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## Euro Crisis

**Summary:** It is argued the current eurozone crisis is neither new nor surprising. Fiscal discipline in the eurozone was weak from its creation in 1999, but ongoing economic prosperity limited the damage. Economic recession deepened the impact of crisis on public finance and pushed some eurozone countries to the edge of bankruptcy. Options available now are costly and painful: foreign bailouts, cuts to expenditures, higher revenues and some combination of the three. They may be conducted both inside and outside the eurozone. If eurozone problems are not solved, financial markets may turn down the euro as a currency, possibly marking the beginning of Euro-disintegration.

**Key words:** Eurozone, Euro, Fiscal discipline, Reform of public finance, Bail-outs, Default, Bankruptcy.

**JEL:** G01, P16, P51.

In February 2010, the press in Europe and the United States was literally plagued with articles on the crisis of the euro. The threat emerged from some countries' high indebtedness and doubts of their ability to service debt, what again may undermine the euro. At the spot market the currency fell against its main rivals. The media promptly coined the acronym PIIGS, to designate main troublemakers in the eurozone - Portugal, Italy, Ireland, Greece and Spain. A sudden rise in the number of articles related to the crisis of euro gives an impression the problems are surprising and recent.<sup>1</sup> In this article I argue they are neither surprising nor recent. Further, I argue the euro is a highly politicized currency, making troubles larger rather than smaller.

Problems with euro stability existed from the beginning, i.e. from its inception. Poor fiscal policies in some eurozone countries, along with the European Central Bank's (ECB) and European Union (EU) authorities' inability to discipline members in the zone - such as either keeping the rules or enforcing fines for violations - contributed to such stability problems.<sup>2</sup> During prosperous years (1999-2008), fiscal escalation in the eurozone was moderate to excessive. The economic recession of 2008-2010 undermined public finances, while governments have not adjusted public spending to reduced financial potential. Public finance troubles escalated in nearly all euro countries, while the stigma fell on the PIIGS only. The PIIGS are probably in the inferior position now, but they are not the only eurozone members with troubled public finances.

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<sup>1</sup> It may be problematic for some authors to explain what happens now in the European Monetary Union (EMU), because the mainstream in the field - for example, Desmond Dinan (2003), Ali M. El-Agraa (2007) - ignored early troubles in the eurozone and behaved basically completely uncritical in presentation and discussion of the EU policies. Neglecting previous troubles, it is difficult to say what is going on now.

<sup>2</sup> What happens now in the eurozone is not surprising to authors that spoke about euro troubles before, cf. Neil Nugent (2003), Miroslav Prokopijević (2005, 2009).

## 1. Irregular Beginning

The idea for a common European currency area was launched at the summit of the European Community (EC)/EU leaders in The Hague in 1969. As with many other common policies, decades elapsed before common currency emerged as the euro in 1999 and came into circulation on January 1, 2002. Monetary authorities representing more and less stable monetary regimes negotiated the conditions for the common currency. Countries like Germany, Austria, the Netherlands or Belgium had more stable currencies, while the Mediterranean countries had a reputation of inflationary currencies. The newborn was a compromise between stable and inflationary currencies. The five convergence or Maastricht criteria reflected the situation - they were more relaxed than expected in order to allow weaker currencies to qualify for the eurozone. Individual eurozone countries' inflation rates were not to exceed the average inflation of the three EU countries with the lowest inflation rates, plus 1,5 percentage points. Budgetary deficits were not to exceed 3% of each country's gross domestic product (GDP). Public debt was to be under 60% of GDP. Long term interest rates were not to exceed more than 2 percentage points of the average of the three EU countries with the lowest interest rates. Finally, the currency under qualification for the eurozone should not fluctuate more than  $\pm 15\%$  relative to a basket of major currencies at least two years before joining the eurozone. The eurozone would be created in 1999 if at least seven out of 15 EU members qualify for it in 1997 and 1998.

At the time of discussing and designing the criteria of the eurozone, some concerns emerged that were related to their consistency and suitability. For example, it is said, one monetary policy cannot fit to individual eurozone economies in different cycles. If one economy expands, it needs a restrictive monetary policy; if another economy contracts, it needs a relaxed monetary policy. One currency may naturally follow one monetary policy only. The rate of 4,75% may be too high for an economy in contraction, while the rate of 1,0% may be too relaxed for an overheated economy. Second, there were doubts among monetary economists whether the eurozone represents an optimal currency area. This problem was underestimated during the creation of the eurozone, as we will see in part D.

Probably the single largest constructive problem of the euro criteria was not discussed at the time of criteria design: an inconsistent budgetary rule of maximum deficit of -3% coupled with a public debt limit of 60%. On the one hand, if a deficit of up to -3% of GDP is allowed in economically bad years and if it is annulled by surpluses in economically good years, then the budget would be balanced over a period of time. If this is so, there would be no public debt over a long period of time, so the public debt limit of 60% is superfluous. Inherited debt would eventually be paid back after some time, so there would be no public debt. On the other hand, if governments may create deficits of up to -3% every year, then the public debt would permanently rise. Depending on the level where it was in some country before joining the eurozone and the tempo of creating new debts, public debt would surpass the limit of 60% after some time and would continue to grow *ad infinitum*. Consequently, if governments may be indebted up to -3% every year, the limit of 60% is ineffective and again superfluous.<sup>3</sup>

<sup>3</sup> Cf. Marek Dabrowski and Jacek Rostowski (2006); Prokopijević (2005, 2009).

At the time of negotiating the Maastricht criteria there was no answer as to what happens if some country violates some of the four first mentioned criteria<sup>4</sup> after joining the eurozone. That shortcoming was solved with the adoption of the Stability and Growth Pact<sup>5</sup> in 1997, initiated by Germany. The Pact envisaged fines for the violation of the budgetary deficit rule only. If some country violates other criteria, the European Central Bank and European Commission may issue a public warning, possibly damaging the reputation of the country but absent other disciplinary effects. Concerning the budgetary rule, the solution was as it follows. If a eurozone country's GDP falls less than -0,75% in a year, the fine for a violation of the budgetary rule would be automatic. If GDP falls between -0,75% and -2%, the European Council and Commission (and not the ECB!) would consider the case and make a decision. If GDP falls more than -2%, there would be no fine, because this means the country is in deep recession and under such circumstances, the budgetary deficit may understandably exceed the limit of -3%. Fines were defined as financial and might reach up to 0,5% of the country's GDP.<sup>6</sup> The Pact said nothing about the possibility the whole eurozone succumbs to a deep recession for several years. This is naturally a larger shortcoming in the regulation. The main puzzle: countries may be fined, but cannot be excluded from the eurozone if they deeply and in several consecutive years break heavily the budgetary rule, putting the whole eurozone at risk. Eurocrats apparently felt such an outcome impossible. The current crisis demonstrates how short sighted regulators were.

It turned out easier to define the rules of the eurozone than to conduct a regular race for criteria fulfillment. If we omit the criterion of currency fluctuation - which cannot be violated once a country abandons their national currency and enters the eurozone - and consider the four others, 60 criteria were to be fulfilled per year (four criteria times 15 EU members). In 1997, only 46 criteria were fulfilled; in 1998, some 50. In 1997 and 1998, only three countries fulfilled all criteria: Finland, France and Luxembourg.<sup>7</sup> All other countries were short at least one criterion. Three countries (Denmark, Sweden and United Kingdom) were not interested in joining the eurozone, Greece was far from fulfilling the criteria, and thus, 11 countries entered the eurozone on January 1, 1999: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. Greece joined in January 2001, Slovenia in January 2007, Cyprus and Malta in January 2008, and Slovakia in January 2009. Presently, the eurozone encompasses 16 states.

The qualification for the eurozone was irregular for several reasons, some important for what later unfolds. First, Belgium and Italy were admitted to join the eurozone, although each ran huge public debts, exceeding 120% of GDP. The ECB recommended they not join, but the European Council - the heads of governments or presidents of member states - turned down the recommendation, stating the eurozone would make little sense if it excluded some of the six founding EC members. An ad-

<sup>4</sup> After abandoning its own currency and entering the eurozone, there is no national currency to fluctuate.

<sup>5</sup> Cf. EUR-lex – Access to European Union Law (2010).

<sup>6</sup> Countries that violate the budgetary rule make a non-interest bearing deposit and it is converted into a fine if, in the Councils opinion, the excessive deficit has not been corrected after two years.

<sup>7</sup> Cf. Prokopijević (2009), pp. 322-323.

ditional rule was introduced to limit the damage following this decision: if some countries have debt over 60% of GDP, it should be declining (i.e., it should decrease from year to year until it falls to under the recommended 60%). Second, a gentleman's agreement among EU authorities excluded some debts from the general public debt in order to qualify. For example, Belgium and Portugal did not count their social security debt in 1997's public debt. Short term loans in Denmark and trade credits and guarantees in France were excluded from public debt. Gold reserves in Germany were "reevaluated" in order to reduce public debt, etc. All these operations were considered "creative accounting". Basically, the term was misused because "creative accounting" covers accounting practices neither allowed nor prohibited, while these operations were clearly moves to get around the rules.

If a game begins in violation of convened rules, one may expect violations will continue when it is played. This is exactly what happened in the eurozone from 1999 on. Bearing in mind the only punishable criterion - budgetary balance - the years 1999, 2000 and 2001 were good for the eurozone and its members. In 1999 and 2000, no country violated the budgetary rule; in 2001, three did (Greece, Italy and Portugal). Deterioration marked the period 2002-2005. In 2002, France and Germany did the rule wrong; in 2003, France, Germany, Italy and Holland; in 2004, Austria, France, Germany, Italy and Portugal; and in 2005, Germany, Italy and Portugal. Greece violated the budgetary rule every year of its eurozone membership but 2006.<sup>8</sup>

It is difficult to say why euro countries kept discipline well in the first years after the eurozone's creation and why they lost discipline in 2002 and thereafter. It may be that there was again some "gentleman's agreement" behind the scene. Some countries held elections and the political cycle typically leads to higher public spending. But most interesting, Germany - always considered an example of fiscal and monetary discipline - heavily violated the budgetary rule in several years. Why did Germany change its behavior after switching from the mark to the euro? Apparently, the rules of the game provided different incentives in two situations. If you spend more and deepen the budgetary deficit when you have your own currency, you destabilize your price system and undermine your future growth rate. If you escalate deficits while under a common currency, you spread the inflationary and stagnation effects throughout the common currency zone. Just a fraction of negative effects spread through the country that escalated its deficit; the rest is spread throughout the entire eurozone. Public choice theorists would say one of two things. In the first case, German voters and politicians profit in the short run (higher expenditures), but will pay the cost later on (higher inflation, lower growth rate). In the second case, German politicians and voters profit in the short run (higher expenditures and transfers), but will pay just a fraction of the ensuing costs because they are spread throughout the eurozone - other countries bear a major part of the cost. Such a game cannot go on forever. If France and Germany may violate the rule, other members would follow suit, leading to huge illegitimate and excessive expenditures and probably the end of the common currency after some time.

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<sup>8</sup> For more details, see Prokopijević (2009), p. 334; or "Public balance" data at Eurostat, <http://epp.eurostat.ec.europa.eu>

In order to avert such a disastrous scenario, finance ministers met very frequently in Brussels during 2004-5. It turned out they were unable to recommend financial fines for violators, but they recommended all countries settle their “problems” in some timeframe, with the very last deadline in 2011 for the Greek public debt. That political action - combined with flourishing markets - is responsible for solid budgetary discipline in the eurozone during 2006 and 2007. Only Italy and Portugal violated the budgetary rule in 2006 and only Greece in 2007.

## 2. Irregularities During Crisis

Economic crisis arrived in Europe in August 2008 and changed the economic and fiscal picture. Sharp decline in economic activity undermined public finances. All eurozone countries are expected to exceed the limit of -3% by far in 2009-10 (see Table 1). Finland was the only country expected to be below the budgetary limit in 2009, while no country is expected to obey the rule in 2010.

**Table 1** General Government Balance in the Eurozone Countries, in % of GDP

Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Eurozone	-1,4	0,0	-1,9	-2,6	-3,1	-2,9	-2,5	-1,3	-0,6	-2,0	-6,3	-6,6
Austria	-2,3	-1,7	0,0	-0,7	-1,4	-4,4	-1,6	-1,6	-0,6	-0,4	-3,4	-5,6
Belgium	-0,6	0,0	0,4	-0,1	-0,1	-0,3	-2,7	0,3	-0,2	-1,2	-6,0	-6,3
Cyprus	-4,3	-2,3	-2,2	-4,4	-6,5	-4,1	-2,4	-1,2	3,4	0,9	-6,1	-6,3
Finland	1,6	6,9	5,0	4,1	2,6	2,4	2,8	4,0	5,2	4,5	-2,2	-4,2
France	-1,8	-1,5	-1,5	-3,1	-4,1	-3,6	-2,9	-2,3	-2,7	-3,4	-7,5	-7,1
Germany	-1,5	1,3	-2,8	-3,7	-4,0	-3,8	-3,3	-1,6	0,2	0,0	-3,3	-4,6
Greece	-	-3,7	-4,5	-4,8	-5,6	-7,5	-5,2	-2,9	-3,7	-7,7	-13,6	-7,1
Ireland	2,7	4,8	0,9	-0,4	0,4	1,4	1,7	3,0	0,3	-7,2	-14,3	-13,3
Italy	-1,7	-0,8	-3,1	-2,9	-3,5	-3,5	-4,3	-3,3	-1,5	-2,7	-5,3	-5,6
Luxembourg	3,4	6,0	6,1	2,1	0,5	-1,1	0,0	1,3	3,7	2,5	-0,7	-4,4
Malta	-7,7	-6,2	-6,4	-5,5	-9,9	-4,7	-2,9	-2,6	-2,2	-4,7	-3,8	-4,4
Holland	0,4	2,0	-0,2	-2,1	-3,1	-1,7	-0,3	0,5	0,2	0,7	-5,3	-5,7
Portugal	-2,8	-2,9	-4,3	-2,8	-2,9	-3,4	-6,1	-3,9	-2,6	-2,7	-9,4	-7,3
Slovakia	-7,4	-12,3	-6,5	-8,2	-2,8	-2,4	-2,8	-3,5	-1,9	-2,3	-6,8	-4,4
Slovenia	-3,0	-3,7	-4,0	-2,5	-2,7	-2,2	-1,4	-1,3	0,0	-1,8	-5,5	-5,6
Spain	-1,4	-1,0	-0,6	-0,5	-0,2	-0,3	1,0	2,0	1,9	-4,1	-11,2	-12,5

Source: Eurostat (1999-2008)<sup>9</sup>; For 2009 cf. Eurostat (2010)<sup>10</sup>; Forecast for 2010, see International Monetary Fund (2009), p. 17.

<sup>9</sup> Eurostat. 1999-2008. Public balance. <http://epp.eurostat.ec.europa.eu> (accessed March 1, 2010).

<sup>10</sup> Eurostat. 2010. News release, 55/2010. [http://ec.europa.eu/portugal/pdf/imprensa/indicadores\\_estatisticas\\_2010/20100422\\_55\\_eurostat\\_en.pdf](http://ec.europa.eu/portugal/pdf/imprensa/indicadores_estatisticas_2010/20100422_55_eurostat_en.pdf) (accessed April 22, 2010).

If it is clear the -4,5% fall in euro area GDP in 2009 may justify a budgetary deficit of -6,3%, how it is to justify an expected 2010 deficit of -6,6%, if the expected fall in GDP is only -0,1%? The rule is that a fall of GDP for more than -2% justifies a deficit surpassing -3%. There may be several reasons for this inelasticity of deficits. First, countries have not adjusted their current expenditures - like salaries, pensions, transfers and public procurements - to lower revenues. Second, due to a rise in layoffs, more people get unemployment compensation and this expenditure is higher. Third, the fiscal stimulus in the euro area in 2009 and 2010 is estimated to be at least 2% of GDP per year. Fourth, governments have issued guarantees for different types of commercial activities in the private sector. Fifth, rising risks in debt service enlarged risk spreads, making debt service and borrowing more costly for a majority of euro area countries. Finally, a combination of these factors may also explain the deficit inelasticity.

Poor economic performance and an inability to adjust public finances to the situation lead to a sharp deterioration in public finances in the eurozone countries. The European Commission expects in 2010 all eurozone countries to exceed the debt limit of 60% (except for Finland, Slovakia and Slovenia).<sup>11</sup> A very rapid rise in public debt of eurozone countries is worrying. At the end of 2008, public debt for the whole zone was 69,3% of GDP and rose in 2009:Q1 to 72,7%, in Q2 to 75,9%, and in Q3 to 77,6%.<sup>12</sup> Public debt of the eurozone for 2009 reached 78,7%.<sup>13</sup> With an average rise per quarter of 2,7 percentage points in 2009, public debt in the eurozone will exceed 84% in 2010 by far (the forecasted figure of the EC and non market funds like the IMF and the World Bank). The figure is already terrifying enough, saying nothing of the larger.

Some countries of the euro area may face a vicious circle of higher debt and higher interest rates. This will be fostered by two factors. First, investors will progressively abandon risky bonds of some states; to induce demand, such countries must offer higher interest rates. The more countries enter "risky" territory, the more intense competition among them will be, driving interest rates to dangerous heights. Second, reference interest rates are now lower due to the policies of the ECB, the U.S. Federal Reserve (Fed) and other large central banks that kept them low<sup>14</sup> during the crisis. In some periods, they even were negative in the real terms. When economic recovery begins one day, inflationary pressures will rise and central banks (including the ECB) will be forced to raise interest rates, making both doing business and servicing debt more expensive. Under such conditions, some heavily indebted euro area countries may face defaults.

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<sup>11</sup> European Commission (2009), p. 44.

<sup>12</sup> European Central Bank. 2009. Quarterly debt and change in debt.

<http://sdw.ecb.europa.eu/reports.do?node=100000318> (accessed March 7, 2010).

<sup>13</sup> Eurostat. 2010. News release 55, April 22, 2010. <http://epp.eurostat.ec.europa.eu> (accessed April 25, 2010).

<sup>14</sup> ECB settled rates as follows: deposit facility at 0,25%, main refinancing operation at 1,00% and marginal lending facility at 1,75% for more than for an year. This solution prevailed at the beginning of March 2010. Inflation rate of the eurozone rose from -0,3% in September 2009, to 1,0% in January and 1,5% in April 2010, and this development may indicate rising interest rates may happen soon. Cf. Eurostat. 2010. News release 58/2010, April 30. <http://epp.eurostat.ec.europa.eu> (accessed May 2, 2010).

Before considering how to fix the rising debt and deficit problems in the eurozone, let us briefly elaborate the question, is inflation a good option. It would mean to pursue policies that boost prices and wages and erode value of the currency, while keeping interest rates low. There are several reasons why inflation is not a solution. First, inflation may initially reduce a small part of debt. However, the debt burden would remain and the negative effects of inflation could create a whole set of new problems. Second, inflation would make future debt service more expensive, because inflation tends to push up interest rates. Markets are going to charge higher interest rates. Third, some countries circulate inflation protected securities, with maturities of 5 to 20 years. Higher inflation would mean costlier debt service. In summary, higher inflation undermines price stability, reduces economic growth, increases social and political stress and adds strain on all, especially the poor. For these reasons inflation is not solution for the eurozone.

### 3. How to Fix the Problem

Several initiatives may help heavily indebted countries ease their financial problems:

- External bail outs;
- Expenditure cuts;
- Revenue increases; or
- Economic recovery.

Some combination may also help, but none are easily accessible or available at low cost. Options mentioned above assume the country in trouble remains in the eurozone. There is also another option, leaving the eurozone for some time. Let us consider them in order.

Bail outs are motivated in at least two ways. First, the crisis in one eurozone country affects the whole zone via loss of credibility and the common currency devaluation. Second, debt of the state facing default is spread in commercial banks throughout the eurozone. For example, if German banks hold € 28bn of Greek debt, the choice of the German government is either to help Greece now or to help German banks later on. Despite, bail out is a very limited option and is not easily negotiable among the euro partners. One may imagine a bail out in the case of one smaller country like Greece or Portugal, but such an operation in the case of PIIGS is impossible. The PIIGS, with Belgium and eventually some other country in the queue, is too big for such a rescue operation. It is even questionable whether Spain's bail out is feasible having in mind the size of its economy and its debt.<sup>15</sup> Bail out has some consequences. First, by helping to one country, other PIIGS will neglect domestic reform and rely on foreign assistance. Second, bail out costs countries providing help by worsening their budgetary positions. If they are already under -3,0% of budgetary deficit, this adversely affects both its and the position of the eurozone. Third, bail out spreads the message weak financial discipline pays off, because others will cover the costs, while domestic politicians and interest groups accrue the benefits. Fourth, this option is not easy to sell in countries providing assistance, because tax payers may

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<sup>15</sup> Spanish debt is € 950bn, i.e., 91% of its GDP.

turn against their government for helping another country whose government heavily misbehaved<sup>16</sup> in the past. Fifth, other countries may not be ready to provide financial assistance to a country in question until the country conducts some reforms to improve its growth and fiscal position. The credibility for such a reform move is low, as we will see shortly. In summary, a bail out is an option when the economy in question is rather small, yet it is accompanied by a number of negative consequences.<sup>17</sup>

Another opportunity to address difficulties in the eurozone countries is cutting costs to improve budget positions. The reasons for this are discussed above. The EU expects Spain to continue with a deficit surpassing -12% in 2010, so cuts in this case do not look likely in the medium term. Greece promised to cut its budgetary deficit from -12,7% in 2009<sup>18</sup> to 2,0% in 2013. Such a drastic improvement has never happened in a developed country in Europe. Table 2 presents more details on Greek fiscal woes.

**Table 2** Greek Public Borrowing Needs, € bn

	2009	2010	2011	2012	2013
GDP (2009 revised)	240,1	239,4	243,0	247,6	253,8
GDP growth	-1,2%	-0,3%	1,5%	1,9%	2,5%
Government deficit	30,5	21,2	14,2	7,2	5,6
Government deficit as % of GDP	-12,7%	-8,7%	-5,6%	-2,8%	-2,0%
Debt maturities		30,2	30,3	31,8	24,8
Gross borrowing needs		53,2	44,6	39,0	30,4
YTD debt issuance		8,0			
Remaining gross borrowing needs		45,2	44,6	39,0	30,4

Source: Greek Ministry of Finance (2010)<sup>19</sup>.

Now, if a country fails to act when its budgetary problems are growing and general economic conditions are more favorable, is it likely to behave better when economic troubles are larger and when a bail out is conditioned upon broader fiscal improvement? If a country internationalizes its problem, it creates the expectation others will solve its problem. This eradicates inclination for deeper reform inside the country. Since something should be done inside the country, half hearted reform may

<sup>16</sup> For example, the Greek government cheated the ECB and the whole world 2001-2005 by depicting budgetary deficits in the range -1,0% and -2,0%, while EU inspection found out it moved -5,0% and -8,0%. In 2009 the Greece conservative government repeated the mistake by declaring budgetary deficit to be around -7,0%, while it turned out to be -12,7%. When the Greek debt crisis was in focus, the New York Times reported Goldman Sachs helped the country to get money in exchange for selling rights on revenues on airport and lottery until 2019. *Cf.* New York Times (2010).

<sup>17</sup> Eurozone arranged a financial assistance for Greece of € 110bn in March 2010, and for other troubled countries of € 750bn in April 2010. The assistance should last for next three years. It buys some time provided the eurozone is able to redefine and enforce the rules, what is again unlikely. Otherwise, it will postpone financial troubles and countries's bankruptcies. Current Greek public debt is 118% of GDP, and in three years it will be at minimum 150%. To everybody is clear that this level is not servicable for Greece, without restructuring the debt.

<sup>18</sup> Eurostat corrected the figure to 13,6% with possibility for a further correction of up 0,3-0,5 percentage points. *Cf.* Eurostat. 2010. GDP, government deficit and debt in the EU. <http://epp.eurostat.ec.europa.eu> (accessed April 22, 2010).

<sup>19</sup> Greek Ministry of Finance. 2010. Greek Public Borrowing Needs. <http://www.mnec.gr/en/> (accessed January 10, 2010).



be the best case result. Greece demonstrates this after getting financial assistance in March 2010. Eventual sharper austerity measures may induce social unrest and enlarge political troubles.

If cutting expenditures is not an option, higher revenues may improve the fiscal position of a country in difficulty. This basically means higher taxes. Customs are abolished internally and fixed externally due to the EU customs union, excise duties are partially harmonized; what remains from larger sources are the Value Added Tax (VAT), individual income tax and corporate profit tax. These sources are responsible for more than 75% of revenues in the EU15. The PIIGS have some room for a higher VAT, because the VAT rates were in April 2010 in Portugal and Italy 20%, Ireland 21%, Greece 19% and Spain 16%. The highest VAT rate in the EU27 is 25% and its height is not limited. However, higher VAT rates undermine economic activity and induce higher inflation. Concerning individual and corporate income tax<sup>20</sup>, less room exists because they are already high in the PIIGS. Higher taxes generally reduce economic activity, currently stagnant even without higher taxes (illustrated in Table 3).

**Table 3** Growth Rates in the Euro Area

Country	2006	2007	2008	2009	2010
Euro area	2,9	2,7	0,7	-4,2	0,3
Austria	3,5	3,5	2,0	-3,8	0,3
Belgium	3,0	2,8	1,0	-3,2	0,0
Cyprus	4,1	4,4	3,6	-0,5	0,8
Finland	4,9	4,2	1,0	-6,4	0,9
France	2,4	2,3	0,3	-2,4	0,9
Germany	3,2	2,5	1,2	-5,3	0,3
Greece	4,5	4,0	2,9	-0,8	-0,1
Ireland	5,4	6,0	-3,0	-7,5	-2,5
Italy	2,0	1,6	-1,0	-5,1	0,2
Luxembourg	6,4	5,2	0,7	-4,8	-0,2
Malta	3,8	3,7	2,1	-2,1	0,5
Netherlands	3,4	3,6	2,0	-4,2	0,7
Portugal	1,4	1,9	0,0	-3,0	0,4
Slovakia	8,5	10,4	6,4	-4,7	3,7
Slovenia	5,9	6,8	3,5	-4,7	0,7
Spain	4,0	3,6	0,9	-3,8	-0,7

Source: International Monetary Fund (2009), p. 6; for 2009 estimates, for 2010 forecasts.

Even if one accepts overly optimistic IMF forecasts for the eurozone presented above, it is not difficult envisioning what will happen in the PIIGS if the VAT and

<sup>20</sup> Taxation and Customs Union – European Commission. 2010. Electronic Databases. [http://ec.europa.eu/taxation\\_customs/common/databases/index\\_en.htm](http://ec.europa.eu/taxation_customs/common/databases/index_en.htm)

other important taxes are significantly higher. Euphemistically, it will put downward pressure on economic activity (i.e., it will slow economic activity for years).<sup>21</sup> Higher taxes mean less investment, less investment means lower productivity growth and fewer jobs, and fewer jobs means lower demand, and so on along the downward spiral. The certainty of such poor development is a factor to explain why authorities in some PIIGS and elsewhere hesitate to take this medicine.

Economic recovery would be the best option, since economic expansion would generate higher revenues, but is not available at the moment due to the ongoing economic crisis. Investment flourished in some PIIGS a decade ago, while now investors hesitate to go there or even leave countries. Out of five PIIGS, two experienced economic boom (Ireland, Spain), one saw moderate development (Greece) and two stagnated (Italy, Portugal) during 1999-2008. Ireland prospered because it conducted larger pro-market reforms from the mid 1980s to 2006. This attracted investors especially in the tradable sector. Spain saw larger investment but was driven by the non-tradable sector (real estate, construction, services). Some authors assume the investment boom resulted from Spanish membership in the eurozone and significantly lower borrowing costs (Paul Krugman 2010). If so, why did capital inflow not happen in Portugal and Greece, also profiting from lower borrowing costs after entering the eurozone and also with attractive coastal locations? Alternatively, competition among Spanish regions and municipalities to attract real estate investment may explain capital inflow. It was a decisive factor in the Spanish boom. Italy and Portugal were unable to conduct reforms and thus stagnated from the 1990s on.

In part D, I consider the main problems for the PIIGS to recover. The core is in the conjunction of labor market rigidity and a rapid rise in labor costs.

Another option for a country in trouble is to leave the eurozone until it settles the financial problems and return to the zone after it again satisfies the convergence criteria. How helpful is this for the eurozone on the one side and for a country's economy on the other side? Before the EU authorities decide to exclude a country from the eurozone, they should consider the following question: is it probable the excluded country - due to this move - will undergo greater political and economic instability adversely affecting the whole EU? It is naturally difficult to obtain a firm and reliable answer, because it would be a first in history and there is no control case, since experiments in history are impossible.

Eventually, the excluded country may affect the eurozone and the rest of the EU in two ways. First, Greek debt for example, is held by EU banks. According to some estimates 40% of this debt is in German and French banks. Some banks would face losses and national governments should bail them out. (Otherwise, banks would collapse and eventually poison the rest of the banking system in a county.) Second, exports from the EU to Greece would be reduced, sending recessive waves throughout the EU.

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<sup>21</sup> Until September 2010, Italy and Ireland kept the VAT rates unchanged, while Portugal (21%), Spain (18%) and Greece (23%) shifted them upwards. This move in Greece induced annual inflation rate of 5,5% and decline of GDP of 5% on the annual basis. The later was facilitated by other spending cuts as well.

The exclusion of a troublemaker from the eurozone would boost the common currency on the financial markets. This will happen less due to the reduced pressure of the country's debt to common currency. More important would be the signal of improving discipline in the eurozone. The main problem is how to exclude a country from the eurozone if serious violations of its rules were never punished before and if there is not a procedure for exclusion now?

Let us now turn to the point of view of a troubled economy. If a country exits the eurozone, it will face a larger cost of reintroducing a national currency. Although this cost is high, it is a minor problem. A greater problem is the country's risk will rise, negatively affecting both interest rates for commercial activity and for new public debts. Salaries and pensions may be inflated, relaxing public finance from this burden. The degree of relaxation depends on the government's ability to resist pressure from unions and other interest groups. Via inflation and depreciation of national currency the country may regain competitiveness of its economy. This is the way to induce more investment, curb economy, exports and the standard of living. This will not happen overnight - it will require at least several years, and probably more than a decade. To survive such a diet would not be easy at all. However, the country cannot inflate its debt because it is denominated in euro bonds. On the contrary, in the case of higher inflation in national currency, more national units would be needed to service every euro of debt. All in all, this option is good for the eurozone and less good for the country in question. For the country in question, it would be better to stay in the eurozone and to regain its competitiveness via deregulation of the labor market, lower salaries and layoffs.

If the conclusion is it is better to keep the troubled economy in the eurozone, options 1-4 and their combinations are left. In the end, if nothing from 1-4 plus exit option work, the country may default. Such a case is not envisioned by the convergence criteria and the Stability and Growth Pact, and it is difficult to figure out what would happen both with that country and the eurozone.

#### 4. Obstacles: Rigidities of the Labor Market

In order to obtain an answer to the question why it is now not likely larger investment will plague the PIIGS and so provide a good exit out of public finance woes, let us consider their competitiveness. In doing so, let us ignore other elements of the business environment and check inflation and labor cost figures for the eurozone.

**Table 4** Annual Average Inflation Rate in the Eurozone Countries, in %

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Euro-zone	1,2	1,2	2,2	2,4	2,3	2,1	2,2	2,2	2,2	2,1	2,3	0,3
Austria	0,8	0,5	2,0	2,3	1,7	1,3	2,0	2,1	1,7	2,2	3,2	0,4
Belgium	0,9	1,1	2,7	2,4	1,6	1,5	1,9	2,5	2,3	1,8	4,5	0,0
Cyprus	2,3	1,1	4,9	2,0	2,8	4,0	1,9	2,0	2,2	2,2	4,4	0,2
Finland	1,3	1,3	2,9	2,7	2,0	1,3	0,1	0,8	1,3	1,6	3,9	1,6
France	0,7	0,6	1,8	1,8	1,9	2,2	2,3	1,9	1,9	1,6	3,2	0,1
Germany	0,6	0,6	1,4	1,9	1,4	1,0	1,8	1,9	1,8	2,3	2,8	0,2

Greece	4,5	2,1	2,9	3,7	3,9	3,4	3,0	3,5	3,3	3,0	4,2	1,3
Ireland	2,1	2,3	5,3	4,0	4,7	4,0	2,3	2,2	2,7	2,9	3,1	-1,7
Italy	2,0	1,7	2,6	2,3	2,6	2,8	2,3	2,2	2,2	2,0	3,5	0,8
Luxembourg	1,0	1,0	3,8	2,4	2,1	2,5	3,2	3,8	3,0	2,7	4,1	0,0
Malta	3,7	2,3	3,0	2,5	2,6	1,9	2,7	2,5	2,6	0,7	4,7	1,8
Netherlands	1,8	2,0	2,3	5,1	3,9	2,2	1,4	1,5	1,7	1,6	2,2	1,0
Portugal	2,2	2,2	2,8	4,4	3,7	3,3	2,5	2,1	3,0	2,4	2,7	-0,9
Slovakia	6,7	10,4	12,2	7,2	3,5	8,4	7,5	2,8	4,3	1,9	3,9	0,9
Slovenia	7,9	6,1	8,9	8,6	7,5	5,7	3,7	2,5	2,5	3,8	5,5	0,9
Spain	1,8	2,2	3,5	2,8	3,6	3,1	3,1	3,4	3,6	2,8	4,1	-0,3

Source: Eurostat (2010)<sup>22</sup>.

Inflation increased more in the PIIGS than in any country of the eurozone in the period of euro membership. Inflation in Portugal, 1998-2009, amounted to 30,4 percentage points, Italy 27,0pp, Ireland 33,1pp, Greece 29,3pp (since 2001), and Spain 33,7pp. On the other side, cumulative inflation in Germany in the period 1998-2009 was 16,7pp, and in Austria 20,2pp. There is a large gap between inflation in the PIIGS and in countries like Germany and Austria. A rapid rise in the general level of prices reduced competitiveness of the PIIGS. However, if one adds the change in labor costs for Germany and the PIIGS in the period 1997-2008, the results even more worrying. German labor costs rose cumulatively over the period for 23,7pp, Greek 77,2pp, Spanish 54,7pp and Portuguese 40,0pp.<sup>23</sup> In other words, prices rose in the PIIGS more than in stable euro economies; labor costs rose even more and the consequence is the PIIGS lost an important fraction of their competitiveness. Low competitiveness will divert larger investment in the tradable sector from these countries elsewhere. This reduces the probability of an economic recovery in the PIIGS.

Countries from South Europe have had the problem of competitiveness even before the introduction of the euro. But at that time, they had their national currencies and by devaluing them they improved their competitiveness. As a result, monetary policy was inflationary, i.e. these countries had significantly higher inflation rates than Germany, Benelux or Scandinavian countries. Higher inflation was the result of union and interest group pressure on wage policy and rigidities in the labor market. Unions and interest groups pushed for higher wages, the government conceded, and in such a situation, inflation was the only instrument to control production costs. When inflation reduces salaries and pensions over some period of time, unions and interest groups renew their activity, pursue higher salaries and pensions, and the game goes on. Consequently, South European countries were endemically inflationary. The introduction of euro changed the configuration. Countries may pursue inflationary policy, i.e., they can reduce the value of the euro on the internal market, but they cannot devalue the euro because the ECB - rather than national central banks -

<sup>22</sup> Eurostat. 2010. HICP, all items (Estimate for 2009). <http://epp.eurostat.ec.europa.eu> (accessed March 1, 2010).

<sup>23</sup> Eurostat. 2010. Labor cost index - annual data. <http://epp.eurostat.ec.europa.eu> (accessed March 13, 2010).

designs monetary policy. Higher inflation in a country raises salaries and costs in the country reducing the level of its competitiveness abroad.

If the PIIGS need to recover, they need to attract more investment and create more jobs or better paid jobs, and to attract investment and jobs, these countries need to regain their competitiveness. This may be done by conducting all encompassing reforms of the state and business environment. However, if some country did not used the period of prosperity to do this, for example, 1994-2008, it is even less likely to conduct painful reforms in a period of economic crisis and deep recession. Is there any alternative?

Sure there is, but it may be even less workable. If there should be an optimal currency area, as Robert Mundell defined it, at least three conditions should be fulfilled. First, in order to be an optimal currency area, it needs to have diversified production. Second, it has to be open to trade. Third, it needs to have mobile factors of production, like capital, labor, etc.<sup>24</sup> The eurozone satisfies the first and second conditions, while it partially satisfies the third one. Capital and other factors of production are mobile with exception of labor. The idea of an optimal currency area assumes if some country or region enters economic downturn, workers go elsewhere to find jobs. For example, if Portugal and Spain face economic troubles, their workers would go to the Netherlands or Finland, where jobless rates are low and where they can find jobs. In the U.S. this is usual, when somebody loses her job in California or Florida, she goes to Texas or New Mexico. European working and living habits are different. If someone loses his job in Hamburg, he will only exceptionally go to Frankfurt to get a job. It is even more difficult for a German to move to Italy or Greece if Germany is stagnant and these two are prosperous at the moment. It is similarly difficult for Greeks or Spaniards to move to Holland or elsewhere where there are jobs available. High transaction costs make for poor international circulation of workers on the common market. People in different countries speak different languages and have different habits and different social capital. According to European statistics, less than 5 million of the total EU15 working force live and work in a foreign country.

In conclusion, workers in the eurozone and the EU do not behave along the expectation of optimal currency area theory. If this is so, labor market adjustment is localized and restricted to countries in trouble. This means adjustment is expected to happen in the PIIGS, implying a very difficult and costly process.

To see why this is so, let us take the example of Spain. Other PIIGS are not much different. Employment in Spain is highly regulated, with the main purpose to protect an employee's rights. Labor market regulations are complex. Jobs are grouped into categories, and each category has a different set of regulations, called *convenio colectivo*. These *convenios* regulate, for example, the legal salary range for each job, hours in a work day, vacation days per year. The following general rules hold for employment in Spain:

- A 40-hour working week;
- Either 14 or 16-and-a-half payments annually. If you choose 14 payments, you pay the monthly salary plus two extra payments;

<sup>24</sup> Robert Mundell (1961).

- Vacation of 21 business days for each full year worked;
- There are not sick days per se. If an employee gets sick, they must find a doctor to confirm this, i.e. to sign a *baja* confirming they are unable to work. With a *baja*, social security takes over to pay the salary of the employee;
- If you fire somebody, you pay 45 days of indemnification for each year the employee worked for you. In any case, you must pay something called *finiquito*, which mainly covers any vacation that the employee has not taken while working for you;
- The employee has a right to 15 days (including weekends) for marriage, 2 days for a birth of child or the death of a family member, one day for home relocation and four months for maternity leave.

Having such provisos in mind, will investors rush to invest and employ workers in Spain and other PIIGS? This is not likely before reforms take place in the PIIGS. The reforms will be costly both in economic and political senses. Both the state and the business environment should undergo reform. The state must cut expenditures and taxes to reduce administrative burden and to cut surplus labor. The eurozone members from South Europe are ranked low in ratings for economic freedom. In *The 2010 Index of Economic Freedom* (The Heritage Foundation & Wall Street Journal 2010), ranking 179 nations of the world according to the level of economic freedom, Spain is ranked 36<sup>th</sup> with 69,6 out of 100 possible index points, Portugal 62<sup>nd</sup> (64,4), Greece 73<sup>rd</sup> (62,7) and Italy 74<sup>th</sup> (62,7). As a rule, these four countries get even less points for labor market regulation: Spain 47,3 out of 100, Portugal 37,0, Greece 55,1 and Italy 58,2 points. Labor market points are far below marks for economic freedom in general, confirming our previous elaboration on labor market rigidity. If reform tackles labor markets, the consequences would be very clear. To Spanish workers there will be more jobs available, but they will be less paid. Other employment benefits will also be much less generous, to say nothing of lower unemployment protection and social security benefits being substantial components of the deficit in Spain. The only question is who is able to sell such a program to Spanish voters. It is not much different in other PIIGS.

## 5. Concluding Remarks

Troubles in the eurozone are neither sudden nor surprising. The rules were violated from the zone's inception and nearly throughout its eleven year history. However, violations of the budgetary rule and public debt were moderate during years of economic prosperity in Europe (1999-2008). High state expenditures were covered by rising budgetary revenues from growing economies. The picture changed dramatically since summer 2008, when the current economic recession arrived in Europe and the eurozone countries. Budgetary deficits reached double digits in several countries of the eurozone while public debt sky rocketed. Debt service became more difficult and the risk of default higher.

The main problem is the currency is highly politicized from the start. Creating the eurozone was a political decision; allowing Belgium, Greece and Italy to join with huge debt was a political decision; tolerating "creative accounting" was a political decision; not to exclude violators of rules was a political decision. The decision to

keep the PIIGS inside is political, as well as the decision to help some countries. In such a context, the euro will continue to be highly politicized, enhancing rather than reducing risks in the eurozone.

Threats to the euro are serious and for the first time in its short life, may be fatal. The single largest threat is a lack of discipline in the eurozone. The inability to exclude troublemakers in the past and now indicates discipline will be eroded rather than improved. If the case of Greece indicates to the PIIGS how the eurozone will behave when they enter the “Greek scenario”, this would be a signal of larger problems. Greek default cannot blow up the eurozone, but a default of several PIIGS can.

If countries in larger financial trouble like the PIIGS are excluded, the eurozone may manage to survive as a small currency area around Germany. If the PIIGS stay inside and their troubles grow, Germany and some other countries may consider an exit option. One option would be the euro disappears as common currency and all members reintroduce national currencies. Options available for the eurozone countries in trouble are conditioned either upon complicated and costly domestic adjustments, risky moves (to leave eurozone temporary) or complicated international negotiations (external bailouts).

The only impossible outcome from this crisis would consist in the preservation of the current *status quo*, prevailing before the second half of 2010. It is impossible to run the eurozone as before, because it allows behavior incompatible with the long term sustainability of euro. The purpose of this article was to discuss options for countries in trouble rather than to suggest what will happen.

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