Revisiting the 1992-93 EMS crisis in the context of International Political Economy

Dimitris P. Sotiropoulos
The Open University Business School, UK.

1. Introduction

This chapter revisits the sequence of the events which led to the well known 1992-93 crisis of the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS) in the context of International Political Economy. The EMS system was the forerunner of the Euro area (EA) and the crisis to some extent laid the foundation for the emergence of the subsequent institutional European framework. From this point of view, the 1992-93 crisis of EMS was an event in the long European movement towards economic and political integration.

In the beginning of the 1990s the EMS was surrounded by optimism and widely considered as "the most ambitious experiment in the international monetary and exchange rate cooperation of the post-Bretton Woods era" (Buiter et al 1998: 1). Its crisis in 1992-93, which came just two years before the Mexican currency and financial crisis, led to a series of academic and political debates followed by numerous research outputs. These discussions were subsequently put into oblivion as part of the unpleasant history of the European Monetary Union (EMU) project and only revisited in order to draw lessons for the feasibility of a fixed exchange rate system in East Asia.

This chapter reconsiders the 1992-93 crisis, trying to make a general point about the workings of monetary unions and contemporary financial markets. It must not be seen as an ex-post contribution to a lifeless debate but as an approach from the perspective of international political economy to put forward a proper reasoning for the understanding of recent economic trends in capitalism. The lessons to be drawn can also help enhance an understanding of the contemporary crisis of the EA.

Section 2 briefly revisits the historical background that led to the inauguration of the EMS in the late 1970s. Section 3 describes its economic characteristics. The analysis does not recycle mainstream economic ideas but puts forward economic reasoning emerging from the

standpoint of political economy. Section 4 touches upon the workings of modern finance, focusing on the exchange rate market. In contemporary financial markets, foreign exchange is widely viewed and treated as a distinct class of asset; it will also become clear that the scope of a monetary union is necessarily based on the unrestricted and uncontrolled operation of exchange rate market. Section 5 revisits the density of the events which built up the wide-range speculative attacks in September 1992. It also explains the reasons that necessitated the abandonment of the 'hard' version of EMS. Section 6 attempts to draw a general lesson, useful not only for the interpretation of the past but also for the analysis of the most recent developments in the EU.

2. The historical background of EMS

The EMS was an intermediate ground in the long route towards European integration. This route was by no means smooth but full of contradictions, tensions and crisis episodes. The idea of a common market with exchange rate stability has always been a major priority and concern.

The Treaty of Rome in 1958 created the European Economic Community (EEC) with the basic aim of gradually moving towards a common market for goods, services labour and capital. During this period of time, exchange rate stability was being secured by the Bretton Woods regime (until its demise in the beginning of 1970s).[1] Nevertheless, the tensions in this regime in the late 1960s threatened the coherence of the international monetary system and led the EEC to mount a summit in the Hague in December 1969. This summit acknowledged once more that a monetary union is the major long term goal of the Community. German and French governments firmly supported this plan, whose terms were made more concrete in the so-called Werner Report. The latter put forward a three-stage approach to monetary union:

> The first stage would foster policy coordination; in the second stage, realignments of exchange rates would require agreements among the countries participating in the plan; in the third stage, a unique central bank, similar to the Federal Reserve System in the United States, would take control over European monetary policy (Buiter et al 1998: 22).

Monetary integration was also seen as a "vehicle for pushing forward political integration" (Eichengreen 2000: 4). The geopolitical aspect of European unification as a process that might challenge US neo-imperial hegemony must not be underestimated; this was a target to be pursued by insisting on agendas for strong economic performance and coordination. However, the interplay between economy and politics was dialectical: the economic process of unification was always based less on strict economic reasoning and more on straightforward political determination. Economic integration and convergence were in most cases conceived not as prerequisites but as *results* of European-wide institutional reforms. In other words, the institutional project of European unification must be seen as one of guiding, disciplining and shaping economic behaviour in line with particular economic strategies

(which favour austerity type policy regimes). We shall come back to this issue in the next section.

The *stagflation* (high inflation accompanied by stagnation) of 1970s and the unsuccessful attempts to establish a stable exchange rate system brought the European Monetary System (EMS) to life at the end of 1978. After a short period of negotiations this plan attained Community-wide consensus. In brief, three were the main features of EMS.[2] First, according to the European Exchange Rate Mechanism (ERM), each EEC country committed itself to limit the fluctuation of its exchange rate within a band of ±2.25% around its bilateral central parity against other members of the ERM (the same limit was ±6% for Italy as well as for Spain, the UK, and Portugal, that did not initially join the ERM). Second, a new European Currency Unit (ECU) – a weighted basket of the ERM currencies due to each country's economic importance – was the new means of settlement among EEC central banks. Third, extensive financing mechanisms were created to ensure that each member state had the necessary resources to meet temporary difficulties in financing balance of payments deficits and in defending bilateral exchange rate parities. For this purpose "twenty percent of the member countries' gold reserves had to be deposited with the European Monetary Cooperation Fund (EMCF) in exchange for the equivalent value in ECUs" (Volz 2006: 6). Moreover, "three kinds of credit facilities were created: the very short-term facility (VSTF), the short-term monetary support (STMS), and the medium-term financial assistance (MTFA)" (ibid.).

The start was uneasy, with a great deal of pessimism about the fate of the newly established exchange rate system. Until the first half of the 1980s cumulative realignments exceeded the narrow band limits, allowing inflation differentials to reproduce themselves across the EEC. In addition, the existence of controls in the movement of capital relaxed to some extent the discipline of fiscal austerity and anti-inflation priority targets. The 'new' or 'hard' EMS that was inaugurated with the Single European Act (SEA) of 1986 attempted to enhance the credibility and the disciplining character of the system to anti-inflationary policies by removing capital controls and creating a single market for financial services until 1990. Financing facilities supporting the role of European central banks were further enhanced by the Basle-Nyborg Agreement in 1987. "This so-called New EMS was set for a relatively long period of European exchange rate stability. No realignment took place between January 1987 and September 1992 [...]. Meanwhile, as the idea of complementarity between a single market and a single money received widespread political (but little analytical) support, proposals for a European Monetary Union were back on the European agenda" (Buiter et al 1998: 29).

This mini success of the 'hard' version of the EMS rekindled the three-stage approach to monetary union of the Werner Report. Jacques Delors chaired the Committee of representatives from EC central banks which set forth the well-known 'Delors Report.' The latter suggested that the decision to enter the on-going union process should be regarded as a commitment to pursue the goal of a final monetary union. This report was adopted as an

official blueprint by the Madrid Summit in June 1989. The summit launched a political process that led two years later to the Maastricht Treaty in December 1991.[3]

As we shall see below, this European optimism was curtailed but not destroyed by the EMS crisis of 1991-93. The latter revealed the weakness of the exchange rate system without undermining either the final target of the common currency or the priority to fiscal austerity and price stability. It prepared thus the Stage III of the EMU, which began in 1999 by irrevocably locking exchange rate parities and making for the introduction of euro.

3. The economic character of the EMS: a general outline

The idea of a European monetary union gained solid ground at least from the late 1960s in the wake of the declining Bretton Woods regime and marked all subsequent institutional developments that led at the end of 1980s to the famous Delors Report.

There is no doubt that the Optimum Currency Area (OCA) paradigm[4] was at the heart of the discussions about a European monetary union. The roots of this approach lie in the neoclassical conception of money. The latter, and all innovations attached to it, are to be understood as genuine (private sector) inventions that reduce transactions costs faced by market participants. This simple idea "has led numerous economists to construct models showing how the private sector could evolve towards a monetary economy as a function of a search for cost minimisation procedures within a private sector system, within which government does not necessarily enter at all" (Goodhart 1998: 410). The OCA can be seen as a natural extension of this analytical approach into the spatial dimension. The gradual replacement of national currencies by a common one would accordingly minimize a class of transaction and adjustment costs.

In the above context, the process of European unification was more or less explicitly dominated from its very beginning by the pronounced *aversion to exchange rate fluctuations*. "One after the other, the political initiatives undertaken to strengthen the process of European integration have led to attempts to lock European currencies into systems and mechanisms that limit the flexibility of their conversion rates. Even during periods when the tide of European integration was at a low ebb, the idea and ideal of exchange rate stability never completely disappeared from the institutional architecture of the Community" (Buiter et al 1998: 19). From this point of view, the long history of the European unification can be summarized as the "quest for exchange rate stability in Europe" (this widely used expression was initially coined by Giavazzi and Giovannini 1989). Nevertheless, this quest is the epiphenomenon of another long term quest for low inflation (competitiveness) and for fiscal discipline linked to policies of austerity. This point was implicitly made at an early stage by Fischer (1987): participation in the ERM was welcomed as an institutional mechanism for 'importing' disinflation and 'borrowing credibility' from the Bundesbank through the stability of the exchange rate.

To understand the nature of the argument, let us suppose that there are two kinds of economies: a peripheral one which is inflation prone and less competitive in the global

market and a central one which is more competitive and able to control inflation to relatively low levels. Why do they come to a monetary union or to a pegged exchange rate system? A first answer is given by the following passage which reflects the mainstream line of reasoning:

> An asymmetric system where the low-inflation country sets the pace of system-wide monetary policy was suddenly seen as an opportunity for monetary and fiscal authorities in inflation-prone countries to make an explicit and publicly verifiable commitment to contain and overcome the forces making for domestic inflation (high monetary growth fed ultimately by fiscal deficits) and loss of international competitiveness (Buiter et al 1998: 27).

In the context of political economy we can reconsider of this argument as follows. Within an internal conflicting social formation there are classes which favour expansionary economic policies. The latter boost domestic demand, making room for wage increases and welfare state services (with both these tendencies likely to create inflationary pressures). For a sustainable economic development, the burden of these policies falls necessarily on capital. Hence, capitalists would be unhappy with expansionary policies and they will demand price stability and fiscal discipline – an austerity mix of economic policies. The above passage indicates that for a peripheral economy, joining the fixed exchange rate system will secure fiscal discipline and competiveness. It will expose domestic firms to international competition, putting the adjustment pressures solely upon labor. It will also undermine the welfare character of the state. It will therefore embed a form of discipline on domestic labor with exploitation strategies favorable to capital.[5] In other words, open economic borders and exchange rate pegs create an economic milieu that benefits the interests of capital. This is the basic incentive for the ruling classes of a peripheral economy to join a fixed exchange rate system similar to the ERM. For a competitive economy of the center the reasoning is pretty much the same. Now the pegged exchange rate system ensures not only discipline to austerity and competitiveness but also exporting markets purged of protectionist biases.

There is one issue in the above mechanism which must not go unnoticed. *The austerity character of the whole setting depends on the insistence of the core on deflationary policies*. Otherwise there will be some room for expansionary policies both in the center and in the periphery. The system has a heart (core) and this heart must not run contrary to the rules of the game. Let us see why.

During the 1980s the German mark was considered as the key currency in the EMS and Germany itself as the most important core economy (with a 'strong' currency and a tendency to generate trade surpluses). On the other hand, inflation prone Italy can be regarded as an example of a peripheral economy (a 'weak' currency with a tendency for trade deficits). In this setting, the Italian lira will have a clear tendency to depreciate against the German mark. What must be the nature of the response in order to defend the exchange rate parity?

A symmetric response (by both of Italy and Germany) as a rule would tend to negate the austerity character of the monetary union. The low inflation core economy would have to

embark upon domestic expansionary policies (a reduction in interest rates), not to mention the necessary interventions in the exchange market to counteract the revaluation of its currency. But this type of reaction would undermine the need for austerity in the periphery. From the viewpoint of the capitalist classes in both countries, this would not be an attractive scenario. As we shall see below, this reluctance will make the symbiosis vulnerable to unexpected events, but this is pretty much the cost to be paid for securing the long-term interests of capital. The character of the adjustment must thus be asymmetric (Italy's sole responsibility is to defend its currency peg) with an option of symmetric intervention in the extreme case of financial distress. Otherwise, the idea of the monetary union will not be an appealing strategy for ruling classes (of course, this is the description of the general mechanism, which cannot capture other contradictions that may arise in the event of a crisis).

4. **The workings of financial markets**

4.1 Uncovered interest parity and cross border capital flows

Speculative attacks played indeed a crucial role in the crisis of 1992-93. We must therefore take into consideration the workings of modern finance and the way it fitted into these events. This section will not exhaust the issue. It will just put forward some basic ideas which will be part of the interpretation in section 5.

The so-called uncovered interest parity (UIP) condition from international finance is the benchmark model. The idea is simple. In an economic region with fixed exchange rate parities, similar assets with the same maturity must have similar yields regardless the currency denomination. Therefore, interest rate differentials on similar assets cannot be consistent with the assumption of equal yields unless there is an expected currency depreciation over the period.[6] The following equation can help us clarify the point:

$$r - r_f = S^e - S$$

r is the domestic interest rate for a single country (say Italy) while r_f is the interest rate on a similar asset in another (foreign) country of the union (say Germany). S is logarithm of the current exchange rate of the domestic currency in terms of the foreign currency (e.g. the price of lira in units of marks) and S^e the logarithm of the expected price of the same exchange rate at the time of asset maturity. Note that the expected price is usually reflected in the forward and futures exchange rate market, but we shall leave derivative markets out of our exposition. The message of the above equation is straightforward: interest rate differentials (r-r_f) measure the expected (probable) shift in the exchange market (appreciation or depreciation: S^e-$S \neq 0$). If market participants believe in the pegged exchange rate between the two countries, then S^e-$S=0$ means that there would be a tendency towards negligible interest rate differentials: r-r_f = 0. Otherwise, a relative higher domestic interest rate (r-r_f>0) is a signal of an expected exchange rate depreciation in the near future (S^e-S>0[7]).

We can understand this as follows. If the interest rate in Italy is 15% and in Germany is 10%, then the Italian lira is expected to depreciate against the German mark by

approximately 5%. Put simply, as the Italian lira depreciates, higher domestic yields will not make a stronger investment case there, as opposed to Germany. But uncovered interest parity has also another implication when read inversely: if market participants expect a depreciation of the domestic currency in the near future, an exchange rate peg can only be sustained by a rise in the domestic interest rate r (or, alternatively, by a fall in r_f; nevertheless, this interest rate is out of the control of domestic authorities). In practise this presupposes a policy mix of higher short-term borrowing costs, fiscal austerity, and intervention in foreign exchange market (the maintenance of proper amount of international reserves and credit lines by resorting to the VSTF). It also presupposes a loss in the control of monetary policy since it is subsumed to the exchange rate peg. This result is in line with the general rule of international macroeconomics, the so-called 'policy trilemma.'[8] According to the latter, for an economy that allows free movement of capital across its borders, exchange rate stability can only be satisfied if monetary policy is the 'variable' to be adjusted. Practically this implies loss of traditional monetary policy tools

The gradual liberalization of European financial markets increased cross border capital flows. Economies less competitive than Germany, but with higher growth prospects and interest rate yields, like Spain and Italy, experienced significant capital inflows. There were two factors promoting this development (or alternatively, two sets of financial strategies[9]). The first is *portfolio diversification*. International investors and hedge fund managers could include assets in their portfolios from a bigger range of choices encompassing now the countries of the so-called European 'periphery.' The second factor concerns the profit opportunities from intra-ERM yield differentials in the context of fixed exchange rates. In plain terms, investors could exploit different interest rates between EMS participating economies, betting on the stability of exchange rates. While there are many different ways to implement a bet like that, we can understand it as a simple case of *carry trade*. The latter, which is a widely established investment practice in contemporary exchange rate markets, involves borrowing in a currency with low interest rate and simultaneously investing in another currency with higher interest rate.[10] If market participants anticipate a credible ERM, then the condition of uncovered interest parity does not hold: interest rate differentials can persist in the absence of exchange rate realignment. An investment in Italian assets will have higher expected returns than a similar investment in German assets, and this difference will not be offset by exchange rate depreciation, since the economies of the EMS are determined to defend the pegged ERM system.

The functioning of financial markets is, in reality, much more complex, but the above-mentioned strategies capture fundamental tendencies that have played important roles in the frame of the ERM.

4.2 On the trade off between 'flexibility' and 'credibility'

Form the view point of a country with a weak currency, defending the exchange rate peg is theoretically possible but it comes with a social cost, since it is conditioned upon a policy mix

of austerity and higher borrowing costs (for both private and public sector). Within limits, this policy mix is welcomed by capitalist power since it disciplines state governance in line with neoliberal strategy: this was, after all, the fundamental incentive for European economies to join the ERM. Nevertheless, the safe 'limits' of austerity can easily be challenged by unpredicted events due either to internal class conflicts or to international conjuncture. Mainstream economic theory categorize these two sets of unexpected events as 'shocks' external to the economic system in order to statistically model them. This is a rather misleading definition: it mystifies the substantive economic and political roots of the processes.

There is a certain threshold beyond which a pegged exchange rate loses its 'credibility' because defending it comes at too high a cost. For instance, a sustained rise in domestic interest rates to defend a weak currency can threaten the viability of the banking sector and can easily dampen aggregate demand and investment activity.[11] This development in its own right may easily derange public finances. At the same time, a speculative attack in the absence of capital controls can only be met by resort to significant amounts of foreign exchange. In practise, this is hardly ever the case. But even under the ERM facility that enabled inter central bank credit lines, the strong currency country would be unwilling to provide unlimited credit since this would accordingly cause first, losses for the central bank in the face of a possible exchange rate realignment, and second a probable liquidity inflow to the economy which would endanger the anti-inflationary policy framework.

In other words, there is a certain trade off between credibility of a fixed exchange rate system and the inherent sustainability or flexibility to deal with unfavourable developments. The commitment to defend the peg therefore cannot be considered as unconditional. In this sense, the policy costs it imposes both upon the centre and the periphery of the EMS is the necessary condition for a possible speculative attack: speculators being aware of the 'costs' can bet against the peg.

This is why the ERM left some room for adjustments by implicit escape clauses. In fact it was a fixed exchange rate system with a limited option to realign. The flexibility of the peg is well verified by the data. For instance, at the period between 1979 and 1985, the cumulative devaluation of the Italian lira and the French franc against the ECU turned out to be 20.25% and 9.25% respectively; while, the cumulative revaluation of German Mark against ECU was 22.25%.[12] The real question involved is how to make room for possible realignments without sacrificing the credibility of the system along with its disciplining austerity character. In practise, this is a difficult equation to be solved. A government must devalue without signalling to the market that inflationary anti-austerity policies have been adopted. But this is not an easy and manageable target to meet.

4.3 Strategic sequential trading in the context of political economy

Financial markets, well aware of the above trade-off, can set up speculative attacks. In section 4.1 a mechanism was suggested for betting on the credibility of a pegged exchange

rate mechanism. But what if private sector investors anticipate a devaluation or loss of faith in the credibility of the system?

Let us take the example of the British pound, which joined the ERM in October 1990.[13] UK had inflation three times higher than Germany, much higher interest rates, double digit public deficits, and most importantly a financial system full of home mortgages, the great majority of which had floating rather than fixed interest rate conditions. It is obvious that interest rate differentials suggested a forthcoming devaluation of sterling. Anticipating some realignment in the near future, exchange market speculators borrowed in British sterling and invested in German marks or other strong currencies. This line of transactions is identical to selling the weak currency (sterling) and buying the strong one (D-mark) in order to take advantage of the coming devaluation in the short-run. As we mentioned above, this profit seeking incentive could only be counteracted if the British government had decided to raise short term interest rates. Given the economic data, UK government's position was vulnerable because the economic and social costs of defending the peg would be extremely high. Higher short term interest rates could put the economy into a recession, threaten the stability of the banking sector, increase the debt burden to households, cause a deterioration in public finances and curtail demand. Private sector investors were well aware of all these events and came up with proper strategies (selling the pound) to take advantage of the government's predictable behaviour.

This is exactly what happened after the summer of 1992. On September 16, the so-called 'Black Wednesday,' a group of speculators, on the basis of an evaluation of the state of the UK economy and a series of other events in the context of the EMS which had wounded its credibility, launched an (uncoordinated) attack to force the withdrawal of British sterling from the ERM. They anticipated that the British government would not be in a position to defend the peg. The route of the events is pretty much known: "in the morning the Bank of England raised the minimum lending rate from 10 percent to 12 percent. A few hours later, a new increase to 15 percent was announced but never implemented. Sterling closed below its ERM floor in London. In the evening, the Bank of England announced the 'temporary' withdrawal of sterling from the ERM. A few days later, on September19, return to ERM was postponed indefinitely" (Buiter et al 1998: 59). The day after the crash, the Bank of England brought its interest rate back to 10%, validating ex post the expectations of the market and justifying the speculative attacks.

This strategic sequential type of trading is just one example of how financial markets work. Investors try to anticipate the pattern of the events several steps ahead, forcing the counterparty to commit an 'error.' Their move hinges upon the analysis of the economic and political conjuncture and of relevant past moves and behaviour. It looks like a game of chess.[14] Nevertheless, *this strategic game was crucial for the organization of the EMS as a system that disciplines government policies to neoliberal austerity*. It may sound contradictory, but without the threat of 'speculative' attacks the rules of EMS could not be implemented and reproduced. In fact, markets take into account the likelihood of a negative development (and try to make a profit out of it) and impose the terms on governments for

dealing with it. Governments, being aware of the workings of the markets, organize their policies in a precautionary manner in order to avoid these negative attacks. Governments address the dilemma 'austerity or economic instability' to the society and win consensus to the austerity agenda. This means that market attacks in line with the interests of capital are by and large a fundamental mechanism for organizing consensus on austerity.

The above setting is not of course shielded against crises and unfavorable developments. But even crises are extreme moments within the very same disciplining mechanism. What followed the September crisis of the ERM was not the breakup of the ERM system but the quest for a tighter fiscal policy in the economies affected by the exchange rate crisis. Very illustrative is the case of Italy, which experienced an attack similar to the one against sterling. The first serious tensions for the Italian lira appeared in the summer of 1992. The ongoing outflow of reserves reinforced consensus to further austerity and wage reductions. At the end of July "employers, unions, and the government signed a historic agreement on income policy, disinflation, and labour costs, which reformed the system of industrial relations, abolishing what was left of the *scala mobile*, that is, the automatic indexation of wages and salaries" (Buiter et al 1998: 55). After the severe attacks of September, Italy took further steps "toward an ambitious project of economic reform, which hinged on containment of the budget deficit, privatizations of state enterprise, and stabilization of lira. The emergency budget for 1993, approved by the cabinet on October 1 and presented to the Parliament three weeks later, involved spending cuts (including a freezing of salaries in the public sector) and tax increases for 1993 amounting to 5.8 percent of GDP" (ibid.: 61). From this point of view, financial markets do not cause states to fade away but their policies are in line with a particular form of state governance: the one which tends to dissolve the welfare aspect of it.

5. A (re)interpretation of the events

This section will revisit some of the events which contributed to the 1992-93 crisis of the ERM in light of the above discussion.[15] Initially it will focus on the developments which made the ERM vulnerable as a system. Then it will describe the speculative attacks, their results and how the 'hard' version of the ERM came practically to an end.

5.1 Towards the summer of 1992-93

German reunification was a major event in the history of the twentieth century. It also proved a painful economic event not only for the German economy but also for the stability of ERM as a system. For the newly unified German economy there were two striking economic results: a boost in domestic demand and in inflationary pressures. Both were unusual for the Western part of the country and both tended to derange the export orientated structure of the economy. While the first reaction of the Bundesbank was rather cautious and completely subordinated to the political priorities of reunification, by the beginning of 1992 it became

clear that this modest attitude was over. The target of price stability became again an unambiguous priority and monetary authorities were ready to use interest rate instruments regardless of possible international consequences to the credibility of ERM. From the end of 1991 until the summer of 1992, interest rates in Germany were steadily increasing. This made the asymmetric defence of weaker currencies an even more difficult task.

This difficulty was combined by some other conjectural economic developments. The UK economy was mired in a severe recession (it was considered then as the worst recession in the post-war history of the country) accompanied by relatively high unemployment. The pressures for expansionary domestic policy (lower interest rates and inflation to alleviate the symptoms of the crisis) were in contradiction with the goal of defending the exchange rate peg, especially in the wake of the unusual increases in German interest rates. The same wave of recession was also felt by other European economies with lag in 1992: France, Italy, Spain and Germany. The position of the Italian government was particularly difficult. A deterioration in economic activity was associated with serious fiscal problems and a noticeable reduction of international reserves. Given all the above facts, it is not difficult to understand why market attacks focused mostly on the Italian lira and the British pound.

There are three more unexpected events which eroded investors' faith to the overall credibility of the ERM. First, the economic recession caused a deterioration in public finances and widened the gap between the Maastricht fiscal criteria and the economic performance of the EU as a whole. This was considered as a negative development, curtailing the optimism for the whole project. At the same time, the credibility of the ERM was further wounded by the result of the national referendum in Denmark. The Maastricht Treaty was rejected, contrary to the expectations. We have to underline the fact that although the Danish people said no by a narrow margin (50.9% to 49.4%), all main political parties had campaigned for the Treaty. This result boosted the confidence of the anti-EU political groups all over Europe and weakened the future prospects for European economic integration especially among market participants. It also functioned as a catalyst for subsequent events, adding to the mood of speculation in the markets against the credibility of the ERM. Finally, on September 8 1992, for the second time in one year, the Finnish central bank was running out of international reserves to defend the currency, all the while reluctant to raise short-term interest rates above their current already high level of 14%. Hence, it let the Finnish markka freely float and the new exchange value embodied a 13% depreciation against the German mark. This was a clear sign of a significant mismatch between official targets, on the one hand, and real economic trends and market expectations on the other.

In brief, the above events of the first half of 1992 weakened confidence and the overall credibility of the ERM project. While interest rate differentials throughout EMS suggested that markets expected devaluations vis-à-vis the German mark, economic conditions both in the centre and the periphery raised serious doubts about the ability and willingness to defend the current exchange rate peg. The stage was ready for the first severe speculative attacks, betting against the credibility of the ERM and the overall stability of the exchange rate pegs.

5.2 The speculative attacks and the dawn of 'Black Wednesday'

The aforementioned developments made it rather clear to both market participants and state officials that the existing currency parities in the ERM were unsustainable. The first signs of speculative bets were already in place from the beginning of the summer, especially against Italian lira. In the official meeting of the EEC in Bath on 5-6 September 1992, ministers of finance and central bank governors expressed their worries, mostly complaining about the high levels of German short-term interest rates. These high numbers made the defence of the currencies under attack much harder, both in technical and social terms. The German side communicated its unwillingness to radically shift its restrictive monetary policy and instead came up with a compromise proposal: it could consider lowering interest rates only if there were a general realignment (devaluation) of all other currencies. This trade off would reverse the inflationary pressures in the German economy that would be caused by lower interest rates. The proposal indicated Germany's willingness to come to an arrangement that did not involve aborting its overall monetary policy. Nevertheless, it was not supported by any other participant in the meeting.

The lack of coordination which was widely reported in the press further boosted the speculative mood. Bets anticipating a near future depreciation of the lira intensified after the Bath meeting. In the following week, the Bundesbank and the Bank of Italy offered a similar proposal for intra-ERM coordination, officially acknowledging the unsustainability of the current parity of lira: only a few days after the Bath meeting, the defence of the lira required interventions of 24 billion German marks in Frankfurt and approximately 60 billion German marks across Europe. The proposal suggested a general realignment: a 3.5% revaluation of German mark and 3.5% devaluation of the lira against all other currencies in the ERM. In practice, this was equal to a 7% devaluation of the lira against the mark. The proposal also suggested a significant cut in German interest rates, but presupposed coordinated actions which other ERM parties refused to pursue. This second coordination failure in such a short time period evidently evaporated any remaining faith in the credibility of the ERM. Nothing could convince even the most bona fide investor that exchange rate parities would remain unaltered and the current interest rate differentials would persist intact.

In the following days, policy reactions across Europe were in the right direction but were unable to alter market beliefs. Initially the Italian lira was the only currency to be devalued against German mark by 7%, while Bundesbank, for the first time in five years, lowered the central bank discount rate by 0.50%. British sterling also depreciated, while the lira could not be stabilized even at its new parity levels. The selling of British sterling was further boosted by the anticipation that, given the fragile condition of British economy, no serious defence could be implemented for long. The Bank of England reported a loss of about half of its international reserves (around $15 billion). The president of the Bundesbank in a public statement confirmed market sentiment, arguing that despite Germany's efforts no-one could exclude the fact that some currencies might experience huge pressures. The setting was

ready for the final act. Economies that appeared to be unable to defend their currencies at any cost were the first to experience the final attack: the Italian lira, the British pound and the Spanish peseta.

The 16th of September was Wednesday. This day will be known in history under the name of 'Black Wednesday.' The Bank of England raised its interest rate from 10% to 12% and, when this proved insufficient, it also announced a further rise to 15%. The latter never materialized since the volume of currency sales was so great that nothing could prevent the coming devaluation. In the evening of the same day, the Bank of England withdrew 'temporarily' the sterling from ERM; British pound never joined again the mechanism. The very same night was not less hard for lira and peseta as well. Italy followed Britain out of the ERM. Spain devalued its currency by 5% but it did not abandon the ERM. During the following days Italy declared its unwillingness to rejoin the ERM, while the Bank of England further cut its interest rates to 9%.

5.3 From the day after to the final collapse of the 'hard' ERM

It did not take much time for the speculation to reach more 'central' economies. The French franc was the next target. This came as a surprise, since the macroeconomic condition of the French economy did not indicate strong vulnerabilities. The puzzle was even bigger because the attacks intensified after the positive result of French referendum on the Maastricht Treaty on September 20. These attacks were finally unsuccessful because of overwhelming interventions in the exchange rate. The losses of the Bank of France reached the extraordinary amount of 80 billion francs in one single month, while short term interest rates significantly increased. Drastic also was the intervention of the Bundesbank in support of the franc. Other more 'unorthodox' forms of interference with the market were put in motion: implicit controls in both capital movements and domestic lending rates. Similar anti-market controls were also introduced by other currencies under pressure (Spain, Ireland, and Portugal).

The answer to the French puzzle is that when confidence in the ERM as a system is lost and policy coordination seems untenable, 'weak' and 'strong' currencies are by and large on the same page: both are candidates for speculative attacks. It is not so important to go through all the events that followed 'black' September. The credibility of the ERM was irrevocably wounded. Market attacks continued in waves through all of the next year but not at the same level of intensity. Financial markets were wavering between periods of tension and relaxation, triggering state interventions and parity realignments.

The last act of the ERM was to be written in August 1993, when the whole setting came once more under systemic pressure. After a period of six months, French short-term interest rates were again above German ones, signalling an expected devaluation. Similar tensions caused the central Bank of Denmark (the second referendum on May 18 had supported the Maastricht Treaty) to raise interest rates. On July 30 most of the ERM currencies were expected to depreciate against German mark, while the Bundesbank refused

to adjust its interest rate and change its monetary policy. The drastic reorganization of ERM rules was decided in an emergency meeting which took place in Brussels on August 1, 1993. From this day, currency rates were allowed to fluctuate 15% on either side of the central parity. This new commitment was not far away from a free float. The German mark and Dutch guilder were excluded from this rule, remaining in the old narrow fluctuation bands. Before the end of the year all currencies except the Dutch guilder had depreciated within their new enlarged bands. The maximum depreciation was 6.95% for the Belgian franc, 8.93% for the Danish krona, 5.7% for the French franc, 4.37% for the Irish pound, 4.94% for the Portuguese escudo, and 5.77% for the Spanish peseta.

This silent breakup of the ERM did not negate the maintenance of a common target for European unification. It rather made quite clear to all sides that the project would be non-functional in the absence of a common currency and proper institutional arrangements to safeguard it from a similar wave of speculative attacks. The new system, which lasted until the decision to lock the exchange rates in 1999 and replace them in the near future by the euro, was not used for implementation of demand-side expansionary policies. On the contrary, European states remained loyal to the austerity type of policies and used the wider bands only as protection against speculation in order to recalibrate markets expectations to the stability of the system.

6. Concluding remarks

It is evident that fixed exchange rate regimes have two basic moments in their general design. They are peculiar economic unions made up by different societies and states, with different institutional settings and growth patterns. All participants share a common strategic target: emphasis on fiscal austerity and competitiveness (exposure to international competition). This is a policy mix that favours the upper classes of the society and is against the interests of labour. At the same time, this *sui generis* form of symbiosis hinges upon the workings of financial markets. In brief (and obviously abstracting from other important tendencies in modern finance), the strategies involved in the latter can take two extreme opposite versions: betting on the stability of the exchange rate pegs or against it. In the first case, we have the so-called 'convergence plays' which generate persistent capital inflows to fast-growing economies, resulting in financial account imbalances within the whole system. In the second case, speculative attacks tend to make the economic symbiosis quite vulnerable, given the economic interconnectedness.

The above summary sketches the main tendency to be developed within a system of fixed exchange rate symbiosis. The two moments are interlinked. The basic message is straightforward: the system is favourable to the long-term strategic interests of capital, but it comes with a cost, because it is quite vulnerable to unexpected events or internal developments. Nevertheless, the whole setting would be more stable and not so hostile to the interest of labour if it were based on the condition of symmetric policy responses. In that case, the adjustment would be an obligation of the system as a whole, while the disciplining

role of finance would be significantly undermined, making room for social welfare policies. This is the basic lesson from the EMS crisis. By and large, the very same patterns in a quite different institutional context can also explain the recent predicament in the EU. The lesson from the earlier crises can be used to help understand the more recent catastrophic events.

Endnotes

1. Buiter et al (1998: 19), Eichengreen (2007: 163-197); and also the chapter on Bretton Woods in this volume.
2. See Garber (1998), Volz (2006), Gros and Thygesen (1998).
3. See Eichengreen (2007; ch. 11), Buiter et al (1998: 29-31).
4. This is a standard topic in international macroeconomics textbooks; see Goodhart (1998) for a comprehensive account of the relevant discussions.
5. For an analytical description of this strategy of to exposing capital to international competition see Milios and Sotiropoulos (2009; 2010), Bryan and Rafferty (2006; ch. 5).
6. We have implicitly assumed that exchange rate risk premia are zero. For the argument see Svensson (1992), Volz (2006), Buiter et al (1998).
7. When $S^e > S$, one unit of the foreign currency is expected to correspond to more units of domestic currency in the future. This is practically a depreciation of domestic currency.
8. See Bryan and Rafferty (2006; ch. 5), Obstfeld et al (2008).
9. For the development of this point see Buiter et al (1998: 69).
10. For a general account of contemporary foreign exchange investment strategies including carry trade see Gyntelberg and Schrimpf (2011).
11. See Volz (2006: 2), Krugman (2008).
12. See Buiter et al (1998: 25).
13. See for this example see Easley et al (2012: 7-8), Buiter et al (1998: 57-8).
14. See Easley (2012: 8).
15. All these events have been widely discussed in the relevant literature. In what follows I shall just attempt a synopsis in the line of the reasoning of the above sections. I will not use any references or quotation. Further discussion on the same events which were associated with the crisis of 1992-93 can be found in: Buiter et al (1998), Eichengreen (2000; 2007), Krugman (2008), Gros and Thygesen (1998), Steinherr (2000).

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