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Towards a Strategic View on EMU

A Critical Survey

BERNHARD WINKLER

EUI Working Paper RSC No. 95/18

European University Institute, Florence

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Towards a Strategic View on EMU

A Critical Survey*

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ABSTRACT

This paper contributes to the ongoing debate over European Monetary Union (EMU). We briefly review the economics literature on the merits of a *single* currency ("optimum currency area") and on the requirements for a *stable* currency ("credibility"). In order to understand Europe's drive for EMU and the transition strategy adopted at Maastricht both issues must be analyzed together. The controversial convergence criteria in the Maastricht Treaty, in particular, primarily reflect valid concerns about the (price) stability performance of a future single currency by determining the timing and membership of EMU. In general we propose to interpret the Maastricht design as a mechanism that must reconcile conflicting interests, solve credibility problems over time and extract information about candidate countries' "stability orientation" in the run-up to monetary union.

1. Introduction

Rarely, if ever, has a group of nations (voluntarily) embarked on a common project as ambitious as Economic and Monetary Union in Europe (EMU). Rarely have the contributions of economic science to a topic of such importance been of so limited value. The silence of standard economic theory on the fundamental issues of why and how successful monetary integration should proceed has been deafening[1]. This is unsurprising given that the role of money itself remains ill understood in the neo-classical paradigm. How could one hope for theoretical guidance on the complexities of monetary integration if there is no useful independent role for currency in the simplest standard economic models? Our hunch is that money matters because it is a social institution that addresses problems of co-ordination, transactions costs, uncertainty, commitment and bounded rationality. Encouragingly there is increasing (re-) recognition that such issues should be placed at the heart of economic analysis. However, Monetary Union can hardly be called off until progress is made in monetary theory. With this caveat in mind, our goal for this present paper is much more limited. We present a selective critical survey of economics' contribution to the debate surrounding the Maastricht project. We also suggest a new framework for thinking about the issue of *how* to get to EMU (as opposed to whether it is desirable objective for Europe to start with), which interprets Maastricht as game of conflict and cooperation.

An immense literature has sprung up concomitantly with Europe's drive for EMU. It can be usefully classified into two main strands, which are briefly reviewed in sections two and three. *First*, the older literature on Optimum Currency Areas (OCAs) has been hauled back into service in order to assess the case for a *single currency*. Fundamentally, the OCA perspective can be interpreted as little more than a special case of the perennial debate over fixed versus floating exchange rates. *Second*, the new classical rational expectations revolution has brought into (formal) fashion ancient wisdom about the value of credibility and commitment for a *stable currency*. The Keynesian OCA concern about losing valuable policy instruments in a monetary union is turned on its head. Restricting policy options becomes beneficial. Paradoxically and in a nutshell, the desirability of EMU hinges simultaneously on the costs *and* benefits of relinquishing macroeconomic policy instruments. Microeconomic benefits, small to the extent that they are understood, must be added to the equation.

It is our contention that both these strands of the literature, taken by themselves, have only limited relevance for explaining EMU, which can only be grasped fully

[1] One of the few economists to admit this is Krugman (1992).

in terms of a larger evolutionary political, historical and institutional process. Nevertheless, we restrict our attention mainly to economists' contributions on the subject. Most of these have primarily addressed the (static) case for or against EMU either for Europe as a whole or the advisability for a particular country to join in. Others have focused exclusively on the difficulties of the convergence that Maastricht stipulates as entry conditions for EMU. By contrast we claim, *first*, that the Maastricht process must be understood as a game of strategic interaction, where players' interests are in partial harmony but also in conflict. The *second* aspect widely neglected in the literature is the intertemporal dimension. The link between EMU performance and events in the preceding transition period goes in both directions: Expectations about the future affect current play and future outcomes will depend on the history of play. The *third* vital ingredient is incomplete information, i.e. uncertainty about policy intentions and preferences. The main innovation offered by considering these three elements is a novel interpretation of the Maastricht convergence criteria, which have puzzled most economists. The same set of factors at the same time affects the viability of the Maastricht design for EMU in toto.

From this perspective we propose to interpret Maastricht as a mechanism, i.e. as a contractual response to problems of co-ordination, intertemporal commitment and information revelation. From a *positive* perspective the "strategic view on EMU" can help to explain the salient features of Maastricht Treaty itself and help to understand countries' behaviour given the treaty incentives in place. Furthermore, a *normative* question, in the light of the severe difficulties the Maastricht way to EMU has encountered, is to investigate alternative routes outside or within the treaty framework that may be more effective in resolving the underlying strategic problems. Throughout the paper the main ideas will be summarized in the form of 12 propositions and the concluding section offers 10 implications for policy.

2. Optimum Currency Areas

If our aim is to understand the incentives of the players in the grand Maastricht game, a natural starting point is to list economic costs and benefits of a single currency. This is what the literature on optimal currency areas (OCAs) seeks to provide[2]. Roughly there are (primarily) **microeconomic benefits** set against macroeconomic costs. The former are essentially direct *transactions costs savings*.

[2] Tavlas (1993) and Bofinger (1994) give recent overviews. Bayoumi (1994) attempts a first formalization.

These are a function of economic integration among the participating countries. As far as transaction costs act like a tax, EMU should increase the volume and efficiency of cross-border transactions. Secondly, the *elimination of exchange rate risk*, to the extent that it cannot be insured against, constitutes a separate item. However, the question whether exchange rate uncertainty affects trade and investment adversely is not settled empirically[3]. Our hunch is that it does but primarily indirectly via the systemic effect of exchange rate regimes on the stability of the economic environment economic agents operate in. To our mind the costs of exchange rate instability are underrated in a fundamental way. Whatever the *role of money* is that makes inflation and variability in national price levels socially costly, the same set of arguments must in principle apply to movements in relative (nominal) price levels between open economies[4]. In a world of wage-price stickiness, moreover, nominal exchange rate fluctuations translate into variations in real variables. This is, of course, what makes exchange rate policy an effective Keynesian policy instrument but it also implies distortions in relative prices, which hardly can be beneficial on micro-grounds.

Proposition 1: There is *no truly integrated market without a single currency*, which together with other social and legal institutions creates a level, predictable, transparent, common environment for the competitive game to be played out. Thus as suggested in the Commission's study "One market, one money" (Emerson 1992) the cases for a single currency and a single market are not unrelated. Conducting business in a single currency may enhance the transparency of prices and the efficiency of resource allocation in a way that is neither captured by standard economic theory nor at all quantifiable.

In terms of **macroeconomic costs**[5] monetary union essentially entails the sacrifice of two (albeit interdependent) national policy instruments: monetary and exchange rate policy. In general, as an extreme point on the continuum of exchange rate regime choice, the desirability of monetary union can be assessed more broadly with the familiar arguments from the debate over fixed versus floating exchange rates[6]. Thus the loss will be a function, *first*, of the incidence and importance of (national) asymmetric shocks (or shocks which *impact*

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[3] Eichengreen (1993, p.1327) cites some of the recent studies.

[4] In this sense the monetarist concern about inflation (which incidentally must rest on *some* non-neutrality of money) paired with utter indifference about exchange rate fluctuations has always struck us as slightly inconsistent.

[5] Note for completeness that there are *macroeconomic benefits* from EMU to the extent that there will be an "automatically co-ordinated" monetary response to *symmetric* shocks.

[6] The perennial underlying argument is about who is "better" (in terms of social efficiency) at setting exchange rates, the markets or governments?

asymmetrically across the union) that are deemed to require a differentiated policy response[7]. In turn these are a function of the degree of openness of an economy (which itself is related to its size), the destination of trade and the degree of commodity diversification among others.

The *second* question is how important and effective the two policy instruments to be surrendered are in the first place. This concerns the degree of *wage and price flexibility* and the degree of *factor mobility* and, more generally, the degree of "market imperfections" that inhibit swift adjustment in response to shocks and thus warrant policy intervention. Clearly this is a divide between Keynesian and new classical views of the world. Empirically, Europe seems closer to the Keynesian picture and more so than, say, the US. As regards the *effectiveness of exchange rate and monetary policy* again the traditional new classical/Keynesian divide on the virtues and vices of policy intervention applies. If they are blunt instruments and ineffective except in the very short term, their surrender is a small loss. If they are harmful, i.e. abused for competitive devaluations or lead to an inflationary bias, their surrender may even be beneficial.

Third, the costs of EMU hinge on the availability and efficiency of *alternative policy instruments*. Indeed the role of the main remaining macro tool, i.e. fiscal policy, in EMU has been the subject of great debate. We believe that fiscal federalism is an important issue in its own right and EMU's implications for an appropriate balance of fiscal autonomy and flexibility versus increased need for co-ordination and the desirability of fiscal co-insurance[8] need to be understood better. The Maastricht criteria curtail fiscal freedom while doing little in the way of effective co-ordination or centralisation. Again, the debate boils down to the relative emphasis on the virtues and vices of policy freedom.

Proposition 2: The OCA literature is largely *empirically irrelevant*[9]. Existing currency jurisdictions display little correlation with most of the factors identified for OCAs but almost always coincide with the political (and fiscal) jurisdictions. What is more important than the incidence of asymmetric "external shocks" is the degree to which *responses to shocks* differ even if the shocks themselves are

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[7] For empirical studies comparing the Europe and the US see Bayoumi and Prasad (1995) and the references therein.

[8] See Sala-i-Martin and Sachs (1992), Bayoumi and Masson (1994) and von Hagen and Hammond (1995) for empirical studies.

[9] See Honkapohja and Pikkarainen (1992) who regress exchange rate regime choice on various country characteristics à la OCA. Cohen (1993) finds political factors most important for successful currency unions.

identical[10]. What matters for agents' behavioural responses to shocks as well as policy interventions is the set of *institutions, common expectations and social conventions* in place, which remain largely wedded to the nation state. To our mind such "deeper" structural and institutional convergence is much underrated in its importance for a successful EMU.

Proposition 3: The OCA literature neglects the most important reasons for different desired policy responses to shocks, which are *differences in objective functions*. Centralising policy then entails welfare losses to the extent that preferences are heterogeneous[11]. This is one aspect of the concept of subsidiarity. Irrespective of the actual outcomes of decentralised versus centralised policymaking, losing the right and freedom of independent choice can be seen as a cost by itself. This is the deeper meaning of subsidiarity. EMU fundamentally is about the transfer and pooling of *sovereignty*.

Proposition 4: The other side of the coin of sovereignty is *commitment*. Restricting freedom can be beneficial in the context of strategic delegation of policy as explained in section 3. More generally, the credibility perspective (unlike the OCA tradition and similar to public choice approaches) views policy as endogenous to preferences and institutional incentives. Thus EMU must be studied as an exercise in institution building.

Proposition 5: The traditional OCA analysis is conducted in a (symmetric) two country world and the only question is whether a currency union is beneficial or not. In a three country world OCAs may differ for each country and the question becomes who joins up with whom. An understanding of EMU must start from the premise that its *costs and benefits differ across countries and vary over time* as a function of economic convergence, national credibility and policy preferences. Moreover, there is both economic and strategic *interdependence* and therefore the EMU cost-benefit analysis for each country is sensitive to other countries' strategies and the corresponding beliefs entertained. This makes EMU a game of

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[10] For example, a common oil shock will impact differently according to wage-price responsiveness (e.g. the nature of the wage bargaining process); the effect of a change in common interest rates depends on the structure of the financial system, e.g. the prevalence of short term borrowing, fixed versus variable rate mortgage lending etc.

[11] In practice on may not be able to distinguish whether different policy choices and preferences reflect diverse "deep preferences" or different institutional and structural features of an economy. For example a large black market economy or inefficient tax collection may call for higher "optimal inflation" (Canzoneri and Rogers, 1990). On this particular issue we agree with Summers (1991) that the "inflation as an optimal tax" approach is of nth order relevance compared with the real effects and credibility problems of monetary policy. Thus we ignore seigniorage as a marginal issue for EMU.

conflict and cooperation where strategic uncertainty and expectations about the future play a crucial part.

Proposition 6: The OCA analysis is *static*. The parameters under consideration will not be invariant to the *regime change* that EMU represents. For example, EMU may bring about greater price-wage flexibility and accelerate economic integration. Thus OCA analysis based on past data is likely to overstate the costs from EMU. On the other hand, regime changes carry costs by inducing uncertainty and requiring painful economic and behavioural adjustments. Thus the long run case for EMU must be analyzed together with the *adjustment costs* to be borne in the transition and the time profile of costs and benefits matters. Finally the case for EMU is crucially sensitive to the appropriate *benchmark scenario*, which is not necessarily the status quo. With the EMS no longer a viable half-way house in the 1990s, failure to implement EMU may not only halt but reverse the process of closer European integration putting in jeopardy achievements such as the single market. From the hard-EMS, "quasi EMU" perspective of the late 1980 both the extra benefits and the costs of EMU appeared quite small. On both sides of the equations now the stakes look much higher.

3. Credibility and the European Central Bank

Judged by the OCA criteria the EC as a whole, save possibly a small inner core of countries, seems an unlikely candidate for monetary union[12]. Indeed, most existing national currency jurisdictions would probably not qualify as OCAs. Thus to tip the balance EMU must furnish better policy results than existing (or alternative) national arrangements. More precisely relinquishing national control in exchange for EMU must be seen to carry significant benefits in terms of policy coordination or policy credibility.

Concentrating on the latter, the basic story is that told by Barro and Gordon (1983a) about the inflationary bias of monetary policy[13]. The low inflation that is optimal ex ante is not credible because the policymaker has an ex post incentive to deviate from it. Were the private sector to set its expectations (e.g. settled its wage contracts) predicated on the ex ante optimal low inflation rate the monetary authorities could not resist to surprise-inflate (e.g. for short-run employment motives) ex post. However, under rational expectations the private sector will anticipate the higher (suboptimal) equilibrium inflation rate from which such

[12] See the sceptical assessments by Feldstein (1992) and Eichengreen (1992) for example.

[13] See Persson and Tabellini (1990) or Cukierman (1992) for comprehensive overviews of the credibility literature.

deviation will no longer be profitable. In such a setting it becomes beneficial to restrict the policymaker's freedom to re-optimise ex post by "binding his hands", i.e. finding some way to commit him to the ex ante optimal low inflation.

This story adapted to the EMS context became popular in the late 1980s and was formalised by Giavazzi and Pagano (1988): countries with domestic credibility problems were seen to peg exchange rates in order to "import credibility" from the Bundesbank, who single-mindedly looked after low inflation in the anchor country. However, exchange rate commitments themselves suffer from credibility problems as the recurrent EMS crises and the de facto suspension of the system in 1993 has amply demonstrated. In EMU, however, the exchange rate commitment will become "irrevocable". However, this does not solve the credibility problem but only passes it on to the European Central Bank (ECB). Thus all depends on the credibility of the ECB. Unfortunately, the credibility literature has nothing substantial to say about the ultimate sources of credibility.

There are several different types of "commitment solutions" to credibility problems. All of them carry some costs and pass on the commitment problem one step further down the line. *First*, the traditional Friedmanian solution is to enshrine a monetary policy rule, say on annual growth rates of the money supply, into the *constitution*, and thus strip the central bank of all discretionary power[14]. The cost of this solution lies in the lack of flexibility to deal with unforeseen contingencies or a changing environment. *Second*, the *delegation* solution, on the contrary, upgrades the central bank into a powerful and independent institution. Thus the government delegates policymaking authority without compromising discretion and flexibility. Independence can only work, however, to the extent that the central bank's objectives or incentives differ from the government's. The cost of appointing central bankers that are more conservative than the population at large as in Rogoff (1985) and Alesina and Grilli (1991) comes in the form of suboptimal stabilization policy (from the population's point of view). Persson and Tabellini (1994) have recognized that the problem can be generalized in a mechanism design perspective. They argue that the optimal outcome can be realized by setting an appropriate incentive structure, i.e. by adding a penalty on inflation that exactly offsets the inflation bias. While the mechanism design perspective is the right one to adopt[15] the "free lunch" credibility that they offer lacks institutional content.

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[14] The constitution is the strongest commitment device at democracy's disposal. Note that the mighty Bundesbank can be stripped of its independence by a simple act of parliament.

[15] Morales and Padilla (1995) are the first to apply the mechanism design perspective to an open economy setting. They study the design of a supranational authority for monetary policy

The *third* category of solutions to credibility problems rely on *reputational forces* to deter short-term opportunistic behaviour. In repeated games of complete information the public uses "trigger strategies" that punish policymakers that would deviate from the expected inflation rate with a "loss of reputation", i.e. higher expected inflation rates in the future (Barro-Gordon 1983b). In games of incomplete information[16] central banks' objectives are not known to the public. Here the observed inflation rates affect the central bank's reputation as the probability distribution over its preferences. This reputation, whether "correct" ot not, in turn affects the public's inflation expectations. In this class of models the building of reputation is a costly process, i.e. it involves periods of surprise deflation (recessions).

In practice, and even theoretically, all the above solutions to credibility problems cannot be separated. A reputation cannot be established unless it is carried by an institution, preferences cannot be independent either without an institutional foundation. Independence will have no meaning unless there is power, i.e. the capacity to act according to different preferences[17]. All commitment is based on some rule-device. Institutions themselves are a set of rules. Thus while the degree of central bank independence and its conservatism are two distinct elements conceptually, they are linked and reinforce each other in practice. Thus gauging ECB credibility is not a simple task. The "delegation solution" adopted at Maastricht in essence is about ceding sovereignty. In EMU there is a double transfer of sovereignty. First the delegation of national policy authority to a supranational body and second the delegation to an independent central bank. The official Maastricht "naive independence" line hopes that just copying the Bundesbank law for the ECB statutes will suffice to build credibility. There are also some rule-elements in the treaty, but they mainly involve putting constraints on fiscal- not monetary policy. The main problem for the ECB will be its lack of its own history and reputation. At its inauguration it will have to confront considerable two-fold uncertainty. First, doubts about its untested policy

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coordination. Other papers, e.g. Frattiani, von Hagen and Waller (1993) or von Hagen and Süppel (1994) had already presented a principal-agent view of central banking.

[16] See Backus and Driffill (1985), Vickers (1986), Cukierman and Liviatan (1991) for examples.

[17] Thus creating an independent central bank in France is insufficient as long as it does not reflect a power base and objectives distinct from the government. This, incidentally supports the empirical regularity that independent central banks tend to flourish in federal, decentralised political structures (Germany, US, Switzerland). Conversely, conservatism, if not incorporated into institutions is also insufficient, as the UK experience in the late 1980s (inflation reaching double digits under Mrs. Thatcher) testifies.

instruments and their effectiveness in a new economic and institutional environment and, second, uncertainty about its policy intentions.

Proposition 7: *Central bank independence by itself is insufficient* for a low inflation EMU. Credibility must be earned and is costly to acquire. Ultimately EMU success rests on the "stability culture" of the population and the extent to which the behaviour of all relevant economic actors (notably fiscal authorities and wage setters) is geared towards price stability.

The "independence solution" to the credibility problem is superficial not only because it neglects important aspects of credibility such as the role of rules, preferences and reputation building. It is also misleading in that no policymaking body can act in isolation from other players or the wider public. Thus commitment via strategic delegation can be costly in a further dimension if it renders co-ordination across different but interdependent policy areas more difficult. Only in the most naive monetarist models will inflation be a function of central bank policy alone *and* will central bank policy only affect inflation. In reality inflation and other macroeconomic policy outcomes result from the complex interplay of several institutions and declaring any single one as "independent" can easily be counterproductive unless implicit co-ordinating mechanisms are in place and various institutions are adapted to each other. Then enhancing the credibility of the ECB unilaterally may not necessarily improve overall welfare. This suggests that the establishment of the ECB should go in tandem with a more comprehensive and careful redesign of national and European institutions. This is especially important for inflation which, to our mind, is an increasing function of the degree of (political, distributional, regional, social) conflict in a society[18] as well as the degree of overall institutional instability.

"Independence" is also misleading in that no (democratic) institution can isolate itself from public preferences; indeed in the longer run institutions are endogenous to preferences[19]. The Bundesbank's reputation is deeply rooted in the German public's inflation aversion after the experience of two hyperinflations this century. In this way a country's inflation history and its institutional arrangements will partly reflect its preferences, which, in turn, are themselves shaped by experience. The crucial question that the Maastricht mechanism must answer is whether the 1980s EMS disinflation and the drive for EMU itself reflects durable alignment,

[18] Recently, Beetsma and van der Ploeg (1992) have investigated the link between inflation and income inequality.

[19] The empirical literature tracing inflation to indices of central bank independence, e.g. Alesina and Summers (1993) is likely to be spurious, omitting variables like the prudence of fiscal authorities, degree of conflict in the society, and public preferences in particular.

i.e. "Germanization", of deep policy preferences[20] or a temporary phenomenon. Does Europe "buy" the Bundesbank because it has learned to believe in the social and economic model that it represents and thus happily recreated the ECB in its image? Or rather, is the Bundesbank to be scrapped because its power has become too dominant and suffering its policies no longer palatable to the European partners[21]?

There is a third question mark concerning the "credibility by delegation" story. If credibility and reputation were the overriding motivations for EMU clearly it would be the most efficient and safest form of monetary union to adopt the DM and entrust the Bundesbank to look after European aggregate money and prices[22]. Equally clearly this would not be politically acceptable (*politically* credible) as a long-run arrangement. In fact, both the negotiations on the EMS and the original push for EMU were mainly driven by concerns over the *symmetry* of the system. EMU's main motivation was and is to remove the Bundesbank's dominance over European monetary policy. If the EMS (or any other) credibility story is right, however, its success hinges on the *asymmetry* of the system, i.e. delegation of policy authority to an *independent* agent (e.g. the Bundesbank). Thus there is a fundamental conflict beween credibility and symmetry (sovereignty/democracy) in principle[23].

Proposition 8: EMU must be understood as an attempt to square the *conflict between credibility and symmetry*. Maastricht's task is to salvage the (Bundesbank's) credibility and restore symmetry at the same time (by eliminating the Bundesbank's anchor role). In this sense EMU is an exercise in the pooling and delegation of sovereignty. These same features characterize political union which must accompany EMU.

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[20] Collins and Giavazzi (1992) present evidence that attitudes had converged in the EMS. EMI president Lamfalussy (1994) recently called this a "cultural revolution".

[21] In his speech at the inauguration for the newly independent Banque de France, French president Mitterand (1994) did not conceal his distaste for central bank independence per se but argues that this "sacrifice" was justified, and justified only, by the very important historic objective of EMU.

[22] Similarly, Currie (1992) and Currie, Levine and Pearlman (1992) have argued that a hard-EMS where the Bundesbank accommodates partially European preferences dominates both a "soft" symmetric EMU and an unmodified hard EMS, where "hard" means renouncing the realignment option.

[23] This conflict was the fundamental internal contradiction of the EMS. There was a tension from the start between the de jure symmetry (e.g. unlimited intervention obligations) and the de facto asymmetry (to protect the anchor stability) of the EMS (see Begg and Wyplosz, 1993).

While delegation may be a necessary condition it is certainly not sufficient to produce a stable currency. In view of the serious deficiencies of the "naive independence" assumption further progress on *economic* and *political union* is indispensable[24] in order to provide conflict resolution and coordination mechanisms and foster a degree of policy consensus and solidarity among the major economic actors within the union. Moreover the monetary policy delegation that EMU represents may itself only be sustainable with a strong political and institutional underpinning as the historical experience with currency unions demonstrates[25]. Finally, Germany has most to lose from EMU on both counts (sovereignty and credibility), thus her bargaining position at Maastricht was strong. This is reflected in the ECB statutes and the convergence criteria. The question "what's in it for Germany" (Brittan, 1995) again suggests that EMU can only be understood in the wider context of European integration and a larger political game (Mélitz 1994).

4. The Maastricht Criteria and the Role of Stage Two

Stage two of the Maastricht design for EMU has been in effect since January 1994. According to the treaty it will be superceded by stage three, i.e. the irrevocable fixing of exchange rates and the speedy introduction of a single currency, by January 1999 at the latest. Stage two of the Maastricht transition strategy and the role of the convergence criteria in particular have attracted most criticism by economists. Their main task is to determine the timing and the composition of EMU. In order to make economic sense the transition process must *first* be linked to the requirements for a successful single and stable currency identified in the previous two sections and in Propositions 2-8. *Second*, the transition must be viable in itself, particularly in terms of solving the economic and political credibility problems of Proposition 8. For both purposes we focus on the three principal problems neglected in the literature and identified in the introduction, namely the interaction of conflicting interests, the time dimension and the importance of information revelation.

A first glance at the criteria adopted at Maastricht reveals that they have nothing at all to do with OCA considerations. Worse, they seem to lack any sound

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[24] Bundesbank board member Jochimsen (1995) calls the political union a "conditio sine qua non" for a successful and stable single currency. He laments that the original German position "no monetary union without political union" had been dropped at Maastricht.

[25] Cohen (1993) considers 6 examples, the detailed study by Theurl (1992) looks at 12 historical cases.

theoretic foundation at all[26]. The debt and deficit criteria of 60% debt to GDP ratio and a 3% deficit ratio seem arbitrary numbers, where the former corresponds to the actual average stock of debt in the EC in 1991 and the latter limit has been surpassed by the EC average in every year since 1981. There is no reference to any sensible intertemporal budget constraint or debt sustainability condition that takes into account growth rates, interest rates, public investment rates and the like. However in view of Proposition 7 the Maastricht criteria can be interpreted as a "self administered vote of no confidence in the independent ECB" being able to discipline fiscal authorities (Buiter and Kletzer 1991). Thus they reflect doubts that market mechanisms and Maastricht's "no-bailout" clause may not suffice to deter fiscal profligacy and they reflect the conviction (as formally modelled in Sargent and Wallace 1981) that fiscal laxity undermines monetary stability at least in the longer run. In addition the criteria may be seen to counter a political deficit bias[27].

Similar criticisms apply to the inflation, interest and exchange rate criteria[28]. A fundamental problem besets these nominal criteria: since expectations play a crucial role they are prone to display self-fulfilling characteristics. If the criteria are missed due to the lack of domestic credibility only external commitment will eliminate residual inflation and devaluation expectations. Essentially making the criteria contingent on expectations of the fulfilment of the criteria is self-defeating[29]. A similar circularity characterises the Maastricht criteria and EMU at large, both via expectational and incentive effects: If EMU is expected, convergence will be forthcoming (for those countries expected to join club) and EMU will come about. For countries not expected to make it the opposite scenario of a vicious cycle appears likely. Elsewhere (Winkler 1995) we have christened this problem the "credibility paradox". If EMU is the solution to domestic credibility problems, requiring candidates to solve their credibility problems before joining appears paradoxical. However, the paradox rests on two implicit assumption. The familiar "naive independence" assumption that takes it for granted that the independent ECB will solve all credibility problems and the "naive harmony" assumption that ignores the fundamental conflicts of interests over

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26 Buiter (1992) calls them a "triumph of dogma over economic reasoning"; see also Buiter, Corsetti and Roubini (1992).

27 See Alesina and Perotti (1994) for a recent survey on the political economy of fiscal policy.

28 The inflation must not exceed that of the three best performers by more than 1.5%; long term interest rates mmust not be more than 2% higher than those of the three best price performers and exchange rates must be held stable within their "normal" bands with no devaluation on "own initiative" for two years.

29 As noted by Begg et al. (1991) and in De Grauwe (1994).

EMU. Only if both assumptions are relaxed can the convergence criteria be understood.

Lacking economic rationale and imposing unnecessary pain, the convergence criteria and stage two as a whole are attacked by many economists as counterproductive, provoking instability and serving no other purpose except to delay. De Grauwe (1993) finds that an extended stage two "makes little economic sense" (advocating that EMU could and should proceed within six months) and that "most of the convergence criteria serve no economic purpose". Instead they were "dictated by Germany" and formulated with a precision and uniformity to ensure that they cannot be met. This would serve Germany's interest is to keep EMU small and to maintain as much power over monetary affairs in Europe as possible[30]. De Grauwe is right in interpreting the criteria as a "mechanism of exclusion" (p.659) from Germany's point of view and a mechanism of inclusion for everybody else. However the claim that this conflict is only political and that stage two's only function is to hide and defer a political crisis remains superficial. On the basis of our earlier observations about the problems of ensuring that a single currency will also be a stable currency we believe that the insertion of the convergence criteria into the Maastricht Treaty reflects valid concerns over EMU performance. These regard risks for price stability, scepticism about the degree of economic convergence and doubts about the general "stability orientation" of partner countries.

Proposition 9: There are clear *economic conflicts* over the timing (sequencing) of convergence which are reflected in the Maastricht criteria and which resurface in the debate about the date, size and initial membership of EMU.

In the absence of domestic credibility, convergence prior to EMU is more costly to achieve than within EMU where external commitment is much stronger[31]. From this reasoning "convergence countries" should argue for an early and unconditonal EMU. On the other hand "credibility countries" like to minimize risks to price stability in EMU and thus require as much prior convergence as possible[32]. Here

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[30] There are two empirical problems with this view. First, Germany was the country that actually first formally proposed EMU in the "Genscher memorandum" (see Gros and Thygesen, 1992, for the history), cognoscent of its partners' concern over EMS asymmetry and Germany has been the main promoter of European integration in terms of both deepening and widening the community.

[31] For example the regime shift to EMU should alter ingrained inflationary expectations at a stroke and equalise nominal interest rates across the union. Why then try to break inflation and other inertial forces laboriously ex ante?

[32] Garrett (1993) confirms that Germany, supported by Benelux and Denmark pushed for "convergence" first to ensure a "hard" EMU, whereas for other countries the primary objective

the criteria can be seen to reconcile conflicting interests. They contract for the "conditional surrender" of the Bundesbank. Without assurance of substantial convergence Germany could not commit to EMU. Likewise, without Germany's commitment to EMU convergence efforts would not be forthcoming, with both parties having incentives to make non-credible promises in the absence of a contractual commitment.

As regard the time dimension the Maastricht criteria can be interpreted as the bridge that links stage two and stage three of EMU. On the one hand, real economic convergence and integration increases the benefits and reduces the costs from EMU. However, the Maastricht criteria have little to do with OCA considerations. As far as nominal convergence is concerned we run into the apparent "credibility paradox" described above. However, as described in Winkler (1995) the criteria can be seen to solve the credibility paradox and transport reputation between stage two and three of EMU in both directions. Making entry into stage three conditional on fulfilment of nominal criteria can increase policy credibility even in stage two, if the incentive to join is strong enough. On the other hand, if information about policymakers' preferences is revealed in stage two this will enhance the credibility of low inflation in stage three. This view asserts that EMU credibility comes not for free but must be earned and built up in the run-up by individual countries' efforts. The ECB will not inherit the Bundesbank's reputation automatically but must rely on a favourable initial conditions to start its job smoothly. This reasoning can also be applied to the fiscal criteria to the extent that high stocks of debt and large deficits are seen to potentially soften the ECB's anti-inflation incentives and thus undermine its credibility.

Proposition 10: The Maastricht criteria make little immediate "economic" sense; in particular they defy OCA considerations. From credibility perspective the threat of exclusion from EMU can be seen as a rough commitment device to ameliorate credibility problems in stage two and provide external incentives for domestic policy reforms more generally[33]. Moreover, if countries' convergence effort is a public good that benefits all future members of the currency union, then the criteria can be seen as a mechanism to induce private supply of this public good.

The central idea in Winkler (1995) is that the criteria may succeed in separating out high inflation "doves" from low inflation "hawks", even if countries' inflation

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was to *soften* and transfom the EMS into a cooperative EMU sooner rather than later (Sandholtz 1993).

[33] As in Giovannini and Spaventa's (1991) "no-entry clause" idea.

preferences are not initially known. In the words of Bundesbank board member Hesse (1995) "the hurdles on the way to EMU must be of such a height that only those countries can clear them, which would not jeopardize the intended union of stability subsequently" (p.7, own translation). Thus even if the convergence criteria should make no immediate economic sense, they can serve an important purpose if they are interpreted as an entry barrier or a screening device under incomplete information. In stage two candidates for EMU must prove their credentials[34] and "earn their way in" (Begg et al. 1991) to minimise the risks to "credibility countries" like Germany. The familiar premise is that what matters for EMU inflation performance is the stability orientation of its members. Signalling activity on preferences is socially costly, however, and thus the policy question is whether there are alternative cheaper ways to address the same concerns and resolve strategic uncertainty about policy objectives.

Proposition 11: The criteria test countries' commitment to EMU and the stability orientation it requires. They may also induce preference revelation. Both are important preconditions for a single currency that is to be stable from the start and durable, given that formal central bank independence is insufficient. In any event the Maastricht criteria serve as rough indicators of the past and present stability culture of a country (inflation, exchange rate, debt and deficits) as well as reflecting the markets' judgement about future credibility (interest rate, exchange rate).

5. Conclusions and Policy Implications

To our mind understanding the strategic interaction of players in the Maastricht game is the key to making sense of the treaty and the role of stage two in particular. Surprisingly an analysis in this spirit has not yet been undertaken. On the whole, moreover, the literature on EMU vast as it is - with many books and surveys already written - still suffers from conceptual fragmentation. Arguments are developed in isolation from the larger picture and thus valid analysis can still be misleading and miss the main points[35]. Thus it is no surprise that the OCA view must find EMU foolhardy; that believers in "convergence through commitment

[34] Bundesbank president Tietmeyer (1993) stresses that EMU is only open to those "who have proven the will and capability for a durable stability policy" in the transition period (own translation). For Bundesbank board member Prof. Issing (1994) "even a discussion of a relaxation of the convergence criteria must give rise to suspicion among those who have distrusted anti-inflationary manifestations in respect of EMU from the very outset".

[35] See for example the contributions in Cobham (1994) for a good collection of very different "partial" views.

magic" find stage two unnecessary; that likewise subscribers to naive central bank independence find the Maastricht criteria superfluous; that economists looking for textbook intertemporal budget constraints find the criteria derisory; that some EMS researchers took Basle-Nyborg at face value in their naive advocacy of the original hard-EMS route to EMU; other EMS researchers are left to marvel why the dead EMS is more alive than ever, with most currencies close to their old bands; that EMU enthusiasts are irritated by the criteria and the dwarfed role for the EMI, tending to suspect Bundesbank sabotage instead of attempting a more sophisticated analysis. For answers to all these puzzles one needs to look at the larger picture.

The larger picture that we have drawn here finds OCA considerations of secondary relevance and the simplest credibility story insufficient for understanding EMU and the Maastricht transition strategy towards a single and stable currency. We stressed the fundamental conflict between the "convergence countries" and the "credibility countries" over the timing and the size of monetary union. We emphasized the potential conflict between "political" credibility (sovereignty) and economic (low inflation) credibility which requires delegation of authority. Moreover, delegation (central bank independence) is not sufficient to guarantee price stability. Ultimately, credibility of monetary policy requires that the behaviour of all main economic actors is consistent with the objective of price stability and is rooted in a common "stability culture" and underpinned by strong institutional foundations. Also, credibility does not come for free, reputation must be earned. This is why stage two of EMU is important as a testing ground irrespective of any real economic convergence that may be desirable in its own right.

Proposition 12: Our "strategic view on EMU" suggests the following *policy implications*:

First, given the importance of stage two any premature rush into EMU can be ruled out. Indeed, 1999 now seems the earliest realistic date for commencement of stage three.

Second, in retrospect the collapse of the hard-EMS can be seen as a blessing in disguise, if our emphasis on information revelation in stage two is accepted[36].

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[36] German finance state secretary Haller (1994) likens the new EMS to an automobile test track lacking crash barriers and notes: "While this places greater demands on the driver, it also permits a more effective assessment of his driving skills". This seems much in the spirit of our informational interpretation of stage two.

With credibility no longer "importable" via the EMS it must now be built "at home" and tested by the markets.

Third, any attempt to resurrect the EMS[37] or upgrade the profile of the EMI in the direction of a supranational authority (Artis 1994) will be resisted by those who fear that their national credibility would be diluted or expropriated. The issue will resurface with regard to the design of a residual EMS in a multi-speed Europe, however.

Fourth, on the other hand a case could be made that the EMI as a forerunner of the ECB ought to do *some* reputation building and some *learning* up front, at least as far as the technicalities of a European monetary policy are concerned. The Bundesbank, on the other hand, much prefers that reputation building be done by the freshly independent national central banks in the national arenas.

Fifth, for the same reason the conflict between symmetry and credibility will prevent significant (centralized) *policy coordination* from taking place before stage three. This implies that the Deutsche Mark will remain the reference currency of a quasi- and core-EMS until it is replaced by the future European currency. Candidates for early EMU participation, notably France, will continue to try to shadow the DM informally. They will be unlikely to exploit their freedom for short-term gain which would send bad signals about their policy reliablity and commitment thereby risking to jeopardize the long-term strategic goal of EMU.

Sixth, a *multi-speed approach* is the only realistic route to EMU. The construction of the Maastricht treaty and the convergence criteria virtually ensure this (cf. Arrowsmith 1995). At the latest after the Schäuble-Lamers paper from the summer of 1994 this taboo and earlier self-deceptions have been broken. It is important to stress that multi-speed is very different from "Europe à la carte" since it grants only temporary derogations to laggards and, in principle, does not allow opt-outs[38]. Multi-speed EMU gives extra time to catch-up to convergence countries without endangering the reputation and cohesion of EMU. Thus strategic uncertainty about ECB policies can be reduced if more "risky" candidates are admitted later and possibly in a staggered fashion.

Seventh, given that the Maastricht Treaty provisions on EMU were a fragile compromise between conflicting interests over convergence and credibility, they

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[37] Eichengreen and Wyplosz' (1993) propose to save the EMS by reintroducing restrictions of capital flows. This ignores the policy conflicts as the root cause of the crises.

[38] This differs also from Alesina and Grilli (1993) who advise against multi-speed EMU since hard-core countries would then refuse to co-opt further members. Their model has no role for the Maastricht criteria, however.

will not be re-opened at the 1996 Intergovernmental Conference nor anywhere else. The complaints that the criteria are too strict or too lax balance out and there is a good measure of flexibility in the wording of the criteria paired with subsequent moves by the German Bundestag and the German constitutional court to commit to a literal interpretation to avoid both premature "giving-up" as well as early complacency on admission to EMU.

Eighth, while Germany will and cannot formally resurrect its original linkage between monetary and *political union*, the "deep-seated connection" with the process of European integration as a whole remains[39]. Some horse-trading across policy areas can thus be expected, even though prospects for progress towards further integration generally look grim. Our "strategic view on EMU" supports the need for further political and institutional integration to underpin a single currency.

Ninth, on the whole the main features of the Maastricht treaty on EMU are remarkably well suited to tackle what appears as a very difficult exercise of reconciling different interests across countries and over time. However, if it is to function well in providing the right incentives and information, the *commitment to the treaty itself* must be strengthened. In this context a higher profile for the EMI and (at least symbolic) progress at the Intergovernmental Conference would be important signals. With the EMS a hitherto reliable element of stability has evaporated and it remains doubtful whether sufficient momentum and commitment can be recovered and maintained over an extended period. Gradualism is the enemy of the credibility of stage two, while gradualism is the friend of credibility in stage three. This is the fundamental dilemma of the Maastricht transition.

Tenth, the Maastricht Treaty left stage two rather empty and monetary responsibilities with the national central banks. Given that the problems of credibility and symmetry in stage two are not fundamentally different from those in stage three restoring credibility and commitment to EMU now may call for some institutional solutions ahead of stage three, e.g. again a greater role for the EMI. This could be acceptable if co-ordination as a conflict resolution mechanism can be seen to strengthen *systemic* credibility without compromising and diluting the anchor's reputation which the EMI and later the ECB must be seen to inherit from the Bundesbank. Again, while such institutional upgrading should help stage two credibility it may compromise stage three credibility.

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[39] In the words of Finance state secretary Stark (1995): I cannot imagine that the German parliament will give an unqualified 'yes' vot to entry into the third stage of EMU unless appreciable progress is made at the Intergovernmental Conference in the other areas as well."

Ultimately, however, the credibility of EMU does not rest on the intricacies of the treaty provisions but on two requirements: political leadership and the support of the people of Europe.

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