Lessons from the Euro Crisis for Regional Financial Cooperation

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Abstract:

Regional financial cooperation (RFC) aims to secure the liquidity of central banks and build and maintain regional risk to be relatively homogenous. One aspect of RFC consists of the fiscal requirements to guarantee price stability and homogeneity among member countries. The regional accounts unit requires a stabilization fund and a debt bailout fund in order to ensure the spreads. This paper provides an overview of lessons for Latin America based on how RFC has worked in Europe, both before and throughout the euro crisis.

Key Words: Euro crisis, exchange rate, financial cooperation, central banks, monetary system

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Introduction[2,3]

The Eurozone was built and became viable on the foundation of economic agreements beginning in 1996. To reach an agreement for a common monetary zone, the 11 original European Council countries went through three steps to achieve the euro system. First, Exchange Rate Mechanism I (ERM I) was launched

in 1979 with a semi-pegged system and a unit of account known as the European Currency Unit (ECU). Later came the Dublin agreements on December 13 and 14, 1996, which established the framework for exchange rate stability and the new exchange rate mechanism, known as ERM II, with fixed exchange rates against the euro.[4] Finally, the euro as the single currency in 1999. Another eight countries then joined, creating the European Union, with 10 countries inside the eurozone and another eight that would join progressively. As of 2015, the European Union had 28 member countries with 19 in the eurozone.

De Grauwe (1995) argued that it was not necessary to set fixed inflation and fiscal targets *ex ante* integration, but rather that an institutional framework should be built that would set the union on the path towards fiscal consolidation and price stability. The Florence meeting of the European Economic and Financial Affairs Council (ECOFIN) in 1995 "made it clear that an exchange-rate mechanism can help to ensure that Member States orient their policies to stability and foster convergence among the Member States not participating in the single currency, and thereby help them in their efforts to adopt the single currency."[5]

Fiscal aspects at the outset of the ERM

For the European Union, the transition phase between 1992 and 1999 severely constrained some countries' fiscal leeway, while others went along as free riders. When the debt threshold was 60%, those that "should have entered" ignored it. However, the majority were required to implement restrictive fiscal policies to continuously lower the fiscal deficit/GDP and public debt/GDP ratios throughout the 1990s.

Another problem resided in the evolution of demographics in Europe, derived from a sharp increase in the proportion of retired persons as compared to the general population, which pushed the fiscal deficit higher as a result of pension plans, rising total healthcare spending, and fewer workers paying in to the system, which cooled off economic growth and made pay-as-you-go difficult for the pension systems. The problem was severe, as the unfunded liabilities of the public pension programs were calculated as equal to or above the visible public debt for the majority of countries (OCDE, 1996).

It seemed likely that national fiscal policies in all of their aspects were subject to a good deal of coordination and not only the mere convergence of deficit and debt rates. There was supposed to be pressure to harmonize taxes, as well, although the tax base is especially mobile, in particular, the value added tax (VAT), and there was meant to be an attempt to address such as matters as the joint management of tax collection. In the end, however, this coordination failed and the recession, which pushed down taxes, won out.

At the onset of ERM II and the euro, there seemed to be a divorce between analysts who argued for not setting fiscal and inflation targets and the EU analysts that were asking for these targets. Apel (1998) challenged the utility of these agreements prior to convergence, and preferred, like De Grauwe (1995) an institutional mechanism that would put members on the path towards fiscal balance and low inflation.

The new European Central Bank and the national central banks kept as their primary objective price stability, which required the various governments involved to enter into various agreements to this effect, which was achieved in Dublin.

In order to reach the inflation targets, the following requirements were put in place:[6]

1. The average rate of consumer price inflation over the previous 12 months must not exceed by more than 1.5 percentage points that of, at most, the three best performing member states and this performance should be sustainable.
2. The general government deficit should not exceed the treaty's reference value of 3 percent of GDP, or it should have declined substantially and continuously…or the excess over the reference value should be temporary and exceptional.
3. The gross debt total of the general government should not exceed the reference value of 60 percent of GDP or, if it does, it should be…approaching the reference value at a satisfactory pace.
4. Long-term government bond yields averaged over the previous 12 months should not exceed by more than 2 percentage points those of, at most, the three member countries with the lowest inflation.
5. A country should have respected the normal fluctuation margins of the ERM for at least two years without severe tensions and without devaluing its currency against any other member's currency on its own initiative.

The eurozone[7] was founded with the Stability and Growth Pact (SGP), a set of rules related to the aforementioned targets, but many countries (Greece, Ireland, Italy, Belgium, and Portugal) were outside of this range, so the decision was made to ignore the SGP and work towards achieving the targets. In principle, there was a severe penalty for failing to comply with the targets, but problems in France and Germany in 2005 led to an institutional reform that allowed countries to justify their non-compliant conduct before the European Commission, making it in practice impossible to assess these penalties (see Table 1).

In 2005, the 19 eurozone member countries had an average fiscal deficit of -1.4% of the GDP, with Greece, Portugal, Italy, France, and Germany as the anomalies, with over 3% of GDP. After the crisis broke out, the cost of bank bailouts added to countercyclical policies meant that most countries started to experience deficits far above what had been agreed (see Figure 1), and the fiscal deficit of the group of countries rose to 6.7% and 7.1% in 2008 and 2009, respectively. It rose most sharply in France.

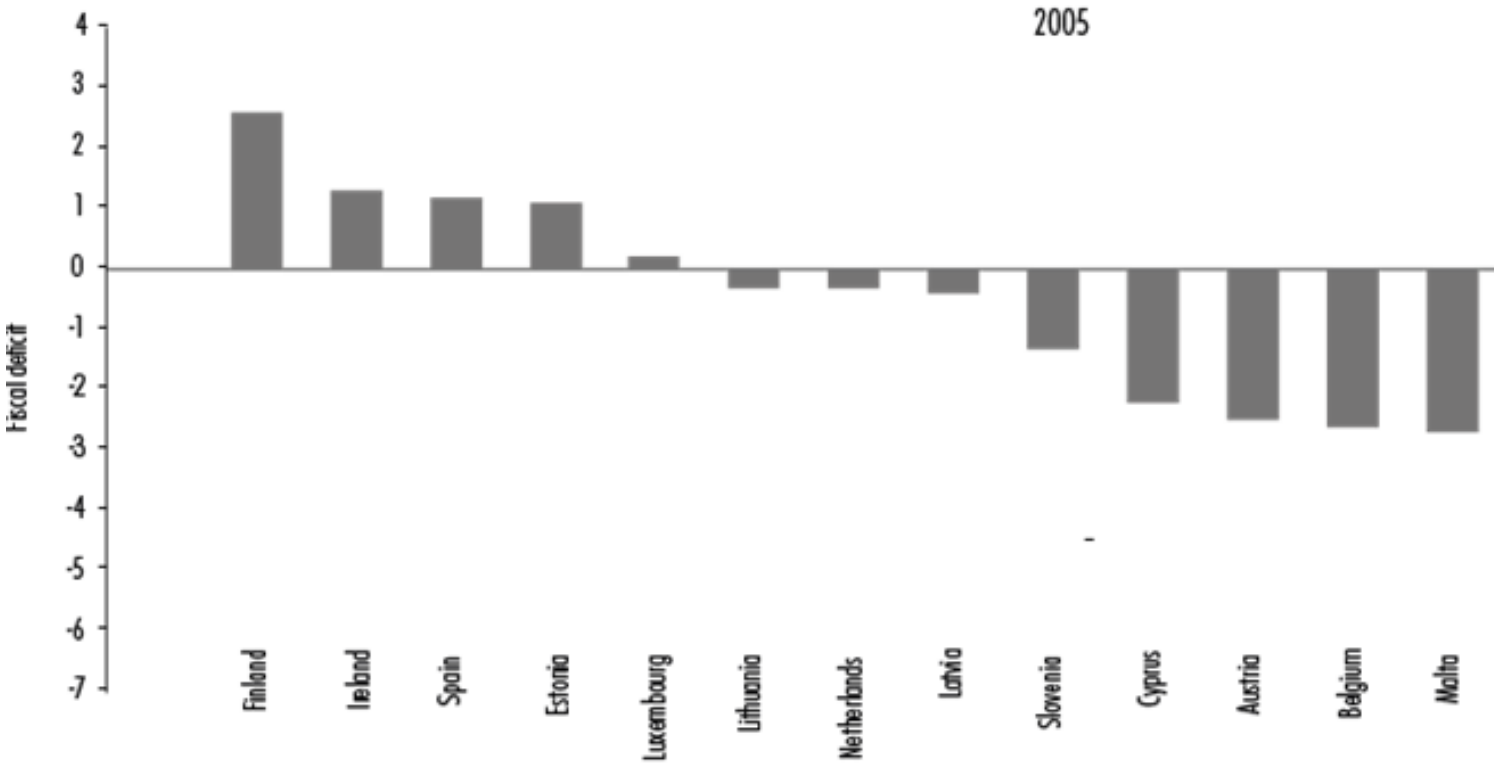
Table 1. Fiscal Deficit or Surplus of Eurozone Countries (Percentage)

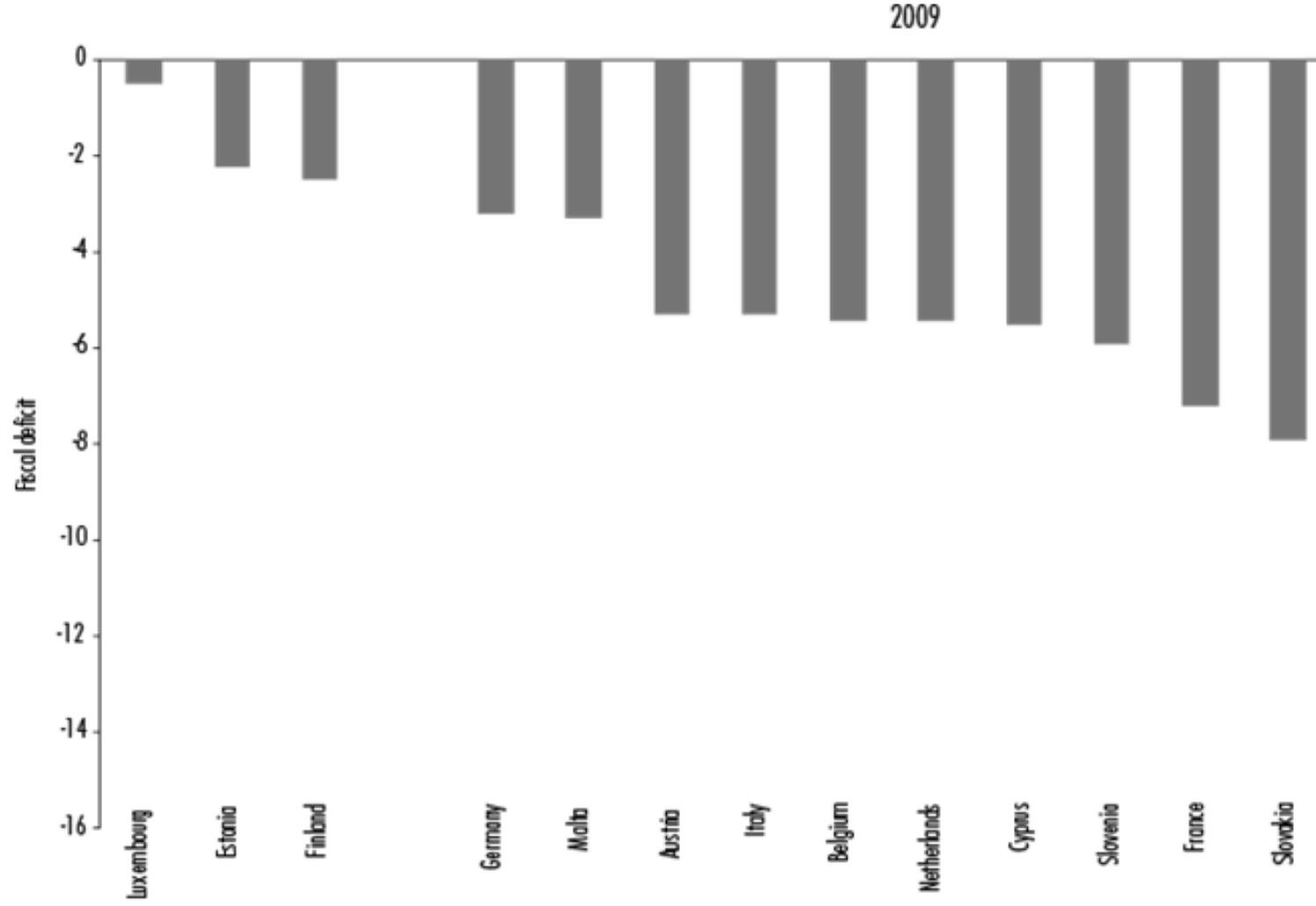
	2005	*2006*	*2007*	*2008*	*2009*	*2020*	*2011*	*2012*	*2013*	*2014*
Austria	-2.5	-2.5	-1.3	-1.4	-5.3	-4.4	-2.6	-2.2	-1.3	-2.7
Germany	-3.4	-1.7	0.2	-0.2	-3.2	-4.2	-1.0	-0.1	-0.1	0.3
Belgium	-2.6	0.3	0.1	-1.1	-5.4	-4.0	-4.1	-4.1	-2.9	-3.1
Cyprus	-2.2	-1.0	3.2	0.9	-5.5	-4.8	-5.7	-5.8	-4.9	-8.9
Slovakia	-2.9	-3.6	-1.9	-2.3	-7.9	-7.5	-4.1	-4.2	-2.6	-2.8
Slovenia	-1.3	-1.2	-0.1	-1.4	-5.9	-5.6	-6.6	-4.1	-15	-5.0
Spain	1.2	2.2	2.0	-4.4	-11	-9.4	-9.5	-10.4	-6.9	-5.9
Estonia	1.1	2.9	2.7	-2.7	-2.2	0.2	1.2	-0.3	-0.1	0.7
Finland	2.6	3.9	5.1	4.2	-2.5	-2.6	-1.0	-2.1	-2.5	-3.3
France	-3.2	-2.3	-2.5	-3.2	-7.2	-6.8	-5.1	-4.8	-4.1	-3.9
Greece	-6.2	-5.9	-6.7	-10.2	-15.2	-11.2	-10.2	-8.8	-12.4	-3.6
Ireland	1.3	2.8	0.3	-7.0	-13.8	-32.3	-12.5	-8.0	-5.7	-3.9
Italy	-4.2	-3.6	-1.5	-2.7	-5.3	-4.2	-3.5	-3.0	-2.9	-3.0
Latvia	-0.4	-0.6	-0.7	-4.1	-9.1	-8.5	-3.4	-0.8	-0.9	-1.5
Lithuania	-0.3	-0.3	-0.8	-3.1	-9.1	-6.9	-8.9	-3.1	-2.6	-0.7
Luxembourg	0.2	1.4	4.2	3.3	-0.5	-0.5	0.5	0.2	0.7	1.4
Malta	-2.7	-2.6	-2.3	-4.2	-3.3	-3.2	-2.6	-3.6	-2.6	-2.1
Netherlands	-0.3	0.2	0.2	0.2	-5.4	-5.0	-4.3	-3.9	-2.4	-2.4
Portugal	-6.2	-4.3	-3.0	-3.8	-9.8	-11.2	-7.4	-5.7	-4.8	-7.2
Average	-1.4	-0.57	0.12	-2.11	-6.86	-7.09	-4.89	-4.13	-3.96	-2.95

Source: <http://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do>

Figure 1 shows the spread of the fiscal deficit and GDP, demonstrating that there is divergence throughout the entire period, although in 2005, there were both surplus and deficit countries, ranging from -6% to +4%. With the crisis in full swing, in 2009, all of the countries were in deficit, between 1% and -15%, and in 2014, when the zone began to stabilize, between +1.5% and -9%. As seen in the chart, there is no convergence.

Source: Eurostat. Created by Jorge Arturo Luna. Obela project.


2005
Fiscal deficit
4
3
2
1
0
-1
-2
-3
-4
-5
-6
-7
Finland
Ireland
Spain
Estonia
Luxembourg
Lithuania
Netherlands
Latvia
Slovenia
Cyprus
Austria
Belgium
Malta


2009
Fiscal deficit
0
-2
-4
-6
-8
-10
-12
-14
-16
Luxembourg
Estonia
Finland
Germany
Malta
Austria
Italy
Belgium
Netherlands
Cyprus
Slovenia
France
Slovakia


2014
2

Figure 1. Spread of the Fiscal Deficit/GDP in the Eurozone

Debt and exchange rate vulnerability

The high debt ratios shown in the table (see Table 2) would be alarming if it were not for the fact that in reality, as Japan has demonstrated with its public debt rate of 245% of GDP, as long as there is confidence in institutions, debt levels are not so relevant,

Table 2. Distribution of Public Debt in the Eurozone 2013-2015 (Percentages)

	2013 Q3	*2013 Q4*	*2014 Q1*	*2014 Q2*	*2014 Q3*	*2014 Q4*	*2015 Q1*	*2015 Q2*	*2015 Q3*
Austria	1.13	0.84	0.75	0.87	1.05	1.19	1.09	1.07	0.87
Germany	4.46	4.54	4.61	4.62	4.86	5.03	5.02	5.03	4.95
Belgium	0.54	0.54	0.53	0.51	0.51	0.51	0.49	0.49	0.48
Cyprus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slovakia	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.07	0.10
Slovenia	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03
Spain	1.41	1.42	1.40	1.39	1.43	1.46	1.40	1.42	1.40
Estonia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Finland	0.23	0.27	0.23	0.21	0.24	0.26	0.27	0.21	0.24
France	15.46	15.31	15.56	14.94	15.20	15.33	14.56	14.01	14.52
Greece	0.37	0.39	0.31	0.28	0.29	0.38	0.36	0.28	0.29
Ireland	12.30	12.34	11.86	10.65	8.11	7.96	7.61	7.50	7.29
Italy	59.65	59.67	59.93	61.48	62.81	61.83	62.95	62.79	62.63

Latvia	0.11	0.10	0.09	0.11	0.12	0.11	0.12	0.12	0.12
Lithuania	0.09	0.09	0.09	0.10	0.11	0.11	0.11	0.12	0.13
Luxembourg	0.09	0.09	0.09	0.09	0.10	0.10	0.09	0.10	0.09
Malta	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Netherlands	0.43	0.45	0.47	0.39	0.40	0.41	0.41	0.49	0.58
Portugal	3.64	3.85	3.97	4.26	4.69	5.23	5.43	6.24	6.26
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Eurostat. Created by the author.

Europe itself does not drive off private investment nor inject inflation, as some have thought. European debt is concentrated in absolute numbers: in Italy, with 60% of the eurozone debt, France, with 15%, Portugal, 6%, and Germany, 5%. At first glance, the size of the debt in Italy would not seem to be an obstacle for its macro performance, whereas Greece's debt does seem to be a decisive issue. Even when measured by size of GDP, Italy's debt is very large but not an obstacle to its economic performance. In other words, there are two sets of rules for playing the game when it comes to financial architecture: one for mature economies and another for emerging (see Table 2). This is Gerson Lima's (2015) argument.

Less clear is when some sort of regional monetary stabilization entity should intervene to stabilize the regional exchange rate and how it should go about doing so.

The case of the exchange rate attack perpetrated by the dollar against the euro as a result of the Greek crisis is one example to study. According to Bloomberg,[8] the trading firm of Monness, Crespi, Hardt & Co called a meeting of a group of hedge fund executives to, among other things, coordinate an attack against the euro, wagering that Greece would default on its payments. They had begun to bet against the euro one week earlier, on January 28. According to Bloomberg, premium investor demand to buy Greek bonds over comparable German bonds, the European benchmark, pushed the spread up to 396 basis points on January 28, the highest since the advent of the euro in 1999. This attack was seconded by others against the bonds of other highly indebted European countries, such as Italy, France, and Germany.

Bloomberg reported that futures traders were placing bets that the euro would fall tremendously as compared to the dollar. The number of wagers made by hedge funds amounted to 71,623 contracts, according to data from the Commodity Futures Trading Commission. The consequences can be seen in Table 3.

Table 3. The Euro Before the Exchange Rate Attack of 2010. Monthly prices

Dollars per euro (last Wednesday of the month)	*Buy*	*Sell*	*Exchange Rate Spread*
27.1.10	1.41059	1.41049	10 basis points
24.2.10	1.35487	1.35463	24 basis points
24.3.10	1.33649	1.33626	23 basis points
28.4.10	1.31919	1.31897	22 basis points
10.5.10	1.29107	1.29086	21 basis points
26.5.10	1.22648	1.22626	22 basis points
30.6.10	1.22509	1.22486	23 basis points

Source: Oanda.

The wager alarmingly widened the spread between Greek and German bonds in April/May 2010, and lowered the price of the euro in dollars by some 13% from 1.41059 dollars per euro to 1.22648 in a matter of 16 weeks.

The European Central Bank (BCE) (2010) reported that the widening of the interest rate margins took off between April and the beginning of May, reaching unprecedented levels at the start of ECU2, which prompted eurozone governments to announce a far-reaching package of measures, including the creation of the European Stability Fund on May 9. In this context, on May 10, 2010, the euro system launched the securities markets program. Under this program, the ECB was able to buy both public and private debt, aiming to secure depth and liquidity for dysfunctional market sectors and in this way recover monetary policy (Chap. 2), in the understanding that this is not equivalent to buying primary issuances. In other words, the ECB could leverage these transactions to stabilize interest rate and exchange rate spreads.

In this way, Europe saw the advent of two aid programs together. First, and exceptionally, the ECB with the purchase of bonds in the secondary market, and second, the International Monetary Fund's (IMF) loan to Greece under the condition of reducing demand and increasing tax revenue. One lesson from the European crisis is that the central entity responsible for monetary stability must react more actively and quickly to stabilize debt bonds and the spread among member countries (Panico and Purificato, 2013).

Early discussions: economic autonomy and relinquishing sovereignty

When countries form a monetary union, they face constraints in terms of how to finance their deficits (De Grauwe, 1994). The same is true of the monetary unit, if the idea is to maintain stability in the monetary space corresponding to the currency basket. In other words, the difference between tax revenue and public spending plus debt interest payments must be equal to the increase in the monetary base plus the rise in debt, in an equal fashion among all of those that comprise the currency basket.

Using De Grauwe, (36) the equation is

$$G-T+rb=dB/dt+dM/dt$$

G= Government spending

T= Tax revenue

rB= total public debt interest

dB/dt= Variation in public debt

dM/dt= Variation in the monetary base

This raises a series of questions. First, tax policy decisions are some of the most important for government leaders. Second, how much to spend is a decision made equally by Treasury and politicians. On the other hand, how much to expand the monetary base is a decision of the central bank, and how much debt to take on is the outcome of the gap between what the Central Bank is willing to issue within established inflation targets and the size of the deficit defined by the Treasury, which includes paying interest on debt (Fischer, 1988; Grilli, 1989).

Critiques swirling around the European Monetary Union (EMU) assert that these monetary policies will give rise to an unacceptable loss of autonomy and will undermine flexibility in using inflation as a revenue source (De Kock and Grilli, 1993).

They also assert that there will be a loss of seignorage for the exchange rate. Currency exchange regimes can be one of three types: pure floating, fixed exchange rate with the possibility of realignment, and the monetary union. The three currency regimes are modeled as alternative ways of committing to the future of inflation policy. The reason to create a currency basket is to foster stability in a regional trade space with adjustable parity and foreign currencies that reflect the inflation conditions and the growth of the sum of the economies in the region as an economic unit. In an adjustable parity regime, exchange rates can be compatible with optimal policies (Mundell, 1961).

The question of fiscal policy

The construction of the European monetary union, starting from the initial stage of the monetary unit under the European monetary system (EMS), has always been focused on coordinating the expansion of the monetary base dM, and left out everything related to dB, or public debt. Frieden (1996) argued that setting exchange rates between economies with different economic, social, and political conditions can be complicated and added that in order to maintain a fixed exchange rate between two economies, macro conditions must not be very divergent. The backbone of the system, according to Frieden, is the inflation rate (see Table 4).

Table 4. Annual Consumer Price Variations (HICP)

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*
Euro area (19 countries)	2.2	2.2	3.3	0.3	1.6	2.7	2.5	1.3	0.4	0.0
Austria	2.3	1.8	4.5	0.0	2.3	3.4	2.6	1.2	0.5	0.6
Germany	1.9	1.6	3.2	0.1	1.7	2.3	2.2	1.0	0.6	0.1
Belgium	1.8	2.3	2.8	0.2	1.1	2.5	2.1	1.6	0.8	0.1
Cyprus	4.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2	0.5	0.1
Slovakia	2.5	3.8	5.5	0.9	2.1	2.1	2.8	1.9	0.4	-0.8
Slovenia	4.3	1.9	3.9	0.9	0.7	4.1	3.7	1.5	-0.1	-0.3
Spain	1.3	1.6	3.9	1.6	1.7	3.3	3.2	2.2	1.2	-0.2
Estonia	2.7	2.9	3.1	-1.7	-1.6	1.2	1.9	0.5	0.3	0.0
Finland	3.3	3	4.2	1.3	4.7	3.1	1.0	-0.9	-1.4	-1.1
France	3.6	2.8	4.1	-0.2	2.0	3.0	2.4	1.5	-0.2	-0.6
Greece	2.2	2.0	3.5	0.8	1.6	2.9	3.3	1.2	0.2	0.1
Ireland	2.2	2.2	4.4	0.2	2.6	3.5	3.1	0.4	-0.3	-1.5
Italy	6.6	10.1	15.3	3.3	-1.2	4.2	2.3	0.0	0.7	0.2
Latvia	3.8	5.8	11.1	4.2	1.2	4.1	3.2	1.2	0.2	-0.7

Lithuania	3.0	2.7	4.1	0.0	2.8	3.7	2.9	1.7	0.7	0.1
Luxembourg	2.6	0.7	4.7	1.8	2.0	2.5	3.2	1.0	0.8	1.2
Malta	1.6	1.6	2.2	1.0	0.9	2.5	2.8	2.6	0.3	0.2
Netherlands	1.7	2.2	3.2	0.4	1.7	3.6	2.6	2.1	1.5	0.8
Portugal	3.0	2.4	2.7	-0.9	1.4	3.6	2.8	0.4	-0.2	0.5

Source: Eurostat.

Table 4 shows that the inflation rate is not convergent and that when deflation began to afflict countries in 2009, it did so homogenously; but when inflation came back, it raged unevenly, as evidenced by the highs in Slovakia, Latvia, and Slovenia, with 7.5%, 6.4%, and 3.7% and the low in Finland of 0.1% in 2004, when the average of the 19 eurozone countries was 2.2%. By 2015, with deflation and stagnation, the spread shrunk, but still hovered between +0.8% and -1.5%, with an average GDP growth of 0%.

Until 2007, economic growth in the 19-country eurozone reached an average of 2.02% per capita, but declined, starting in 2008, to -0.37%, insofar as deflation and economic depression foster convergence whereas growth prompts spreads and divergence. A rising fiscal deficit coupled with debt did not help the exchange rate even after 2009, because its function is not principally countercyclical, but rather one of payments for bank and financial bailouts. Rising fiscal deficits likely prevent the GDP performance figures from becoming more negative (see Table 5).

Table 5. GDP Growth Rate per Capita

	2004	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*
Euro area (19 countries)	1.7	1.1	2.8	2.5	0.0	-4.8	1.8	1.3	-1.1	-0.5	0.7	:
Germany	1.3	0.9	3.9	3.5	1.4	-5.3	4.3	3.7	0.2	0.0	1.2	1.0
Austria	2.1	1.4	2.8	3.3	1.2	-4.0	1.7	2.5	0.3	-0.3	-0.4	0.0
Belgium	3.2	1.5	1.8	2.6	-0.1	-3.0	1.8	0.9	-0.5	-0.4	0.9	0.9
Cyprus	3.2	2.4	2.8	2.7	1.1	-4.6	-1.3	-2.1	-3.9	-5.7	-1.4	2.5
Slovakia	5.2	6.3	8.4	10.7	5.5	-5.7	4.8	3.4	1.4	1.3	2.4	3.5

Slovenia	4.3	3.8	5.3	6.4	3.1	-8.7	0.9	0.5	-2.9	-1.2	2.9	2.8
Spain	1.6	1.8	2.5	1.8	-0.5	-4.4	-0.4	-1.4	-2.7	-1.3	1.6	3.3
Finland	3.6	2.4	3.7	4.7	0.3	-8.7	2.5	2.1	-1.9	-1.2	-1.1	:
France	2.0	0.8	1.7	1.7	-0.4	-3.4	1.5	1.6	-0.3	0.2	-0.3	:
Greece	4.8	0.3	5.3	3	-0.6	-4.6	-5.6	-9.0	-6.8	-2.5	1.3	0.1
Ireland	2.6	4.0	3.6	2.4	-4.2	-6.5	-0.1	2.2	-0.1	1.2	4.9	:
Italy	0.8	0.3	1.6	0.9	-1.8	-6.0	1.3	0.2	-3.3	-2.2	-0.6	0.9
Latvia	9.5	11.9	12.9	10.8	-2.6	-12.9	-1.7	8.2	5.3	4.1	3.3	3.6
Lithuania	7.8	9.5	9.1	12.4	3.7	-13.9	3.8	8.5	5.2	4.6	4.0	2.6
Luxembourg	3.0	1.6	3.5	6.6	-2.6	-7.1	3.7	0.2	-3.1	1.7	1.6	2.9
Malta	-0.2	3.1	1.5	3.6	2.7	-3.2	3.0	1.5	2.1	3.1	2.7	5.4
Netherlands	1.7	1.9	3.4	3.5	1.3	-4.3	0.9	1.2	-1.4	-0.8	0.6	1.6
Portugal	1.6	0.6	1.4	2.3	0.1	-3.1	1.9	-1.7	-3.6	-0.6	1.5	1.9

Source: Eurostat.

If we assume that in the long term, the creation of dM will be equal to the growth rate of the product, fiscal deficits are funded by dB, in other words, by debt. This means that special mind must be paid to the components that comprise the deficit both on the side of tax revenue T, as well as for spending G, including what is paid by way of interest on public debt. The monetary policy dM/dt is used to control inflation, which in turn requires certain fiscal assumptions that ensure economic convergence.

The opening of capital accounts changes the assumptions and makes the new currency vulnerable, as demonstrated by the aforementioned 2010 exchange rate attack.

The conventional view is that the fiscal crisis engendered the balance of payments problem, but there is also evidence that financial deregulation has played a central role in the genesis of the euro crisis (Vernengo and Pérez Caldentey, 2012). From the post-Keynesian perspective, some authors have asserted

that the fiscal crisis, in other words, a rise in the deficit and internal debt, is the result, rather than the cause, of the external crisis.

Kregel (2012) identified six lessons from the euro zone crisis:

1. Currency zones don't solve the problem of payments imbalances.
2. Institutional structures cannot be created *ex ante*, but rather must result from the process of economic convergence.
3. There is no consensus among the major economies to stabilize the exchange rate through convergence. The creation of exchange rate mechanisms served to buffer growth differences in GDP and inflation between Germany, France, and Italy. The targets for the same were not the same.
4. Competition reduces inflation, but does not produce growth or convergence.
5. A common currency does not eliminate the need for internal adjustments.
6. The solution to the problem facing the eurozone is not increased political integration via more sovereign EU economic and political institutions.

De Grauwe (1994) says that if it is impossible to centralize the majority of national budgets, fiscal policies should be wielded with discretion, and the deficit should be allowed to grow, when there are negative external shocks, permitting automatic stabilizers to take action. This Keynesian approach was applied in the 2007-2011 crisis, and has led to very high debt levels in terms of GDP, as already mentioned, because moreover, the cost of bank bailouts has been added in (see Table 6).

Table 6. Debt/GDP Ratio

Country	*Debt/GDP*					
	1995	*2000*	*2005*	*2008*	*2010*	*2014*
1. Germany	54.9	59.0	67.1	65.1	80.5	74.7
2. Austria	*68.0*	*65.9*	*68.3*	*68.5*	*82.4*	*84.5*
3. Belgium	*130.7*	*109.0*	*94.7*	*92.2*	*99.5*	*106.5*
4. Czech Republic	13.6	17.0	28	28.7	38.2	42.6
5. Estonia	:	5.1	4.5	4.5	6.5	10.6
6. Slovenia	*18.3*	*25.9*	*26.3*	*21.6*	*38.2*	*80.9*
7. Slovakia	21.7	49.6	33.8	28.2	40.9	53.6

8. Greece	:	*100.0*	:	*116.0*	*126.7*	*177.1*
9. Spain	*61.7*	*58.0*	*42.3*	*39.4*	*60.1*	*97.7*
10. France	*55.8*	*58.7*	*67.2*	*68.1*	*81.7*	*95.0*
11. Finland	55.1	42.5	40	32.7	47.1	59.3
12. Latvia	13.9	12.2	11.7	18.6	46.8	40.0
13. Lithuania	:	:	17.6	14.6	36.2	40.9
14. Luxembourg	8.1	6.1	6.3	14.4	19.6	23.6
15. Hungary	*84.5*	*55.2*	*60.8*	*71.9*	*80.9*	*76.9*
16. Italy	*116.9*	*105.1*	*101.9*	*102.3*	*115.3*	*132.1*
17. Malta	34.4	60.9	70.1	62.7	67.6	68.0
18. Netherlands	73.5	51.3	49.4	54.8	59.0	68.8
19. Portugal	*58.3*	*50.3*	*67.4*	*71.7*	*96.2*	*130.2*

Note: The highest ratios are in cursive.

Source: Eurostat Code: tsdde410.

When created, the hope was that the structural differences between the economies would gradually fade away through a convergence fund administered by the European Commission, equivalent to 1% of the European GDP and funded through VAT revenue from each country. The problem arose when public debt rose sharply due to the effect of the costs of bank bailouts in Ireland, Spain, Portugal, France, Italy, and Slovenia. This affected the risk level and widened the spreads between stable economies with low GDP debt indices and those with high indices (see Table 7).

Table 7. Performance Curves for Eurozone AAA Zero Coupon Bonds, Spot Market

Term/Time	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*
Term: 1 year	3.22	3.99	3.61	0.91	0.59	0.90	0.05	0.06	0.01	-0.27

Term: years	5	3.53	4.08	3.83	2.75	2.01	2.19	1.03	0.85	0.49	0.03
Term: years	10	3.76	4.23	4.25	3.82	3.15	3.15	2.20	1.96	1.42	0.63
Term: years	20	3.98	4.41	4.61	4.43	3.71	3.65	2.85	2.77	2.23	1.20
Term: years	30	4.06	4.49	4.72	4.30	3.64	3.65	2.77	2.66	2.23	1.35

Source: Eurostat

The danger, however, has not been the depreciation of the euro. Rather, its existence has been threatened by a precipitous drop of a single country's share in the entire region's GDP. Such a massive imbalance, even when it is a small country, can cause the weights to shift dramatically. A small imbalance in a large economy can do the same. Inflationary differences derived from disparate and uncoordinated fiscal policies can displace trade from one country to another, generating intraregional differences.

Kenen (1969) suggested that most budgets be centralized at the regional level, which allows countries that have undergone a negative shock to receive automatic transfers and, therefore, reduce the social costs of the process of losing the national fiscal instrument. The MacDougall Report, ordered by the Commission of the European Communities (CEC, 1977), asserted that the unemployment insurance system should be centralized so that the labor market would not suffer distortions in light of the shocks. However, it was not yet under way in 2010.

From the start, Masson (1996) suggested that meeting the criteria for joining the ECU took the spotlight off of other major structural problems. The fact that it was precisely peripheral countries that suffer this problem indicates that a severe structural problem could not be alleviated with the aid created through the European Union convergence fund. This analysis obscures the fact that Italy is the most indebted country in absolute terms, with half of its debt inside the eurozone, and the second most-indebted country in terms of its economy, after Greece, with an economic depression rate above the average of the zone (see Table 5).

What has become clear is that before the monetary union, eurozone member countries had fiscal deficits above 3%, and that debt levels for some were above 100% of GDP. In other words, what mattered was not the absolute deficit level as a straitjacket, but rather coordination among members as to the deficit level, at the level they set. With deflationary pressures due to falling consumption, concerns about inflation are not fundamental. On average, in 1991, the eurozone had an average deficit of 5% of GDP, ranging from -11.4 for Italy to 0.7% for Luxembourg. All of these countries managed to reduce their fiscal deficits

to join the eurozone, and by 2007, the average was -0.7% of GDP, ranging from -6.4 for Greece to 5.2% for Finland. All of the economies moved in the same direction.

The issue is whether coordinating entails giving up the right to handle policy and ceding this power to Brussels, as in the case of Greece in 2015, and how this fits in with the democracy of each country. A referendum to determine the national stance towards European policies did not result in greater autonomy for Greece, but rather distain by European authorities towards the country and the doubling down on agreements that constrain macroeconomic policy management (Varoufakis, 2015).

The idea in 2011 was to have central fiscal governance to prevent substantial deficits and, above all, to coordinate policies that all pointed in the same direction. The concern for the critical size of the economic deficit, rather than focusing on the debt spread with shared regional risk (a European risk) became a change agent for policies while failing to address the problem of the cost of debt. The Outright Monetary Transactions (OMT) program would start to look at the issue of spread in 2013.

The fiscal compact as a new agreement to stabilize the Eurozone

In March 2012, the Fiscal Compact[9] was established, addressing the following:

a) Maintain fiscal equilibrium or a surplus.
b) A floor of 0.5% of GDP can be considered a structural deficit. The contracting parties shall converge (around a surplus) within a fixed term.
c) The parties may deviate from their targets in the medium term only briefly.
d) When the debt/GDP ratio is far below 60% of the recognized limit, the government may raise its deficit up to 1% exceptionally.
e) If the contracting party deviates from the long-term target regularly, automatic correction mechanisms shall be applied to remediate the situation in the short term.

The agreement is meant to keep tight reins on the euro group, through quarterly missions that ensure that the member states address sources of macroeconomic instability (UE, 2012). This undoubtedly restricts the autonomy of the eurozone partners.

The risk that one of the economies would exit the zone began to grow in mid-2012, when the spreads expanded. For the financial markets, it was not enough to know that in the long term the deficit would be closed – the markets feared the total collapse of the euro. The ECB president intervened saying that

everything necessary would be done to defend the euro.[10] In light of that, the so-called OMT program was set up to buy the debt of countries with high spreads in the secondary market. The purpose of these operations is to reduce the spreads and try to create a common European risk. “OMTs are an insurance device against redenomination risk (of a country exiting the euro), in the sense of reducing the probability attached to worst-case scenarios” (BCE, 2013).

This mechanism was contested by the German Central Bank and challenged in court as market meddling, but the European Union Court of Justice[11] ruled in 2015 in favor of OMTs, saying that they are compatible with the laws of the union and that the ECB is not going beyond its attributions in monetary policy matters. In other words, the ECB is now free to enter the secondary market.

What is certain is that the announcement of the mechanism in 2012 served to reduce spreads and calm the markets. A monetary stabilization fund must, therefore, provide for not only exchange rate stability but also, and more importantly, the stability of spreads and making risk throughout the region uniform.

The banking union as an instrument of financial stabilization

In September 2012, the European Union announced a European banking union (BU) concerned with transferring the cost of the financial bailout in case of a problem related to bank decapitalization.[12] To prevent a financial crisis from spreading, the BU has at its disposal three main instruments:

1. *Ex ante* Resolution Fund to fund any urgent bailout required by European Banks before the problem grows;
2. A Deposit Guarantee Scheme (DGS) to prevent potential runs on deposits throughout the union;
3. Eurobonds to level access to markets for all member governments participating in the BU, mitigating discrepancies among the different bank markets.

With the OMTs, it is also true that governments will become lenders in a single European currency in an enormous capital market that will no longer be segmented, where market sanctions in terms of high financial costs are felt swiftly and drastically.

By way of conclusion

Evidently, the developments in Mediterranean Europe, Great Britain, and Ireland in 2010 were the result of the fact that the euro system did not play the role of lender of last resort in national public debt markets, failing to adhere to the spirit of the Maastricht Treaty, which stipulates that the euro system shall ensure the proper functioning of the monetary policy transmission mechanism, due to the political pressures of some countries in the European Monetary Union who maneuvered national interests to prevail over those of the greater eurozone (Panico and Purificato, 2013).

Copper and Kempff (2004) argued that the meaning of fiscal policy was ignored in determining the welfare profits of a monetary union. In other words, not only the function of fiscal policy has been ignored as complementary to monetary, but also the positive aspects of coordinated fiscal policies were left aside. While the coordinated response to external shocks among various countries is a sufficient condition to justify the existence of net earnings for a monetary union, the fiscal side was not perceived as necessary. Once fiscal policies are taken into account, the trade-off between the losses of stabilization instruments and the reduction in transaction costs for a common currency disappears. In fact, a monetary union can improve welfare regardless of the correlation of disturbances.

Similarly, if there had been a supra-national fiscal body to keep government deficits in line and coordinate countercyclical policies, the outcome would surely have been different for all of Europe, and for Greece in particular, using the same base of rules established in the reformed SGP. This disregards the central problem of the fact that Greece became a target of speculation starting in February 2010. The problem is that it was not only Greece, but rather a myriad of European countries in the same critical situation, which goes beyond the multilateral institutionality of either the ECB or the IMF, designed for foreseeable times of crisis and not those on the order of magnitude of the crisis that broke out in 2007, or depending on how you read the data, 2000. In this way, what should have resulted in an expansion of productive capacity or improved productivity to help Greece converge with other European Union countries ended up in consumption and housing, which exerted pressure on the mortgage market and land values. The global crisis burst the bubble first in the most vulnerable economy, a target of speculation. This attack later spread to the currency itself.

Some lessons to learn from the European crisis in regard to regional financial cooperation mechanisms are as follows:

1. For countries to join the basket, they must have relatively homogenous macroeconomic indicators, while maintaining differences for the smallest economies which, for structural reasons, will have disparate indicators.

2. There must be macroeconomic coordination to ensure that the targets agreed upon at the outset are upheld and that there are no imbalances in the region due to very different fiscal policies.
3. It is preferable to think about creating a macroeconomic policy coordinator, which would deal with both the fiscal and monetary side, and would have regulated punitive power to discourage members from defaulting on the agreed targets.
4. There should be two extraordinary regional supra-national funding mechanisms, one to serve as lender of last resort to cover fiscal deficits in critical cases, and the other as a debt bailout fund to reduce credit spreads. It is not enough to have a fund to support the balance of payments that lacks the power to buy debt instruments in the secondary market in critical moments.
5. It is preferable to have homogenous fiscal policies in certain realms, such as income tax and the VAT, so that companies do not move from one country to another for fiscal reasons.
6. It is important but not sufficient to have a convergence fund.
7. The topic of pensions must be calculated and although many countries have set up private pension schemes, their deficiencies have forced the return of public spending in some countries already. These pressures must be anticipated by reducing the levels of benefits in public pensions, in order to avoid the dilemma of the mass creation of new taxes alongside rising fiscal deficit and debt ceilings.
8. Productive economic problems must be dealt with before a country can join a monetary zone. Otherwise, the balance of payments deficit in national currency will smother disadvantaged economies. This will not be detected because it will seem to be a banking problem, as we saw in the case of Greece in 2009 and since.
9. Finally, it would seem to be preferable to maintain a common unit of account that permits payments in national currency rather than forcing a monetary union when productive and fiscal difference between the members of union are so significant. The condition is that inflation rates must be relatively low and homogenous and exchange rates stable. In the unit of account, semi-pegged exchange rates are preferable.
10. Currency baskets can be the target of attack by currencies that serve as the international reserve. These attacks can tear apart the monetary zone if there are no institutions and resources to act as a counterweight to them.
11. Inflation rate and growth rate disparities between South American economies or the economies of all of Latin America make it very difficult to work towards building functional regional financial cooperation schemes beyond monetary stabilization funds.
12. The challenges of creating new regional development entities such as the Bank of the South makes clear the difficulties in creating more complex institutions that would aid in regulating and coordinating monetary policies.
13. The economic and political asymmetries in Latin America are still larger than those between member countries of the eurozone.
14. The fragility of the balance of payments and the lack of domestic capital markets makes the foreign exchange market very vulnerable to speculative attacks, such as those described in February 2010.
15 Latin American currencies are not reserve currencies. There are even countries that do not have their own currencies and are subject to the monetary policies of another country, which makes it difficult to coordinate monetary policies among all members to facilitate intra-regional trade, which is the purpose of monetary coordination and regional financial cooperation.

[1]A preliminary version of this paper was published as Ugarteche and Ponce, "Lecciones de la crisis del euro para la integración sudamericana," in C.E. Martins (2013), *Los Retos de la Integración y América del Sur*, Buenos Aires, CLACSO.

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[3]Report by the Ecofin Council to the European Council. The preparations for stage 3 of EMU. http://www.europarl.europa.eu/summits/dub2_en.htm

[4]Idem.

[5][i] IMF, The IMF & the European Economic and Monetary Union, March, 1999, <http://www.imf.org/external/np/exr/facts/emu.htm>

[6]The eurozone consists of 19 countries that are members of the European Union, which has 28 member countries.

[7]http://www.bloomberg.com/news/articles/2010-03-03/u-s-said-to-tell-hedge-funds-to-save-euro-records

[8]Treaty on Stability, Coordination and Governance In the Economic and Monetary Union between the Kingdom of Belgium, the Republic of Bulgaria, the Kingdom of Denmark, the Federal Republic of Germany, the Republic of Estonia, Ireland, the Hellenic Republic, the Kingdom of Spain, the French Republic, the Italian Republic, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Grand Duchy of Luxembourg, Hungary, Malta, the Kingdom of the Netherlands, the Republic of Austria, the Republic of Poland, the Portuguese Republic, Romania, the Republic of Slovenia, the Slovak Republic, the Republic of Finland and the Kingdom of Sweden, March 12, 2012. http://www.consilum.europea.eu/european-council/pdf/Treaty-on-Stability-Coordination-and-Governance-TS.

[9]"Draghi says ECB will do what's need to preserve euro: economy," Bloomberg, July 26, 2012. http://www.bloomberg.com/news/articles/2012-07-26/draghi-says-ecb-to-do-whatever-needed-as-yields-threaten-europe

[10]PRESS RELEASE n°70/15 Luxembourg, http://curia.europa.eu/jcms/upload/docs/application/pdf/2015-06/cp150070es.pdf

[10]"Europe's Progress Towards Banking Union," European Union Center of North Carolina Policy Area: Banking Union, July 30, 2013. http://europe.unc.edu/wp-content/uploads/2013/12/Brief1312-bankingunion.pdf

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