

# The future of the Eurozone

Mário Amorim Lopes

Universidade do Porto, INESC-TEC

[mlopes@fep.up.pt](mailto:mlopes@fep.up.pt)

June 2012

## 1 Introduction

Ten years ago, few would dare to question the Euro as a mechanism to further unite the European Union and to push for further economic growth. Economists raising any reasonable objection to the currency union would be immediately rendered helpless and labeled as "*pessimists*" or "*euroseptics*".

But several warnings had been given. Theory around optimum currency areas pointed out several flaws in the way the European currency union (Eurozone) was being devised. It lacked important preconditions that had to be verified to ensure its optimality. More recently, and following the latest global financial crisis, literature trying to predict the economic and financial implications of a potential euro breakup, such as [Eichengreen \(2007\)](#), started emerging. Terms like "Grexit" have been recently coined as a not so subtle reference to a Greek departure from the Eurozone. A devastating blow to the European project?

Financial Times' columnist Martin Wolf wrote an interesting article entitled "*The eurozone's next decade will be tough*" ([Wolf, 2010](#)). Had it been written a couple of years before and given his British origins he would have been accused of what so many others had been accused before: euroscepticism. But in the middle of the major Eurozone turmoil that followed the global financial crisis, he is to be paid proper attention.

Mr Wolf starts by showing how the current crisis could have been avoided by the means of flexible exchange rates, which have automatic stabilization mechanisms enacted to

offset the disparities with current account balances. We will later delve into the specifics of what this means. He then provides some relevant figures about the main economies of the eurozone, supplying the interested reader with an accurate description of how this financial mess got triggered. But that is history. What is truly interesting is his claim that these recent crises were *to be expected* in a non-optimal currency union, such as the Euro. That is the most puzzling issue to this author. If it was known back then, how could we reach this stage?

We will outline this work following Mr Wolf's article, but first we will provide the economic underpinnings by shedding some light on the literature surrounding Optimum Currency Areas, something that was extensively studied back in the 60s. We will then give ground to Mr Wolf's claim that a flexible exchange rate would help, and we will review some relevant economic indicators for the Euro countries and emphasize relevant gaps. We will then give Paul Krugman's opinion to further reinforce Mr Wolf's claim and drive the point home of a suboptimal currency union. Following this, an accurate description of the current state of affairs will be given. We will finish by extending Mr Wolf's article and providing this author's own opinion to where we are headed.

## 2 Optimum currency areas

In 2002, the National Bank of Hungary elaborated a list of the theoretical advantages of joining the Eurozone, namely: reduced transaction costs, which can soar with exchange rate conversion and in-house (administrative) costs charged by financial intermediaries; elimination of the nominal exchange rate uncertainty, allowing international traders to conveniently accommodate for import-export costs; and a natural expansion in foreign trade, expected upon ruling out exchange rate volatility, nominal uncertainty and transaction costs (Csajbók and Ágnes Csermely, 2002). The Reserve Bank of New Zealand came to similar conclusions while addressing this pertaining issue (Brash, 2000).

If only it were that simple.

### 2.1 The theory of optimum currency areas

The pioneering work of Mundell (1961) on optimum currency areas set the stage for an extensive literature to be written on such an important field of Monetary Economics. In fact, minimizing macroeconomic shocks arising from exchange rate uncertainty and volatility has been making the headlines of leading journals most prominently since the WWII, and led to the creation of the Bretton Woods fixed regime of exchange rates,

which then collapsed with the inability (unwillingness?) of the United States to keep the parity with gold.

Mundell published two models, one considering stationary expectations and the other considering international risk sharing. We will focus on the first, as it is the one most often cited. According to this model, in order for a successful currency union to hold four criteria have to be verified. [Frankel and Rose \(1998\)](#) summed it up as follows.

1. **Labor mobility across the region.** This means the ability to travel, the lack of cultural barriers to free movement (such as different languages) or prejudice against foreigners, and institutional arrangements to allow for the transfer of social funds such as pensions across regions;
2. **Openness with capital mobility and price and wage flexibility across the region.** In principle, this guarantees economic efficiency. If verified, full capital mobility and price and wage flexibility guarantee that the market readjusts to equilibrium;
3. **An automatic fiscal transfer mechanism** to redistribute money to areas/sectors which have been adversely affected or suffer from imbalances. This guarantees an effective risk sharing system, where less developed areas receive monetary transfers to compensate for unexpected adverse shocks or trade deficits;
4. **Similar business cycle across countries.** Sharing similarities on the macroeconomic fluctuations allows for a one-size-fits-all rule by the Central Bank to promote growth during recessions and to set monetary rules such as inflation-targeting during booms.

## 3 The Eurozone

### 3.1 Some data about Europe

Prior to digging deeper into the Euro, it might be useful to observe the evolution of some of the macroeconomic indicators for the biggest European economies in order to spot the imbalances. Mr Wolf provided some figures and we will add to that.

Figure 1 is self-explanatory. With the advent of the monetary union the gaps between net exporters and net importers accentuated. Fixed exchange rates gave an artificial nominal ability for net importers to expand their consumption of foreign products, which should

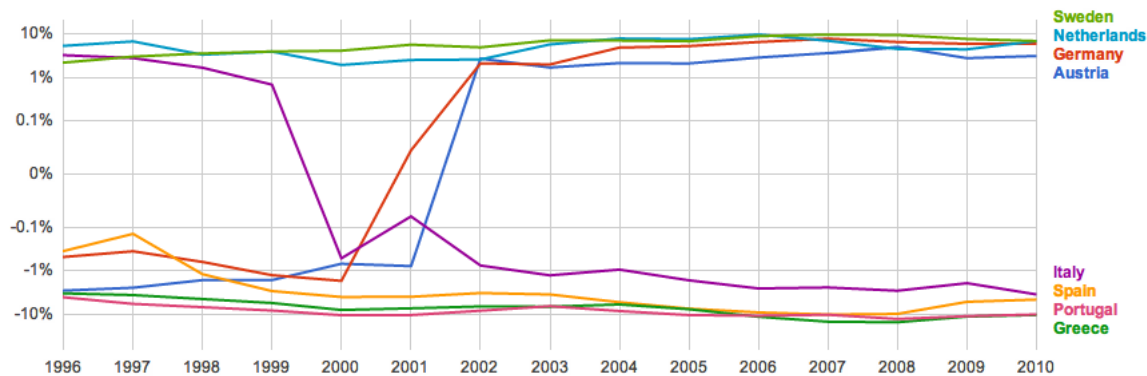


Figure 1: Current account balance (ratios to GDP, log scale) of central and peripheral countries in the EU. Source: World Bank.

have been offset by a devalued currency and a decrease in imports, had the countries their own floating currency, or by running fiscal surpluses to contain aggregate demand. Instead, there was a surge in capital and large inflows of goods, *benefiting* net exporter countries like Germany. Contrary to other countries, such as the United States, current account balance distortions are not automatically offset by fiscal transfers between states.

### 3.2 The European currency union

Does the European Currency Union verify the four aforementioned conditions of a viable OCA? Hardly so. [Baldwin \(2006\)](#) shows why. While full labor mobility within the European Union is effectively allowed and sometimes even promoted by the official European institutions, reality shows otherwise. Cultural barriers do exist, as the European Union has over twenty three official and working languages.

As for capital mobility, it is indeed verified within the European Union, in sharp contrast to price and wage flexibility, given that some Eurozone countries, especially those in the South, still exhibit rigid labour markets, resulting in sticky prices and salaries and preventing market-clearing mechanisms to operate. Gaps in firing costs and labour rigidity within the union itself have been one of the causes for the loss of competitiveness that Europe has been facing. Moreover, countries exhibiting low firing costs tend to produce new goods, while countries with high firing costs and a rigid labour market will tend to focus on safer bets, such as secure and market-tested products, but with a smaller rate of return ([Saint-Paul, 1997](#)). This further widens the gap between members of the union and pushes the imbalances further.

Another condition of the utmost importance for a healthy currency union is also lacking

in Europe. An automatic stabilization system capable of transferring money within the union, very much like the one that exists in Germany, where the Western states transfers to the Eastern part have been occurring ever since the collapse of the Berlin wall. The program, entitled “*Solidaritätzuschlag*”, was put in practice in the 90s and has been responsible for over 200 billion Euros in fiscal transfers to the former states of the GDR. Although the economic effectiveness of such policy is still subject to great dispute (Page, 2003), it is a given fact that fiscal transfers were officially forbidden within the union by a clause in the Stability and Growth Pact<sup>1</sup>, let alone endorsed. On the contrary, a lot of political pundits and eurosceptics openly question such measures for Europe, with the problem being further increased as anti-European extreme right-wing parties gain momentum in several national polls like those of Greece or France.

Finally, the stance on similar business cycles. Empirical studies show that the Eurozone members trade heavily with each other, conducting to a deep degree of economic interconnectivity, which can possibly lead to similar business cycles (Baldwin, 2006). Indeed, the more economies are open to each other, the less asynchronous — that is, out of phase — are their output fluctuations arising from demand shocks (Frankel and Rose, 1998). This premise seems to hold.

### 3.3 Inside out: Florida versus Spain

Krugman (2012) makes for an interesting case by comparing the state of Florida with Spain. Mr Krugman starts by citing the work of Kenen (1969) to make the claim for fiscal federalism, or to a lesser extent, for a fiscal transfer mechanism (which usually comes bundled in in federalism package Krugman refers to).

Before addressing Krugman’s idea, it might be wise to review a bit of Kenen (1969). Kenen looked at the conditions under which asynchronous macroeconomic shocks across countries would become less likely. If output were more diversified, Kenen concluded that the country in question would be a better candidate to have fixed exchange rates with its neighbors because shocks focused on a particular industry would offset each other in the aggregate (McKinnon, 2001). He then adds that the principal developed countries should perhaps adhere to a fixed regime, rarely resorting to changes in exchange rates. The less developed countries, being less diversified and less-well equipped with policy instruments, should make more frequent changes or perhaps resort to full flexibility (Kenen, 1969).

---

<sup>1</sup>The no-bailout clause was unofficially abandoned in April 2010 in an effort to rescue Greece (Colum, 2010).

Onto Krugman's example. His main argument for comparing such countries relies on the similarity in relative size and to the huge housing bubbles followed by busts that both states recently witnessed. He sketches some crude calculations and comes to some numbers. IRS taxes collected in Florida saw a massive decrease of \$25 billion USD between 2007 and 2010; although he provides no data for Spain, with a little help of the World Bank and the U. S. Census Bureau one can easily grab the necessary data to compare tax income drops between the two economies, depicted in Figure 2.

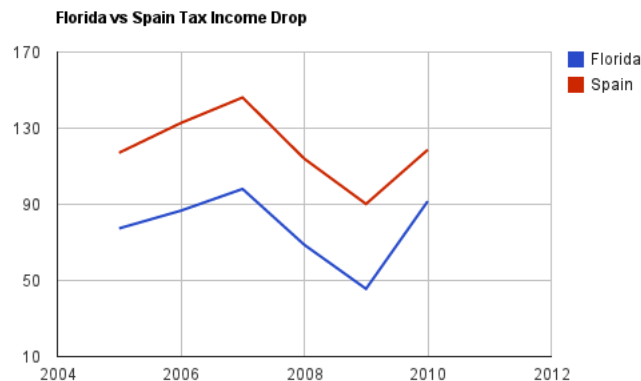


Figure 2: Tax income for Florida and Spain. Not deflated to PPP. Source: U.S. Census Bureau and the World Bank.

The massive drop in tax revenues experienced in these two states occurred at exactly the same time and almost in the same relative proportion. In the meanwhile, and according to Krugman's article, Florida received a transfer, not a loan, of the federal government of over \$31 billion USD. In contrast, Spain had to raise taxes and resort to issuing government bonds (public debt). While Florida recovered, Krugman claims, Spain and its banks are still struggling.

### 3.4 Inside Europe: Germany vs Spain

Krugman (2010) also authored another very interesting column comparing Germany to Spain<sup>2</sup>. Spain is, indeed, a relevant case not least because it is being featured everywhere nowadays, but also because the turmoil it is facing is not the result of fiscal irresponsibility. Contrarily to other countries, such as Greece or Portugal, Spanish public finances were actually doing relatively well. Instead, the country was subject to an asymmetric shock. Recall that it is a most important factor for the stability of an OCA that its constituent economies are not subject to or are at least protected from out of phase

<sup>2</sup>Krugman is a fan of *tortillas*, which could perhaps explain the incidence in Spain.

business cycles. Within an OCA, this could be potentially offset by fiscal transfers. Not in Europe, though.

Like in so many other places, Spain got trapped in a real estate bubble, which started inflating after real estate prices soared in the year 2000. At the same time, other economies such as Germany moved into huge current account balance surpluses<sup>3</sup>. Figure 3 denotes the imbalances.

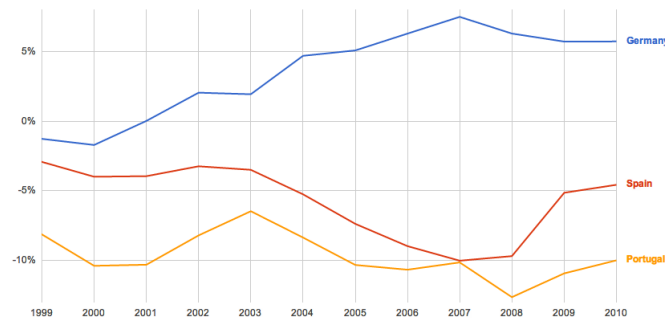


Figure 3: Current account balance (ratios to GDP). Source: World Bank.

The easy access to international capital markets increased both public and private debt in a significant way. Furthermore, by not running budget surpluses either by reducing expenditure or increasing taxation, the capital inflows tend to raise demand for domestic goods and services. Times were apparently good. Houses valuing by the day, investment in construction giving way to thousands of jobs. All well and good until the international financial crisis halts the housing bubble, leaving Spain with a contracted domestic demand and highly uncompetitive economy as a result of the rise in domestic prices and wages, and a banking sector holding on to devalued assets that if written off the balance sheets would turn the banks insolvent. Had Spain its own currency, the currency would potentially appreciate during the real estate boom and then depreciate upon falling economic fundamentals, which would result in a real readjustment of domestic prices and salaries. Nemat Shafik of the IMF puts it in a brilliant way, *“If you have an exchange rate you can move your brush back and forth. If you don’t have an exchange rate you have to move the whole house”*. And that is exactly what Spain and Portugal will be facing: deep structural reforms and nominal adjustments as the only means to an external adjustment.

---

<sup>3</sup>Recall that the current account balance is the sum of net exports of goods, services, net income, and net current transfers.

### 3.5 An Euro trap?

Are Germany, Finland or Holland to blame by exporting more and running balanced budgets? Certainly not. But they should have played their part as well. Without a flexible exchange rate mechanism allowing monetary policies to devalue the domestic currency and subsequent real adjustment in prices and wages, the borrowers that typically form the group of less competitive countries have to resort to deflationary policies, straitjacket fiscal adjustments and sudden government expenditure cuts, which results in output contraction and an upsurge in unemployment.

Net lending countries could have done more. They could have allowed for some expansion in aggregate demand (by lowering taxes, for instance) and conducted policies so as to funnel the budget surpluses to their own domestic markets, letting their own prices and wages rise so as to balance competitiveness. They need to realize that their own growth, dependent on a strong domestic market but also with a strong emphasis on exportations, also depends on those countries that import the products they manufacture and export. If importers lack the resources to keep importing, sooner or later net exporter countries will also face a full blown crisis. Everyone would be worse off.

A lot of economists had warned a long time ago that a currency union lacking a political and fiscal union would be prone to crisis. And that is precisely what happened. Public and private debt kept growing in peripheral countries such as Portugal or Greece. In the meanwhile, other countries like Spain or Ireland were facing huge housing booms, leading to inflationary trends that caused an uprise in prices and wages above productivity, decreasing their external competitiveness. With the advent of the global financial crisis, capital inflows that allowed for the public debts to accumulate and for the bubbles to grow dried up. Ireland had to rescue its own banking system, resorting to public debt for proceeding with a bailout, and later asking for a rescue from the IMF and the EU. Public debt topped 160% of the GDP, unsurmountable values to any measure. Portugal followed through, also asking for external assistance.

Lacking the ability to print too much money was one of the reasons why the European currency union was formed. It makes sense, as examples from the past show the consequences of a lax monetary policy. But in order for it to work, all countries need to be singing to the same tune. Europe is anything but that.



## 4 The road ahead

Austerity is required to put public finances in shape, but fiscal adjustments are patchy, at best, in a non-optimal European Monetary Union. However, a currency union may perhaps work given such disparities ([TheEconomist, 2012](#)).

Europe is neither a group of independent states with sovereign governments capable of adjusting fiscal and monetary policy, nor a fully fledged federal union equipped with the tools to make such a currency union a viable option. The future looks gloomy because it is, indeed, to be feared. Breaking up the Euro would be a major step-back, with unpredictable economic costs.

Regardless of the solution to be found, countries such as Greece or Portugal should continue pursuing fiscal adjustments and regaining competitiveness. Greece probably has no other option than to leave the Euro and re-adopt the drachma, given the severity of the adjustments it needs to pursue. Countries such as Finland or Germany, on the other hand, should realize that their stories of economic success were also due to the expansion of demand that these countries merely witnessed, notwithstanding their effort, seriousness and commitment to sound economic policies.

## References

- Baldwin, R. (2006). *In or Out: Does it Matter? An Evidence-Based Analysis of the Euro's Trade Effects*. Centre for Economic Policy Research. -898128-91-X, London.
- Brash, D. T. (2000). *The pros and cons of currency union: a Reserve Bank perspective*. Reserve Bank of New Zealand.
- Column, D. (2010). *Greece Takes Bailout, but Doubts for Region Persist*. The New York Times.
- Csajbók, A. and Ágnes Csermely (2002). *Adopting the euro in Hungary: expected costs, benefits and timing*. MNB Occasional Papers Magyar Nemzeti Bank (the central bank of Hungary).
- Eichengreen, B. (2007). *The Breakup of the Euro Area*. Europe and the Euro. University of Press, Chicago.
- Frankel, J. A. and Rose, A. K. (1998). The endogeneity of the optimum currency area criteria. *The Economic Journal*, 108:1009.

- Kenen, P. (1969). The theory of optimum currency areas: An eclectic view. In *Mundell and Swoboda (eds. Monetary Problems in the International Economy*, University of Chicago Press, Chicago.
- Krugman, P. (2010). *Anatomy of a Euromess*. The New York Times. February 9, 2010. On the world wide web.
- Krugman, P. (2012). *Florida versus Spain*. The New York Times. June 2, 2012. On the world wide web.
- McKinnon, R. (2001). *Optimum Currency Areas and the European Experience*. Stanford University.
- Mundell, R. A. (1961). A theory of optimum currency areas. *American Economic Review*, 51:4.
- Page, W. (2003). Germany's mezzogiorno revisited: Institutions, fiscal transfers and regional convergence. *Deutsche Bank Research Notes*, 9.
- Saint-Paul, G. (1997). Is labour rigidity harming europe's competitiveness? the effect of job protection on the pattern of trade and welfare. *European Economic Review*, 41(3-5):499–506.
- TheEconomist (2012). Share a currency, with them? *The Economist*, 13.
- Wolf, M. (2010). The eurozone's next decade will be tough. *Opinion column on the Financial Times.*, 5.