten years of its existence, the Euro zone seemed to have been functioning like a “true” currency union. We then witnessed the accelerating integration of its capital markets, an increase in cross-border activities and a reduction of the existing gaps in income per head between the Member States. . Since the beginning of the Euro crisis, this integration has come to a halt and has even been reversed: interest rate differentials have increased and spreads are back to pre-Euro levels (Graph 9).



Graph 9

Capital markets (especially sovereign debt markets) are becoming more fragmented along national lines, and even in the real economy we can observe a tendency towards the renationalization of certain activities (such as M&A operations).

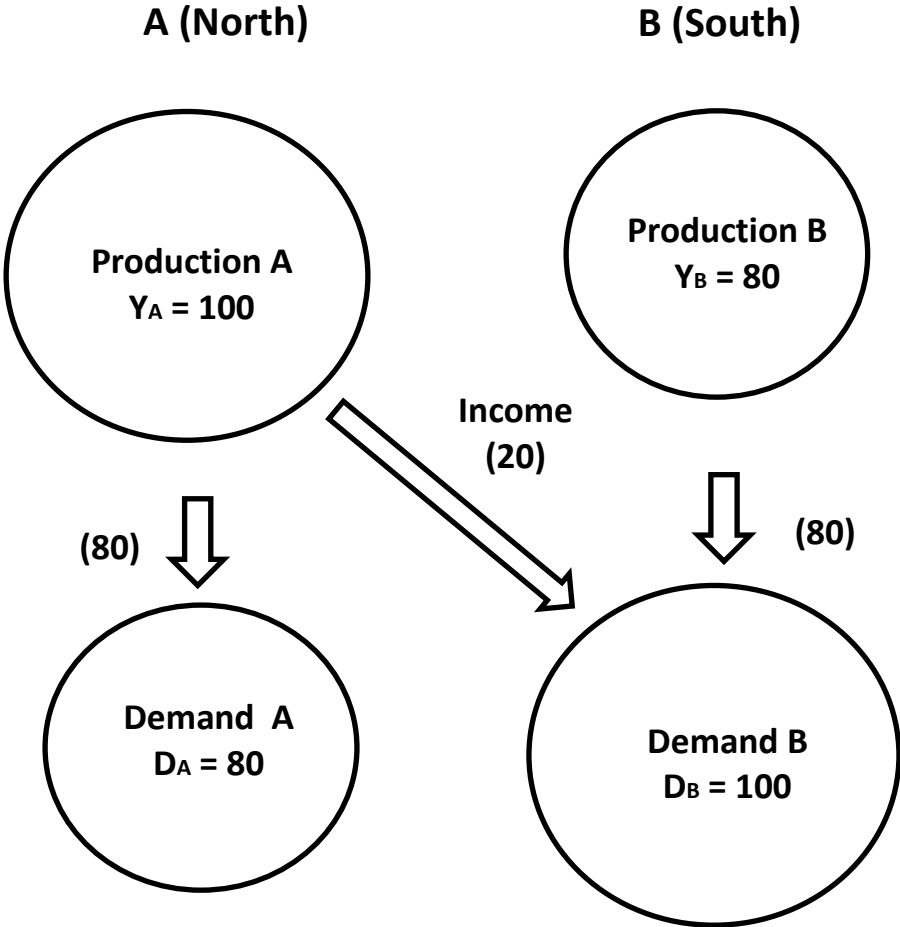
The question to be asked is: what is the explanation for this?; What went wrong in the Euro area after the first ten years, during which it seemed to be in good running order? Answering this question will help us to analyze the policies and tools that have been put in place to cope with the crisis. And it will also enable me to explain in my concluding remarks what in my view remains to be done to ensure the smooth functioning of the Euro zone.

To this end, I will use a simple theoretical model which will show that what we created with the introduction of the European currency was probably not a “full-fledged” currency union such as exists in the US. During the first ten years, all actors (public and private) nevertheless behaved as if the Euro area were a “full-fledged” currency union. It is precisely this behaviour, which was not

sustainable, that led to the current crisis. The policies that have been implemented since the beginning of the crisis are designed to enable this “incomplete” currency union to work. My argument is that if we want to put a final end to the crisis we will probably have to achieve more fundamental reforms to transform the Euro zone into a “full-fledged” currency union.

I - WHAT WENT WRONG WITH THE EURO?

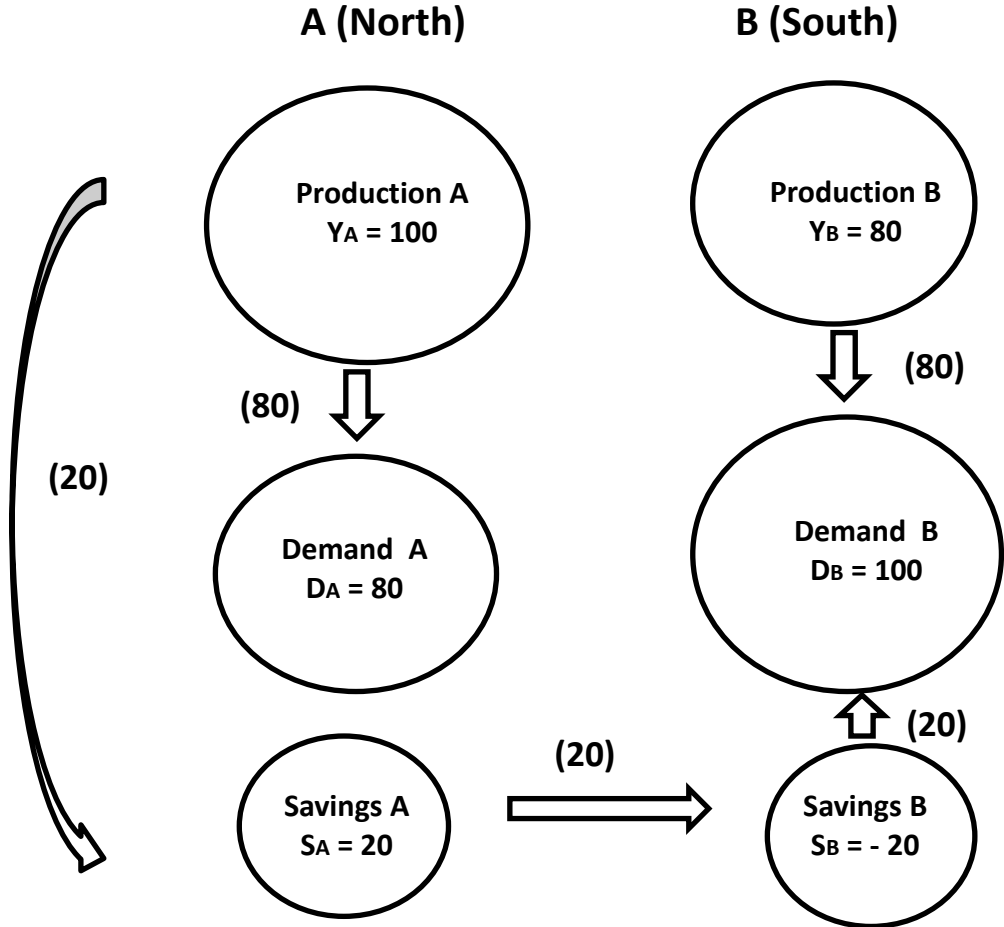
I will start with a simple model of a closed economy (a “currency union”) with two regions A and B: A (the North of the Euro zone), where firms produce (100) more than is locally demanded (80). Macroeconomists would say that there is an excess aggregate supply (over aggregate demand) of 20. In area B (the South of the Euro zone), demand (100) outstrips production (80): there is an excess demand of the same amount (20).



In a microeconomic approach, equilibrium between A and B is determined by the markets according to the law of supply and demand for each of the goods and services that are traded in and between A and B.

From a macroeconomic point of view, the most straightforward adjustment process is based on the net flows of income (of 20) going from A to B. These flows occur “directly” either because some people working in region A live in region B and consume in B, or because there are (public or private) transfers of income from A to B.

When transfers of disposable income are not sufficient, net savings in A will be invested in the economy of B. The equilibrium can therefore be attained “indirectly” through saving: people working in A save 20, which is lent out through capital markets to people in B, which can use these savings to fulfil their needs (20) (be it in consumption, investment or public expenditure). The people of B will borrow these savings at an interest rate which is determined by the equilibrium between demand (20) and supply (20) in the capital markets.



In the longer run, transfers of consumption from B to A, and of production from A to B, can also be achieved through the mobility of the population and of the factors of production (capital and labour).

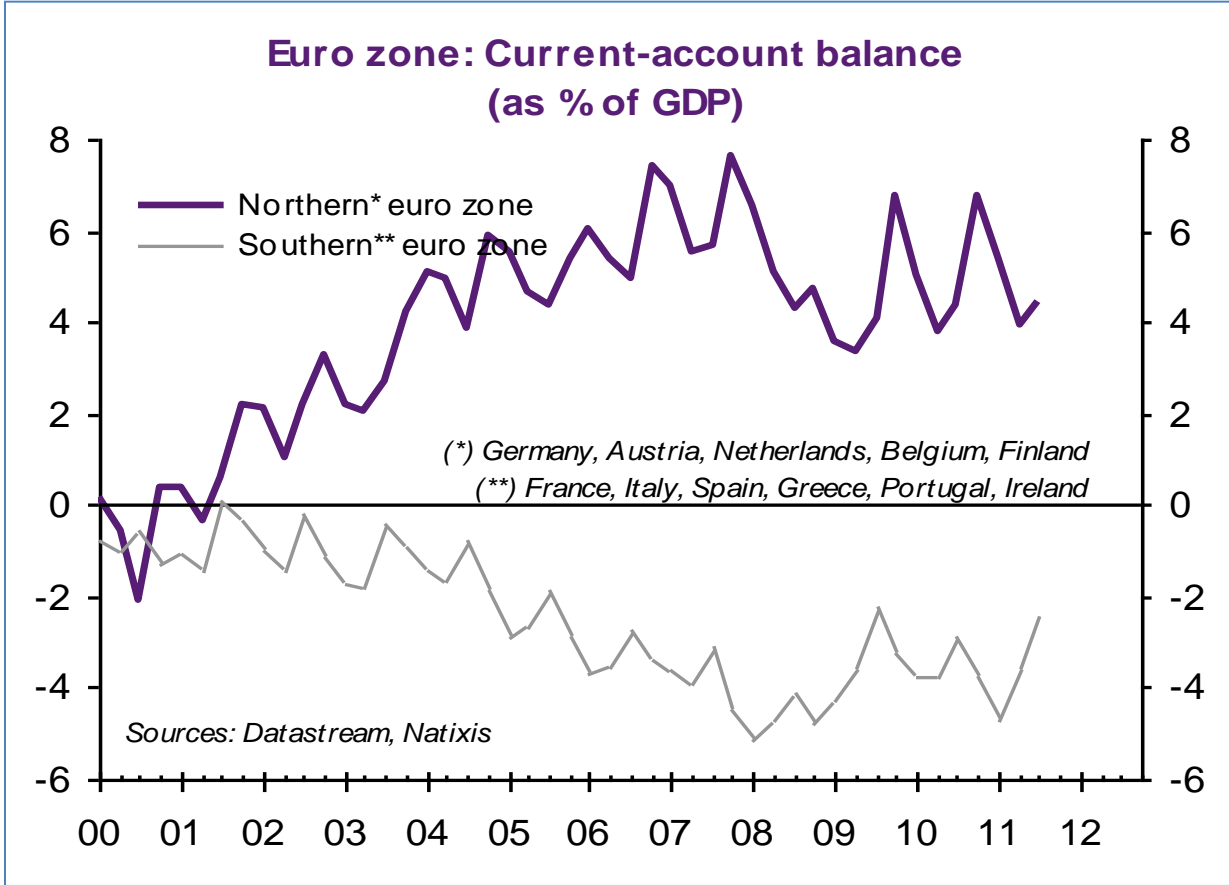
Let me define a “full-fledged” currency union as an area where we do not have to care about current and capital accounts between the various regions of the area: the flow of goods and services moves according to the law of supply and demand on each market, and the economy of each region of the area evolves according to its own structural parameters without having to take into account trade imbalances and capital flows with neighbouring regions. This happens when there is a combination of transfers of income and mobility of population and factors of production with a smooth functioning of automatic stabilizers like an increase in unemployment which puts pressure on wages, or a rise in interest rates which adjusts the demand for to the supply of savings. I prefer this concept of a “full-fledged” currency union to the notion of an “optimum currency area” because I do not think that this type of area ever existed: in other words, we do not need a perfect mobility of factors of production to have a “full-fledged” currency union (after reunification Germany was far from being an optimum currency area, but it immediately became a “full-fledged” currency union).

In a “full-fledged” currency union the system remains in a durable state of equilibrium as long as transfers of income and capital lending lead to an equilibrium between demand and supply in the real economies of each of the two areas. The capital markets stay stable as long as the people of A feel comfortable lending to the people of B, that is, as long as they have not been accumulating too much (private or public) debt.

When, due to a lasting real imbalance between A and B, the amount of debt in B increases, the interest rate required by the people of A goes up, reducing the net demand for savings coming from the people of B (and increasing the net supply of A as well). This adjustment process takes place mainly in the real economy of B. It is obtained through a decrease in aggregate demand (investment and to a lesser extent consumption and public expenditure), which

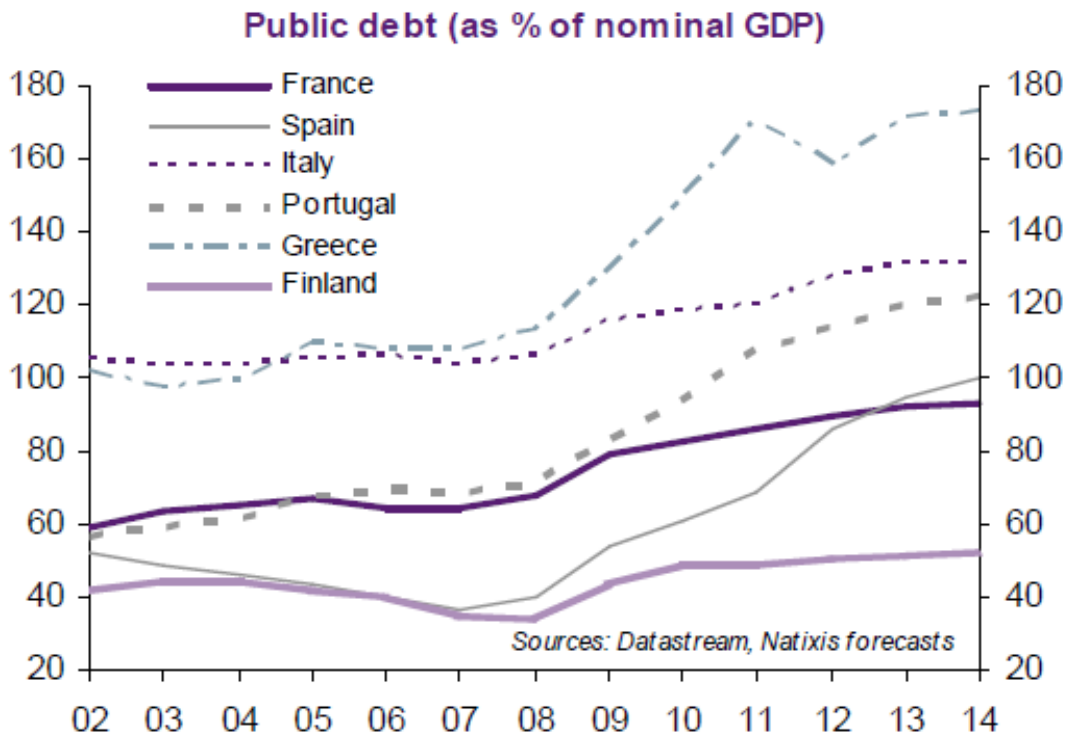
is the counterpart of the reduction of the demand for savings by the people of B.

What has to be pointed out in order to understand what has happened in the Euro zone since the inception of the Euro is that the mechanisms that correct a lasting real imbalance can start to come into play after a rather long period of time. The Euro zone seemed to be in a “stable” situation for 10 years. This means that throughout this period, transfers of income and lending of capital from the North to the South financed, without causing any significant pressure, the excess aggregate demand of the countries of the South plus Ireland (their “current account deficits”, Graph 10).

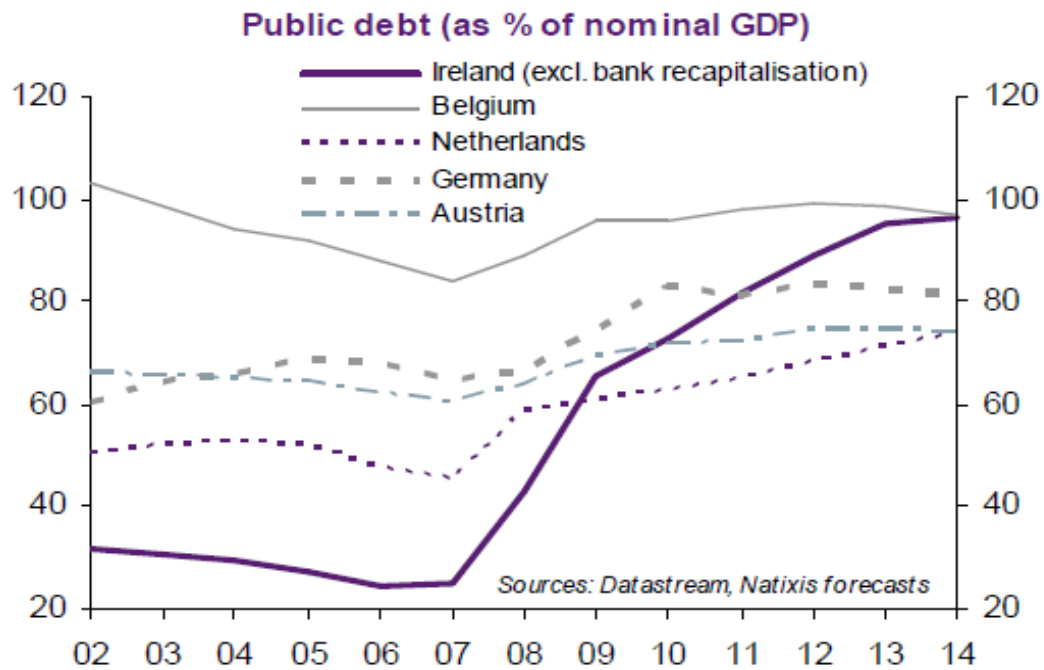


Graph 10

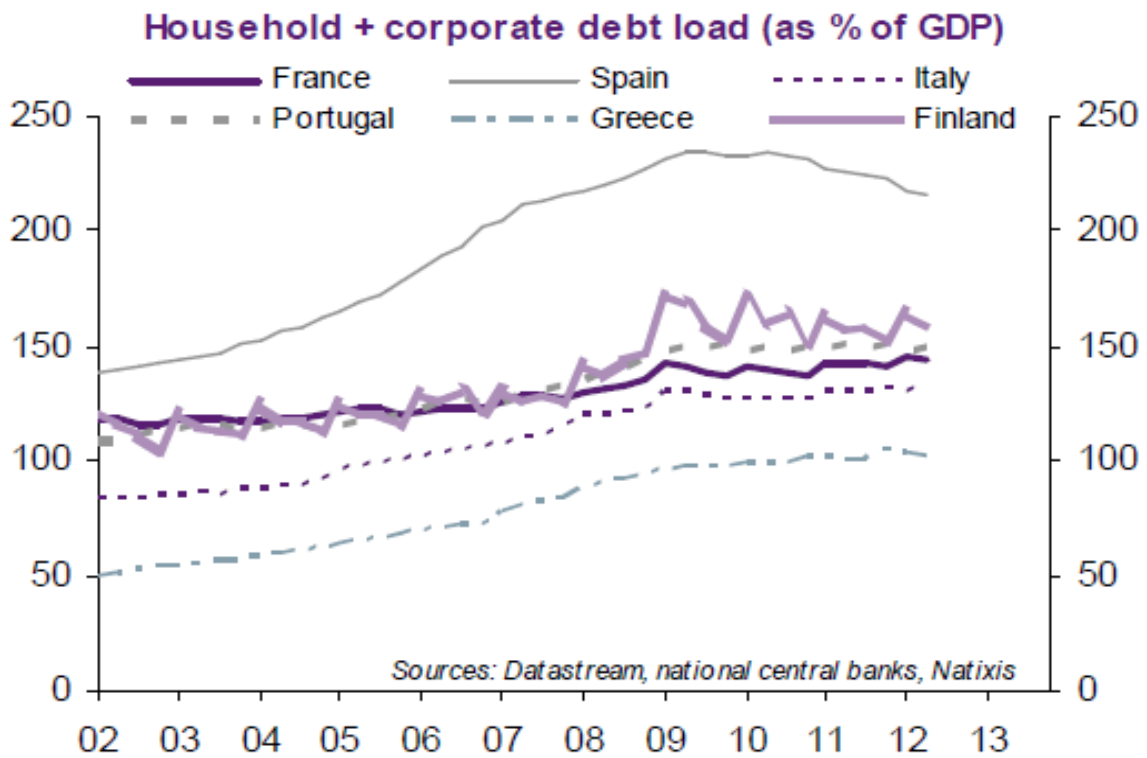
Why did it last so long? Why didn't the accumulation of debt (public and private) in the countries of the South (plus Ireland) trigger a surge in interest rates before 2009 (Graphs 11, 12, 13, 14)? Why did the markets underprice risk in southern Europe for nearly 10 years?



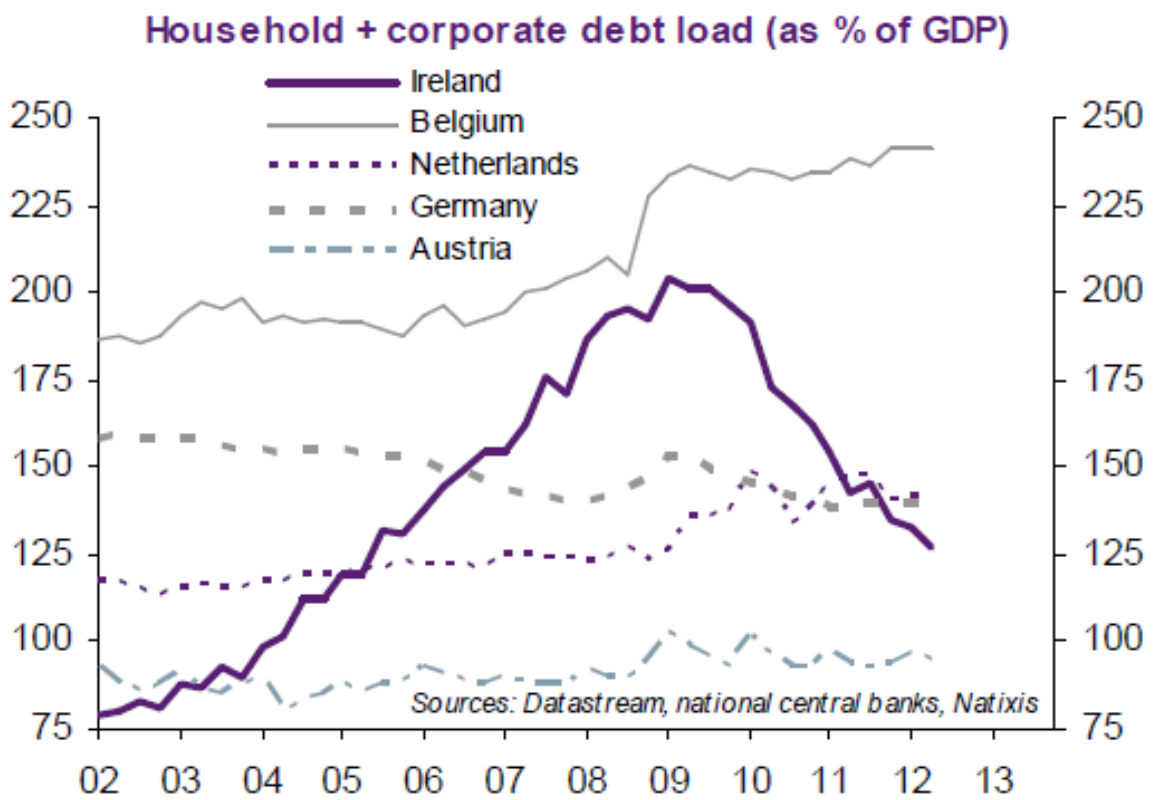
Graph 11



Graph 12



Graph 13



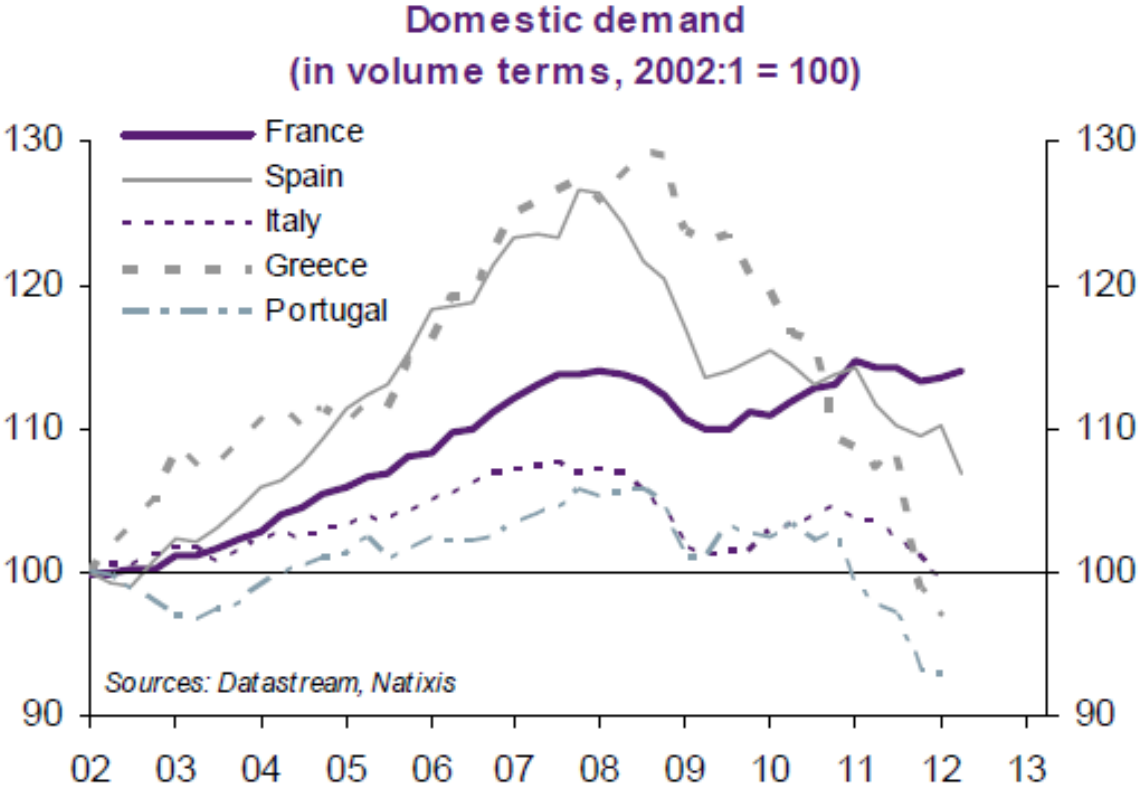
Graph 14

This is an interesting puzzle, which I will leave to your reflection. I personally think that the creation of the European currency and the perception that the Euro was bringing with it a “full-fledged” currency area is probably part of the answer. What is more obvious though is the fact that the world financial crisis which started in 2008 has played the role of a catalyst for the emergence of the underlying flaws of the Euro area. You will remember the Keynesian motto uttered by all international bodies (the IMF, the G20...) at that time, claiming that more public expenditures and fiscal deficits were desperately needed to fight the crisis. In the Euro zone, implementation by several southern countries of this new course of fiscal policy has been the trigger which has set in motion the mechanisms that enter into force when durable current account disequilibria (which do not serve to finance productive investment) give birth to an increasing debt accumulation.

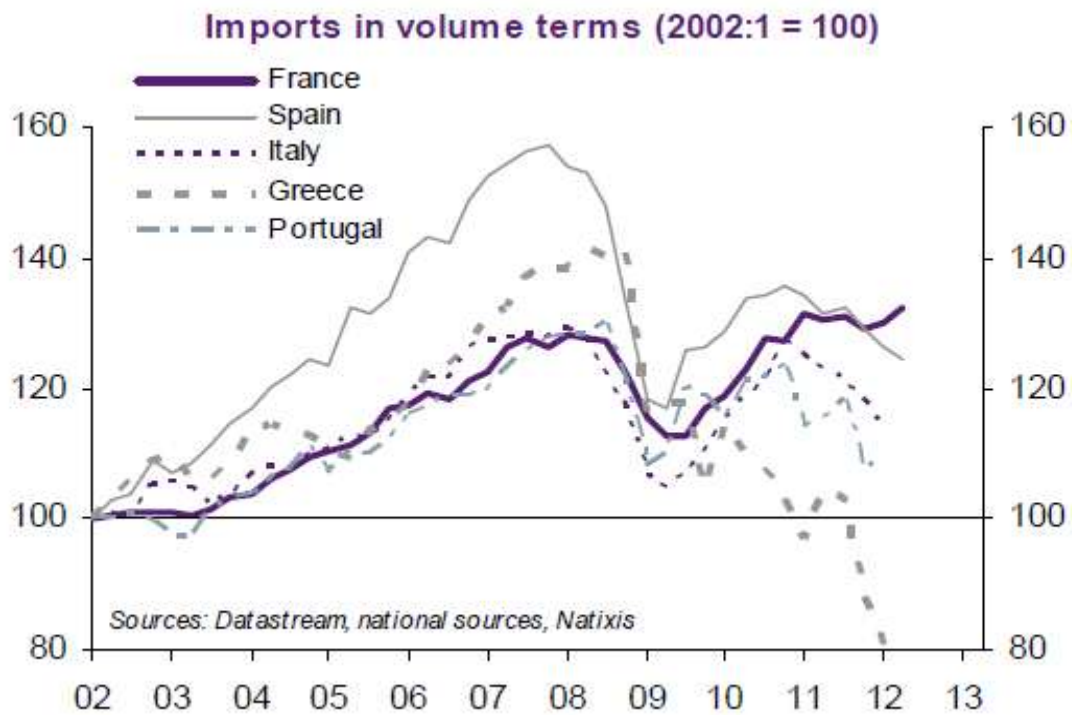
These mechanisms, which I have already partly described earlier, are well known: on the capital markets, interest rates rise and they may attain unsustainable levels (Greece, Ireland, Portugal...). In the real economy the adjustment proceeds through the fall of domestic demand (Graph 15) that leads to a decrease in imports (Graph 16), which is the main vector to a return to current account equilibrium. It is driven by higher interest rates, lower public expenditures and lower wages, these last two moves being more or less imposed by the European authorities. The adjustment through the change in real exchange rates (which in a currency union cannot happen through a change in nominal exchange rates) should normally take place through price level differentials.¹ Countries of the South which post excess supply should see their price levels decrease. This “deflation” of prices in B should foster demand from A for goods in services produced in B, therefore raising the income of B and reducing the gap between income and demand in B. Unfortunately, despite a significant fall in nominal wages (Graph 17), prices remain relatively

¹ See Patrick Artus’ model in: “The equilibrium between Germany and the rest of the euro zone: An interpretation using the equilibrium real exchange rate theory”, Natixis, Flash Economics, November 22, 2012, No. 788.

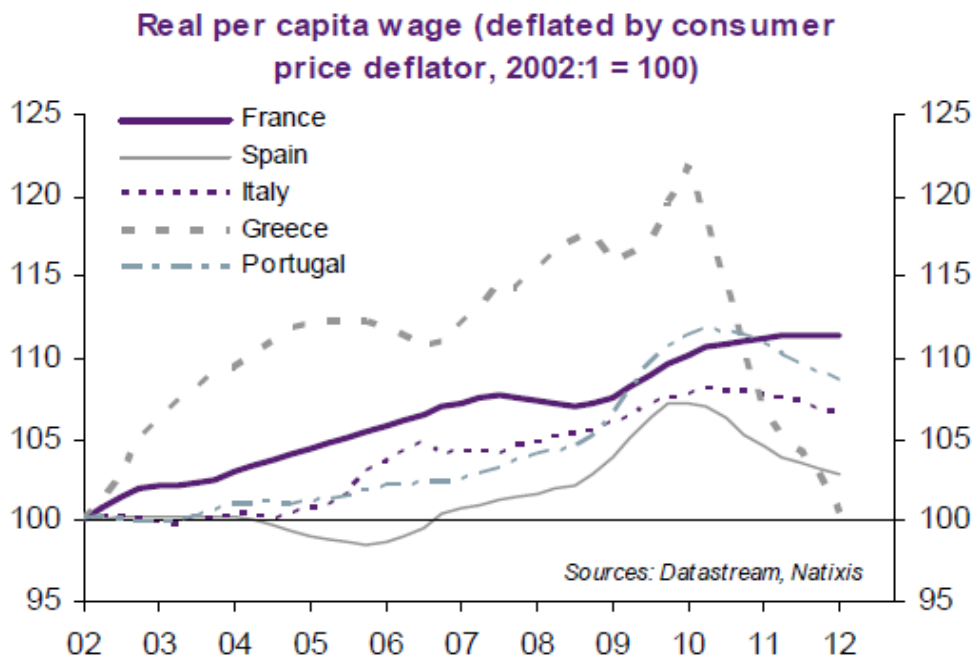
sticky and have increased less in Germany than in the rest of the Euro area (Graph 18). As can be observed in Graph 19, real exchange rates depreciated less in the Euro area outside Germany than in Germany itself. Hence there is an adjustment process that is more painful (in terms of output and unemployment) than it should be, because lower relative prices would improve the competitiveness of the traded sector and therefore lead to more exports (Graph 20).



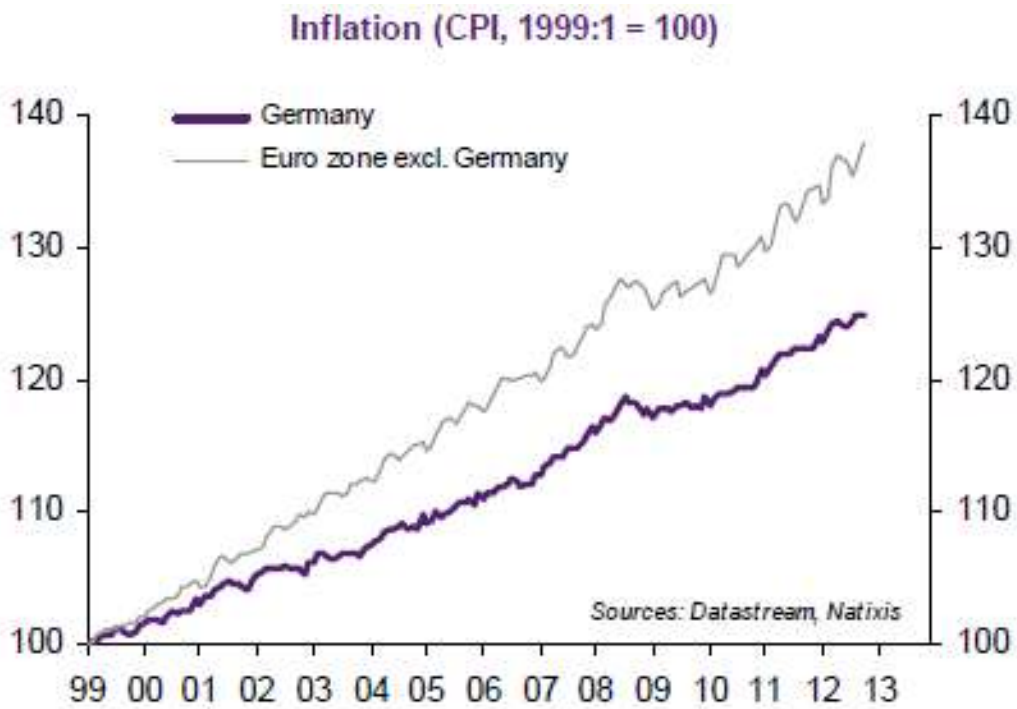
Graph 15



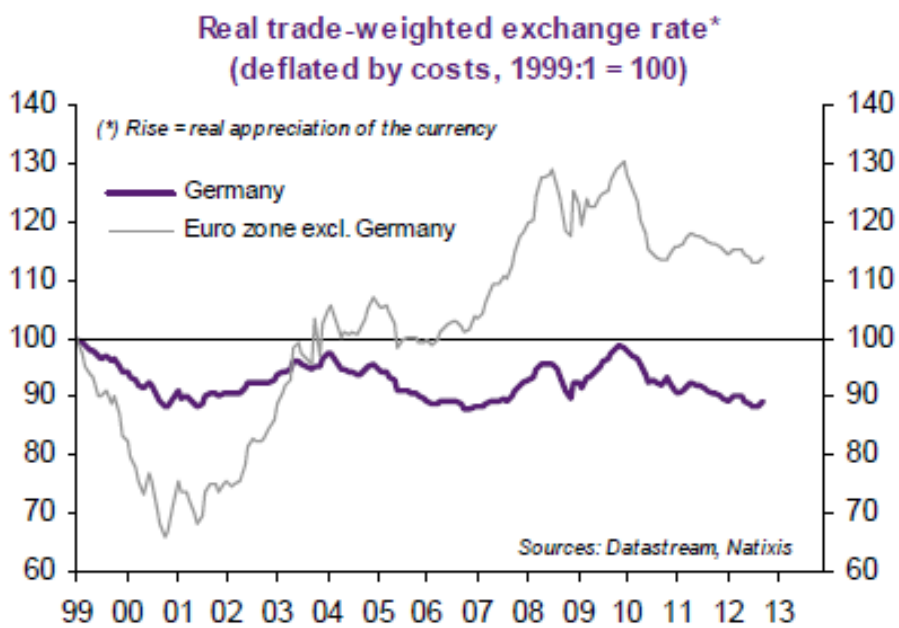
Graph 16



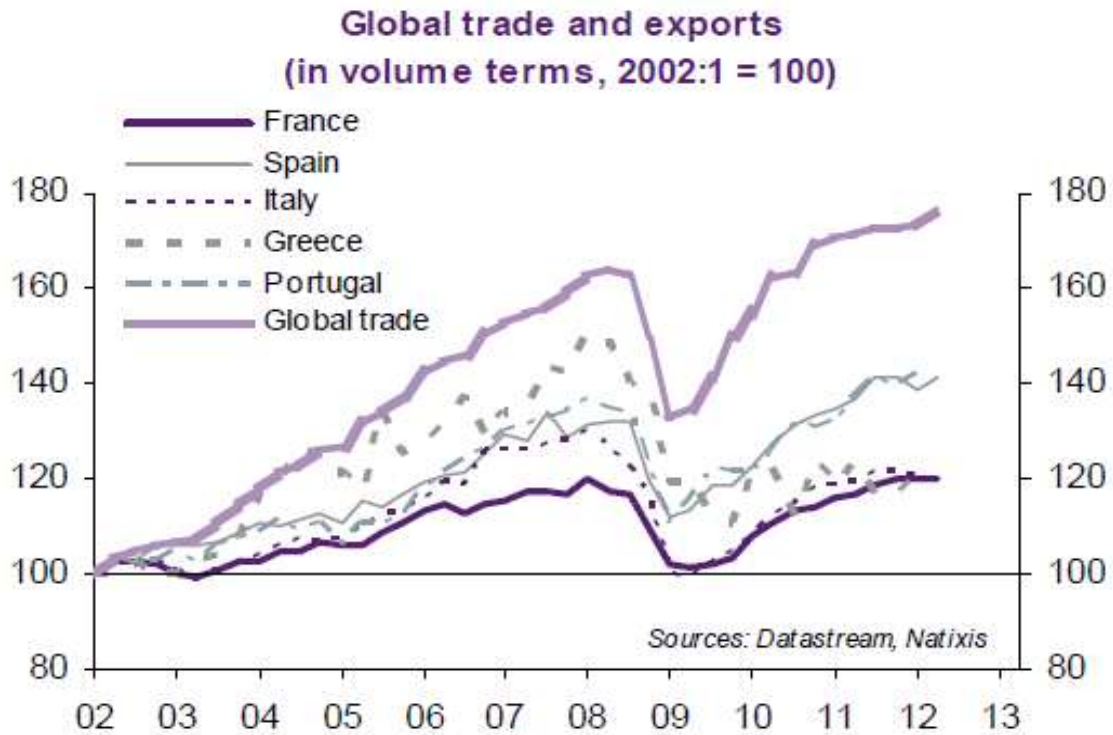
Graph 17



Graph 18

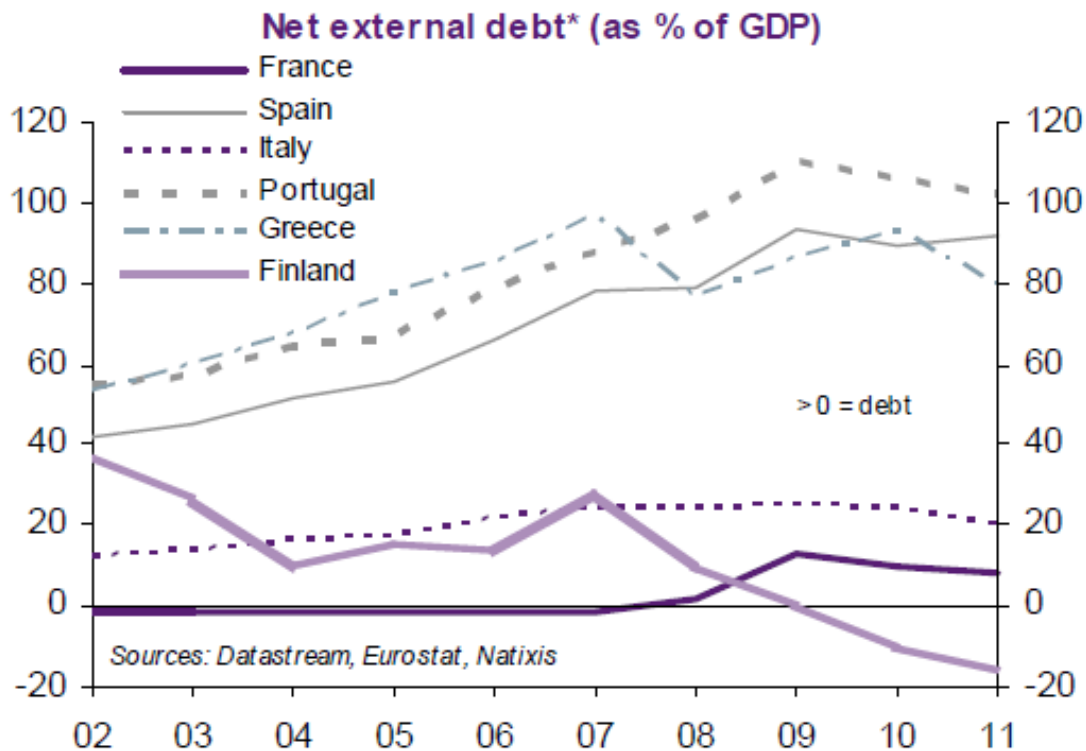


Graph 19



Graph 20

If I am right in my analysis, when we adopted the Euro in 1999, there was a large consensus that we were entering into a “full-fledged” currency union. And we lived with this illusion for 10 years. In other words we acted as if we had achieved such a currency union. We minimized the significance of current account disequilibria among Member States, considering that we had to look at the whole Euro area balance of payments only. We did not foresee the risk incurred by letting competitiveness differentials grow among Member States and we underestimated the danger for some countries of accumulating large amounts of external debt (Graph 21).



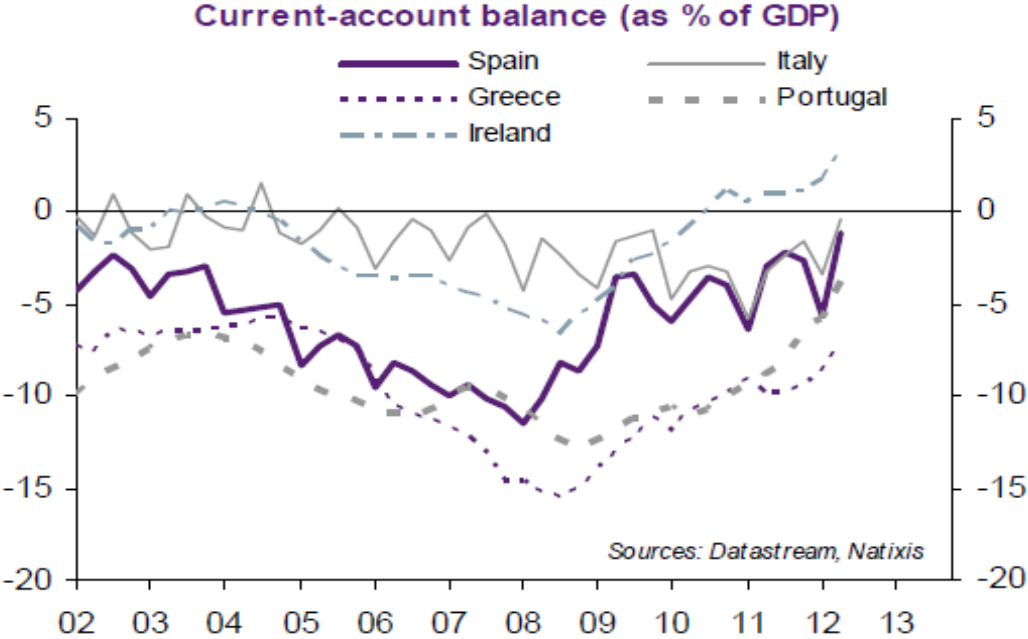
Graph 21

We also neglected the diversity of the economies of the various Member States for the conduct of the monetary policy of the ECB.

When a currency union is not yet “full-fledged”, it is hazardous for any member state to post a durable current account deficit. Because there will come a time when the automatic forces which I have described will push the economy back to current account equilibrium.

It appears clearly in our simple model that the smaller the transfers of income from A (North) to B (South), the more painful the adjustment that has to take place to realign demand to production in B (and therefore in A). Without mobility of labour (the emigration of the population of B) and capital in B (South), adjustment rests mainly on a reduction of the demand of B, which unfortunately entails a reduction of production and a rise in unemployment. Unless A (North) is willing to share the burden of adjustment through an increase of its demand, B (South) is trapped in a deflationary process which makes a return to equilibrium socially costly.

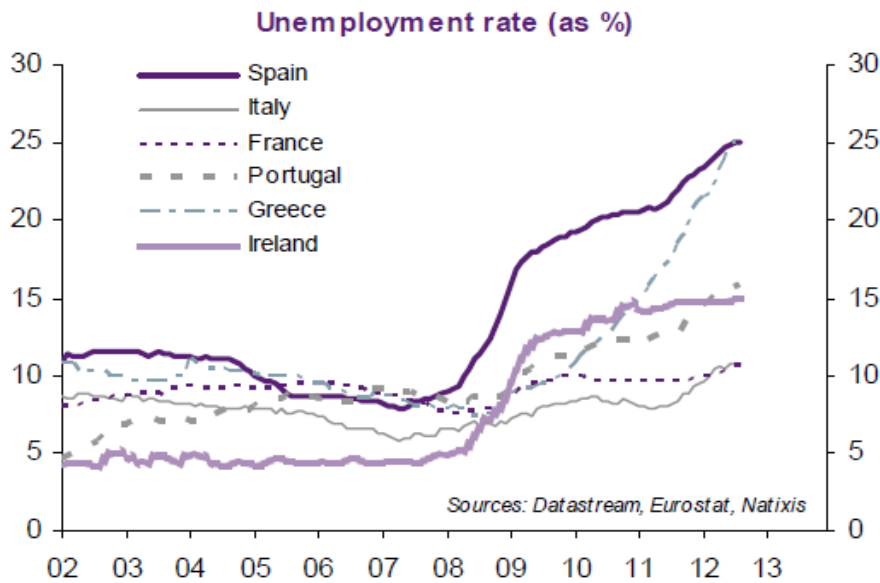
This is the scenario that is presently unfolding in the South of the Euro zone. You can see in the following graphs that all southern countries have already reduced their current account deficits by a significant amount (Graph 22) and observe the consequences in terms of output (Graph 23) and employment (Graph 24).



Graph 22



Graph 23



Graph 24

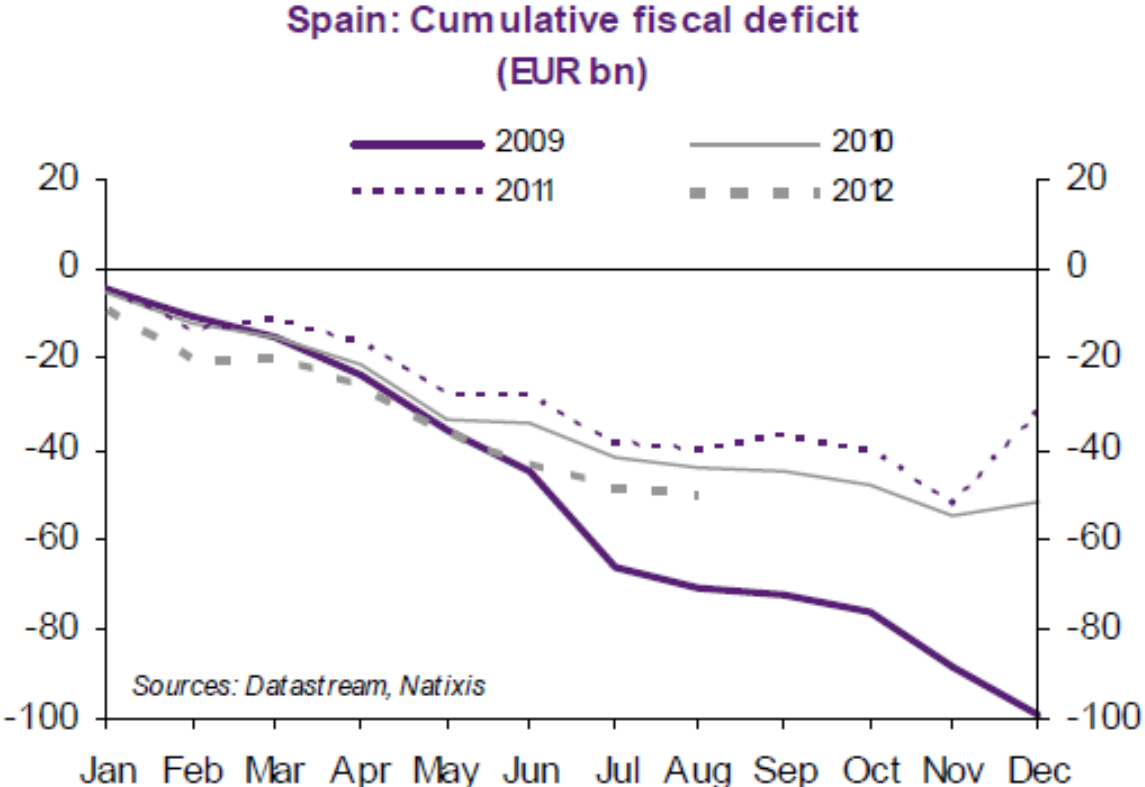
II - FOUR LESSONS OF THE EURO CRISIS

The Euro area exhibits idiosyncrasies which make its functioning somehow different from the standard case of a currency union (e.g. the US). Let me briefly describe four characteristics which explain how we had to cope with the crisis and what remains to be done.

1) The first and most well-known peculiarity of the Euro area is that its Member States retain their full sovereignty. Their control of the macroeconomic variables in their own jurisdiction is much more pronounced than in other currency unions, which entails many consequences.

First, being responsible for their own fiscal policies, they may be induced to post excessive budget deficits, which may contribute to destabilizing the macroeconomic equilibrium of the currency area. This danger had been foreseen since the inception of the Euro. The Maastricht Treaty (1992) and later on the Stability and Growth Pact (1997) had already prescribed ceilings on fiscal deficits (3% of GDP) and on public debt (60% of GDP). These ceilings have been systematically violated. In the toolkit put in place to fight the Euro crisis, the so-called “fiscal compact”, which is presently being implemented through a Treaty between Member States in order to compel them to respect fiscal

discipline, appears as the cornerstone of the anti-crisis road map. Its implementation can result in serious hardship: due to the recession that may accompany fiscal restraint, it may become even more difficult for a country (as we can see in Graph 25 for Spain) to levy taxes, and therefore to reduce its fiscal deficit.



Graph 25

Furthermore, contrary to the US the Euro zone is deprived of any countercyclical fiscal policy. Automatic fiscal stabilizers cannot enter into force as shock absorbers.

This focus on fiscal discipline should not hide the fact that other channels exist through which Member State governments retain their influence on macroeconomic equilibrium. Spain and Ireland, which before the financial crisis were abiding by the rules of the Stability and Growth Pact, embarked on lax housing policies which were encouraged by low interest rates. This overspending led to a huge piling-up of private debt in these countries.

I should add that, by meddling in the process of wage-setting, governments contributed to the emergence of distortions in wage trends in the Euro area, which have been detrimental to the appearance of a competitiveness level playing field. Hence the new emphasis of the European authorities on monitoring and supervising the various aspects of the economic policies of the Member States.

A last observation on this first point: besides better control over Member State policy-induced imbalances, the “full-fledged” currency union approach teaches us that these countries should avoid preventing automatic stabilizers from coming into play: they should in this respect encourage mobility of labour and capital (the fragmentation of capital markets goes in the wrong direction), and the downward flexibility of prices through the enhancement of competition in the goods and services markets.

2) The second difference with the US currency union is that in the Euro zone, there exist forces that may contribute to destabilizing the system: these forces are born in sovereign debt markets, in the banking sector and in the European currency itself.

Looking at the sovereign debt markets first: in the US there is no guarantee of the Federal Government on bonds issued by the States: any State can theoretically default. In the Euro zone, when we created the Euro, investors and market participants considered that there was an “implicit guarantee” on the debts issued by Member States, even though nothing of the kind had been written in the Maastricht Treaty.

The risk premium, which was high for some Member States before the existence of the euro, disappeared; spreads with Germany came down to near zero for all countries, leading to the expenditure spree which I have already described. When the global financial crisis hit the Euro area, market participants realized that this guarantee did not in fact exist, and interest rate spreads began to widen.

In this context, after France and Germany decided at Deauville (November 2010) to introduce collective action clauses in future issuances of public securities in the Euro area, and imposed the PSI (Private Sector Involvement) doctrine, which was applied later on (summer 2011), through a haircut borne by private investors on the existing public debt of Greece, mistrust of investors toward the public debt of peripheral countries soared. As a consequence, a disequilibrium arose in the sovereign debt markets of countries of the South, with investors wanting to get rid of these bonds. With hindsight, it is clear that both policy makers and market participants badly managed the risk associated with holding this public debt.

The role of sovereign debt markets in the Euro crisis has been compounded by the behaviour of the European banking sector. As a matter of fact, the link between sovereign debt and the financial sector is much more pronounced in the Euro zone than in the US. In the latter, financial institutions ponder the risk they will bear when they buy State bonds, like for any other asset. In the Euro area, the illusion of an overall guarantee on these holdings was reinforced by regulatory rules. For example, for insurance companies the weight on their capital of their holdings of Greek, Irish or Italian debt was (and still is) zero, as for German bonds. The piling up of these debts by banks and insurance companies was therefore encouraged by prudential rules.

No wonder that the Euro crisis contributed to destabilizing the balance sheets of many financial institutions, at a time when some of them were weakened by the explosion of the housing bubble (Ireland and Spain).

In order to counter the pressure on the sovereign debt markets, the European authorities decided to create a special fund, the EFSF (European Financial Stability Fund), which is being supplemented by a new fund, the ESM (the European Stability Mechanism). They are expected to buy public bonds in peripheral countries under certain circumstances.

Furthermore, during the summer of 2012 the President of the European Central Bank repeatedly asserted that the European Central Bank would do

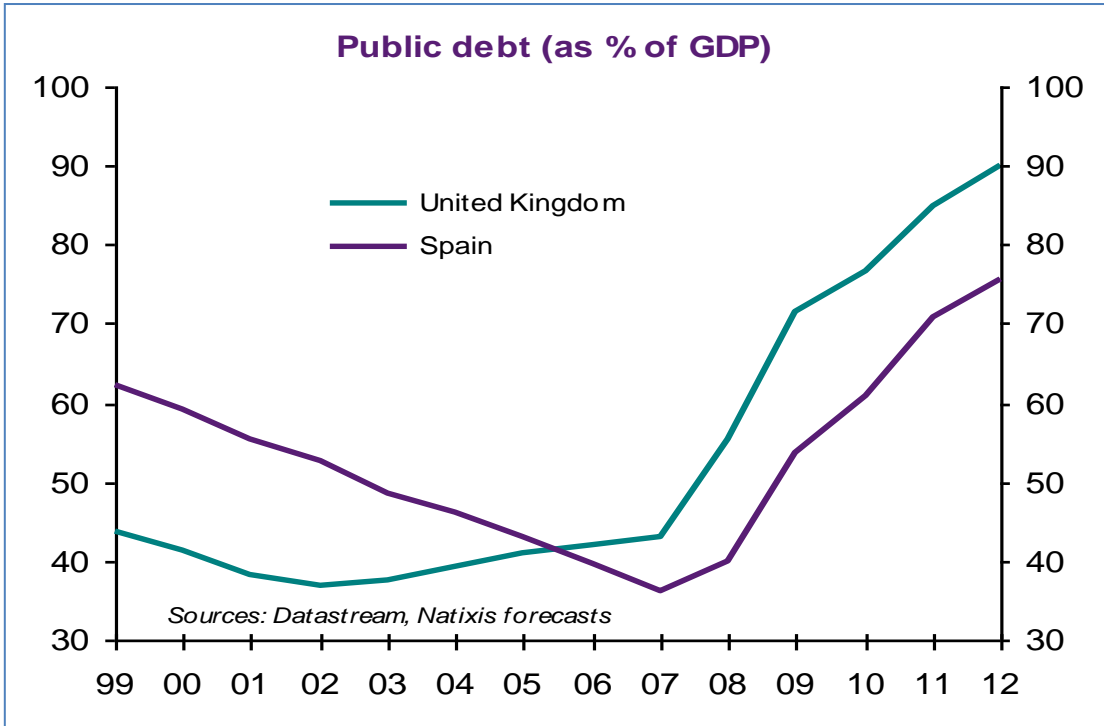
“whatever it takes to save the Euro”, and he announced that under conditionalities imposed on the country under stress, it was ready to intervene without any limit in its sovereign debt markets. The mere announcement of these so called OMT (Outright Monetary Transactions) operations reassured investors holding these public securities, who understood that the ECB would not let Member States default. Since then, the overall financial climate in the Euro zone has improved dramatically.

A banking union is also being put in place to enhance supervision under the auspices of the European Central Bank, and also to allow the new ESM to recapitalize banks when needed: the Irish Government, faced in November 2010 with the bankruptcy of its banking sector that it had to bail out with its own budget, was forced to ask for assistance from the European Union because of the resulting deterioration of its fiscal situation.

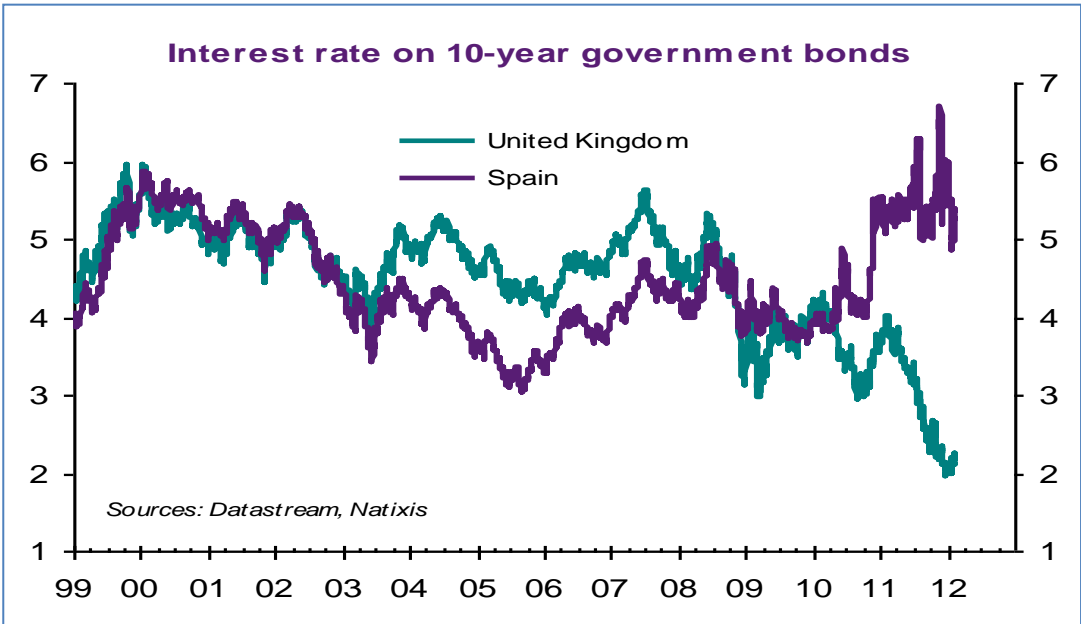
The Irish case and the present situation in Spain convinced the European authorities to cut the link between the need for funds of the banking sector of some Member States and their public finances.

- The third destabilizing force of the Euro area concerns the Euro itself. In the US, there is no question whatsoever about the durability of the dollar. Unfortunately, all the talk about the prospects of the breakdown of the Euro is eroding the credibility of EMU and compounding the tensions: the flight of cash and capital from the most vulnerable parts of the Euro area to northern countries (Germany) or abroad, is contributing in these countries to the weakening of banks and accentuation of deflationary pressures. It is weighing heavily on the Euro itself. In this respect the new commitment of the ECB to ensuring the survival of the euro at any price has dramatically improved confidence in the European currency.

3) The importance of these OMT operations is also evident when we compare the evolution of public debt and interest rate spreads in Spain and the UK (see Graphs 26 and 27).



Graph 26



Graph 27

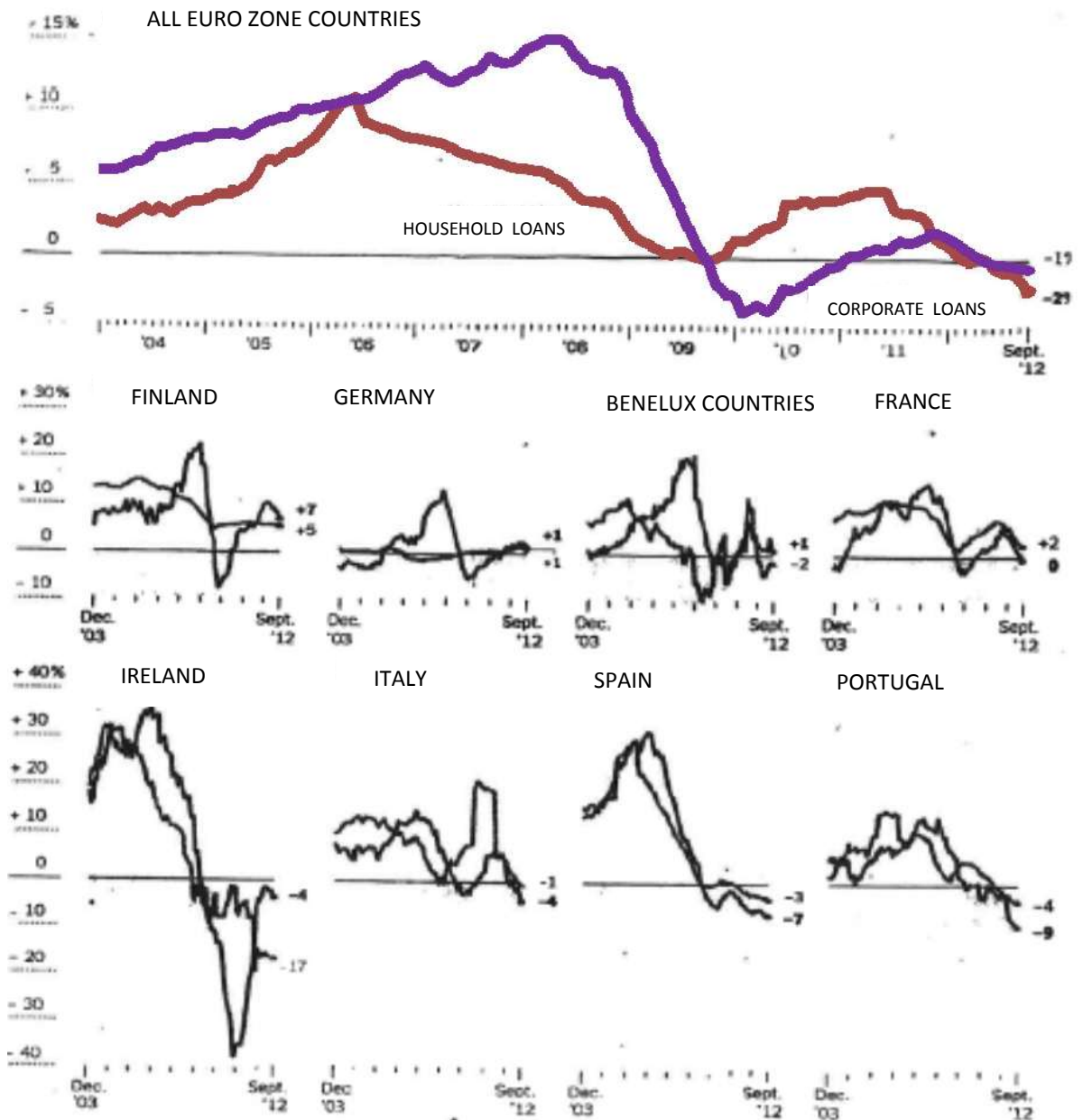
While public debt in the UK increased more than in Spain, interest rates went down in the UK and up in Spain.

Contrary to standalone countries (the UK, the US), the absence in the Euro zone of a central bank as a potential lender of last resort on sovereign bonds enhances the risk of default. The fact that the ECB has declared that it is ready to intervene on the sovereign bond markets without any limit, helps to bridge the gap between the ECB and the other central banks in terms of the markets' perception of its commitment to preventing sovereign default.

Nevertheless, we should not underestimate the problems that may arise if the ECB has to use these OMT operations. The President of the European Central Bank stressed that if the conditionalities imposed on a country requiring its intervention were not respected, he would not hesitate to stop buying its bonds. But if he were urged to do so, he would have to ponder the consequences of this decision on the markets. I am afraid that it would be extremely difficult to decide to leave a country in the hands of speculators. Hence the risk of a "game of chicken" between the ECB and the country it should be trying to help. In this respect OMT operations have some resemblance to a nuclear threat: it works better as a deterrent than as a weapon.

4) My fourth and last point is about bank regulation and monetary policy. Normally in a period of recessionary adjustment, we should expect the monetary environment to be permissive. This seems to be the case: presently in the European banks there is an excess of liquidity over their needs of the order of one trillion Euros (the order of magnitude for the US banks). Nevertheless, we can observe a significant decrease in bank credit (Graph 28):

Year-on-year change in outstanding loans



Graph 28

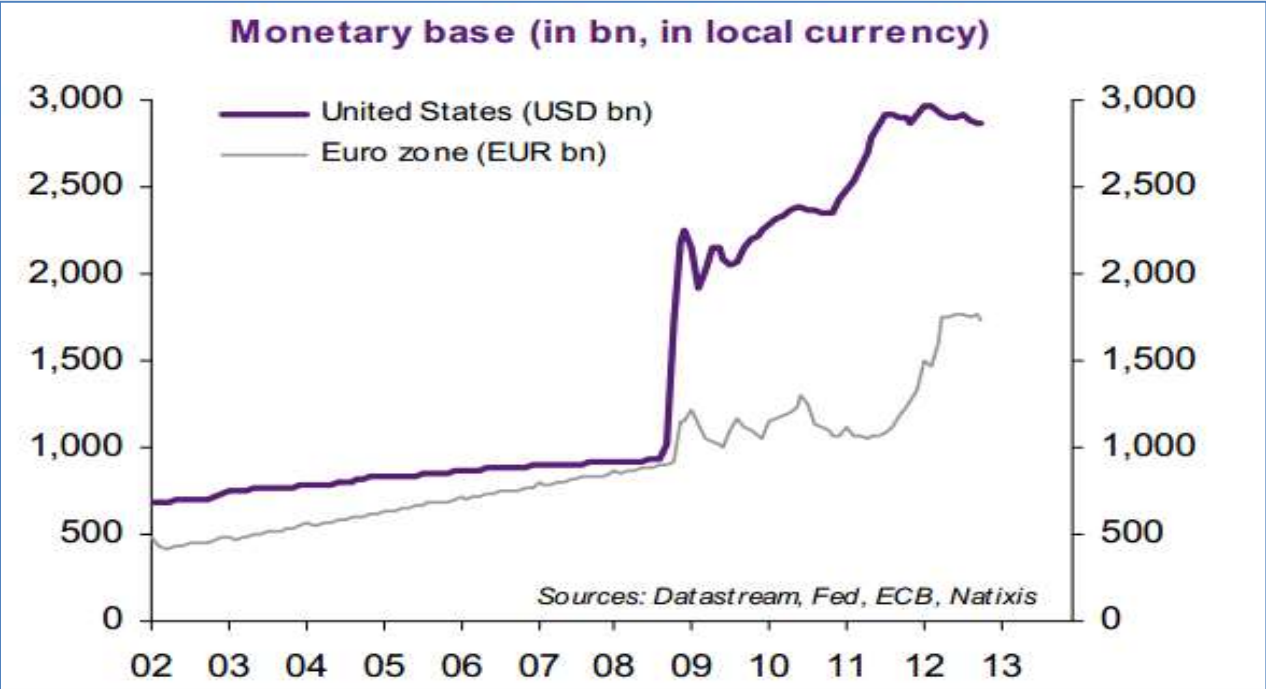
Needless to say that this is in great part the result of a decrease in the demand for credit. But there are good reasons to believe that the conditions for the banks to supply credit are not optimal, and that this stringency is being borne first and foremost by the peripheral countries (see Graph 28).

In order to understand this apparent paradox, we must go back to summer 2011. At that time, under the pressure of the IMF the European authorities decided to hasten the agenda of the new regulatory rules called Basel III. They

embarked on setting higher capital ratios and also new liquidity requirements (called CRD 4). Under pressure from the markets, banks felt compelled to abide by these new requirements well in advance of the agenda (2015). As a result they sold part of their credit portfolios, and slowed down their supply of credit. In order to avoid a “major credit crunch” (according to Mario Draghi himself), the ECB decided, in the winter of 2011-2012, to launch two long-term refinancing operations (LTRO) for an amount of one trillion Euros, which allow banks to borrow liquidity at will at a cost of 1% for a three-year period. This policy dramatically improved the liquidity position of the banks and for a time reduced the pressure from the markets.

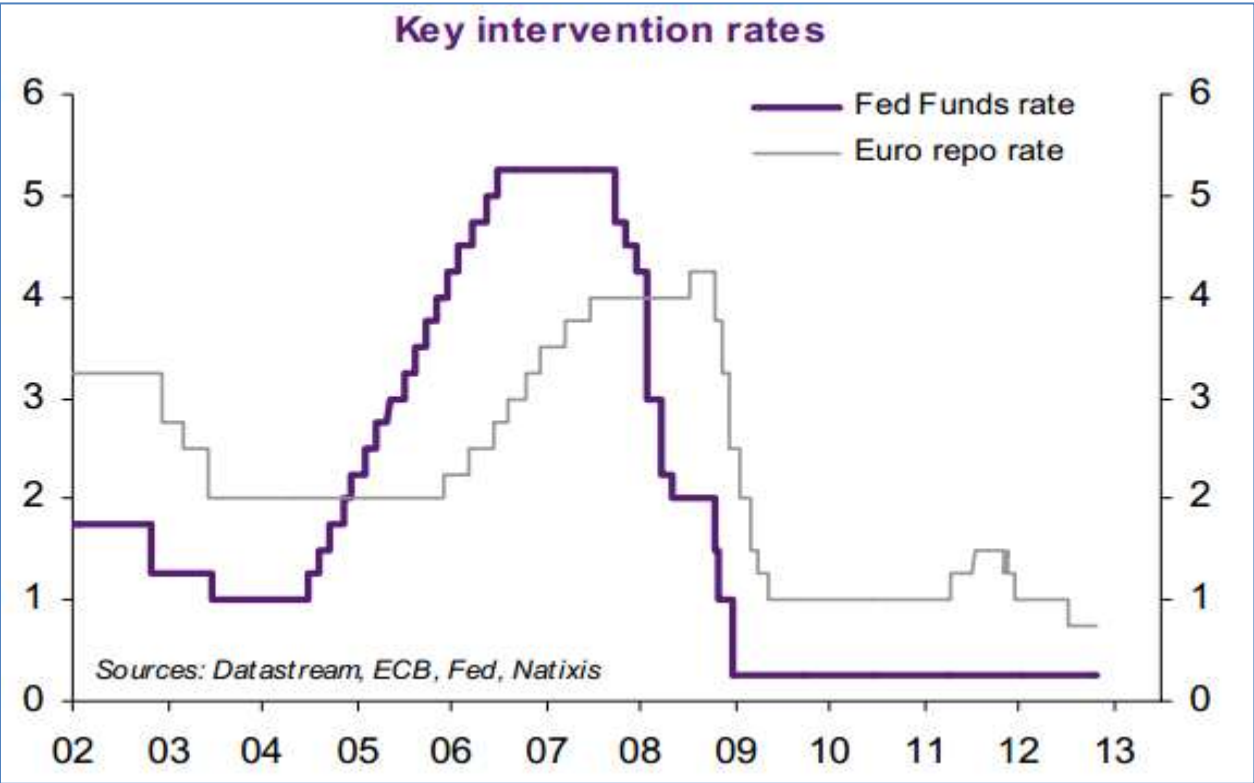
Nevertheless, I do not think that the monetary environment in the Euro zone is yet fully adapted to the harsh situation of its real economy. Peripheral countries are still suffering from a credit crunch. In spite of their abundant liquidity, many banks are reducing the volume of the credit supplied, in order to respect the new ratio requirements.

Furthermore, despite the LTRO operations- due to the new round of quantitative easing (QE3) launched by the FED the monetary base in the Euro area is still much lower than in the US (Graph 29):



Graph 29

And the intervention rate of the ECB remains still higher (Graph 30):



Graph 30

No wonder, in these circumstances, that the value of the Euro vis-à-vis the dollar remains too strong with respect to the relatively poor performance of the Euro zone economy.² The Euro zone cannot afford to pursue a monetary policy which is more restrictive than in the US, the UK and Japan. In this respect, it is interesting to note that the Mexican President, Mr Calderón, when his country was in charge of the G20, has been publicly advocating a weaker Euro.

CONCLUSION

The European authorities have learned a lot from the crisis that has hit the Euro area over the last three years. They have put in place a set of policies and tools which correspond to what is needed in order to make the scenario of a

² Since this paper was written the Euro Repo rate has been lowered by 25 base points.

breakdown of the euro no longer credible. And the overall climate on the financial markets has dramatically improved.

I nevertheless think that the current policy mix is wrong. In a region which is in a recession, you cannot simultaneously have fiscal and monetary policies that are relatively too restrictive.

In a longer perspective, I don't think that we have yet created the conditions for the smooth functioning of a "full-fledged" currency union. The risk for the Euro lies less in the markets than in the social and political realms. Will peripheral countries always accept the sacrifices that are demanded of their people?

The model which I have used to describe the functioning of the Euro area clearly shows what kind of structural reforms have to be implemented: in order to reduce the pain of the adjustment process we need to have transfers to peripheral countries, and also to create the conditions for more flexibility and mobility inside the Euro zone.

We also certainly need much more efficient control over the economic policies of the Member States. We will not attain these objectives without a more politically and economically integrated Euro area.