

The EMS Crisis of the 1990s Parallels with the present crisis?

Daniel Gros

No. 393 / March 2014

Abstract

The EMS crisis of the 1990s illustrated the importance of a lack of confidence in price or exchange rate stability, whereas the present crisis illustrates the importance of a lack of confidence in fiscal sustainability. Theoretically the difference between the two should be minor since, in terms of the real return to an investor, the loss of purchasing power can be the same when inflation is unexpectedly high, or when the nominal value of government debt is cut in a formal default. Experience has shown, however, that expropriation via a formal default is much more disruptive than via inflation.

CEPS Working Documents are intended to give an indication of work being conducted within CEPS' research programmes and to stimulate reactions from other experts in the field. The views expressed in this paper are those of the author and do not necessarily represent any institution with which he is affiliated.

ISBN 978-94-6138-390-7

Available for free downloading from the CEPS website (<http://www.ceps.eu>)

© CEPS 2014

Contents

Introduction.....	1
1. The EMS crisis – a brief review.....	2
2. Crisis factors.....	3
3. Analytical issues: The instability of high public debt within and outside a monetary union	4
4. The case of Italy	6
5. Default versus inflation.....	8
6. Concluding remarks.....	9
References.....	10
Annex: Two vignettes.....	11

List of Figures

Figure 1. External position and current account in Ireland, Greece, Spain, Italy and Portugal, 1993 and 2008	3
Figure 2. Gross public debt and primary public deficits in Ireland, Greece, Spain, Italy and Portugal, 1993 and 2010/1	4
Figure 3. Italy: Snow-ball factor (interest rate minus growth of GDP) 1990-2011 and S&P ratings history	7
Figure 4. ‘Foreign currency’ and ‘domestic currency’ risk premia compared	9
Figure A1. Public debt/GDP ratio: Belgium vs Italy, 1998-2013	12

The EMS Crisis of the 1990s Parallels with the present crisis?

Daniel Gros*

CEPS Working Document No. 393 / March 2014

Introduction

The crisis in the European Monetary System (EMS) of the mid-1990s was considered at the time as posing an existential threat to the process of monetary integration. For a while it seemed that the markets (and the sceptics) had won in the sense that in 1993 the EMS had de facto been abandoned with the widening of the bands of fluctuations to $\pm 15\%$. But the crisis also provided a stark illustration of the problems that can arise when capital is mobile and exchange rates are set by market pressures. In the end the crisis thus reinforced the determination of policy-makers to implement the Maastricht Treaty, which had been signed just before the crisis broke.

At the time it was argued that countries like Italy (or Spain) with a weak reputation for price stability had a strong interest in entering the EMU because this would deliver lower interest rates. The argument was that by joining the single currency, Italy could convince financial markets that it would not use the printing press to inflate away the value of its debt and hence benefit from lower risk premia.

Oddly enough, the opposite argument is often used today: Some argue that Italy and Spain have to pay a high risk premium because they have lost the option to use the printing press.

The common thread in these two arguments is that a self-fulfilling crisis can arise under both scenarios.

Moreover, it has been argued that the higher interest burden could exceed the willingness of the public to pay taxes, thus pushing the country into default if interest rates stay too high.

This paper starts by providing a brief review of the EMS crisis, emphasising that the most interesting period might be the 'post-EMS' crisis of 1993-95. It then reviews in section 2 the crisis factors, comparing the EMS crisis to today's euro crisis. Section 3 outlines the main analytical issue, namely the potential instability of high public debt within and outside a monetary union. Section 4 then compares the pressure on public finance coming from the crises for the case of Italy. Section 5 uses data on 'foreign currency' debt to disentangle expectations of devaluation/inflation from expectations of default. Section 6 concludes.

* Daniel Gros is Director of the Centre for European Policy Studies (CEPS) in Brussels. This paper was prepared for the Conference on "Progress through crisis?", organised jointly by the National Bank of Belgium and the European Central Bank, 12 February 2014, to mark the occasion of the 20th anniversary of the establishment of the European Monetary Institute. The paper will be published by the ECB and the NBB in a forthcoming collective volume. The author gratefully acknowledges financial support for his research from the Belgian Federal Science Office, in connection with the 'Beldebt' project.

1. The EMS crisis – a brief review

The EMS (European Monetary System) had been set up in 1979 to create a ‘zone of monetary stability’ in Europe. It was essentially a ‘fixed but adjustable’ system of exchange rates with a grid of bilateral ‘central’ rates at its heart, with fluctuation margins of $\pm 2.25\%$ – the Exchange Rate Mechanism (ERM). These exchange rates were supposed to be defended by both sides with interventions of potentially unlimited amounts. The institutional and operational set-up underpinning the EMS (see Gros and Thygesen, 1998, for more detail summary) did not change substantially over its lifetime (essentially 1979–93), but the way the system was managed had to evolve in the late 1980s and early 1990s, as capital movements were progressively liberalised as part of the internal market or ‘1992’ programme. With free capital movements, the system became vulnerable to speculative attacks whenever the market expected discrete changes in exchange rates and national central banks could no longer control their domestic (short-term) interest rates. See De Grauwe and Ji (2013) for an in-depth analysis of short-term and long-term interest rates during the EMS.

By 1992 there had not been any change in parity ‘realignment’ since 1987, although prices and wage competitiveness indicators had diverged considerably between Germany and its main partners. At the same time, Germany experienced considerable inflationary pressures in the aftermath of the boom created by unification.

The need for a realignment appeared obvious to some (especially the Bundesbank), but it was resisted by others and badly managed. It proved impossible to agree on ‘maxi realignment’ to re-establish competitiveness in an orderly way and the Bundesbank refused to engage in unlimited intervention as price stability in Germany seemed at stake. The result was that two major currencies – the lira and the pound sterling – left the system (formally only the Exchange Rate Mechanism or ERM) – in September 1992, in the midst of public recriminations among major policy-makers. (Annex 1 provides a brief discussion of why the events of the 1992 pound meant the end of the crisis for the UK, but only the beginning of a more acute phase for Spain.)

However, even after the partial break-up in 1992, the strain on the remaining participants persisted. The most visible sign of these difficulties were the continuing large interventions at the margin, which were necessary to keep the exchange rates of the remaining participants within the normal margins of fluctuations. Public disagreement among major policy-makers contributed to unsettling markets. Bundesbank officials insisted on their duty to preserve price stability in Germany, which, in their view, limited their ability to intervene or to lower interest rates. Important policy-makers from France and other countries argued that Germany had undertaken a precise commitment to defend the EMS and that its policy-makers should take the overall European economic context into account in setting policy for the country.

From today’s point of view, it is important to note that doubts about the sustainability of public finances were not among the many factors that were held responsible for the problems at the time: apparent overvaluation of some participating currencies, German unification and the associated distortions in the German policy mix, doubts about the feasibility of EMU in the light of the difficulties of ratifying the Maastricht Treaty in several member states, and the weakness of the US dollar. Even with the benefit of hindsight, it is difficult to disentangle the relative importance of these factors, but until 1993 the sustainability of public finances did not figure importantly in official discussions or market commentary.

As the tensions continued into 1993, and the Bundesbank remained reluctant to continue its interventions, the system could no longer be defended: the margins of fluctuations were

increased to $\pm 15\%$ at the end of a dramatic ECOFIN meeting on 31 July–1 August. This led to a temporary calm in markets as the risk for speculators had become more two-sided. But after a more stable 1994, the turbulences resumed in 1995. The peseta and the lira were then the main targets. At one point in 1995 the lira had depreciated by more than 60% relative to its 1992 DM EMS parity and the differential on longer-term interest rates increased to over 6%. It is during this ‘post-ERM’ crisis period that public finance issues came to the forefront of market concerns and policy discussions. It is this period that might contain lessons for today’s crisis.

2. Crisis factors

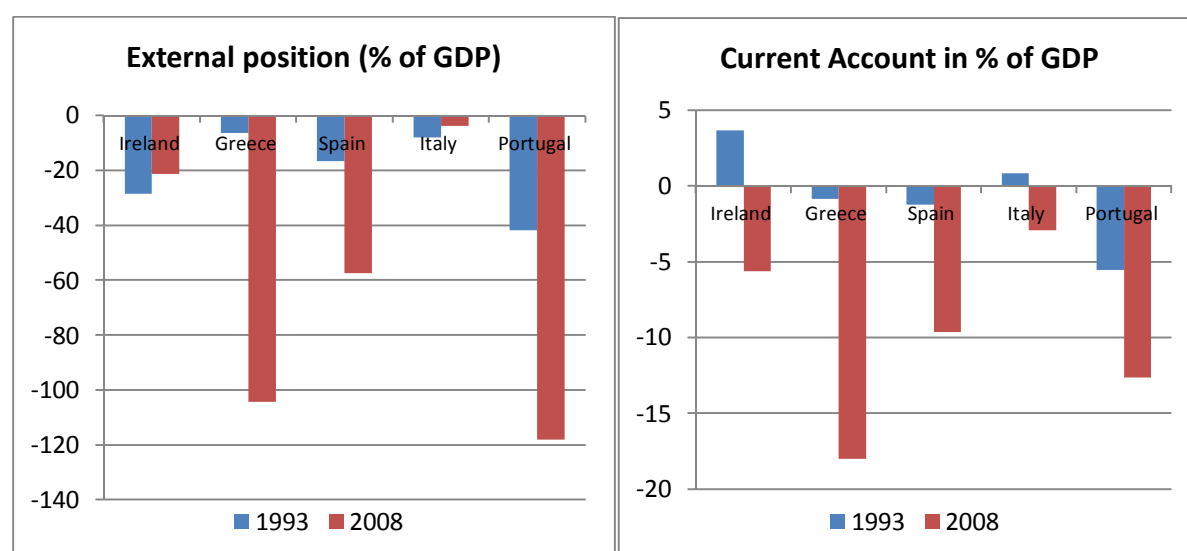
The focus of this contribution will thus be on this ‘post-ERM’ period, with particular attention on Italy and Spain (and to some extent Portugal) because these were the key countries for the EMS.

As mentioned above, the higher inflation rates in the EMS ‘periphery’ had led to a gradual erosion of their competitiveness. Different indicators (unit labour costs, relative CPIs, etc.) gave somewhat different numerical results, but whatever loss of competitiveness had accumulated during the tranquil period from 1987 to 1992, it had been compensated by the realignments and devaluations by 1993.

At any rate, the external disequilibria were minor by comparison to today, both in terms of flows and stocks. By 1993 the current account of Italy was in a small surplus and that of Spain was in a deficit of only 1% of GDP. Moreover, neither country had a history of large current account deficits as can be seen by the fact that their net external position (proxied by the cumulated current account balances up to 1993) was very small.

By contrast, Spain was running a current account deficit of close to 10% of GDP in 2008 and that of Portugal was even larger.

Figure 1. External position and current account in Ireland, Greece, Spain, Italy and Portugal, 1993 and 2008



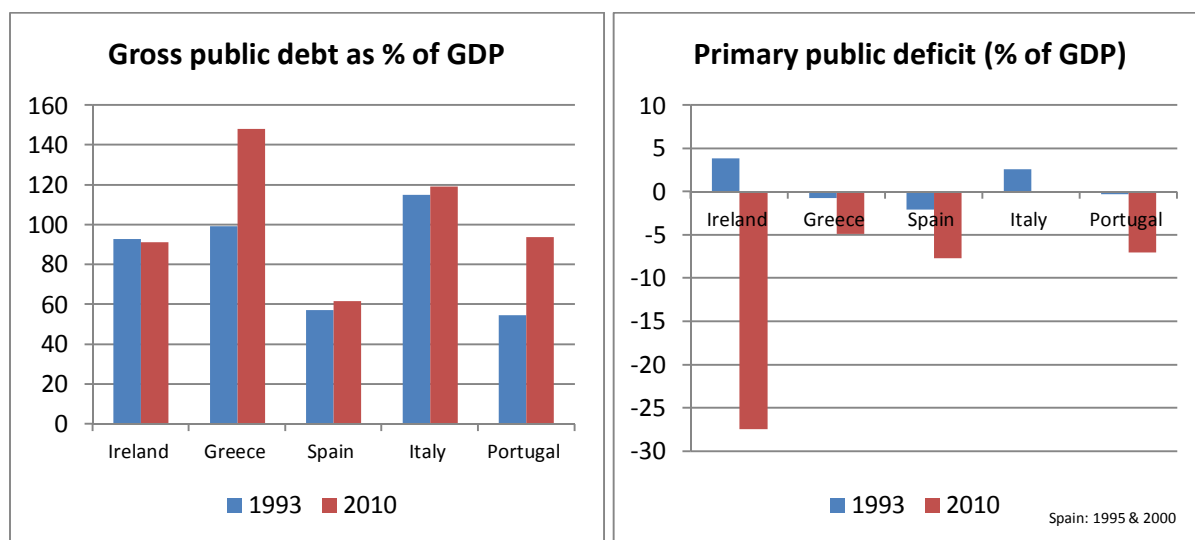
Source: AMECO, 2014.

Public finance became the key issue after 1993, but even here the situation looked less alarming compared to today. The debt ratios were actually much lower than today, except for Italy, which already at the time had a higher debt.

Fiscal deficits, however, were even higher than today. But part of this was due to higher inflation (which meant that part of interest expenditure in reality was a reconstitution of the real value of the debt). Italy had no primary deficit at the start of the crisis (1991) and its primary balance kept on improving until it reached close to 4% of GDP at the height of the crisis in 1995. The present crisis shows a very similar pattern with Italy starting in 2010 with an approximate primary balance and now a surplus of about 3% of GDP.

The primary balance of Portugal was somewhat more variable, but it was also in surplus for most the turbulent period (whereas at the outset of the present crisis, Portugal started with a primary deficit of 7% of GDP).

Figure 2. Gross public debt and primary public deficits in Ireland, Greece, Spain, Italy and Portugal, 1993 and 2010/1



Source: AMECO, 2014.

3. Analytical issues: The instability of high public debt within and outside a monetary union

The present crisis has led to the observation that a high level of public debt can lead to self-reinforcing feed-back loops and even multiple equilibria in a monetary union. The argument is quite simple: even a rather high level of public debt could be sustainable if the government had to pay only a low interest rate, say, close to the compensation required on a riskless investment. However, the same level of debt might become unsustainable, forcing a country into default, if the borrowing cost is much higher. Hence many authors (most persuasively De Grauwe, 2011) have argued that there might be multiple equilibria: if the market thinks the government can pay, it will be able to pay because its borrowing cost will be low. However, if the market thinks the government cannot pay, in practice it will not be able to pay because the high-risk premium requested will make the debt service so expensive that it will not be able to find the necessary resources. Doubts about the ability of a government to service its debt could thus become self-fulfilling. This line of reasoning has been used to

justify central banks' interventions in the market, for example, the OMT (outright monetary transactions), which have been widely credited as having stopped the crisis.

However, the EMS crisis of the 1990s had prompted a similar resurgence of the view that self-fulfilling speculative attacks could be destabilising. The first leg of the EMS crisis seemed to justify the models of self-fulfilling speculative attacks on fixed exchange rates. But the 'post-EMS' (1993-95) experience of Italy led to an application of these models to public finances. These models were actually used to justify the creation of EMU with an independent central bank. The reasoning was very similar: If the market suspects the country will abandon the commitment to price stability, it will ask for a high-risk premium (a high nominal rate of interest). But if the rate of interest is very high, the government will find it very difficult to keep the commitment to price stability because this would imply very high ex-post real interest rates and a correspondingly high burden to service the public debt.¹ The strength of this mechanism depends of course on the size of the public debt (relative to GDP).

Countries with a high level of debt thus seem to have only bad choices: if they enter a monetary union a speculative attack can force them to default. But if they keep monetary autonomy a speculative attack can force them into high inflation.

Calvo (1988) confirms this: he considers both the case of a country with monetary autonomy and the case when it does not. He finds that multiple equilibria can arise in both cases. He also finds that in both cases the high interest-rate equilibrium is Pareto inferior.

This result is not surprising. From the point of view of investors it should not really matter whether the government defaults on its obligations and imposes a haircut on investors or whether it is forced into high inflation, which then reduces the real value of the debt securities they hold, even without a formal default.

Assume for instance that within a monetary union, the probability of a default of a member country is $1/5$ and that the haircut in case of default is 20%. This would justify an interest rate premium (over the riskless rate) of 4 percentage points. If the country had kept its own currency, the risk of abandoning the hard currency policy might also be $1/5$ and the inflation rate, in case the hard currency option is abandoned, might be also 20%. This would also require for a risk-neutral investor an additional compensation (risk premium) of 4 percentage points. The risk (and thus its price) should be the same under both circumstances: being part of a monetary area or having one's own currency.

One could of course argue that, at least for a euro area member country, both the cost of defaulting on government debt and that of exiting the euro area would be much higher than the cost of merely exiting a fixed exchange-rate regime (and permitting inflation to increase to higher levels). However, the usual models of speculative attacks would then also imply

¹ This mechanism in turn is similar to the one for a fixed exchange rate system. According to Adrian & Gros (1999), a "fixed exchange rate regime can experience a self-fulfilling crisis if a high risk premium leads to high domestic interest rates that depress domestic activity, and thus make it more likely that the government will actually abandon the system. Depending on the parameter configuration, two equilibria might exist. One is characterized by low interest rates and a low (possibly zero) probability that the exchange rate commitment will be abandoned; the other is characterized by high interest rates and a high probability that the exchange rate commitment will be abandoned." This quote refers to the analysis of a country under a fixed exchange regime, but it also applies to the case of a free-floating exchange rate. The debt burden in both cases would be reduced through inflation; the difference is that under the fixed regime there is first a currency crisis and the exit from the hard peg regime. A number of other authors arrived at similar conclusions (see Obstfeld (1995) and the further references provided by Gros (2011)).

that, given the much higher cost of defaulting, the credibility of the government not to default should be much higher and consequently the likelihood of multiple equilibria much lower. This was indeed one argument widely used to illustrate the advantages of giving up one's currency.

The practical argument that speculative attacks can in reality only be of limited importance remains the same today. It is simply the fact that only a relatively small portion of public debt has to be refinanced at any point in time. For example, with an average maturity of seven years even a country with a debt-to-GDP ratio of 130% of GDP needs to re-finance 'only' less than 20% of its GDP every year. This implies that a speculative 'attack' would have to persist for some time before it would result in higher debt-service costs. This could also be observed in Italy during the 2011-12 crisis: although the interest rate reached at times 7% (for longer maturities), the actual average debt service costs moved very little.

A key aspect of the models of multiple equilibria is that even if investors demand higher interest rates to hold the public debt because they expect either inflation or a default, the government is not forced to validate these expectations. It can increase taxes or reduce expenditure to pay for these higher interest rates. This is indeed what happened during the 'post-ERM' crisis period. But not validating the expectations of either default or high inflation comes at a cost: ex post, the cost of servicing public debt is very high.

Ex ante, it is impossible to say under which regime the ex-post cost of not validating the doubt of investors concerning the sustainability of public finances is lower. This depends on the nominal risk premium demanded by investors and the debt-to-GDP ratio. Differences between these key variables might decisively affect any comparison between regimes. But a comparison between the 1990s and today is instructive.

4. The case of Italy

Let us first consider the case of Italy. Italy's debt-to-GDP ratio is today about 130%, only somewhat higher than the 120% of GDP reached already during the post-EMS crisis of the 1990s. In this respect there is thus little difference between today and the EMS crisis period.

Annex 2 shows that Belgium had an even higher debt ratio than Italy during the 1990s, but paid much lower interest rates. In this sense it is surprising that Italy was affected by the post-EMS crisis, but Belgium almost not at all. It is easier to understand why Belgium was not affected by the euro crisis because at that point Belgium had a much lower debt-to-GDP ratio owing to the fact that it had continued to maintain substantial primary surpluses during the first, calm, decade of the euro.

Given the debt-to-GDP ratio, the key indicator for the sustainability of government debt is then the difference between the borrowing cost and the growth rate of GDP, which is often also called the 'snowball factor'. If the interest rate is higher than the growth rate, the debt-to-GDP ratio will continue to grow and eventually explode unless the country continuously runs a primary surplus.

In the multiple equilibrium view of the world, a speculative attack starts when the 'risk premium', i.e. the difference between the risk-free rate and the borrowing cost of the country in question increases. How threatening an attack then is can be measured by the size of this snowball factor (multiplied by the debt/GDP ratio), but this parameter was about the same in both the ESM and the present crisis).

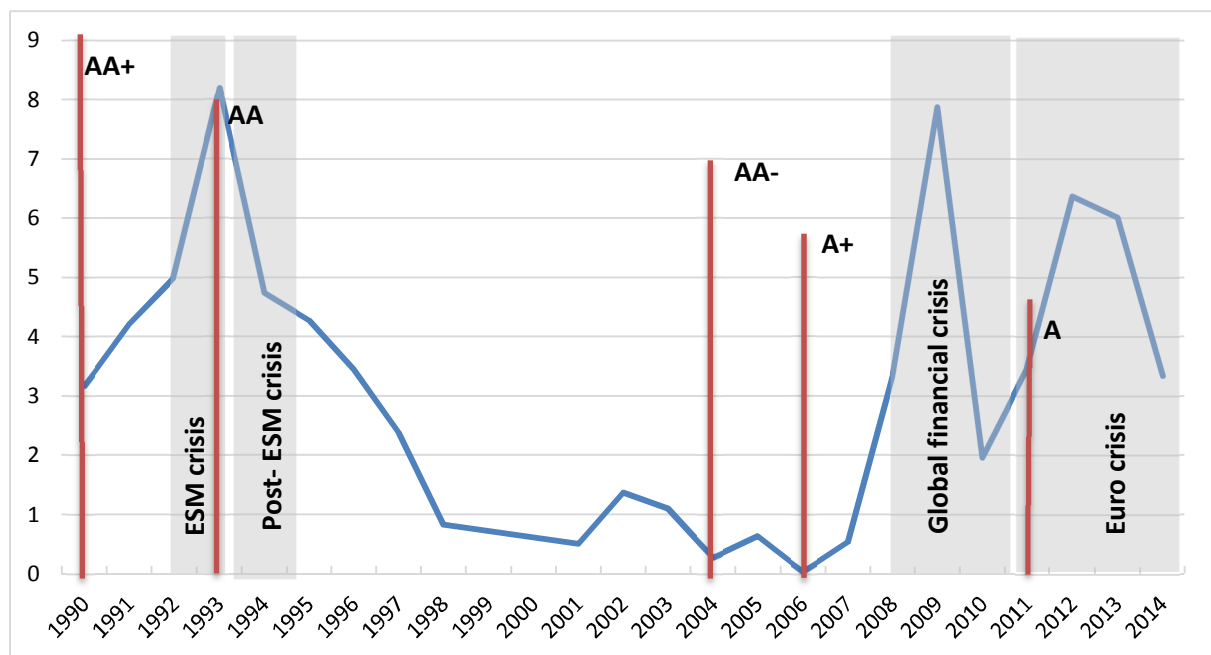
Figure 3 shows the evolution of the 'snowball effect' measured by the difference between the long-term interest rate on Italian government debt and the growth rate of nominal GDP (realised over the preceding twelve months). It is apparent that the country was under

extreme stress during the wave of speculative ‘attacks’ of the early 1990s. In 1993, when the authorities were still defending the peg within the ERM, the difference between the (nominal) interest rate and the growth rate of (nominal) GDP was over 10 percentage points. The snowball effect then declined after the country left the ERM, but it disappeared gradually only as it became more and more likely that Italy would join EMU.

Figure 3 also suggests that the sharp fall in nominal GDP right after the Lehman collapse induced a short-lived spike in the snowball effect, which was apparently discounted by the financial markets because of its temporary nature.

A comparison of this period of flexible exchange rates to the euro crisis suggests that the speculative pressures are less acute today: the snow-ball factor remains, at around 2-3 percentage points, much below the level of the early 1990s and the peak reached in 2012 remains much below the peak of the 1990s. The spread on German government securities (the benchmark risk-free rate) would have to double for the snowball effect to reach the same level of tension as 15 years ago. Moreover, interest on public debt now accounts for about 5% of GDP, which again is less than one-half than it was during the 1990s and it would take several years before high interest rates would translate into materially higher interest expenditure for the government.

Figure 3. Italy: Snow-ball factor (interest rate minus growth of GDP) 1990-2011 and S&P ratings history



Note: The snow-ball factor is defined as the difference between the interest rate on 10-year government bonds and the actual nominal growth rate.

Source: Own calculations on ECB and Commission Services (Ameco) and Standard & Poor's.

The nature of the speculative pressures during the post EMS-crisis period can be illustrated by looking at the pricing of the foreign currency debt of Italy, compared to its ‘national’ currency debt.

5. Default versus inflation

It is generally assumed that during the 1990s the difference between ITL and DM interest rates reflected expectations regarding the future evolution of exchange rates (which in turn, at least in the long run, are usually supposed to be equivalent to differences in inflation rates). However, the government of Italy could also have defaulted formally on its debt even if it was denominated in Italian lira. Reinhard and Rogoff (2009) show that defaults on domestic currency debt are rare, but they do occur.

There is way to disentangle the devaluation/inflation risk from the risk of a formal default. The government of Italy had debt also outstanding in other currencies, notably the USD. The risk premium the Italian government paid on its USD debt (i.e. the rate paid by the Italian government minus the rate paid by the US government, which presumably reflects the riskless rate in USD) should thus provide evidence on the likelihood.

Since the start of EMU, all Italian government debt is denominated in euro. The difference between the interest rate of debt issued by the German government and that issued by the Italian government during the euro crisis presumably reflected only expectations of default, as both governments now issue debt in the same currency. In this context it does not matter whether this default takes the form of a 'hair cut' or whether the country leaves the euro area.

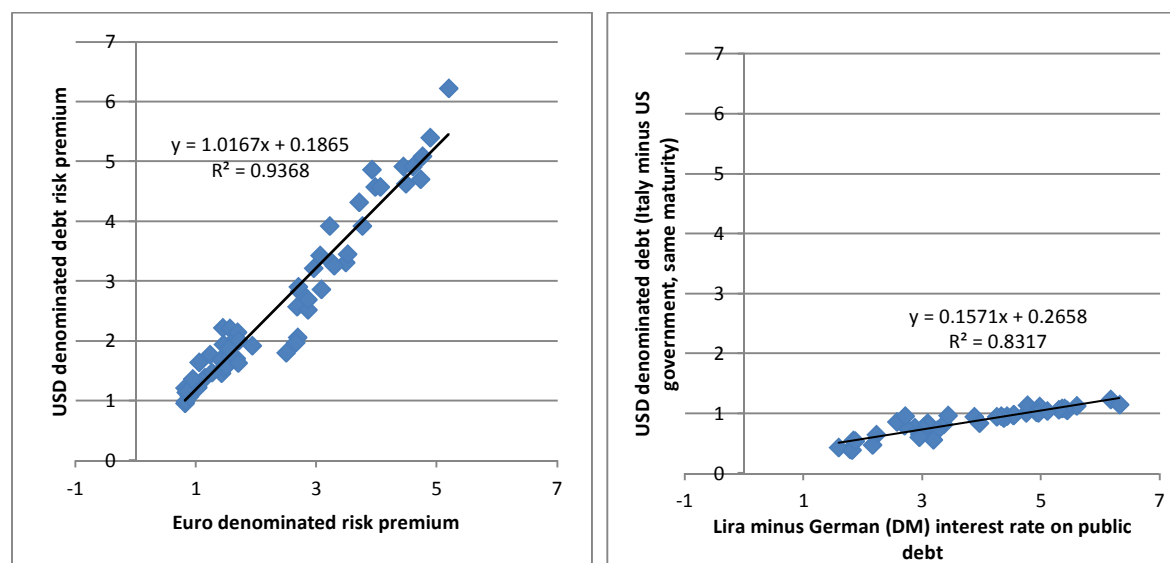
The pricing of the Italian USD-denominated debt during the 1990s compared to today can thus be used to infer the probability of a formal default. The two figures below show the co-movements of the USD spread to the 'national currency' spread during the 1990s and the euro crisis. (The national currency spread refers to ITL- versus DEM-denominated debt for the 1990s and to euro versus USD debt during the euro crisis.)

A simple comparison of the two figures below shows the key difference between the 1990s ('national currencies' DM and ITL) and the euro crisis ('national currency' = euro).

During both turbulent periods,² there was a strong correlation between the risk premia on debt denominated in USD and the 'national currency', but there was one key difference: during the 1990s, an increase in the difference between ITL and DM interest rates of 1 point led to an increase in the risk premium on Italian USD-denominated debt of only 0.15 points. By contrast, during the euro crisis an increase in the spread on Italian euro-denominated debt was accompanied by an increase in the spread on USD-denominated debt of also 1 full point. The spread on USD dollar debt follows one to one the spread on euro-denominated debt. In other words, the market is pricing euro-denominated debt as 'foreign currency' debt.

² During the credit boom period with low risk aversion, both spreads were an order of magnitude lower and the correlation fell to about 20% (with negative values at times).

Figure 4. 'Foreign currency' and 'domestic currency' risk premia compared



The data from the 1990s thus suggest that for financial markets the probability of a formal default on public debt is much lower than the probability that the government lets the exchange rate and inflation increase. This in turn suggests that the political and economic costs of a formal default are perceived to be much higher than the cost of breaking an exchange rate commitment or allowing higher inflation.

6. Concluding remarks

The overall conclusion one should draw from the experience of the EMS and post-EMS crisis of the 1990s is that a highly indebted country has nowhere to hide. If it keeps a national exchange rate, it is subject to potentially self-fulfilling speculative attacks on its exchange rate and government bond market. If it enters a monetary union, it is still subject to potentially self-fulfilling attacks on its government bond market and has to rely on liquidity support from somewhere else.

The break-up of the EMS in 1993 constitutes a 'red herring'. The fact that it proved impossible to defend a fixed exchange rate system with open capital markets does not imply that floating exchange rates insulate against speculative attacks on government bond markets. The subsequent experience (especially Italy's in 1995) showed that even when the exchange is floating, a highly indebted country can still be forced to pay very high risk premia.

A review of the EMS (Gros and Thygesen, 1998) stated: "There are two types of mistake that an exchange-rate system must attempt to avoid. The first is to defend rates that are perceived by markets to be misaligned; the second is to give in to speculative pressures when rates are in good correspondence with fundamentals."

The euro crisis suggests that a similar conclusion might be appropriate for the European Stability Mechanism (ESM):

There are two types of mistake that a Stability Mechanism must avoid. The first is to provide financing to countries with public debt that are perceived by markets as unsustainable; the second is to give in to speculative pressures when public finances are fundamentally sound.

The key question that remains at the analytical level is thus: What mechanisms make a formal default with a haircut different from debt monetisation followed by inflation.

References

- Adrian, T. and D. Gros (1999), "A stochastic model of self-fulfilling crises in fixed exchange rate systems", *International Journal of Finance and Economics*, Vol. 4, No 2, pp. 129-146.
- Alesina, Alberto et al. (1992), "Default risk on government debt in OECD countries", *Economic Policy*, pp. 428-463.
- Calvo, G. (1988), "Servicing the Public Debt: The Role of Expectations", *American Economic Review*, Vol. 78, No. 4, September, pp. 647-661.
- De Grauwe, P. (2011), "Governance of a Fragile Eurozone", CEPS Working Document No. 346, CEPS, Brussels, May (www.ceps.eu/book/governance-fragile-eurozone).
- De Grauwe, P. and Yumei Ji (2013), "The Fragility of Two Monetary Regimes: The European Monetary System and the Eurozone".
- Diamond D.W. and P.H. Dybvig (1983), "Bank runs, deposit insurance, and liquidity", *Journal of Political Economy*, Vol. 91, No. 3, pp. 401-419.
- Eichengreen, B., A.K. Rose and C. Wyplosz (1995), "Exchange Market Mayhem: The Antecedents and Aftermath of Speculative Attacks", *Economic Policy*, Vol. 21, pp. 249-312.
- Gros, D. (2011) "Speculative Attacks within or outside a Monetary Union: Default versus Inflation (what to do today)", CEPS Policy Brief No. 257, CEPS, Brussels, November.
- Gros, D. (2012), "A simple model of multiple equilibria and default", CEPS Working Document No. 366, CEPS, Brussels, July.
- Gros, D. and N. Thygesen (1998), *European Monetary Integration*, Harlow: Longman.
- Kopf, C. (2011), "Restoring financial stability in the euro area", CEPS Policy Brief, CEPS, Brussels, March (www.ceps.eu/book/restoring-financial-stability-euro-area).
- Obstfeld, M. (1986), "Rational and Self-fulfilling Balance of Payments Crises", *American Economic Review*, Vol. 76, pp. 72-81.
- Obstfeld, M. (1995), "Models of Currency Crises with Self-Fulfilling features", NBER Working Paper No. 5285, National Bureau of Economic Research, Cambridge, MA, October.
- Reinhard, C.M. and K. Rogoff (2009), *This Time Is Different: Eight Centuries of Financial Folly*, Princeton, NJ: Princeton University Press.
- Sachs, J., A. Tornell and A. Velasco (1995), "The collapse of the Mexican Peso: What have we learned?" NBER Working Paper No. 5142, National Bureau of Economic Research, Cambridge, MA, June.

Annex: Two vignettes

Annex 1. 'Teflon' UK?

Comparisons of the experience of the UK with that of Spain have been used recently to illustrate the advantage of having a national currency (Kopf, 2011 and de Grauwe, 2011). Interestingly enough, a comparison of the same couple of countries during the 1990s shows a similar pattern. The UK pound left the ERM in 1992 (along with Italian lira), whereas the Spanish peseta remained although its central rate against the DM was repeatedly realigned, leading in the end to an even-larger devaluation than that of the pound. It is thus difficult to argue that Spain's formal membership of the ERM constituted a serious constraint. However, despite the fact that exchange rates were de facto flexible for both countries, there was a big difference in interest rates, which remained low and rather stable in the UK, whereas they were high and variable for Spain.

The UK was also able to pursue an aggressive fiscal policy, letting the deficit increase to about 7% of GDP in 1994, without incurring any perceptible risk premium. In 1995, at the peak of the crisis, Spain and the UK had almost exactly the same primary deficit (slightly above 2% of GDP in both countries). There was also little difference in the public debt ratios, which in 1991 was only 43% of GDP in Spain, which was only 10 percentage points higher than in the UK.

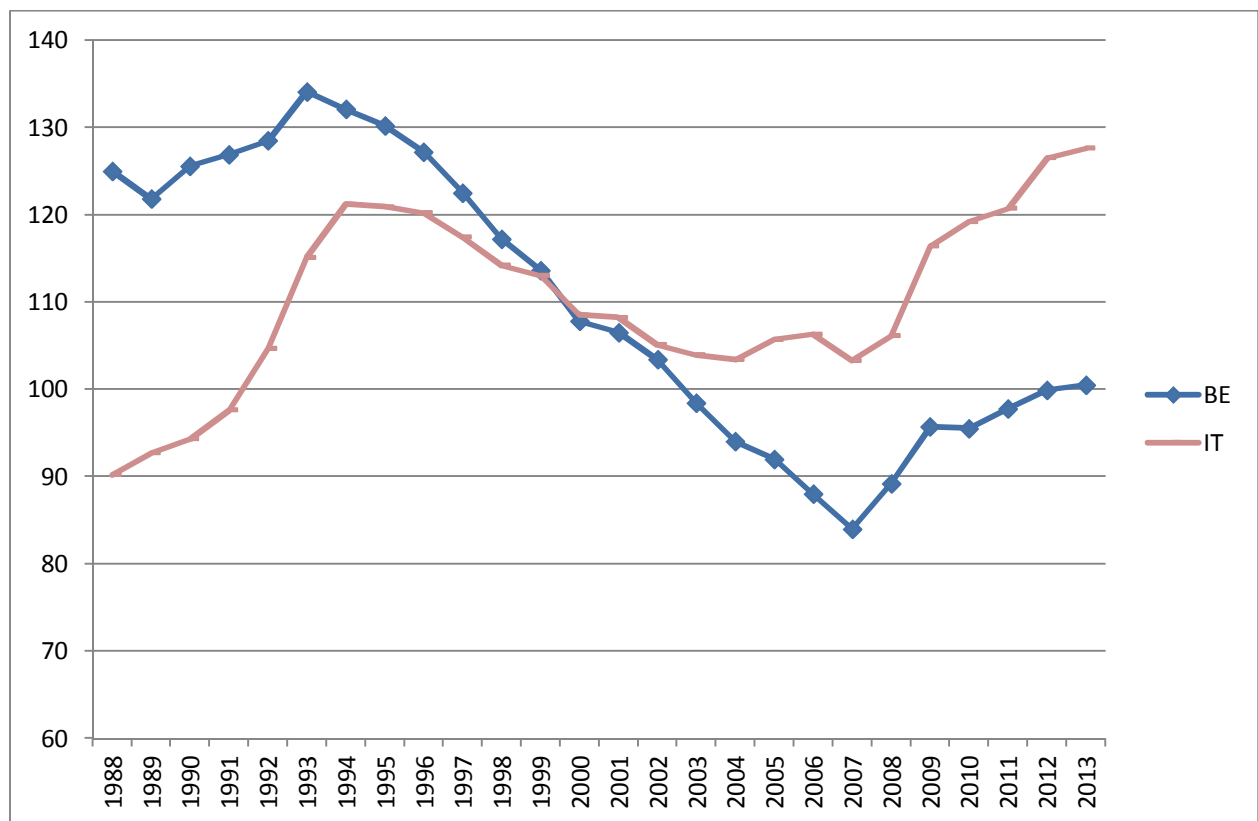
Given this similarity in the fiscal fundamentals, it is difficult to understand why the markets perceived Spain in such a different vein. (Ratings remained different. But even here the difference was not that large, with the UK remaining at triple A compared to a double A for Spain.) The UK appears to be more favourably perceived in the markets, which is independent of the exchange rate regime.

Annex 2. The dog that did not bark: Belgium versus Italy

Belgium is the one country conspicuous for its absence from the EMS crisis (except for a few months in 1995), although its public debt ratio was at the start of the crisis almost 30% higher than that of Italy (in 1991 Italy had a debt ratio below 100% of GDP, whereas that of Belgium was close to 130 % of GDP). In both countries the debt ratio increased during the turbulent period of 1991-1995. But it increased much more in Italy, partially because Belgium was running somewhat larger primary surpluses, but also because Belgium had to pay much lower risk premia. The result of these two factors was that by the end of the 1990s the initial difference of 30% of GDP had been eliminated and the two countries went then into EMU with about the same debt/GDP ratios.

Over most of the following decade there was little difference in the cost of servicing the debt between the two countries, but Belgium maintained a much larger primary surplus, especially during the good times of the early years of EMU. This proved to be an important investment since the debt-to-GDP ratio fell to 84%, which was one key reason why Belgium's cost of debt service remained low even after the start of the euro crisis, whereas that of Italy rose. After two decades, the positions of the two countries are thus completely reversed: Italy is now where Belgium was in 1991 and Belgium is today where Italy was more than 20 years ago (see Figure A1).

Figure A1. Public debt/GDP ratio: Belgium vs Italy, 1998-2013



Source: European Commission.

The return to fiscal prudence or the price of profligacy

During the period of low risk premia of the early 2000s, the return from lowering the debt ratio appeared minor. With an interest rate of around 2% in real terms, Belgium could expect to save interest payments worth only about 0.4% of GDP p.a.. The failure of Italy to reduce its debt ratio seemed thus to be of secondary importance. However, when the crisis broke, Italy had to pay a substantial risk premium on its entire debt, worth 100 % of GDP. If one assumes that this risk premium amounts to 2.5%, one could argue that Italy had to pay 2.5% of GDP more than Belgium simply because of its failure to reduce its debt ratio during the good times. For Belgium the return for its prudent policy was thus the riskless rate plus $2.5/20$, or an additional return of 12.5%. Ex post, Belgium thus made a higher profitable investment by reducing its debt ratio during the good times. Another way to look at these numbers is that Italy should have taken into account the potential consequences of a return of risk aversion and calculated a cost of public debt of 15%. This figure might actually have been even higher since this calculation is based only on the public finance aspect and does not take into account the loss of output caused by the public finance crisis in Italy.



ABOUT CEPS

Founded in Brussels in 1983, the Centre for European Policy Studies (CEPS) is widely recognised as the most experienced and authoritative think tank operating in the European Union today. CEPS acts as a leading forum for debate on EU affairs, distinguished by its strong in-house research capacity, complemented by an extensive network of partner institutes throughout the world.

Goals

- Carry out state-of-the-art policy research leading to innovative solutions to the challenges facing Europe today,
- Maintain the highest standards of academic excellence and unqualified independence
- Act as a forum for discussion among all stakeholders in the European policy process, and
- Provide a regular flow of authoritative publications offering policy analysis and recommendations,

Assets

- Multidisciplinary, multinational & multicultural research team of knowledgeable analysts,
- Participation in several research networks, comprising other highly reputable research institutes from throughout Europe, to complement and consolidate CEPS' research expertise and to extend its outreach,
- An extensive membership base of some 132 Corporate Members and 118 Institutional Members, which provide expertise and practical experience and act as a sounding board for the feasibility of CEPS policy proposals.

Programme Structure

In-house Research Programmes

Economic and Social Welfare Policies
Financial Institutions and Markets
Energy and Climate Change
EU Foreign, Security and Neighbourhood Policy
Justice and Home Affairs
Politics and Institutions
Regulatory Affairs
Agricultural and Rural Policy

Independent Research Institutes managed by CEPS

European Capital Markets Institute (ECMI)
European Credit Research Institute (ECRI)

Research Networks organised by CEPS

European Climate Platform (ECP)
European Network for Better Regulation (ENBR)
European Network of Economic Policy
Research Institutes (ENEPRI)
European Policy Institutes Network (EPIN)