# Towards Economic and Monetary Union:

### **Problems and Prospects**

**Daniel Gros** 





#### CEPS Paper No. 65

### Towards Economic and Monetary Union: Problems and Prospects

by Daniel Gros

For the CEPS Economic Policy Group

Jeffry Frieden, Alberto Giovannini, Daniel Gros, Andrew Hughes Hallett, Jean Pisani-Ferry and Niels Thygesen\*

<sup>\*</sup> Jürgen von Hagen participated in three meetings of the CEPS Economic Policy Group. Each member of the EPG participated in his personal capacity; the views expressed in this report do not necessarily reflect those of the institutions with which he is affiliated. CEPS wishes to acknowledge the financial support of Banco de España, Deutsche Bundesbank, Sveriges Riksbank and the German Marshall Fund. These institutions are not in any way associated with the contents of this report. CEPS also wishes to thank without implicating in any way Otmar Issing and especially José Viñals for comments and discussion.

In the CEPS Paper series, leading experts make original contributions to the debate on public policy in Europe, written in a style and format that is geared to policy-makers. The views expressed are those of the authors and do not necessarily reflect the views of the institutions with which they are affiliated or their supporting institutions.

© Copyright 1996, Centre for European Policy Studies. ISBN 92-9079-202-7

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means — electronic, mechanical, photocopied, recorded or otherwise — without the prior permission of the Centre for European Policy Studies.

Centre for European Policy Studies
Place du Congrès 1
B-1000 Brussels
Tel: (32.2) 229.39.11
Fax: (32.2) 219.41.51

#### **Contents**

|        | Preface by Peter Ludlow<br>Executive Summary            | i<br>iii |
|--------|---|----------|
| I. Int | troduction and Background                               | 1        |
|        | 1. Basic Questions about EMU                            | 2        |
|        | 2. The Structure of the Report                          | 2<br>9   |
| II. D  | oes EMU still make sense?                               | 11       |
|        | 1. Is EMU desirable? Reconsidering the Costs and Benefi | ts 11    |
|        | 2 Causes of the Crises since 1992                       | 18       |
|        | 3. Lessons from the Recent Currency Crises: Are         |          |
|        | exchange rates a powerful adjustment instrument?        | 21       |
|        | 4. An Issue that Will Not Go Away: Unemployment         | 25       |
|        | 5 Costs and Benefits: An Overall Assessment             | 28       |
| Ш. Т   | The Hurdles to be Overcome on the Road to EMU           | 32       |
|        | 1. The Transition to Price Stability                    | 32       |
|        | 2. Towards Sound Finances: Debt Levels versus Changes   | 34       |
|        | 3. The Macroeconomics of Fiscal Retrenchment            | 45       |
|        | 4. How to manage variable geometry?                     | 50       |
| IV.    | The Intergovernmental Conference on Political Union     | 65       |
|        | 1. The Many Different Meanings of Political Union       | 65       |
|        | 2. The Maastricht System                                | 67       |
|        | 3. How would Maastricht work under stress?              | 70       |
|        | 4. The Fiscal Criteria in the Long Run                  | 80       |
|        | 5. Conclusions  | 89       |
| V. H   | low do we get there?                                    | 93       |
|        | 1. Where do we stand?                                   | 93       |
|        | 2. What needs to be done?                               | 93       |

#### Annexes

| 1.<br>2.<br>3. | Lessons from the UK and General Lessons<br>Interest Savings in EMU<br>Historical Experiences with Monetary Union in | 96<br>102 |
|----------------|---|-----------|
|                | 19th Century Europe   | 105       |
| 4.             | Fiscal Stabilisers in the US Federal Fiscal System  | 110       |
| 5.             | A Note on the CEPS Economic Policy Group  | 114       |
| Tabl           | es  |           |
| II.1           | Ranking of EU Members by OCA Indicators   | 15        |
|                | Public Debt in High-Debt Countries  | 39        |
|                | Public Sector Deficits in the EU  | 43        |
|                | Fiscal Adjustment and Debt Service Savings  | 44        |
|                | Advantage of Exiting the ERM  | 97        |
| A.1.2          | The Impact of Large Exchange Rate Adjustments   | 99        |
|                | Interest Rate Burdens in Select Member States   | 102       |
|                | Potential for Debt Service Savings  | 103       |
| A.3.1          | Membership and Dates of Operation of  |           |
|                | Previous Monetary Unions  | 105       |
| Boxe           | S   |           |
| II.1           | Optimum-Currency-Area Indicators Defined  | 14        |
| Ш.1            | An Interpretation of the Maastricht Criterion on Debt   | 37        |
|                | The Business Cycle of Automatic Stabilisers   | 41        |
| III.3          | The Effects of Large Fiscal Retrenchments:  |           |
|                | What do macroeconomic models tell us?   | 47        |
| III.4          | Technical Conditions for the Viability of a Currency Board  | 60        |
|                | Why are large deficits undesirable?   | 81        |
|                | Sanctions for Excessive Deficits  | 84        |
| IV.3           | Decision-Making in the "Excessive Deficit Procedure"  | 88        |
| Grap           | hs  |           |
| II.1           | Ranking by OCA Criteria   | 16        |

#### Preface

The following report by Daniel Gros for the CEPS Economic Policy Group could scarcely be more opportune. In the first place, the Madrid meeting of the European Council has reaffirmed the commitment of the European Union's leaders to Monetary Union by 1 January 1999, and approved detailed plans for the implementation of the scheme. Secondly, the issues with which the report is principally concerned are now at the centre of the political discussion.

When the Economic Policy Group was established towards the end of 1993 to discuss the political underpinnings of a European Monetary Union, public debate was still dominated by the combined effects of the post-Maastricht ratification process and turbulence in the currency markets in 1992 and 1993 which had virtually destroyed the EMS in the form that the Maastricht Treaty-makers had predicted as an essential stepping stone towards Monetary Union. Speculation about what a post-EMU regime might look like seemed therefore to many rather less important than the still more basic question as to whether there would be an EMU at all.

In defining a policy research agenda, however, short-lived electrical storms are rarely a good guide. It is much more important to look at the underlying trends and, still more, at obstacles which are a good deal less fickle than "market sentiment". That there would be some kind of Monetary Union by 1999 or at the latest 2000 has never really seemed to us in this house at any rate to be in doubt. Precisely for this reason, however, the question of political infrastructure of Monetary Union seemed all the more important.

Like so many lessons from history, the argument that there has never been a successful Monetary Union without Political Union is too simple by half. A great deal turns on what is meant by Political Union, particularly within the context of a *sui generis* construction such as the EU. It is however legitimate and indeed necessary to ask whether the provisions of the Maastricht Treaty are sufficiently strong to ensure not only that the wrong countries do not get into the Monetary Union in the first place but, still more, that those that do, cannot engage in destabilising policies once inside.

In addition to this question, Daniel Gros also looks at the issue of the "insiders and outsiders". What regime, in other words, could and should be developed which will ensure that the slower countries are helped rather than handicapped by the creation of a Monetary Union amongst an inner group of EU members?

Funding for this project was provided by the Bundesbank, Banco de España, Sveriges Riksbank and the German Marshall Fund. We are grateful to all of them. As always, however, the views expressed in this paper are those of the author alone and do not commit any institution, either those who funded the project or CEPS itself.

Peter Ludlow Brussels, January 1996

#### Towards Economic and Monetary Union: Problems and Prospects

### by Daniel Gros

#### For the CEPS Economic Policy Group

#### **Executive Summary**

Economic and Monetary Union (EMU) is still desirable and can be reached by the year 1999. The crises of the European Monetary System (EMS) that started in 1992 and the turbulence experienced by the financial markets in 1995 should not be viewed as evidence that EMU is impossible or undesirable. On the contrary, they indicate that without EMU, there could be a continuation of financial market instability and excessive exchange rate variability which have a negative effect on growth and might even endanger the single market.

There is no need to automatically link EMU to political union. In the absence of visible progress in European integration, however, the political consensus behind EMU would be in danger. For this reason, the overall success of the 1996 intergovernmental conference (IGC) will be crucial for EMU.

The combination of the single market, plus monetary union, plus the fiscal criteria, plus the provisions for policy coordination already constitutes a sort of "economic policy union". There is no need therefore for a centrally run fiscal policy. Furthermore, centralisation of social and employment policies is not desirable under EMU because large productivity differentials are likely to persist for some time.

Observation of the convergence criteria should be regarded as desirable because they represent sound economic policy. Their justification, therefore, is derived by far more than mere legalistic reference to the Maastricht Treaty.

Since it is unlikely that all member countries will fulfil the convergence criteria by 1997-98, some form of variable geometry is unavoidable in the monetary field. If those who cannot participate in the start of EMU implement their convergence plans, the number of participants could, however, increase substantially within a few years.

Variable geometry might create difficulties if financial markets assume that exclusion from the "core" group that forms EMU in 1999 will lead to a slowing down in convergence. To lessen this risk, countries that cannot participate in the first wave should clearly indicate that they will continue, and perhaps even increase their convergence efforts to be able to join EMU at the next possible date. This would reduce the potential for financial market instability, but it might not be sufficient to rule out speculative attacks which might derail convergence. Thus, some exchange rate mechanism would still be useful to limit exchange rate variability and misalignments of the currencies outside EMU. The kind of system that will be desirable (and feasible) in 1999 cannot be predicted at this point because its nature will depend on the number of countries that cannot join EMU initially and whether or not they have a credible prospect of joining in the near future. Due to the differences in size between the "core" and the "periphery", any post-EMU exchange rate mechanism will operate even more asymmetrically than the old EMS.

For countries that are far advanced in their convergence efforts, but that do not fully satisfy the fiscal criteria because of high interest rates, associated membership in EMU might be a suitable option. These countries could mimic participation in EMU by binding their currencies irrevocably, and on a unilateral basis, to the common currency already by 1999, provided the ECB agrees that they otherwise qualify for EMU. This should lead to substantial debt-service savings and accelerate convergence so that full membership in EMU could follow rapidly. Belgium and Austria have de facto already successfully followed a similar strategy. Larger countries, however, may find it more difficult to follow this example.

The Maastricht condition on public debt is sometimes misunderstood.

The Treaty says clearly that the reference value of a debt/GDP ratio of 60% is not an absolute limit. All that is required is that the ratio be "sufficiently diminishing and approaching the reference value at a satisfactory rate" (Art. 104c, 2b). This vague expression should be translated into a transparent and objective rule that is consistent with the spirit of the Treaty.

There are many different ways to resolve this problem of interpretation. The following practical rule represents our proposal for putting public debt on a sustainable path: the debt ratio should decline each year by a sufficient amount to eliminate at least 1/20th of the discrepancy between the actual debt/GDP ratio and 60% of the GDP reference value. In Belgium, this would imply that the ratio would have to decline by nearly 4 points each year because it now stands at 134% of GDP; in Portugal, however, the required reduction would be only about 1/2 point per year because the debt ratio is now at about 70% of GDP.

This is not the only rule possible. Some agreement on the interpretation of the debt criterion is urgently needed, however, so that the countries that have at present a debt/GDP ratio far above the 60% reference value know the magnitude of reduction in the debt ratio they must obtain in order to be allowed into EMU. The next round of discussions of national convergence programmes should lead to an explicit indication of whether their implementation will be considered sufficient for entry into EMU on this account.

#### Chapter I Introduction and Background

Four years have now passed since the Maastricht Treaty was negotiated and ratified by large majorities in national parliaments (in some cases, followed by a referendum). Nevertheless, the prospects for European Monetary Union (EMU) are now often assumed to be worse than when the Treaty was negotiated because the economic environment has changed radically:

- i) The exchange rate mechanism (ERM) of the European Monetary System (EMS) has gone through a severe crisis, and a deep recession lifted unemployment to unprecedented levels. For a while, it seemed that EMU had just been a short-lived dream, but the recovery that has since taken place has put EMU back on the agenda. Financial markets have not calmed down, however, and large exchange rate and interest rate movements have affected several member states, as exemplified by the tensions of early 1995.
- ii) Meanwhile, the development that has done the most to damage the prospects of EMU has been the inability of member states to bring public finances under control. In 1990, 6 of the 12 members of the EC had a fiscal deficit below 3%. As of 1995, only four countries (Denmark, Germany, Ireland and Luxembourg) of the 15 members cleared this hurdle. Furthermore, public debt ratios increased over this period in most member countries. The fiscal convergence criteria constitute now the main obstacle to a rapid move to the third stage. By contrast, inflation rates have remained low and interest rates have tended to converge so that the other convergence criteria are fulfilled by a larger number of countries (10 to 11 at present).
- iii) It is now taken for granted that at least some of the associated states in Central Europe will join the European Union shortly after 1999. Given that the potential newcomers are at a very different stage in the economic transformation process and that at least one member country (Greece) has made very limited progress in convergence, it is likely that quite a few years, possibly even

decades, will have to pass before all present and potential future members of the EU are able to join EMU. The geometry of EMU is thus likely to be variable for quite some time.

Against this background, the remainder of this introductory chapter presents some of the most commonly asked questions concerning EMU and offers some brief answers and explanations. The main body of the report that then follows elaborates on three central themes:

- i) Is EMU still desirable?
- ii) What hurdles have to be overcome on the road to EMU?
- iii) What is the link between EMU and political union and what should be done at the 1996 intergovernmental conference?

#### 1. Basic Questions about EMU

In most discussions about EMU, a number of basic questions are repeatedly raised. The following section provides some brief answers that have been intentionally formulated in a simplistic manner so as to be accessible to non-specialists as well as to economists and monetary experts. The underlying arguments are provided in the main body of the report as indicated.

#### Is EMU still desirable?

Yes. The economic benefits of EMU (and perhaps also the costs) are even more apparent now than they were when Maastricht was negotiated. The stakes are thus higher than was originally assumed. It is difficult to establish a precise accounting of the costs and benefits, but the group has come to the conclusion that, on balance, the cost of "non-EMU" is now larger than they were before. The alternative to EMU is no longer a stable EMS, but rather continuing exchange rate instability which is detrimental to investment and could even endanger the internal market as large currency swings lead to large shifts in competitive positions. (See Chapter II.)

#### Is EMU still feasible?

Yes. The economic conditions in terms of inflation and interest rate convergence remain very good. Eleven countries satisfy the inflation criterion and 10 meet the requirement on interest rates. The fiscal criteria constitute now the main obstacle. The adjustment effort needed to allow EMU to at least start in 1999 — while sizable — is within the range of past adjustments and could be attained by determined governments. The fiscal adjustment has already started, and a number of countries are planning to reduce their deficits at/or below 3% of GDP by 1997. This might not be sufficient for countries with a debt/GDP ratio well above 60%, but the further effort to achieve a "satisfactory" movement towards the reference value should be manageable if the debt criterion is applied along the lines suggested below. The number of countries that qualify for the starting group might thus be larger than often assumed. (See Chapters II and IV.)

#### Should Stage III be postponed?

No. Although postponing the move to monetary union by one or two years might at first sight appear to facilitate convergence, it would mainly lead to further uncertainty and increase the risk of exchange markets instability. Extending the transition period does not make the adjustment costs easier to bear. On the contrary, experience shows that protracted fiscal adjustment programmes are proportionally more costly than stricter, i.e. shorter and more credible, ones. Moreover, postponing EMU would only prolong the time period during which some countries have to pay higher interest rates as the price of an option (to devalue) that they to not intend to use. (See Chapter III.)

#### Is variable geometry unavoidable?

Yes. A number of countries will not satisfy the convergence criteria by 1997, and at least one country is expected to opt out. From an economic point of view, this is not ideal, but it does not

pose insurmountable problems for the countries that move first. There is a procedure that has served the Community well in the past: those able and willing move ahead and the others are invited to join them later. The arrangement implies, however, that the initial movers will have a disproportionate influence on the early evolution of EMU. In short, to start EMU without the participation of certain large countries is not ideal, but it should not pose a danger to the cohesion of the EU as long as it is clear that all countries can join later and that most will do so in the foreseeable future. It is most important that a framework be established to guarantee that the countries with a derogation do not face more difficulties in converging once EMU has started. (See Chapter III.)

#### Will EMU cure the unemployment problem?

No. There is no point in creating illusions. Almost all policies that have the potential to reduce structural unemployment in a major way (if properly used) remain under the responsibility of national governments. In the medium run, EMU could make a significant contribution to alleviating the cyclical component of employment by providing a framework for macroeconomic stability and lower interest rates. (See Chapter II.)

#### Should the convergence criteria be strictly observed?

Yes, but they need to be applied as foreseen in the Treaty. The criteria on inflation, interest rates and exchange rate stability are relatively straightforward. The fiscal criteria might create confusion, however. While the 3% of GDP ceiling on deficits is clear, it is sometimes claimed that no country with a debt/GDP ratio above 60% can join. This is not correct. The Treaty specifies only that the ratio should be "sufficiently diminishing and approaching the reference value at a satisfactory pace" (Article 104c, 2b). The notion of what constitutes a "satisfactory" movement of the debt/GDP ratio towards its reference level of 60%, however, should be clarified. A possible practical rule, which is detailed later, is based on the idea that each year 1/20 of the

excess of the actual debt ratio over the 60% reference value should be eliminated. Ireland satisfied this rule, thereby justifying its exclusion from the excessive deficit procedure. (See Chapter III.)

### Will national governments be deprived of all autonomy in setting economic policy?

No. They will lose autonomy only in the area of national monetary policy. This is significant, but non-German participants in the ERM have for a long time renounced this form of autonomy. For them, participation in EMU will to some extent increase policy autonomy as the governors of their central banks will participate in the decisions of the European Central Bank. For other policy instruments, including fiscal policy, the current assignment of responsibilities will remain, subject only to the avoidance of excessive deficits. In addition, a major constraint on national policies will vanish as the risk of a currency crisis will be removed. (See Chapter IV.)

#### Will observing the fiscal criteria be costly for economic activity?

No and yes. It will actually be beneficial in the long run, but it may be costly in the short run. On the one hand, standard macroeconomic models predict that any reduction in deficits leads initially to a fall in output growth (but later also to a recovery). On the other hand, the member countries that undertook radical deficit reductions during the 1980s did not experience a large fall in demand nor a large increase in unemployment. A crucial point is whether the fiscal adjustment programme is strong enough to be believed by financial markets. The stronger the programme and the more serious the initial position, the more room there will be for favourable confidence effects on demand. A strong and properly designed adjustment package could thus reduce the short-term output costs and perhaps actually induce more growth even in the short run. A sustained reduction in deficits will, in any event, be beneficial in the long run. The adjustment effort should thus not be motivated only by a desire to comply with the Maastricht criteria. Politicians should acknowledge that stable public finances are desirable in their own right and not just needed for early entry into EMU. (See Chapter III.)

### Will member states satisfying the convergence criteria ipso facto be fit for EMU?

Yes...and no. The countries that are likely to satisfy the criteria in 1997 (mainly the narrow band group in the old ERM) also have a record of low inflation over the last decade and have maintained a stable nominal exchange rate vis-à-vis the DM at least since 1987. Hence, they already have the experience of a de facto and actually more difficult version of monetary union. They have thus shown that their system of economic policy-making can live with tight monetary policies. Additional efforts to improve structural convergence (e.g. increasing price and wage flexibility or fostering convergence in financial structures), however, would be most welcome and would facilitate the operation of monetary union. The focus on the nominal criteria should not distract countries from improving their real performance in the perspective of monetary union. (See Chapter IV.)

#### Should EMU be limited to the rich?

No. There is no evidence that member countries with below-average income per capita benefit less from EMU or face higher adjustment costs. "Health" rather than "wealth" is thus more important for EMU. Experience confirms this: during the 1960s, when exchange rates were fixed, the poorer countries grew much faster relative to the rich ones than they do today. There is therefore no reason for poorer countries to wait until they have caught up in terms of income per capita before they participate in EMU. There is also no reason to increase the transfers to poorer regions and/or countries just because they participate in EMU. There are good reasons for the regional and structural funds, but they are not related to EMU. The benefits and costs of EMU depend less on the country's relative income than on its degree of

integration in the European economy and on the similarity of its economic structure with that of the other members. (See Chapter II.)

#### Does EMU need to be complemented by a political union?

No...and yes. The answer depends on what one means by political union. There is no need to create at the EU level the institutional infrastructure of a nation state. The issues discussed at the IGC on political union, while important in their own right, are not of direct relevance for the working of EMU. However, without progress towards European integration, the political consensus behind EMU could be in danger. What is needed to make EMU work is a political consensus on the ideas behind the Maastricht criteria (i.e. the value of price stability and sound public finances). Observation of the criteria should be regarded as desirable because they represent sound economic policy. The combination of the internal market, monetary union, the fiscal criteria and the provisions for economic policy coordination that are in the Treaty already constitutes a sort of "economic policy union". There is no need to create special automatic fiscal income stabilisers. They might be useful, but even in the US they do not constitute the main mechanism of adjustment. (See Chapter IV.)

#### Is there a need to amend the Treaty?

No. The broad outline for EMU is still appropriate. There is no need to open "Pandora's box" and re-discuss the entire EMU chapter. Nevertheless, some important steps can be taken without changing the Treaty. One example would be an agreement on the interpretation of what constitutes a debt ratio that is "approaching the reference value at a satisfactory pace" along the lines of the proposal mentioned above. (See Chapter III.)

#### Who will participate in 1999?

Those that make sufficient effort to enable them to pass the

examinations held by the European Council in early 1998. The adjustment required in terms of inflation and fiscal deficit would for most countries be within the range of historical experience. Making public finances sustainable and reducing inflation should contribute to lower interest rates and more stable exchange rates. There is, however, one element that is outside the control of the national monetary and fiscal authorities; namely, the interpretation of the debt criterion. An unreasonable interpretation of this criterion, e.g. that the 60% debt/GDP reference value constitutes an absolute limit would make it practically impossible for any country with a ratio currently above 65% to participate. Since this is the case for 9 member countries, an agreement on the interpretation of the debt criterion, perhaps along the lines proposed above, is urgently needed.

#### Will the creation of a "core" harm the "periphery"?

No... if the countries that cannot join immediately make clear that they will continue their adjustment efforts anyway. This should ensure that the creation of a core EMU does not increase the potential for financial market instability. But it might not be sufficient if the markets do not believe that the commitment is real. Hence, a revamped "exchange rate mechanism" could contribute to stabilising financial markets and ensure that convergence does not become more difficult. What kind of system will be needed cannot be predicted now (see below). For the countries that have achieved price stability but have an excessive deficit just because of higher interest rates, a more ambitious approach could be considered. They might join EMU on a unilateral basis. They would not participate immediately in the decision-making mechanisms of EMU, but, by implementing the common monetary policy as if they were members, they should benefit from lower interest rates. The interest rate savings on public debt that would follow, coupled with a stringent adjustment programme, should then allow these countries to join the decision-making mechanisms of EMU more quickly. (See Chapter III.)

#### Is there a need for an EMS-type arrangement after 1997?

Yes, the Treaty implies that sometimes, although in practice any arrangement will have to recognise that the core will be so much stronger than the periphery. Given this difference in size, the new system will have to be asymmetric and resemble a hub with spokes around it. Its nature will depend on the convergence that has been achieved by 1998. If the core that starts EMU is small and if the other countries are likely to need a number of years to converge, a more permanent and elaborate system will be needed than if the core is large and it appears likely that all important countries will and/or can join within a couple of years. For countries that are far advanced in their convergence efforts but that do not fully satisfy the fiscal criteria because of high interest rates, unilateral or associate membership in EMU might be a suitable option. But there should at any rate be a link between the tightness of the system for the outsiders and their convergence efforts. intervention obligations of the ECB will under any circumstance be subordinated to the task of maintaining price stability in the EMU area. (See Chapter III).

#### 2. The Structure of the Report

The remainder of this report will discuss in some detail a number of key issues to provide the analytical background to the assertions made above. This discussion is organised around three general themes.

The first issue treated in Chapter II is whether EMU is still desirable. We believe that recent financial market turbulence should not be taken as an indication that the costs of EMU will be larger than expected. On the contrary, the experience with exchange rates under full capital mobility in an environment of wide swings in market expectations about future policies makes EMU even more desirable. The story about asymmetric shocks emphasised by the optimum-currency-area approach is less important than these systemic issues. Chapter II also asks whether EMU can be expected to affect the most important problem of the EU

economies, namely unemployment. It argues that EMU should have little impact on unemployment. The "natural" rate of unemployment is determined basically at the national level where demographic and social forces interact with economic regulation to produce the incentives that ultimately determine unemployment. Hence, it is up to member states to remedy the problems that have been created in this area over the past decades.

Chapter III discusses the main hurdles on the road to EMU, starting with the most important one, namely the fiscal convergence criteria. According to standard macroeconomic models, the fiscal adjustment needed in a number of countries to achieve a deficit below 3% of GDP could have a negative impact on growth and unemployment in the short run; but the long-term effects will be clearly beneficial. This chapter also argues that the text of the Treaty is quite clear with respect to public debt: the level is not decisive, but rather, the speed of the movement towards the reference value of 60% of GDP. We derive a particular numerical rule that could be used to assess what constitutes sufficient speed of adjustment.

Chapter IV discusses the link between EMU and political union by looking at different hypothetical scenarios of how economic and political problems could arise under EMU. One of the main messages of this chapter is that the term political union should really not be used because it means different things to different people. Another message is that the existence of EMU will lead important political forces, especially in the financial area, to organise themselves at the Union level. Hence, EMU will foster the emergence of certain elements of a wider political union.

Chapter V concludes the presentation of the EPG's deliberations by offering an outlook for EMU. It briefly outlines the adjustment effort that is needed in some countries and shows how the Union could help countries that cannot participate from the start of the third phase.

### Chapter II Does EMU still make sense?

#### 1. Is EMU desirable? Reconsidering the Costs and Benefits

It is sometimes argued that the currency fluctuations in recent years show that it would not be desirable, and perhaps even impossible to fix exchange rates irrevocably. This point of view implies that EMU would entail large economic costs and that the attempt to fix exchange rates irrevocably (in stage III a) could not succeed because financial markets might attack any exchange rate commitment (Obstfeld, 1994). We examine this line of thought by first looking for evidence that the costs of EMU are larger than were assumed in 1990-91, when Maastricht was negotiated. We then turn to a brief assessment of the causes of the exchange rate crisis that broke in the summer of 1992.

A full discussion of the costs and benefits of EMU is beyond the scope of this report. But it is necessary to briefly recall the nature of the main cost of EMU as seen by economists in the so-called optimum-currency-area approach. If a shock reduces the demand for the exports of a country, a real depreciation is required to maintain full employment and external equilibrium.\(^1\) The required real depreciation could also be achieved by a reduction in nominal ("money") wages and/or migration, but this takes time and can presumably be achieved only if there is a period of substantial unemployment. The proper exchange rate policy could thus reduce, and possibly even eliminate, the unemployment problems that arise from "asymmetric shocks".

It is important to take into account that not all idiosyncratic shocks justify an exchange rate adjustment. First of all, one needs to distinguish between financial and real shocks. Fixing exchange rates is beneficial if there are financial shocks. If there is a shift in the portfolio composition desired by savers from one currency to another, the appropriate response is to satisfy this shift by varying the supply of assets denominated in different currencies at unchanged exchange rates. This general consideration already implies that the increased volatility in financial markets observed in Europe since 1992 (and the increased importance in general of financial markets worldwide) constitutes an argument to fix

exchange rates to avoid the misalignments that arise in volatile financial markets.

Moreover, one must also take into account the fact that the degree to which the exchange rate should be adjusted in the face of non-financial shocks differs from case to case. For example, if domestic demand falls suddenly in one country of the EU (as occurred in Italy in 1993), a depreciation could mitigate, or possibly even eliminate the impact on unemployment; but such a competitive devaluation would be at the expense of the partner countries and hence would not necessarily be in the interest of the entire EU. If one looks at the interest of the entire area, the appropriate response to a shock that hits only one country might thus be quite different from the "beggar-thy-neighbour" response the country would be tempted to take if it were acting only in its own interest.

All this implies that it is not easy to say what the macroeconomic cost of renouncing the exchange rate instrument will be (or whether there will be any cost at all). It is therefore impossible to produce quantitative estimates of the cost of EMU. All one can do is compare countries and obtain some indication of which ones would best fit into EMU according to the optimum-currency-area criteria. This is also reflected in the available empirical studies<sup>2</sup> on the cost of EMU. They usually just analyse differences in economic structure (composition of output or exports) and the degree to which various macroeconomic indicators, e.g. output, unemployment, etc., are correlated.

Existing research (see Gros, 1996, or Eichengreen, 1992, for a survey) has tended to converge on the conclusion that there is a core group of countries for which the costs of fixing the exchange rate are probably negligible because their industrial structures are very similar and their economies usually move together. The exact size of this core varies from study to study; but most experts agree that France, Germany and the countries that in the past have maintained close monetary and exchange rate ties with Germany (i.e. Austria and the BENELUX) are part of it. Denmark and the UK are usually, but not always, viewed as belonging to this group whereas Italy and Spain are more often than not found to

be outside this core.

This received wisdom is called into question, however, if one looks at the data on the most commonly used indicators from the optimum-currency-area (OCA) approach. Box II.1 presents the definitions of the indicators used here. The results are contained in Table II.1 which presents a ranking of all member countries (except Luxembourg) according to the six indicators that measure indirectly the likelihood of asymmetric shocks by measuring similarity of trade structures and the degree to which key macroeconomic indicators are correlated with the EU average.

Even a cursory glance at this table reveals that different indicators give different messages. The data for the UK, for example, which appear on the bottom row, indicate that if one looks at the degree of similarity in trade, as measured in the first two columns, the UK occupies rank three, i.e. according to these two indicators it is better placed than 11 other member states. However, despite this high degree of similarity in trade structures, the UK economy has in the past been subject to a different business cycle. In terms of the correlation of national GDP growth with the EU average (column 3), the UK is ranked at 10th place. And if one looks at the correlation of UK industrial production with that of the EU average, see column 4, its position slips to 12th place. In terms of the latter two indicators, there are thus between 9 and 11 countries that are better placed than the UK. The UK represents an extreme example but even for some other countries, the discrepancies between the different indicators are considerable.

This brief discussion cannot do justice to the OCA approach, but it does show that quite often one cannot unambiguously say which countries will benefit from EMU. Not even a clear ranking can be established. A quick comparison across rows reveals a number of other large differences in ranking. The correlation across the 6 different indicators used here is only about 50%, which suggests that this approach cannot be used to identify unambiguously which countries will benefit from EMU. But some rough indications emerge nevertheless if one looks only at the average ranking from the six indicators used here. Graph II.1 shows this average rank of the EU member states and confirms the central position

#### Box II.1 Optimum-Currency-Area Indicators Defined

Below are defined six indicators from the optimum-currency-area approach.

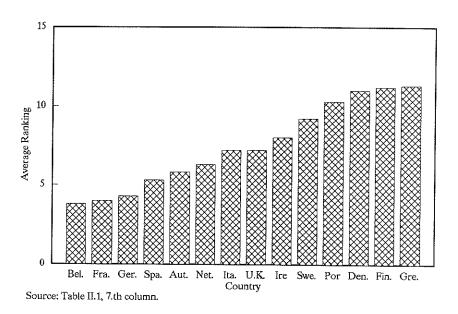
- Trade structure similarity: Correlation co-efficient between the shares of about 70 products (at the 2-digit CN-level) in overall intra-European exports and in the exports of each EU member to other EU members (1992 data).
- Intra-industry trade: Grubel-Lloyd index on the basis of the 2-digit CN-level of trade structures. This index is calculated as one minus the sum of the absolute value of net exports of each CN 2-digit sector over the sum of total exports and imports (1992 data).
- Real GDP growth correlation: Correlation co-efficient between real GDP growth in EU12 and single EU members from 1980-93.
- Industrial growth correlation: Same method as above.
- 5) Unemployment rate correlation: Correlation co-efficient between the unemployment rate of EU12 and individual EU members, 1980-93.
- Exports to EU15 as a percentage of GDP.

The first two indicators capture the differences in economic structures that are supposed to measure the potential for asymmetric shocks. Indicators 3 to 5 measure the extent to which the economies of individual countries have tended to move together with the EU average over the last 15 years. The last indicator measures the importance of trade with the rest of the EU and is thus a measure of the expected benefits from EMU. In all cases, Table II.1 presents only the relative ranking of member countries not the values of the indicators, because it is difficult to say what magnitude of the correlation co-efficient would be acceptable. It is apparent that there is considerable difference in the rankings. For example, the average correlation co-efficient between the first column and the other five is 0.5.

The last two columns try to pull the evidence together by providing an average ranking and an indication of how many times each country ended up among the top 7 (i.e. was better qualified than the other half of the EU).

|   | Times in<br>Top 7    | 1                     |          |         | 5   | 5   | 0    | ,    | 5   | 5   | -    | 2   | 4   | 4   |      | 5   | 1   | m    |
|---|----------------------|-----------------------|----------|---------|-----|-----|------|------|-----|-----|------|-----|-----|-----|------|-----|-----|------|
| ndicators   | Average<br>Ranking   | )                     |          |         | 5.8 | 3.8 | 11.0 | 11.2 | 4.0 | 4.3 | 11.3 | 8.0 | 7.2 | 6.3 | 10.3 | 5.3 | 9.2 | 7.2  |
| cy-Area I   | Exports<br>to EU15   | as %<br>of GDP        |          | 1993    | 5   | 2   | 8    | 4    | 11  | 6   | 14   | ,   | 12  | 3   | 7    | 13  | 9   | 10   |
| num-Curren  | Unempl.<br>Rate      | Correlation with EU12 |          | 1980-93 | 6   | 8   | 14   | 12   | 4   | 3   | 9    | 2   | 7   | 10  | 13   | 1   | 11  | 5    |
| ers by Optin  | Industrial<br>Growth | Correlation with EU12 |          | 1980-93 | 9   | 1   | 10   | 14   | 4   | 2   | 6    | 1.1 | 5   | 7   | 8    | 3   | 13  | 12   |
| Ranking of EU Members by Optimum-Currency-Area Indicators | Real GDP<br>Growth   | Correlation with EU12 |          | 1980-93 | 3   | 9   | 14   | 12   | 2   | 7   | 11   | 13  | 4   | 5   | 6    |     | 8   | 10   |
| Ranking   | Intra-<br>Industry   | Trade                 | CN-class | 1992    | 9   | 2   | 6    | 12   | -   | 4   | 14   | 11  | 10  | 5   | 13   | 7   | 8   | 3    |
|   | Trade                | Similarity            |          | 1992    | 9   | 4   | 11   | 13   | 2   | -   | 14   | 10  | 5   | 8   | 12   | 7   | 6   | ני   |
|   |                      |                       |          |         | AUT | BEL | DEN  | FIN  | FRA | GER | GRE  | IRE | ITA | NET | POR  | SPA | SWE | 1117 |

### Graph II.1 Ranking by OCA Criteria



of France, Germany, Belgium and Austria. But these data also suggest that Spain is closer to the core than Italy or the Netherlands. Graph II.1 confirms that three of the "four corners" of the EU, namely Finland, Portugal and Greece, do not belong to the core on this account because they have quite different economic structures. Ireland is much closer to the EU average according to this data. But this impression might change if one were to consider the relationship between Ireland and an EMU without the UK.

In judging these results, one has to keep in mind that they are based on past data. Economic structures change slowly, but over a decade, they can still change fundamentally. One would expect that the structure of

the poorer member countries would evolve towards the EU average as they converge in other aspects as well, as most of them have done over the past. How would EMU affect the process of structural change? It has been argued prominently (Krugman, 1993) that EMU could lead to more regional specialisation and hence more regional unemployment problems. This is just one possible outcome, however, and the models used to generate this conclusion can also yield the opposite conclusion. (See Adrian, 1995.) Even if regional economies of aggregation do become stronger under EMU, however, they are likely to operate at the regional and not at the national level. Since the larger member countries contain a number of regions, such a development might be a challenge for regional policy at the national and EU level, but it should not constitute a reason for exchange rate adjustments (Gros, 1996).

Differences in the transition mechanism of monetary policy that lead to asymmetric consequences of symmetric financial shocks and the monetary policy of the ECB might be as important as the "real" shocks discussed so far. These differences in the transition of monetary policy can arise from different financing patterns of industry and households. As shown in Borio (1995) and Borio and Fritz (1995), they are particularly marked between the UK and the continental EU countries. In the UK (and some continental EU members that had higher inflation rates in the past), short-term financing is more important whereas in the continental European countries with a tradition for price stability, longterm financing is the norm for both industry and households. This difference can be very important if long- and short-term interest rates move in opposite directions, as occurred in Germany in 1992. An increase in interest rates decided by the ECB could thus have different effects in different parts of the EMU area as analysed in more detail in Coudert and Mojon (1995).

Although these differences in financial structures are likely to constitute a source of differences in the business cycle throughout the EMU area, they should not be taken as an insurmountable obstacle to monetary union. Financial structures are bound to converge under the impact of internal market legislation on corporate governance, accounting and disclosure rules, etc. The common experience of price stability under

EMU will also have an impact. Moreover, differences in business cycles caused by differences in financial structures should be only temporary and constitute more of a nuisance than a fundamental problem. It might at times be actually preferable not to have the entire EMU area experiencing a boom (or a depression).

This brief discussion shows that the optimum-currency-area approach does not yield totally objective and consistent indicators of the benefits and costs of monetary union. All that one can do is obtain a qualitative impression of similarities in economic structures.

An even more fundamental problem for the optimum-currency-area approach that has been followed so far is that its fundamental mechanism does not seem to work in reality. Research carried out for the Economic Policy Group (see Gros, 1996) indicates that shocks from foreign trade have never been an important determinant of unemployment either under fixed or flexible exchange rates. Moreover, shocks to exports have not been important for most smaller member countries. This indicates that even countries with rather different economic structures should not face large economic costs as a result of mandatory fixed exchange rates.

There are two main reasons why the potential for shocks arising from differences in economic structures does not translate into large shocks to overall exports: i) broad shifts in tastes and technology (say from microcomputers to personal computers) take years to materialise even in such fast-moving industries as micro-electronics; and ii) EU member countries usually export a large number of different products so that even if sudden shifts in the demand for individual products were to occur, they would compensate each other to a large extent.<sup>3</sup>

#### 2. Causes of the Crises since 1992

If asymmetric shocks to tastes and technology have not been important in the past, how can one explain the recurrent exchange rate crises that started in 1992? There is wide agreement among economists that these crises were not triggered by the asymmetric shocks to technology or

tastes, which are the main theme of the literature on optimum currency areas (Portes, 1993). Economic policy shocks can in all instances be clearly identified as the main trigger. This is an important point since it implies that the currency crises that occurred over the past few years cannot be used to argue that EMU would be subject to unavoidable asymmetric shocks. If policy shocks were the reason for the crises, the real question suggested by the recent experience becomes: Are similar policy shocks likely to arise under EMU as well?

There is also widespread agreement that in the case of the UK, Italy and Spain,<sup>4</sup> tensions had been building up in the form of a growing loss of competitiveness in the years leading up to 1992. A number of reports (see for example de Grauwe et al., 1991) have estimated that the currencies of these three countries were overvalued by between 10 and 25% and that a large realignment was unavoidable once the large capital inflows that had financed the current account deficits came to an end. Some exchange rate adjustment was thus unavoidable sooner or later. Many economists would also argue that German unification required a real appreciation, thus increasing the underlying tensions. While this argument has been disputed (see Gros and Steinherr, 1995), there can be no doubt that the high interest policy of the Bundesbank in response to the expansionary fiscal policy induced by German unification was a major factor behind the outbreak of the crisis.

In 1993, the situation was different in that obvious overvaluations had been corrected and the currency markets questioned the exchange rates within the core of the ERM where there was no evidence at all of a systematic overvaluation of the Belgian or French francs or the Danish kroner. The crisis in 1993 was caused by market expectations about future changes in the policy stance of France (and some smaller countries) because many observers thought that the governments of these countries were in a different cyclical position than Germany and therefore would have liked to follow a different policy mix than Germany.<sup>5</sup> (See Eichengreen and Wyplosz, 1993, and Kenen, 1995.)

It does not really matter whether one considers the 1993 crisis a self-fulfilling speculative attack or a simple policy coordination failure. The

crucial point for this discussion is that there is no evidence of a real policy-independent shock that required an exchange rate adjustment in 1993. Similarly, there is no evidence that the turbulence of 1995 was caused by real shocks. The difficulties of the peseta and the lira were probably due to a combination of factors, such as the fall-out from the Mexican crises, internal political uncertainty and elements of self-fulfilling speculative attacks.

The 1993 and 1995 episodes indicate that it will be difficult to keep exchange rates stable, even if (present) underlying fundamentals and policies are sound because exchange rates are influenced by expectations about future policy. Since it is by definition difficult to give guarantees about future policy, very large capital flows can be set in motion if the markets suspect that policies will be changed. Moreover, the suspicion of the markets can at times be self-fulfilling (Obstfeld, 1994). For example, a higher interest rate premium that arises because financial markets have doubts about the resolve of the government to reduce the deficit makes it more difficult to bring public finances in order.

These mechanisms would not exist under EMU. Expectations about future changes in (national) monetary policy are by definition impossible in EMU. And in the area of fiscal policy, the Maastricht criteria are designed to impede the emergence of public debt crises as nearly experienced by Italy and Sweden early in 1995.

German unification represented a large policy shock which, given the absence of monetary policy coordination, required some exchange rate adjustments. It is likely, however, that the macroeconomic cost of adjusting to German unification would have been much lower if EMU had already been in place. In that case, the ECB would not have been forced to increase interest rates to the extent that the Bundesbank did because all the inflationary pressures were bottled up in Germany.<sup>6</sup>

All in all, one therefore has to conclude that the exchange rate turbulence that started in 1992 cannot be used as an argument that EMU is no longer desirable. On the contrary, it shows that, with full capital mobility, expectations about future policy shifts can lead to large

exchange rate changes unless the authorities are willing to allow for large movements in short-term interest rates. The cost of "non-EMU" has increased.

### 3. Lessons from the Recent Currency Crises: Are exchange rates a powerful adjustment instrument?

Another issue brought up by the recent experience with large exchange rate adjustments is how powerful the exchange rate could be as an adjustment instrument. In 1992-93, a common perception seems to have emerged that the UK was able to engineer a mini-boom through a competitive devaluation and that this was a strategy that other countries should also consider.

This perception had important consequences. During 1993, the British approach was often invoked as a possible course for France to follow, and the crisis in the summer of that year was due to the fact that the markets were not sure that the French authority would stick to the existing FF/DM central parity. The temptation to devalue will continue to exist in the future if policy-makers perceive that exchange rates are a powerful instrument to increase growth or lower unemployment. But does this perception correspond to reality?

A first point to note in this respect is that the 1992-93 experience shows a break with the past in at least one respect. During the 1970s and 1980s, even large devaluations did not improve the competitive positions of the devaluing countries significantly, because prices rose rather quickly to offset a large proportion of the depreciation of the exchange rate (see Emerson et al., 1991). By contrast, the very large exchange rate adjustments in 1992 (and later) were not followed by a surge in inflation in the depreciating countries. The movements in the nominal exchange rate translated almost entirely into movements of the real exchange rate.

The really important question, however, is whether these movements in the real exchange rate actually exerted a strong effect on output. This is discussed in Annex 1 on the basis of the UK experience after it pulled out of the ERM in 1992, as compared to France which stayed in, and also on the basis of a comparison among the three large countries that devalued the most, namely Italy, Spain and the UK.

The lesson that emerges from the analysis in Annex 1 of the large exchange rate adjustments that have occurred since 1992, is that the exchange rate has a surprisingly small impact on overall economic developments, at least in the short run. The analysis undertaken by the Commission's services (CEC, 1995) as well as that of Locarno and Rossi (1995) for the Italian case, confirms this conclusion. Among the three large countries that devalued in 1992 (Italy, Spain and the United Kingdom), only one, the UK, has had since a markedly better performance in terms of unemployment and growth than the rest of the EU. This suggests that a devaluation undoubtedly helps, but even large exchange rate movements cannot solve deep-seated problems. There are two fundamental reasons for this limitation:

- i) The price elasticities in international trade are apparently rather low. Empirical estimates of the price elasticity of export demand are usually below 1. Recent estimates suggest that it might be as low as 0.3 and only 0.5 even in the long run (see OECD, 1995). The recent report of the Commission's services on the impact of exchange rate fluctuations on trade flows (CEC, 1995) confirms that even very large exchange rate changes did not lead to large shifts in market shares.
- ii) Trade accounts only for a fraction (about 20 30%) of GDP in the larger EU member countries. A "competitive" depreciation could still have an impact on employment, even it did not affect the trade balance. Even this impact would be modest in general, however. An export demand elasticity of 0.5 implies that a depreciation of 20% is needed to obtain an increase in exports of 10%. Given a ratio of exports to GDP of 20% and given "Okun's law", which holds that an increase in the growth rate of about 2% leads to a fall in unemployment by about 1%, a devaluation of 20% would be needed to increase employment by 1%. With unemployment rates above 10%, it is clear that a competitive depreciation would have

to be very large indeed before it can solve a substantial part of this problem. Taking into account that a similar effect should come from imports could lead to a total gain in employment that is twice as high. In reality, however, most large devaluations have other side effects that reduce the gain in employment. Domestic prices and wages tend to increase, thus eroding competitiveness. A lack of confidence in financial markets that these inflationary pressures will be contained can then lead to a large risk premium on interest rates.

All of this suggest that the factors that drive domestic demand, which accounts for almost 80% of GDP, are much more important for employment than the exchange rate. But what policy instruments affect domestic demand? The experience over the last years has shown that fiscal policy is no longer an instrument that can be used freely to manage demand, especially if there are doubts over the sustainability of public finances as discussed in Chapter III below. This leaves monetary policy as the main policy instrument to achieve short-term stabilisation. Recent research indicates that interest rates (or, more precisely, the term structure of interest rates) have a strong impact on economic activity. This could also be seen during the crisis of 1992. The UK, whose currency was less obviously misaligned than that of Italy and Spain, chose to leave the ERM because it was not willing to follow German interest rate policy. The level of the exchange rate was only a secondary consideration.

Developments since 1992 have shown that in the short run, there is a link between interest rate policy and the exchange rate. But the nature of this link differs from country to country and sometimes even for a given country, it changes over time. A lowering of interest rates by the central bank is sometimes interpreted by the markets as a sign of strength (leading to a stronger currency) and sometimes as a sign of weakness (leading to a weaker currency). This first type of reaction was often observed in the case of France, and the second was more typical of the situation in Italy. Hence, one can no longer consider exchange rate and interest rate policy as two sides of the same coin — at least in the short run.

The main lesson one should draw from the experience since 1992 is thus that countries at times value the freedom to set interest rates independently. This freedom, of course, is incompatible with a fixed exchange rate, but the size and direct impact of the exchange rate adjustment that followed changes in monetary policy remain of secondary importance, unless there was a clear misalignment to begin with. This result indicates that the main obstacle to EMU is not the story about asymmetric shocks to trade emphasised by the optimum-currency-area approach, but, at times, differences about the short-run orientation of monetary policy.

The point to be made here is not that exchange rates do not have an impact on unemployment and demand. Rather, we wish to emphasise that if a member state tries to cure its unemployment problem through a "competitive devaluation", it would require very large exchange rate adjustments (20-40%) that would certainly have undesirable side-effects. Moreover, most of the gains would come at the expense of other member countries. A devaluation can thus work only if other member countries do not react by devaluing themselves. A generalised resurgence of uncoordinated exchange rate policies throughout the EU that results in widespread competitive devaluations would achieve very little, since the share of trade with the rest of the world in EU GDP is rather low.

The conclusion that exchange rates are not a powerful instrument of macroeconomic control does not imply that the very large exchange rate changes that have taken place in the EU over the past few years have been irrelevant. On the contrary, in those areas of the EU that were most negatively affected by the competitive advantage gained by the devaluing countries, there has been a strong political reaction that has, at times, even called into question the concept of the internal market. The strongest expression of concern about the consequences of exchange rate volatility in Europe has come from representatives of the automobile industries in Germany and France (see e.g. Werner, 1995).

Until now, there is no indication that the calls for protection against imports from countries accused of "competitive devaluation" will be heeded. But this might be due to the fact that in most cases the largest

exchange rate depreciations came in the wake of domestic political uncertainty and could be regarded as involuntary and hence not attributable to a deliberate beggar-thy-neighbour policy.

Is there not a contradiction between the finding that exchange rates have had only a small macroeconomic impact and the strong statements from a number of industries warning of the danger posed by competitive devaluations? What appears to have happened is that firms in the revaluing countries have absorbed most of the exchange rate changes in the profit margins in order to keep their export markets. This explains why even firms that have managed to hold on to their markets retain a strong interest in the exchange rate. It is thus possible that flexible exchange rates have only a small impact on social welfare (i.e. mainly employment, trade balances), while at the same time the particular interests of some private actors can result in strong political pressures.

All in all, it appears that the large exchange rate swings in the EU that started in 1992 had a stronger impact in terms of political pressures for protection than would be warranted by their impact on macroeconomic variables.

#### 4. An Issue that Will Not Go Away: Unemployment

The analysis so far has suggested that the exchange rate cannot have a strong impact on unemployment even if a depreciation is not rapidly offset by price movements. But the current level of unemployment in the EU certainly constitutes a serious problem. Would EMU make it better or worse?

It is very difficult to come to any firm conclusions concerning the impact EMU will have on unemployment in the long run. The underlying reason for this uncertainty is that the existing body of empirical and theoretical research on the long-term causes of unemployment has not been able to identify a single overall cause, but several factors that interact in a complex way. This can be confirmed by looking at the stylised facts about unemployment presented in Viñals and Jimeno

(1996). The recent large study of the OECD and the White Book of the EC on the same issue come to, or are based implicitly on, the same conclusion.

Will EMU make unemployment worse or better in the long run? Unfortunately, the answer is that EMU is likely to have only a marginal impact. The basic reason for this finding is that unemployment is a multi-faceted and structural problem. EMU does not, per se, imply any changes in the labour market institutions and social policies that are commonly held responsible for the structural component of unemployment. But EMU should make the commitment to price stability and open markets more credible in some countries and should thus be conducive to more flexible labour market institutions. But this is only an indirect effect and labour market institutions remain the competence of member states. Viñals and Jimeno (1996) provide ample theoretical and empirical support for this analysis.

Unemployment is often proclaimed to be the most important problem for economic policy at present in most member countries. In reality, however, few member countries are undertaking concrete actions that have a real prospect of reducing unemployment. The main reason is that there seems to be a trade-off between unemployment and inequality in the wage structure. The rate of unemployment is generally highest among the lower skilled and the young. Reducing their wages to price them into the market increases the spread between the lowest and the highest paid and this is often perceived to be politically unacceptable.

Another reason why national governments have in reality taken few steps to combat unemployment might be that the electoral groups that are most influential in determining policy often occupy the centre of income distribution. The employment prospects of these groups will be little affected by any widening of the gap between low and high wages that might be necessary to reduce unemployment among the low skilled.<sup>8</sup> This might explain the discrepancy between the inaction of governments on the domestic front and their repeated pronouncements that unemployment is the most important issue for economic policy.<sup>9</sup>

All in all, one must therefore conclude that most of the unemployment in the EU is structural, and that there is no single measure that could cure the problem. EMU is unlikely to have a significant impact on unemployment in the long run. Despite the strong official rhetoric at the national and EU level, in reality very little is being done about structural unemployment, because the measures recommended by economists are politically difficult to implement.

At present, there is also a small but significant cyclical component in unemployment. EMU should reduce this part of the unemployment problem by providing a framework for macroeconomic stability and sound public finances that lead to lower interest rates.

Another implication of this analysis is that unemployment is a problem that needs to be resolved mainly at the national level. Under the principle of subsidiarity, there is little the EU could or should do in this area. Some research indicates that EMU might make labor markets more flexible and hence lead to lower unemployment, e.g. Sievert (1995). 10

While it is reasonably certain that EMU will have little impact on unemployment in the long run, this cannot be said about the transition. According to the standard macroeconomic models, fiscal and monetary policy should have a strong impact on unemployment, at least in the short run. The adjustment required in some countries to qualify for EMU might thus have an impact on the cyclical component of unemployment. We return to this issue in Chapter III.

Another reason why EMU is unlikely to have a negative impact on unemployment is that, as discussed in Section 2 of Chapter I above, there is little reason to believe that idiosyncratic shocks will lead to substantial unemployment problems that could be cured with the exchange rate instrument. This has not been the case in the past and it is unlikely to be the case in the future.

#### 5. Costs and Benefits: An Overall Assessment

This chapter has shown that statements about the economic costs and benefits of EMU must always be nuanced. It is very difficult to establish a precise balance of the costs and benefits for any given country. All one can say is that this balance might be different from country to country and that it depends in a major way on what one thinks is the alternative to EMU.

The optimum-currency-area approach suggests that differences in economic structure should be a major determinant of the cost of EMU. This has often been taken to imply that only a small group of countries around France and Germany would benefit from EMU. The data presented here and in other recent studies suggest that this might be the case for a larger area. The optimum-currency-area criteria should not be overemphasised in discussions about membership in EMU because the central thesis of that approach, namely that shocks to trade could lead to large unemployment problems, cannot be confirmed empirically. Moreover, the recent experience with large exchange rate movements within Europe shows that the exchange rate is not a powerful tool with which to correct domestic macroeconomic disequilibria.

A further problem of the optimum-currency-area approach is that it implicitly compares the fixing of exchange rates to an idealised world where everything else is unchanged but exchange rates can be moved in an optimum manner in response to asymmetric shocks. In reality, the choice might be quite different. In the current economic and political context, the choice for Europe is, in fact, between the following two alternatives:

- Erratically moving flexible rates for all member countries (except a narrow DM-bloc) with the associated dangers for the single market; or
- An initially small EMU that expands quickly as the remaining countries satisfy the convergence criteria. This would preserve and even strengthen the single market.

From this perspective, the net benefits from EMU would appear to be rather large; larger than what they were thought to be before 1992, when one could assume that the alternative to EMU was a smoothly functioning EMS which posed no threats to the single market.

This section has carried out an implicitly long-term evaluation of the costs and benefits of EMU. Even if the balance is positive, especially because of the systemic considerations, one could still argue that the expected net benefits should be set against the short-term costs of the transition. The latter are discussed in the next chapter.

#### **Endnotes**

- 1. The classical papers are Mundell (1961), McKinnon (1963) and Kenen (1969). Recent contributions are Bayoumi (1994) and Bofinger (1994). Surveys can be found in Ishiyama (1975) and Masson and Taylor (1993).
- 2. The implicit benchmark in comparative studies (e.g. Bini-Smaghi and Vori, 1992, and Eichengreen, 1992) is usually the US in the sense that it is argued that if the economies of member countries show a similar degree of correlation among them as do states or regions inside the US, EMU should not create particular problems. The central problem of this approach is that it is not clear why the US should be the appropriate benchmark. One could even argue that some distribution of the cyclical component of demand over the regions that compose the EMU has advantages because the ECB would have a tougher task of preserving price stability if all member countries experience a demand boom at the same time (and vice versa for a slump).

If one cannot just use the US as a benchmark, it becomes rather difficult to measure the importance of the idiosyncratic shocks that require exchange rate adjustments. Other studies just measured differences in economic structure and ranked member countries in terms of their similarity with the EU average or Germany. This is the approach used here.

- 3. See, for example, Kenen (1969).
- 4. Eichengreen and Wyplosz (1993) argue, however, that the peseta was not obviously overvalued and that the crises of that currency should be considered a self-fulfilling attack.
- 5. In the case of Belgium, the response of the government was so clear that the exchange rate and interest differentials returned to their previous values in less than half a year. In the case of France, the speculative attack did not end in such a clear-cut manner because of the French presidential elections that had still to come.
- 6. See Sievert (1995).
- 7. See for example Borio (1995) who also documents differences in financial structures.
- 8. For an analysis of the national economy of unemployment, see Saint-Paul (1995).
- 9. These groups might, however, be strongly affected by a major recession that increases unemployment rates for all groups without any widening of the dispersion. This might explain the strong concerns that the adjustment to EMU might lead to

more unemployment.

10. See also Horn and Perrson (1988) and Bertola (1988).

### Chapter III The Hurdles to be Overcome on the Road to EMU

The main obstacles to EMU today are the convergence criteria, especially those concerning public finances. Experience suggests that if these are satisfied, the remaining criteria concerning the interest rate and the exchange rate are more likely to be satisfied as well (provided the country puts its currency into the ERM). II

Most economists agree that price stability and sound public finances constitute good policy. In this sense, one should not regard the Maastricht criteria as something that has been imposed arbitrarily. If there is a transitional cost that arises from the fulfilment of these criteria, it should be regarded as the cost of achieving sound economic management in the long run — a desirable goal whether the country wants to participate in EMU or not. This is also the main reason why it is of little use to discuss at length whether fulfilment of the Maastricht criteria is necessary from a theoretical point of view. It might be possible to have EMU without prior convergence, but these criteria exist and they represent sound policy.

This chapter starts with a brief description of the residual task for disinflation. It than turns to a careful analysis of the need for fiscal retrenchment and the macroeconomic consequences this will have. Finally, it turns to the practical issues in managing variable geometry, including a concrete proposal for the transition.

#### 1. The Transition to Price Stability

Most member countries are now close to price stability. The three best performers in 1995 (Belgium, the Netherlands and Finland) had an average inflation rate of below 2%. Another eight countries had an inflation rate only moderately higher (at most 1.5 percentage points higher than the three best performers). Thus, a total of 11 countries fulfil the Maastricht criterion on inflation.

There are four countries (Italy, Spain, Portugal and Greece), however,

where the rate of inflation exceeds this benchmark (and the rate is increasing in the case of Italy). Further disinflation thus remains necessary. Except for Greece, these countries will need to reduce inflation by about 2-3 percentage points. Will this cause more unemployment in these countries?

Many economists assume that lowering inflation leads to higher unemployment in the short run. It is also generally accepted, however, that the trade-off between inflation and unemployment is not stable. It depends on the credibility of the anti-inflationary policies, i.e. the extent to which the reduction in inflation is anticipated and thus incorporated in interest rates and in wage contracts. It is also now generally accepted that a permanently lower inflation rate does not lead to permanently higher unemployment. On the contrary, some recent research suggests that lower inflation is associated with better output performance over the long run. (See Barro, 1995, and Banian et al., 1994.)

Unfortunately, it is impossible to be more precise on the size of the transitional cost of disinflation. The so-called sacrifice ratio, i.e. the price paid in terms of higher unemployment in exchange for a reduction in inflation, has varied widely over the past. In some countries, disinflation has even been accompanied from the start by more growth and less unemployment. Existing macroeconomic models will be less reliable than in the past, since it is likely that the behaviour of economic agents will not follow past patterns if they see that the economic environment changes fundamentally as EMU approaches. This is the essence of the so-called "Lucas critique" (see Lucas, 1976).

It is therefore impossible to say what transitional cost the four countries with high inflation would have to sustain in order to satisfy the Maastricht criterion on inflation, <sup>12</sup> or whether there would be any cost at all. Little can thus be said about the short-term consequences of disinflation, other than that any short-term costs are worth the longer-term benefits. The adjustment to public finances deserves more extensive discussion.

#### 2. Towards Sound Finances: Debt Levels versus Changes

It is widely assumed that the fiscal criteria imply that a country that wants to qualify for EMU has to have a deficit below 3% of GDP and a public debt-to-GDP ratio of below 60%. This is not entirely correct, however, at least as far as the debt ratio is concerned. How could this confusion arise? What are the conditions under which a country has an excessive deficit? The second paragraph of Article 104c is key in this respect:

The Commission shall monitor the development of the budgetary situation and of the stock of government debt in the Member States with a view to identifying gross errors. In particular it shall examine compliance with the budgetary discipline on the basis of the following two criteria:

- (a) whether the ratio of the planned or actual government deficit to gross domestic product exceeds a reference value, unless
  - either the ratio has declined substantially and continuously and reached a level that comes close to the reference value;
  - or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value;
- (b) whether the ratio of government debt to gross domestic product exceeds a reference value, unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.

The reference values are specified in the Protocol on the excessive deficit procedure annexed to this Treaty.

The Protocol referred to establishes the reference value for the deficit at 3% (the deficit of general government as a proportion of GDP) and 60%

for the debt (gross debt of general government as a proportion of GDP). These are indeed the numbers that dominate the public discussion, but the Treaty also contains important qualifications that are often overlooked.

On the deficit, the Treaty could be interpreted as saying that only small overruns are admissible and that they have to be temporary. A valid reason for a temporary deficit is often assumed to be a downswing in the business cycle; but there might also be unforeseen expenditure due to a court ruling as happened recently in Italy and Germany. It will always remain debatable what "close to the reference value" means in practice. Is a deficit of 3.5, or even 4% of GDP still close? But it is now generally accepted that the 3% deficit reference value should be considered an absolute upper limit even during a downswing and member countries are aiming at a value somewhat lower. These are questions of detail, however, compared to the ones that arise concerning the debt level, which in some countries is double the reference value.

In contrast to the provisions concerning the deficit, the rules concerning debt do not specify that the level of debt has to stay close to the reference value. The reason for this is quite clear: when the Treaty was negotiated, several countries already had debt in excess of 100% of GDP. From this starting point, it was clearly impossible to get close to the reference value in any foreseeable future because the debt level is a stock that cannot be changed quickly. A deficit, which is a flow concept, can be adjusted rather quickly, but it takes time for this to have an impact on the debt level. The Treaty merely requires that the debt/GDP ratio must be moving in the right direction at a certain minimum speed. The decisive formulation concerning the excessive deficit issue will thus be for the foreseeable future: "unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace".

The crucial question then becomes: What constitutes a sufficiently diminishing debt ratio? This vague formulation needs to be made more precise; otherwise, there will be too much room for disagreement. The case of Ireland, which was exempted from the excessive deficit procedure in 1994 and 1995 — although its debt/GDP ratio was still nearly 90% —

is cited in some countries as evidence that the Maastricht criteria have been softened. This criticism could arise only because the debt criterion is so vague.

It is not widely appreciated that most of the vagueness arising from the phrase "approaching the reference value at a satisfactory pace" could actually be resolved on the basis of the numbers contained in the Treaty, combined with some simple arithmetic. 13 Box III.1 shows that a country that observes the 3% deficit limit should, under ordinary circumstances (i.e. if nominal GDP grows at 5% p.a.), see its debt-to-GDP ratio decline automatically towards the 60% target. If the deficit is equal to 3% of GDP, the speed of this convergence towards the target would be slow. because only 5% of the difference between the actual debt/GDP ratio and the 60% target would be eliminated each year. But this rule would at least ensure a minimum of convergence, and a country that starts with a higher debt level would automatically achieve larger reductions in the debt/GDP ratio. A country that starts with 140% of GDP would achieve a reduction of 4% points per year, whereas a reduction of 1.5 percentage points would be sufficient under this rule for a country that starts with a debt ratio at 90% of GDP.

In order to ensure that the improvement is not transitory it would be necessary to apply this criterion over a number of years. This could be achieved, for example, through the following practical rule that could be adopted informally by ECOFIN:

The debt to GDP ratio is considered "approaching the reference value at a satisfactory pace" if, over the last three years, it has been declining continuously, and the total reduction has been equal to three-twentieths of the difference between the debt ratio at the beginning of the three-year period and the reference value of 60%.

This rule should be applied each year when the public finances of member countries are examined for the excessive deficit procedure. In practice, it would be relevant for those member countries that have a debt/GDP ratio that is clearly above the 60% reference value. It should be obvious, but

### Box III.1 An Interpretation of the Maastricht Criterion on Debt

The numbers specified as reference values in the Maastricht Treaty are arbitrary. The two values, 3% deficit and 60% debt-to-GDP ratio, are at least coherent with each other, however, if one assumes that nominal GDP grows at 5% per year. This seems a reasonable assumption since it corresponds to the growth rate that a relatively good performer in terms of price stability, such as Germany, experienced during the 1980s. (During the 1960s and 1970s, nominal GDP actually grew at over 8% in Germany.) If growth in the EU stays at 3% (i.e. just a bit above potential output growth), a 5% nominal growth rate would be compatible with inflation of 2% (less than the German average over the last 40 years).

Given this assumption, the two reference values are consistent with each other in the sense that at a 60% debt/GDP ratio and a 3% deficit will leave the debt ratio unchanged. This can be seen by considering the government budget constraint in terms of ratios of GDP, which implies that the change in the debt ratio, denoted by  $b_t$  -  $b_{t-1}$ , is approximately equal to the deficit (the overall deficit, not the primary deficit), indicated by def<sub>t</sub>, minus an adjustment factor for GDP growth:

(1) 
$$b_t - b_{t-1} = d_t - b_t * growth of nominal GDP$$

If the nominal GDP growth is 5%, this equation implies that the 3% deficit limit will lead to a debt-to-GDP ratio automatically at 60% since if the deficit, def, equals 0.03, equation (1) can be rewritten as:

(2) 
$$b_t - b_{t-1} = -0.05 * (b_t - 0.6)$$

If the debt ratio is initially above 60%, it will decline, and vice versa if it starts out below 60%. It will be constant only if  $b_1 = 0.6$  (i.e. 60%).

This result depends, of course, on the assumption of a residual inflation rate of about 2% (plus real growth of 3%). With absolute price stability, GDP would grow only at 3%; in this case, a deficit of only 1.8% of GDP would be required to keep the debt ratio constant. If one takes into account the average deficit should be below 3% of GDP since this value is the upper limit, there is thus room for improvement on the debt ratio — even if nominal GDP grows by less than 5%. If the budget were balanced in good times and allowed to go to a deficit of 3% in bad times, e.g., the average deficit would be 1.5% of GDP if good times occur with the same frequency as bad ones.

The most important implication of equation (2) in this context, however, is that one-twentieth (0.05) of the discrepancy between the actual debt ratio and the Maastricht target would be automatically eliminated each year, if the deficit is 3% of GDP.

This suggests that the expression in Article 104c, 2b that a debt/GDP ratio above 60% constitutes an excessive deficit "unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace" could be interpreted more precisely as saying that the debt ratio should be declining at least by enough to reduce the distance between the 60% reference value and the starting point by at least by 5% p.a. If this rule is accepted, any government whose deficit was below 3% of GDP (and that does not accumulate debt off-budget) would automatically meet the debt criterion.

it bears repeating that this rule should also apply after a country has joined in order to ensure continued movement towards the 60% target.

The main reason why even such a slow (at least at first sight) speed of adjustment should be acceptable is that the potential pressure on the ECB that derives from a large debt level is much reduced once financial markets see that the debt/GDP is clearly on a durable downwards path.

Table III.1 below shows the evolution of the debt/GDP ratio until 1995, for those 8 member countries that are clearly above 60%. It is apparent that, except for Ireland, there has been no improvement since 1993. The last column of this table then shows what would be required if the abovementioned rule were applied in the 1998 examination that will be based on budgetary data for 1997. Belgium would be admitted if the ratio had declined from only about 135 to 123% of GDP; this would require a considerable effort, however, since the ratio has essentially been constant over the last few years. For Ireland, the speed of decline since 1993 (12 percentage points of GDP until 1995) would be sufficient to continue to be exempt from the excessive deficit procedure. For countries with a debt ratio of around 70%, the required adjustment would be minor.

It is noteworthy that neither the Maastricht Treaty nor any other official document uses the accounting identity that the increase in government debt over any given year should be equal to the deficit incurred during that year so that the deficit and the debt criteria are linked. Unfortunately, this is seldom the case in reality. Small deviations from this accounting equality would not matter. But the discrepancies that are contained in the official figures for the recent past are so large that they make the interpretation of the convergence criteria very complicated.

For example, in 1994, the deficit of Germany was below 3% of GDP so that the debt/GDP ratio should have been approximately constant given that the growth of nominal GDP was slightly above 5%. But the debt ratio increased during 1994 by about 8.5% of GDP (i.e. more than one would have excepted on the basis of the evolution of nominal GDP and the deficit). The reason was that the German government took over the accumulated liabilities of the Treuhandanstalt, the agency charged with privatisation in the former GDR.

# Table III.1 Public Debt in High-Debt Countries (Percentage of GDP)

| Public debt as<br>% of GDP | 1993  | 1994 | 1995 | Required in<br>1997 |
|----------------------------|-------|------|------|---------------------|
| Belgium                    | 137.5 | 135  | 134  | 123                 |
| Denmark                    | 80    | 76   | 74   | 74                  |
| Greece                     | 115   | 113  | 114  | 105                 |
| Ireland                    | 97    | 91   | 86   | 86                  |
| Italy                      | 119   | 125  | 125  | 115                 |
| Netherlands                | 81    | 78   | 78   | 75                  |
| Portugal                   | 67    | 69   | 71   | 68                  |
| Sweden                     | 76    | 80   | 81   | 76                  |

Source: European Commission and own calculations.

The prize for the largest "stock flow adjustment" in recent times goes to Greece, where it exceeded 20 percentage points of GDP in one year alone (1993)! In cases like this one, clearly the deficit numbers are not sufficiently informative by themselves and the formulation in Article 104c 2 that "the Commission shall monitor the budgetary situation and the stock of government debt in member countries with a view to identifying gross errors" acquires real meaning. Reconciling deficit and debt figures should be worth a major effort by the services of the Commission.<sup>15</sup>

Under EMU, most of the legitimate reasons for the stock flow adjustment (e.g. borrowing by the central bank to bolster its reserves, a change in the domestic value of debt denominated in foreign currency, as long as it is in another EU currency, due to a devaluation) should disappear. The practice of keeping certain items off-budget should then be thoroughly scrutinised.

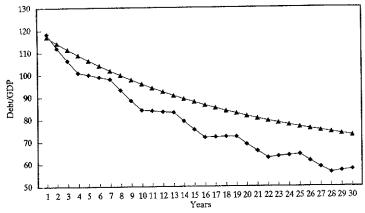
All in all, these considerations imply that a government that keeps the deficit at, or even slightly below, 3% should also be able to satisfy the debt criterion, provided that it keeps does not accumulate debt off-budget and that growth is satisfactory. The deficit is thus the key variable even for countries whose debt level is, still, far above the target value of 60%. This might also be ultimately the reason why the Treaty speaks only of an excessive *deficit* procedure.

What would be the implications of the proposed rule in reality? A deficit of 3% of GDP at present is not enough to obtain the required reduction in the debt ratio for some member countries for two reasons: i) the growth rate of nominal GDP is slightly below 5%, and, more importantly, ii) off-budget debt accumulation is continuing to the tune of 1 to 2% of GDP each year. This implies that countries with a debt level far above 60%, such as Belgium and Sweden, would need to aim at a deficit (as officially measured) substantially below 3% of GDP. For these countries, deficits not exceeding 1-2% of GDP would be the only way to attain the minimum reduction in the debt level outlined above. Box III.2 shows how the debt/GDP ratio would behave if the automatic stabilisers are allowed to work so that deficits are below 3% of GDP during good times.

The proposed rule is only one possibility. An alternative solution would be to require the primary deficit (i.e. the deficit net of interest charges on public debt) to be consistent with a decline of the debt ratio under normal real growth and real interest rate conditions. This would have the advantage of making the assessment of the fiscal situation independent from a variable that the government does not control, namely the long-term interest rate, but at the cost of making the evolution of the debt ratio less predictable. Any rule based on the primary deficit would also be difficult to reconcile with the Treaty's emphasis on the overall deficit.

Whatever rule is finally retained, it is important that the interpretation of the criterion be clarified in advance, because this would i) increase the credibility of EMU, ii) avoid the situation in which the decision was made on political rather than economic grounds and iii) help countries to design their convergence programme, including those that will not qualify in 1998, but aim to do so as soon as possible thereafter.

### Box III.2 The Business Cycle and Automatic Stabilisers



- With automatic stabilisers (3% deficit during downswing, 1% during upswing).
- With constant 3% deficit and no business cycle (constant growth of nominal GDP).

The practical rule proposed here to determine whether a debt/GDP ratio is "approaching the reference value at a satisfactory speed" should be considered as the absolute minimum. If a country were to have a deficit of exactly 3% of GDP, growth of nominal GDP of 5% and no accumulation of debt off-budget the movement of the debt/GDP ratio towards the 60% reference value would indeed be slow as shown in the accompanying graph. Even after 30 years the ratio would still be above 70%.

However, there is now broad agreement that the deficit should in general be held clearly below 3% in order to ensure that even in a recession it does not exceed this limit. It is thus more realistic to assume that the deficit will sometimes be below 3%. The lower line in the graph shows what would happen if the deficit were to be equal to 3% of GDP during a downswing of the business cycle (defined here as a growth rate of nominal GDP of 4%) and 1% during the upswing of the business cycle (defined here as a growth rate of nominal GDP of 6%). This still implies an average deficit over the cycle of 2% of GDP, but the automatic stabilisers would be allowed to work. Under these conditions, the debt/GDP ratio would go down in a stepwise pattern because during the downswing two effect reinforce each other: the deficit is large and the denominator (GDP) grows more slowly. Under this approach, the movement towards the reference value is much quicker. Starting from a debt/GDP ratio of 120%, it would take "only" about 15 years to get close to 70%.

### 3. The Macroeconomics of Fiscal Retrenchment: Will fulfilment of the Maastricht criteria hurt economic activity?

#### 3.1 How much adjustment is needed?

Satisfying the deficit criterion alone already implies a considerable fiscal adjustment in a number of member countries. Table III.2 below shows the most recent estimates of general government deficits in 1995. The figures for 1990 are also presented to show that the situation in 1995 will be similar to the situation just before Maastricht was negotiated. It is remarkable that in one key country, France, an unprecedented deterioration in the fiscal accounts took place between 1990 and 1995, i.e. just after the country signed up to observe the Maastricht fiscal convergence criteria. The largest swing took place in Sweden, where the deterioration between 1994 and 1990 was equivalent to almost 15% of GDP, but the improvement planned for 1996 is also very large. Finland shows similarly large swings between 1990 and 1995.

The first group in Table III.2 comprises the four countries with a deficit below 3% already in 1995. An additional two countries plan to go below 3% in 1996. The further adjustment needed between 1996 and 1997 should be modest for most of the countries in the last group. But even if one discounts the plans for 1996, which must always be treated with caution, it is clear that the need for fiscal adjustment in most member countries is now relatively small — between 1 and 2% of GDP, if one assumes that a deficit of 3% of GDP is the target. One has to keep in mind that for Belgium (and the Netherlands), however, a deficit of 3% of GDP is not sufficient to put the debt level on a clearly downward path, as argued above. For Belgium, a fiscal adjustment of about 3 percentage points of GDP (to reach a deficit of about 1.5% of GDP) and for the Netherlands, an adjustment of about 1.5 percentage points (to a deficit of about 2% of GDP) would probably be required for both countries to achieve a sufficient reduction in their debt levels (which currently exceed 60% of GDP in both countries) in terms of the practical rule discussed above.

Table III.2

Public Sector Deficits in the EU

|                        | De          | Adjustment<br>Needed in<br>1997 to<br>Reach 3%<br>Deficit |                   |              |
|------------------------|-------------|---|-------------------|--------------|
|                        | 1990        | 1995<br>(Provisional)                                     | 1996<br>(Planned) |              |
| Denmark                | 1.5         | 2.0   | 1.3               | none         |
| Germany                | 2.1         | 2.9   | 2.8               | none         |
| Ireland                | 2.2         | 2.7   | 2.0               | none         |
| Luxembourg             | -5.9        | -0.4  | -0.6              | none         |
| Finland<br>Netherlands | -5.4<br>5.1 | 5.4<br>3.1  | 1.5<br>2.7        | none<br>none |
| Austria                | 2.1         | 5.5   | 5.0               | 2.0          |
| Belgium                | 5.4         | 4.5   | 3.1               | 0.1          |
| France                 | 1.6         | 5.0   | 3.9               | 0.9          |
| Greece                 | 14.0        | 9.3   | 8.3               | 5.3          |
| Italy                  | 10.9        | 7.4   | 6.0               | 3.0          |
| Portugal               | 5.5         | 5.4   | 4.7               | 1.7          |
| Spain                  | 3.9         | 5.9   | 4.7               | 1.7          |
| Sweden                 | -4.2        | 7.0   | 4.5               | 1.5          |
| UK                     | 1.5         | 5.1   | 3.7               | 0.7          |
| EU 15                  |             | 4.7   | 3.8               | 0.8          |

Source: Commission of the European Community.

There are, however, some countries that would have to reduce their deficits by much more than 3 percentage points of GDP. Italy and Sweden stand out with an adjustment need (as of 1995) of about 4% of GDP to reach a deficit of 3% of GDP. However, the figures used so far might constitute an overstatement of the real need for fiscal retrenchment, since these countries also pay at present much higher interest rates on their public debt. As they get closer to EMU, the debt service burden should fall considerably. Would this effect be important? The answer is yes, but unfortunately it is difficult to predict the exact amount of the interest rate savings. Annex 2 offers two alternative sets of calculations. Table III. 3 below uses an average of the estimates in Annex 2 of the interest savings the highly indebted countries could experience as they converge to EMU in order to assess the reduction in non-interest expenditure that remains necessary to reach the 3% limit.

Table III.3
Fiscal Adjustment and Debt Service Savings

|              | Bas | Adjustment needed (in % of GDP) to reach a 3% Deficit |   |                    |   |  |
|--------------|-----|---|---|--------------------|---|--|
| Debt/<br>GDP |     | Deficit/<br>GDP                                       | Potential<br>Debt<br>Service<br>Savings | Overall<br>deficit | Primary<br>Balance<br>with Debt<br>Service<br>Savings |  |
| Belgium*     | 134 | 4.5   | ?                                       | 2.5                |   |  |
| Greece*      | 114 | 9.3   | 6.7                                     | 7.3                | 0.6   |  |
| Italy*       | 125 | 7.4   | 4.5                                     | 5.4                | 1.0   |  |
| Portugal     | 71  | 5.4   | .5 - 3.0                                | 2.4                | 2.0-0.0   |  |
| Spain        | 65  | 6.0   | 1.5                                     | 3.0                | 1.5   |  |
| Sweden       | 81  | 7.0   | 2.2                                     | 5.0                | 2.8   |  |

<sup>\*</sup> For these countries, the target is a deficit of 2% of GDP because of the high debt level. Source: Own calculations; see Annex 2.

This table suggests that, if they could count on EMU interest rates, even countries like Italy, Spain and Portugal would have about the same need for discretionary adjustment in primary (non-interest) expenditure (and/or taxes) as other countries with lower deficits, i.e. about 1 - 2% of GDP. The remainder would come through lower debt service costs. For Sweden, the need for adjustment, after taking into account the full potential for a reduction in the cost of servicing public debt, is now only moderately above that of the rest.

A closer analysis of the fiscal accounts thus suggests that the high-interest-rate member countries are in a sort of "catch-22". As long as they are outside EMU, they need to cut deficits by between 3 and 5% of GDP. But if they were already in EMU, the need for fiscal adjustment would be manageable, about 2% of GDP. We will return to this central problem in Chapter IV.

#### 3.2 The Macroeconomic Consequences of Fiscal Retrenchment

What would be the short-term macroeconomic consequences of implementing the deficit reduction identified above as necessary to observe the fiscal criteria? In most macroeconomic models (see Hughes Hallett and Pisani-Ferry, 1996, for further references), a fiscal contraction leads to lower demand and hence to lower output growth and employment creation, at least in the short run. These effects can in principle be quantified with some precision. Most of the existing macroeconomic models have multipliers somewhat above one so that they would predict that if any one country reduces its deficit by 2 to 3% of GDP, demand would fall by a similar amount in the short run. If several countries move fiscal policy in the same direction at the same time, the impact on output might, however, be different depending on the sign of the spillover effect.

Standard macroeconomic models generally predict that a fiscal adjustment quickly causes a fall in output that is then followed by a rebound. This "U-form" adjustment pattern appears in most models. However, the different large macroeconomic models that are available differ strongly in their implications for the length and the strength of the

initial dip. There are also large differences concerning the subsequent recovery, that, depending on the model, could lift output above the starting point because of a strong interest rate effect. The short-term macroeconomic consequences of a fiscal adjustment are therefore difficult to determine with any precision.

The simulations from the early 1990s that are available are difficult to compare with more recent exercises because the adjustment required (to reach a deficit of 3% of GDP) has changed over time. It is symptomatic that none of the international organisations (neither the IMF nor the OECD) nor the services of the Commission has so far published the results that one would obtain with their macroeconomic models. At any rate, different simulations also make different assumptions concerning the time path of the adjustment, the accompanying monetary policies and the number of countries involved. For example, one simulation might hold exchange rates and interest rates constant whereas another allows for flexible exchange rates even within Europe. Box III.3 discusses the result of some recent simulation exercises performed for the Economic Policy Group.

Hughes Hallett and Pisani-Ferry (1996) provide the most recent evaluation of the macroeconomic effects of the fiscal adjustment necessary to achieve a deficit of 3% of GDP in some larger member countries (France, Italy, and the UK). They use the model of the IMF to determine the impact of this adjustment to the Maastricht norm on output and prices. Their main result is that the models predict a fall in output and prices (compared to the so-called baseline) that could be substantial and protracted, depending on the timing of the adjustment. The cumulative percentage decline in output would in general be somewhat smaller than the reduction in the deficit as a percentage of GDP. Thus for France, the fall in demand could be somewhat below 2%, whereas it would be larger in Italy or the UK.

Hughes Hallett and Pisani-Ferry (1996) also suggest that the experience with large fiscal adjustments in the past shows that determined action can reduce, and possibly even eliminate the output cost of fiscal contractions. Indeed, most of the *sustained* fiscal adjustments that occurred in OECD countries over the last two decades caused actually very little or no

## Box III.3 The Effects of Large Fiscal Retrenchments: What do macroeconomic models tell us?

Simulations with standard macroeconomic models that assess the adjustments necessary to meet the 3% deficit limit suggest that the remaining reduction in deficits (about 2% of GDP in France, somewhat more in the UK and, about 4% of GDP in Italy) involve non-trivial costs in terms of output losses. The results differ depending on the model used and the starting point, but even more optimistic simulations conclude that the fiscal multiplier (measuring the decline in output per unit of deficit reduction) typically lies between 0.5 and 1.0 for a large country. This implies that fiscal retrenchment will significantly dampen growth in several European countries in the run-up to EMU.

Eichengreen and von Hagen (1995b), for example, report serious recessions resulting from a contraction of government spending, where output recovery takes up to five years. One reason for the slow recovery is that the deficit criterion is formulated in relation to GDP. This implies that expenditure needs to be cut by more than needed initially to reach the 3% target (ex-post) to offset the fall in GDP growth. This aggravates the recession, making the needs for retrenchment even larger.

One reason why the models usually produce large output costs is that they assume that nothing else affects the monotonic relationship between fiscal policy and output. This is often not the case, however. Pisani-Ferry and Cour (1995) study large budgetary adjustments in OECD countries since the 1970s and report that the output costs in their sample have been rather low. They therefore conclude that the output costs can be lower than is generally assumed.

One possible explanation for this finding of low impact of fiscal retrenchment could be that the risk premium on the public debt diminishes with a sustained improvement of the deficit. With the exception of Denmark, however, the impact of the adjustment on interest rates has in reality been rather low in the short run. One thus has to attribute the low negative effects of a determined fiscal retrenchment to other stimulating monetary policy and/or to the direct expansionary effect the restoration of sustainability have on private demand.

Hughes Hallett and McAdam (1995) used the IMF's MULTIMOD model to study the effects different adjustment scenarios would have on the long-run growth in those countries undertaking them. They point out that it might be quite easy for countries to squeeze in by forcing their deficit down to 3% but that it that it would be harder to keep it there. The standard models also predict a considerable deflation (a fall in the price level relative to the baseline) following fiscal retrenchment. Since this is not needed in most countries (especially France), these models thus also imply that a restrictive fiscal policy could be coupled with a less restrictive monetary policy without endangering price stability. By keeping the price level at the baseline, a large part of the output loss could be avoided.

output losses at all. The explanation might be that a fiscal adjustment that is the result of a change in the fundamental rules followed by the government should have different implications than an action that just changes the deficit for a couple of years, as argued in Lucas (1976). EMU would certainly represent a shift in the fundamental rules for both fiscal and monetary policy.

Should one therefore accept the conclusion that fiscal retrenchment leads to a temporary reduction in economic activity? The basic problem with the macroeconomic simulations is that a fiscal adjustment to satisfy the Maastricht criteria should have other than the standard demand effects. In countries where the present fiscal situation is not sustainable, the interest rate reflects also the fear of financial markets that the government will in the end be forced to renege on its debt or create some surprise inflation. This is presumably the reason why, with one exception. namely Belgium, the countries with the largest adjustment need are also those that have the highest risk premium in the sense that the interest rate differential with Germany is high. For these countries (mainly Italy and Sweden), it is virtually certain that a decisive fiscal adjustment will lead to much lower interest rates. It is difficult to say how large this confidence effect will be, but the potential is certainly considerable if one takes into account that the interest rate differential between Italy and Germany has hovered around 5 percentage points in 1995.

Moreover, as shown above, once interest rates fall, the need for adjustment on the primary budget is much reduced. Hence, a confidence effect on interest rates would be beneficial on two accounts: it boosts demand and reduces the need for tax increases and/or expenditure cuts. These considerations suggest that one should distinguish between those countries where the deficit is above 3% of GDP but the debt level is low, and those countries where the situation is unsustainable because the debt-to-GDP ratio is already high and would increase even further without corrective action.

For countries like France, Holland, Belgium and Austria, the interest rate differential with respect to Germany is small. (For most of 1995, it was around 70-80 basis points for France on short-to-medium-run maturities.) This suggests that for these countries, the confidence effect through lower

interest rates might be weak. France is the most important example for this situation. In this case, the consequences predicted by macroeconomic models might be qualitatively acceptable.

By contrast, the economies of the high-debt countries (notably Italy and Sweden) are likely to react differently. Decisive action to put the debt/GDP ratio on a clearly declining path should lead to a large fall in interest rates. Although the need for fiscal adjustment might at first sight be larger in Italy and Sweden, the implementation of decisive measures might have less of a negative impact on output and demand than the more modest adjustment required in the low-debt countries.

It is not impossible that a convincing fiscal adjustment could actually exert an expansionary effect on demand and output in countries that start from a truly unsustainable situation. A decisive reduction in the deficit that stabilises public debt or even puts it on a downwards path could lead to so much lower interest rates that their positive effect on demand might more than offset the direct impact of higher taxes or lower expenditure. 16 This happened in the 1980s in Denmark and Ireland where a sharp fiscal contraction was accompanied by an expansion of output. The importance of the confidence effect can also be seen (operating in the opposite direction) in the experience of Spain and Italy discussed above. Domestic demand, including investment, fell sharply in both countries after the 1992 ERM crisis, despite small reductions in interest rates. This suggests that a confidence effect can operate even in the absence of any interest rate changes. Giavazzi and Pagano (1995) and Sutherland (1995) provide empirical support and analytical models for this point of view.

Even if one were to accept the predictions of the macroeconomic models that fiscal retrenchment leads to a recession or a protracted showdown of growth, it would be one-sided to emphasise the macroeconomic costs of the Maastricht criteria. These criteria simply represent generally accepted principles of sound finance. Maastricht can thus be held, at most, responsible for encouraging governments to make hard choices that they would eventually have had to make in any case.

#### 4. How to manage variable geometry?

There is little point in discussing whether variable geometry is desirable or not. The part of the Maastricht Treaty dealing with EMU is clearly based on the assumption that the third, decisive stage, of EMU may initially involve only a subset of countries. This is implicit in the provisions that stipulate that EMU should start by 1999, but that only the countries satisfying the convergence criteria can participate. Those that do not satisfy the convergence criteria will have a derogation. In practical terms, a derogation means that the country concerned does not link its currency irrevocably to the others and does not participate in the formulation and conduct of the common monetary policy.

The position of the countries with an opt-out clause, i.e. the UK and Denmark, would formally be similar to that of the ones with a derogation. Politically, and economically, their positions would, however, be quite different. Expressed in colloquial terms, it is the difference between the "willing, but temporarily unable" and the "unwilling". We will first discuss the general problems raised by variable geometry and then present a concrete proposal for the "willing but temporarily unable"

#### 4.1 Variable Geometry in General

What are the institutional, economic and political consequences of the form of variable geometry foreseen in the Treaty? Does it represent a serious hurdle for EMU, especially for those "willing, but temporarily unable"?

The institutional problems of variable geometry are already addressed in the Treaty which regulates explicitly how the ESCB (and to some extent ECOFIN) will have to deal with a variable number of participants in the third stage. The initial group of countries will, of course, have more influence than the latecomers on the institutions since the Treaty stipulates that only the countries that participate in the initial group will decide on the composition of the Executive Board (the President, Vice-President and four other members) of the ECB.<sup>17</sup> Unless it is decided

that not all 6 members are appointed immediately (this possibility is already foreseen in the Treaty), these 6 members of the Executive Board will initially have a very important position in the Council of the ECB because there may be only 6 to 8 presidents of the national central banks participating from the start.

The initial group of countries participating in EMU will also take certain decisions concerning the implementation of the common monetary policy and the instruments to be used by the ECB that will have to be accepted by the countries that join later. These are minor issues, however, compared to the economic and political ones.

It is tempting to compare the transitional arrangements for EMU to those that have always been made for weaker member countries (and new members). There is one crucial difference, however. In the legal field, the transitional periods can be defined and limited exclusively in terms of time. In the monetary field, this is not possible, because what counts are the results, i.e. the fulfilment of the convergence criteria — and this cannot be guaranteed by the passage of time.

But what are the incentives created by the Maastricht provisions? In general, the gains from EMU increase with the number of participants. The old adage "the more the merrier" applies thus to EMU as well. However, once a core group that includes at least France, Germany and some other countries has started EMU, the marginal gains in strictly economic terms from adding "peripheral" countries are small, because the latter account only for a small share of trade and output of the Union. This is not necessarily true the other way round: for a "peripheral" country, the gain from participating in EMU might be very large indeed. In general, this implies that the nature of EMU will be affected by the composition of the group of countries that takes the first step. The latecomers will have to adapt to what has already been decided for them (see Pisani-Ferry (1996)).

The asymmetry in interests between the core and the rest could create problems. For example, it has been argued (see De Grauwe, 1995) that if the initial core group perceives that it has a higher preference for price stability than the rest of the EU, it might be tempted to increase the

requirements for subsequent participation by the countries that are perceived to be weaker. In this view, it would even be possible that the countries that cannot participate in EMU from the start might be excluded indefinitely. It is difficult to see how this could come about in reality, however, since the convergence criteria are defined in objective terms. For the only exception, i.e. the rule on public debt, we have shown above that it is possible to devise a rule of thumb that would eliminate most arbitrariness from this criterion as well.

A more important reason why variable geometry is likely to create problems is that the countries that are not part of the initial core might fear more financial market pressures if EMU goes ahead without them. The reaction of financial markets to the remarks by the German Minister of Finance in October of 1995 shows that news about the likelihood of participation in EMU can have important consequences. The most obvious impact was on Italy whose currency depreciated immediately by several percentage points and interest rates rose by more than one percentage point.

But there were also some "dogs that did not bark" in the autumn of 1995 (and other crisis episodes) which are equally important. Firstly, although Mr. Waigel also mentioned Belgium as one of the countries that was unlikely to join EMU in 1999, there was no reaction in the Belgian financial markets. The reason must be that the markets expected that the hard currency policy of Belgium will be continued whether or not the country is part of the core founding group of EMU. Apparently financial markets suspect that this might not be the case for Italy in the sense that the efforts to stabilise public finances would weaken if Italy's participation in EMU had to be postponed. An immediate practical consequence was also that the re-entry of the lira into the ERM, which seemed imminent, was postponed sine die. Secondly, there was also no reaction in the financial markets of those countries that have clearly no prospect (or intention) of joining EMU in 1999. For these countries, there was no new element that could have induced financial markets to reassess their evaluation.

This episode thus suggests that the uncertainty about the composition of the core group is likely to lead to increased financial market volatility for those countries that would like to participate in EMU and undertake adjustment efforts mainly for that purpose. If markets perceive that the efforts are undertaken not because fiscal adjustment is desirable in its own right, they might conclude that if the interest rate is high the country will not be able to participate in EMU (because the deficit will be high). This attitude might also lead to a slackening of the adjustment efforts. However, another equilibrium is also possible: if interest rates are low, the adjustment required to enter EMU is smaller and hence it is more likely that it will actually be undertaken. Italy seems to exemplify the "bad" equilibrium, whereas Belgium seems to exemplify the "good" equilibrium.<sup>18</sup>

All this implies that for some countries the financial market uncertainty will persist until the European Council takes its final decision scheduled for 1998. Until then, financial markets could oscillate between the two equilibria causing large swings in exchange rates and interest rates.

The problem will be most acute when the decision has to be taken in 1998. Countries that are close to fulfilling the criteria, but are not admitted into the first group because they fall a little short can expect a strong reaction from their financial markets. Hence, they could plead that a vital national interest is at stake for them and that EMU should therefore be postponed until they can also join. This would require, however, a Treaty revision, which would put the EU in an extremely difficult position.

The main problems created by variable geometry in the monetary area thus come from the economic and political mechanisms that are amplified by financial markets. In a nutshell, the problem is that countries that cannot participate in stage III in 1999 might try to delay the start of EMU if they are close to satisfying the convergence criteria. In this sense, it is the "near periphery" that creates more of a problem than the "far periphery", i.e. those countries that are clearly some way from satisfying the convergence criteria.

In principle, all countries signed up to the conclusions of the Madrid Council of December 1995. But important politicians in some countries have repeatedly stated in public that postponement should be considered.

It would, however, be dangerous to yield to a demand for postponement because there will be differences in the time required by the "near periphery" to fulfil the convergence criteria. Establishing the principle that everybody should wait for the ones that are close to catching up might set in motion a long chain of countries that were formerly far and then come close to being able to participate as others graduate from being close to actually fulfilling the convergence criteria. In the meantime, all candidates would have to bear the cost of the higher risk premia that will persist until EMU really comes into existence. Moreover, it is important to establish the principle that no single country should impede the others to go ahead.

Whether or not the countries that are excluded, despite nearly fulfilling the criteria, will suffer a confidence crisis depends mainly on two factors: first on their determination to press ahead with convergence efforts so that they can join in the near future, and, secondly, on the exchange rate regime between the common currency of the core and the countries with a derogation. We now turn to this issue.

#### 4.2 What exchange rate mechanism for the outsiders?

One of the convergence criteria in the Treaty is "the observance of the normal fluctuation margins provided for by the exchange rate mechanism of the European Monetary System, for at least two years, without devaluing against the currency of any other member state" (Article 109j (1)). The subsequent article then goes on to say that once EMU has started, there has to be, at least every two years, an examination of the countries with a derogation. A country can join EMU after such an examination only if it fulfils all the convergence criteria. Hence, the Treaty implicitly seems to assume that the exchange rate mechanism of the EMS will continue to exist. This does not necessarily imply, however, that the EMS has to continue in exactly its present form. Since the circumstances will change radically once the third stage begins, one could even argue that it has to change.

The Madrid Council has discussed this issue, but a final decision has not been taken yet. What considerations should guide future discussions?

We already emphasised that countries that cannot participate in the first wave should make clear that they will continue and perhaps even increase their convergence efforts to be able to join EMU at the next possible date. This would help to reduce the potential for financial market instability, but it might not be sufficient to rule out speculative attacks.

Some exchange rate mechanism would thus still be useful to limit exchange rate variability and misalignments of the currencies outside EMU. What kind of system will be desirable (and feasible) in 1999 cannot be predicted at this point because its nature will depend on the number of countries that cannot join EMU initially and whether or not they have a credible perspective of joining soon. Consider the following two extreme scenarios:

- i) By early 1998, 11 countries have made enough progress to participate in EMU and the UK elects to "opt in". Only Greece, Portugal, Sweden and Italy have still an excessive deficit, but the last three have made so much progress that they will probably be able to join a year or two later.
- ii) Only France, Germany and a few other small countries start the third stage in 1999. The UK has confirmed its intention to opt out and convergence in the rest of the Union has been very slow so that the other countries will need some years before they can join EMU.

It is apparent that the nature of the exchange rate system that will be needed will be radically different depending on which of these two unlikely scenarios is closer to reality. Under the first scenario, there is really no need for a fully fledged exchange rate system, since exchange rates are likely to be stable anyway. By contrast, under the second scenario, there would be a real need for some system to limit exchange rate fluctuations.

We do not have any prior knowledge of which scenario is more likely. However, a few simple considerations show it is unlikely under any circumstance that it will be possible to re-create the old EMS. The main

reason is the difference in size which has two implications: asymmetry and bilateralism (or rather "hub and spoke").

- Germany, France and some smaller countries) will be several times as large in terms of GDP and trade as the set of countries that are outside (excluding the UK which anyway would not be interested). The difference would be even larger in terms of the size of financial markets and reputation for stability. A formally symmetric system like the EMS becomes impossible under these circumstances. In the old ERM, Germany played a central role, although in terms of trade and GDP, it never accounted for more than 45% of the area covered by the ERM.
- ii) "Hub and spokes". The trade of the periphery with the core that will represent the "hub" of the system is several times larger than the trade among the "spokes" (i.e. the likely outsiders). Hence the new system will not be multilateral. It will effectively be bilateral in the sense that it regulates the bilateral relationships between the ECB and the national central banks of the outsiders.

This does not imply that each outsider should have a different agreement. On the contrary, the same type of arrangement should be offered to all outsiders. However, even if all outsiders are willing to sign up to the same system it will de facto not work in the same way for each participant. The case of the UK (and Denmark) might, of course, present a particular problem if the British government decides to opt out in 1998 and refuses even to enter into an agreement concerning the exchange rate of the pound. However, the other member countries are likely to be willing to cooperate with the ECB to create a system that stabilises exchange rates. We have indicated why we believe that it is too early to discuss the details of such a system, but there are two features that should be part of whatever system is finally adopted.

First, the support from the core, i.e. the ECB should be linked to the convergence effort of the outsiders. The closer a country gets to satisfying the criteria for full EMU membership, the more support it should receive from the ECB in defending its exchange rate if it comes

under a speculative attack.

Second, there must nevertheless be a limit to the obligations of the core. The ECB could not underwrite to a system that forces it to intervene with unlimited amounts at some pre-specified exchange rate because that would put its primary responsibility, namely to keep prices stable for its members, in jeopardy. Hence, an essentially unilateral peg is the only possible solution.

The Madrid Council of December 1995 asked the EMI to prepare a report on the exchange rate regime for the outsiders. This report will also have to address the tension between these two features that are likely to be part of whatever system is finally adopted. But how the system will then actually operate after 1999 will depend much more on the degree of convergence achieved by the outsiders at that date than the formal rules of the game.

It is often argued that countries that remain outside will be tempted to resort to competitive devaluations. But this fear, which is based on recent experience, seems to be unfounded. First of all, exchange rates are difficult to control since they evolve with market expectations about future policy. Hence, it will be difficult for any government (or national central bank) to "engineer" a competitive depreciation without starting a cycle of inflationary expectations and high interest rates that is difficult to control. Moreover, as was shown above, even large exchange rate changes tend to have only a limited impact on unemployment and the trade balance. Finally, since the criterion on exchange rate stability will continue to apply, any country that is tempted by this policy would know that the price for a clearly "beggar-thy-neighbour" policy of this type would be further delay in EMU membership.

How tight the exchange rate system will be after stage three has started, depends thus essentially on the country concerned. The next section presents a specific proposal that is designed to address the legitimate concerns of the excluded countries without delaying EMU.

#### 4.3 A Concrete Proposal

The countries that are excluded from the start of EMU, despite a desire to participate, need some reassurance from the Union that the constitution of the core group is only a temporary measure and that the others will be invited to join once they have converged. This is certainly the intention of the Treaty. But what if initial exclusion makes convergence much more difficult, even if there is some exchange rate mechanism for the outsiders?

One solution might be granting a form of associate status in EMU (or rather the initial core group). The country concerned could be invited to come under the EMU umbrella to benefit from lower interest rates, but it would not participate in the management of EMU until it had converged in fiscal terms as well.

This arrangement could be achieved technically by a unilateral declaration that the country concerned accepted all the obligations arising from membership in EMU, 20 but it would be preferable to have a formal agreement between the EU (or rather the ECB) and the country concerned, and the political support from the Council because this would make it much more credible with the markets. The agreement would specify mainly that the national central bank agreed to follow the monetary policy of the ECB as if it were a full member of the EMU. At the same time, however, it would be clear that for purposes of decisionmaking in the ECB (and ECOFIN), the country would continue to be treated as having a derogation. In essence, the country would give up its national monetary policy and replace it with that of the ECB. More precisely, this means that the exchange rate would be irrevocably fixed, the payments systems would be unified, actions by the ECB would have direct effect in the country concerned and the decisions of the ECB would have to be applied by the national central bank, a portion of whose foreign exchange reserves would be pooled in the ESCB like those of the full participants. Moreover, the country concerned would be subject to the full excessive deficit procedure.<sup>21</sup>

All this would be officially acknowledged by the Union in conjunction with a convergence programme outlining how the country would, with

the help of lower interest payments, satisfy the fiscal criteria by a certain deadline.<sup>22</sup> Acknowledgement by both the Union and the ECB would make this arrangement credible and would ensure that market interest rates in the country concerned converge quickly to the level of the core.<sup>23</sup>

This sort of associate status in EMU will deliver the benefits in terms of lower interest rates only if it is credible. Credibility should come already from the endorsement given by the ECB, but it would be immensely strengthened if markets see that the exchange rate could be defended under any circumstance. This should be the case if one views the proposed arrangement as a "currency board". A currency board is credible if the national central bank possesses adequate foreign reserves to guarantee conversion of all of their liabilities (the monetary base) into the common currency of the core. Would this be the case? Box III.4 below shows that most of the central banks that might be candidates for this approach do indeed have enough reserves to make the currency board approach credible.

All the candidates for associate membership in EMU could thus be confident of operating a tight link with the core even under a worst-case scenario. If the markets know that there is no chance that they can force a break in the link to the common currency of the core, they will regard it as credible. Any country that chooses this approach could increase the credibility even further by passing a law that obliges the national central bank to defend the exchange rate through unsterilised interventions. Moreover, it is likely that if there were really a totally unjustified speculative attack, the ECB would help the country concerned. If the underlying fundamentals are sound, credibility should thus not be a problem. If the fundamentals are not sound, the ECB would not recommend this approach in any event, and no country would (or should) dare to try it against its advice.

Technical viability is of course only a necessary, and not sufficient condition for the stability of a currency board arrangement. The reason why central banks usually sterilise their interventions is that the large increases in interest rates that might result if they did not are not accepted; either because of their macroeconomic consequences (UK in

## Box III.4 Technical Conditions for the Viability of a Currency Board

Technically a currency board is viable if the central bank has enough reserves to exchange all its liabilities (the monetary base) into foreign currency. This is the case if the foreign exchange reserves are larger than the monetary base. Column (3) in the table below shows that the ratio of foreign assets to the monetary base is above, or close to, 1 for all countries except Italy. If one takes into account that, even in a worst-case scenario, few people will exchange their holdings of cash, it would be sufficient for a national central bank to have enough foreign assets to cover the remainder of the monetary base (i.e. required reserves). Column (4) shows that this is the case by a large margin for all the countries considered below, with the exception of Italy and Finland. Even for these two countries, however, the shortfall is rather limited since the existing foreign exchange reserves cover already 100-110% of the reserves held by banks with the central bank. In the Italian case, this result is due to the unusually large reserve requirements imposed on banks in Italy. The reserve ratios in Italy are at present 5 to 10 times higher than in the rest of the EU and have to be lowered anyway if Italy wants to participate in EMU. If reserve requirements were only halved in Italy (leaving them much above the EU average), the international reserves of the Banca d'Italia would be much larger than the mobile part of the monetary base. (Some margin is needed since part, say 20-25%, of the foreign reserves will be pooled in the ECB.) Hence, even the Banca d'Italia could defend the exchange rate if it previously lowered required reserve ratios towards the EU average, provided, of course, that it does not engage in any sterilisation as done so often in the past.

#### Reserves and Monetary Base

|                         | (1)           | (2)               | Ratios based on:            |   |  |
|-------------------------|---------------|-------------------|-----------------------------|---|--|
|                         | Base<br>Money | Foreign<br>assets | Monetary Base (3) ≈ (2)/(1) | Required Reserves (4) = (2)/[(1) - cash in circulation] |  |
| Belgium (bill. Franc)   | 430.4         | 731.7             | 1.7                         | 36.0  |  |
| Finland (bill. Mark)    | 38.0          | 33.5              | 0.9                         | 1.2   |  |
| Greece (bill. Drachma)  | 2500.1        | 2975.5            | 1.2                         | 4.6   |  |
| Italy (bill. Lira)      | 150.0         | 86.6              | 0.6                         | 1.0   |  |
| Portugal (bill. Escudo) | 3001.3        | 3706.7            | 1.2                         | 1.6   |  |
| Spain (bill. Peseta)    | 7.800         | 6.152             | 0.8                         | 4.8   |  |
| Sweden (bill. Kroner)   | 163.8         | 175.7             | 1.1                         | 1.8   |  |

Source: International Monetary Fund.

1992), or because they could endanger the stability of the banking system (Sweden also in 1992). Central banks and governments will have to convince markets that they will be willing to accept interest rate increases if the market tests their resolve. The experience of Belgium, which faced a test of its commitment in 1993, shows that it is possible to present this case persuasively.

We do not wish to suggest that associate membership in EMU will constitute a magic wand that eliminates all problems. But it represents an option for countries that are very close to qualifying for full membership. Irrevocably fixing the exchange rate with the prospect of full participation in EMU after a couple of years is fundamentally different from fixing exchange rates in the environment of the 1980s (with high and variable exchange rates) or during the early 1990s (when some currencies were clearly overvalued). The argument that experience has shown that fixing the exchange rate is impossible because financial markets could attack any exchange rate should thus not be over-rated. There will be little reason for financial markets to attack an exchange rate if inflation is low, deficits are close to 3% of GDP (possibly even below), debt ratios are declining and the external current account indicates a good competitive position.

The political viability of this idea depends upon its presentation. If it is characterised as a means of circumventing the convergence criteria, which is actually not the purpose of this proposal, the core will veto it. The scheme merely aims to help the peripheral countries bridge the gap that separates them from the core without softening in any way the convergence criteria for full participation in EMU.

Only countries that have done their basic homework should be encouraged to pursue this approach. In order to qualify, the deficit when calculated at German interest rates should at a minimum fall below 3% of GDP. This discipline would also ensure that the debt ratio would be declining once the lower interest rates took effect. It bears reiterating that the country in question would have a derogation in the decision-making organs of the ESCB, which would imply that the convergence criteria had not been suspended.

In a sense, Belgium and Austria have already successfully opted for this course by pegging unilaterally to the DM. Why can't the others follow their example? The real test of this approach will come in the case of a large country, e.g. Italy. Large countries have always experienced more problems in acquiring stability through the exchange rate. But in this case, they would not attempt to use the exchange rate to force adjustment in prices or wages. Their problem is that they are stuck in a low credibility-high interest rate trap out of which it is very difficult to escape without outside help as analysed above. The decision to participate in EMU, even if essentially on a unilateral basis, would constitute one large step away from this trap. Of course, this can only facilitate adjustment. It is in no way a substitute for the resolute fiscal action that has to be taken anyway.

#### **Endnotes**

- 11. If public finances are clearly in order and inflation is low, the likelihood of speculative attacks must also be very low.
- 12. Another danger for inflation might arise for countries that enter EMU with an excessively depreciated exchange rate. Macroeconomic models suggest that it takes a number of years before a depreciation translates into higher prices. This raises the possibility that a country that entered EMU with stable prices but a depreciated exchange rate would for some years have a substantially higher inflation rate than the rest of EMU. It is even possible that such a country would no longer satisfy the inflation criterion after it had already entered EMU. However, this should not be regarded as a danger for price stability in the EMU since the countries whose currencies are relatively overvalued at the start will experience a corresponding moderation of inflation.
- 13. But economists have long been aware of the simple arithmetic that follows. Kenen (1995) is just one example.
- 14. The picture for Ireland would change if one were to take 1992 as a starting point. The development in 1993, however, was due to special circumstances.
- 15. It is surprising that there has been no official explanation of these inconsistencies and no official comment on them in terms of the interpretation of the fiscal convergence criteria. They must clearly be taken into account during the excessive deficit procedure. An increase of the debt ratio could in some cases be cause for concern, but in other cases they might be accepted as having little to do with the overall fiscal situation. Two recent examples illustrate this statement: In 1993, the stock flow adjustment for Ireland was about 7% of GDP (i.e. the debt/GDP ratio increased from 94 to 97% of GDP, whereas it should have declined by about 4 points on the basis of the recorded deficit and the actual growth of nominal GDP). Most of this was due to the devaluation which increased the domestic currency value of the part of debt denominated in foreign currencies by over 10%. This event thus did not signal a deterioration of the underlying fiscal position, but presumably a once and for all adjustment.

Germany provides a second example. In 1995, the debt ratio jumped to 58% of GDP as mentioned earlier because the Federal government took over the debt of the privatisation agency "Treuhandanstalt" in that year, although it should have stayed constant at about 50% of GDP. If the deficits of this agency had been incorporated into the federal budget from the beginning (as they should have been), the general government deficit would have been about 2% points of GDP higher during the previous four years of operation of the Treuhandanstalt. Hence, this stock flow adjustment arose from the fact that the previous practice of keeping the

Treuhandanstalt off-budget partially concealed the seriousness of the fiscal situation in Germany.

- 16. Recent theoretical contributions (see Giavazzi and Pagano, 1995) have also shown that if the fiscal situation is unsustainable, a fiscal adjustment can be expansionary.
- 17. See Article 109k5.
- 18. See Gros (1995c) for a formal model of this idea.
- 19. The combined GDP of F, G, NL, AUT, SF, plus IRL, LUX is about 3,000 bn ecu, compared to 800 bn ecu for P, IT, ESP, GR, B, SW.
- 20. The government would have to declare that it accepted the obligations arising from Articles 104c(9) and (11) (excessive deficits procedure); 105(1),(2),(3) and (5) (monetary policy); 105a (notes and coins); and 108a (empowering the ESCB). The national central bank would also accept the obligations resulting from the ESCB statutes (Articles 3, 9, 12.1, 14.3, 16, 18, 19, 20, 22, 23, 30-34 and 52). However, the restrictions specified in paragraphs 3 to 6 of Article 43 of the ESCB statutes would apply. In addition, the country concerned would not participate in decisions under Articles 109 (exchange rate system with rest of world) and 109a(2)(b) (membership of the executive board of the ESCB).
- 21. Unilateral restricted participation would in effect be a sort of Anschluss much like the period when the DM was introduced in the territory of the former GDR. This might not be a very enticing example. In the case of the EU, however, convergence will take place before, not after, monetary unification. Hence, the economic difficulties that followed German unification should not occur.
- 22. Acknowledgement by the Union should not necessarily imply that the ECB, when setting its monetary policy, would take into account economic conditions in the country that participated in the same way as those of "regular" participants.
- 23. The actual debt service burden would decline only gradually, however, until the outstanding high interest debt is retired. Depending on the maturity structure, this might take two years.

# Chapter IV The Intergovernmental Conference on Political Union

#### 1. The Many Different Meanings of Political Union

In recent years, it has often been argued that "EMU is impossible without Political Union" (Tietmeyer, 1995). The real meaning of such an assertion, however, depends on how one defines Political Union.<sup>24</sup> Unfortunately, precision in this case is not possible. Monetary Union can be defined precisely; Economic Union has also a precise meaning for economists, but the term "political union" means different things to different people. For some, political union means more decision-making through the supranational institutions of the EU (the European Parliament, the Council, the Commission); for others, political union means more common policies in one or more of the following fields: fiscal policy, foreign affairs, justice, defence, police, immigration and internal affairs in general. Even political scientists do not operate with a widely agreed definition of political union. Hence, it would be useless to try to define exactly what political union means. Moreover, most of the elements of political union that have actually come up during the preparations for the 1996 IGC that is supposed to deal with political union (citizenship, transparency, foreign and security policy, the number of commissioners, the nature of the presidency) have little to do with the functioning of EMU.

It is possible, however, to discuss the link between EMU and Political Union in a sensible way if one starts to ask what concrete elements of political integration are needed to make EMU work well.<sup>25</sup> This is the approach followed here.

Before going into this general discussion, one has to deal with the argument that there is no historical precedent for EMU. It is indeed true that there is no instance of monetary unification without political unification that has lasted forever. The 19th century offers the examples of some regional groupings that lasted for several decades, but which in the end broke up. A closer look at these experiences shows, however, that they cannot be compared to EMU for Europe. Two important differences distinguish EMU from the more prominent examples drawn from the last century (for details, see Annex 3), as follows:

- i) The participating countries traded much less among themselves than do EU member countries today. For most participants of the major monetary unions of the 19th century, trade outside the union was more important than trade within the union.
- ii) There were no common institutions comparable to the European Central Bank. This is a crucial difference because it implies that a free-rider problem arose: all national central banks were tempted to over-issue currency because the inflationary tendencies would be distributed over the entire union. This aspect was even more important then because governments had few other sources of financing.

Moreover, most of these unions broke up when their members were involved in wars; not because of the asymmetric shocks emphasised by the optimum-currency-area approach. Wars among member countries or involving only one member country have become unthinkable today.

Despite these fundamental differences, which are not widely appreciated, some still argue that the historical experience suggests that a monetary union composed of sovereign states is impossible. However, the same is true of market integration in general (no free trade area has lasted forever) and one could thus say the same about the internal market. EMU has no precedent in history, but nor has the EU. The absence of an historical example should thus not be taken as an indication that EMU is impossible or necessarily doomed to fail. The entire EU is an institution sui generis.

The view that EMU is impossible in the absence of political union can also be viewed differently. It could be taken to express the concern that without further political integration, EMU might not work in the economic and political environment of the EU that one can expect for the early years of the next century. The idea that EMU would "not work" does not mean in this context necessarily that EMU would soon break up. Nevertheless, an EMU that leads to serious political tensions or that needs to be propped up by additional measures in other areas is not desirable. Frieden and Giovannini (1996) and Von Hagen (1995) discuss

different aspects of this issue.

This is a concern that needs to be taken seriously. EMU would not be worthwhile if it became a major source of serious tension among the member states. Hence one needs to ascertain whether the elements of political integration that already exist are sufficient to make EMU work in such a way that economic problems do not lead to political tensions between member states and dissatisfaction with the working of EMU in general. This is not a straightforward task since it is difficult to go beyond general statements like: "there is a need for an economic government of Europe" or "asymmetric shocks will lead to dissatisfaction at the national level with the policy stance of the ECB".

This paper proposes to go further by looking at concrete scenarios of how trouble could emerge and how it is likely to be dealt with under the system that one can foresee for the year 2005; i.e. once EMU has passed the teething problems that will inevitably arise during the first years of operation. But before this can be done, one needs to clarify what kind of system of economic policy-making will govern EMU.

#### 2. The Maastricht System

Before one can discuss the shortcomings of EMU as designed in Maastricht, one has to take stock of what is already contained in the Treaty as it stands. How can one characterise the nature of the system of economic policy-making that will govern EMU? It will not be based only on Maastricht. It has evolved over the past 40 years starting with the Treaty of Rome and will continue to evolve as a result of decisions already taken in Maastricht.

There is no need to describe the EU system of macroeconomic policy-making in detail here. What is essential are the fundamental principles that underlie the system as it is currently conceived. They are the following:

1) A sharp division of responsibilities between the monetary and

budgetary spheres: monetary policy is unified and conducted by the ECB, whereas budgetary policies remain in national hands. Coordination of policy in general is envisaged in the Treaty, but the procedures of Art. 103 are not implemented at present.

- 2) In the monetary sphere: The primacy of price stability, which entails a host of other principles, such as the prohibition of monetary financing of deficits and the independence of the ECB and national central banks.
- 3) In the budgetary sphere: National autonomy is subject to the limits on excessive deficits to safeguard price stability. The limits on tax rates from the internal market are not yet perceived as constraining.

The environment in which these two classic macro-policy instruments operate is determined by the following principles:

- 4) A preference for market-based solutions.
- 5) An acceptance of a limited redistributive function at the European level focused on regions (not countries) rather than social classes.
- 6) The adoption of common policies in a limited number of specific areas and a modest budget.<sup>26</sup>
- 7) An overriding emphasis on economic government through the establishment of general codes of conduct, harmonisation of ground rules, informal coordination, surveillance and discipline through peer pressure rather than through "direct" intervention, let alone through traditional taxing and spending.

This system is of course different from mature federal states, not to mention established unitary states. It blends coordination with competition among national and sub-national bodies compete to find the most efficient solutions to their problems. The EU thus contains a well defined framework for economic policy (called *Ordnungspolitik* in German) in the widest sense.

The broad outline of the Maastricht system sketched here conforms to the two basic principles of economic policy emphasised in Eucken (1952). The first principle relates to competition policy and the second principle says: "The economic policy activity of the state should not be aimed at the shaping of the framework of the economy, not at the direction of the economic processes" (translation by the author).<sup>27</sup>

From the point of view of economic science, this system should be efficient because it guarantees an unprecedented degree of market integration among 15 states while maintaining a high degree of flexibility for national solutions. From a political point of view, economic efficiency is not enough, however. The Maastricht system, including EMU, needs to be accepted as legitimate by political forces and the population. This implies, inter alia, that EMU can work properly only if there is a mechanism that allows political institutions in Europe to express their concerns and views of economic policy in general and monetary policy in particular.<sup>28</sup>

At first sight, the Maastricht construction seems to create an institution, the ESCB, that is suspended in a political vacuum. However, this not likely to be the case in reality. The monetary policy chosen by the ESCB will affect the interests of many — savers, workers, financial institutions and not least governments. All these groups will try to affect the decisions of the ESCB and react to them. This implies that as EMU pushes authority for monetary policy up to the Union level, politics will inevitably follow. The way in which this happens depends of course on the institutions mediating all these demands for policy. During tranquil times, i.e. when there are no strong conflicts of interest, monetary policy might be considered an almost technical issue, but whenever there are tensions, e.g. during downswings of the business cycle or if strong inflationary pressures emerge, the demand for changes in monetary policy are likely to become much stronger. It is during these times that the existence of institutions that channel political pressures towards acceptable outcomes (i.e. price stability and full employment) become particularly important.

The Maastricht system is thus likely to come under stress when the ECB

needs to increase interest rates in an unfavourable economic environment or when the excessive deficit procedure imposes pressure on some countries. Interest rate increases might be seen as being responsible for increases in unemployment, they might cause difficulties for budgets and they would work against the interests of borrowers. All of these groups might then oppose such a policy. Is there anything that could be done to make sure that the pressures coming from such groups are channelled in such a way that they accept the outcome? This is the question underlying the discussion in this chapter.

The economic constitution of the EU that is contained in the Maastricht Treaty is, of course, not perfect and some details might have to be changed soon. But it represents the first attempt to describe the endpoint in terms of economic and monetary integration. Experience of the first steps in European integration has shown that member states have been able to adjust without great difficulties to the loss of the instrument of commercial policy and border protection in general. Will this be the case for the monetary policy instrument as well? Or will it lead to irresistible pressure for compensation in other areas and large fiscal transfers? This is a further issue implicit in the following discussion.

#### 3. How would Maastricht work under stress?

It is evident that there will be few problems with EMU if everything goes well, i.e. if there are few asymmetric shocks, if overall inflation stays low, growth is satisfactory and unemployment is first reduced and then stays low. But it is unlikely that such a rosy scenario will become reality. The remainder of this chapter therefore discusses what would happen if things go wrong. We do this in order to see whether additional elements of political integration would be useful if there is trouble, not because we believe that the scenarios of difficulties discussed below are inevitable. It is not possible to predict already what the problem areas will be ten years from now. What follows is thus necessarily speculative. This analysis is based on our view of how economic and political forces interact in member countries, which is discussed in details in Frieden and Giovannini (1996).

Trouble could also come under an overall rosy scenario if the perceived gains from EMU are distributed unevenly. For example, one could imagine that some peripheral countries enter at a very competitive exchange rate and that this advantage is not eroded through higher wage growth. Their industries would then prosper at the expense of the core. The boom in the countries that entered at a competitive exchange rate would call for a restrictive policy by the ECB, but the opposite would be appropriate for the rest of the EU. This development might lead to a situation where a group of countries constantly feels disadvantaged. Such a scenario seems to be behind some of the reservations expressed by politicians in Germany, especially those from regions with an important automobile industry. They consider the current exchange rates of some southern countries to be "too competitive".

Would the EU need additional instruments and/or institutions to deal with such a situation? The structural and cohesion funds that already exist are in principle designed to deal with the problem of regions in decline, but in practice, most of the support has so far been given to the poorer regions. If these become more prosperous, as assumed in the above scenario, a reduction of the flows funds they are receiving should not cause too many political difficulties. A stagnant north might then feel partially compensated for the perceived contractionary impact of the policy of the ECB. It is difficult to say a priori whether changes in the allocation of the existing elements of regional re-distribution would be sufficient to defuse such a conflict. One could thus argue that additional instruments would be needed. However, it is difficult to see what element of political integration could have an impact here. A common foreign policy, a common citizenship or greater recourse to majority voting would hardly be regarded as adequate compensation by regions that feel disadvantaged by EMU, unless they are also the ones most in need of the great security provided by EU membership.

The scenario discussed here assumed that the south gained more, but the opposite cannot not be ruled out. Economy-wide economies of scale might lead to a further concentration of industry in the north. This would not change the nature of the problem; but the same arguments about the limited importance of political union would, mutatis mutandis,

apply here as well.

The opposite of the rosy scenario would be a worst-case-scenario under which trade unions would ask for, and obtain, equalisation of nominal wages in the common currency across EMU without regard for productivity differentials. This would, of course, be a disaster since it would lead to high unemployment in the countries and regions with below-average productivity. The de-industrialisation of these regions that would follow would then lead to demands for more transfers to the regions that are suffering, although experience (especially in Germany and Italy) has shown that even very large transfers cannot really offset the impact of wages that are set at the wrong level. If demands for the equalisation of nominal wages really arise, it would be better to dissolve EMU than to try to combat the consequences with other means.

At present, there is no indication that such a scenario could come about. Trade unions remain organised at the national level and seem to be aware that wages cannot be decoupled from productivity. The experience with wage equalisation in Germany serves also as a reminder to everybody regarding the consequences. The German experience will not be repeated at the EU level because wage equalisation was pushed in the context of the constitutional goal to equalise living standards throughout the Federal Republic and the fiscal consequences were widely accepted as inevitable. These mechanisms do not operate at the EU level, where any increase in the budget requires unanimity. Moreover, in the present environment it is inconceivable that trade unions would have the power to organise and maintain a "cartel" of this magnitude.

However, this brief discussion of the "worst case" still indicates that too much political union could actually be dangerous. If the same feeling of solidarity that exists at present within member countries were to extend to the entire EU, it would make the differences in wages across member countries that will be needed for the foreseeable future more difficult to accept. Common social or (un)employment policies could also increase the danger of demands for wage equalisation. In this limited sense, one could even say that EMU is possible only without political union (of the sort that leads to calls for wage equalisation). Von Hagen (1995) also

argues, based on the experience of the US, that a bit more of political union could be worse than nothing at all (or a complete political union).

Less extreme problems could arise in many different ways. However, the following three scenarios represent some of the more likely sources of conflict:

#### i) Inflation is higher than acceptable in Germany

If after a number of years, inflation in Germany is substantially higher than the 1-2% that its society has become accustomed to and if there is no clear external cause (such as a major oil shock) for this outcome, there will be sustained criticism of the ECB and of EMU in general. (Similar criticism will be voiced in other countries as well, but the focus here is on the reaction in Germany because of its central position in the EU.)

Germany, i.e. the government, political parties and other German institutions, would have no means to modify directly the policy of the ECB. But the ruling of the Bundesverfassungsgericht (German Federal Constitutional Court) of 12 October 1993, offered the possibility that a case could be brought to it against German participation in EMU on the grounds that EMU turned out not to be a *Stabilitätsgemeinschaft* (i.e. a community of stability). If the Court found that inflation under EMU had indeed been unacceptably high, i.e. that EMU had failed to become a *Stabilitätsgemeinschaft*, it might actually order the Federal government to pull out of EMU.<sup>29</sup>

It is unlikely that it will come to this extreme case, but even the remote possibility of a German withdrawal will weigh in the minds of the ECB when inflation is already high and criticism in Germany is mounting. Hence, it is certain that the ECB will toughen its policy long before inflation is so high that a crisis point has been reached.<sup>30</sup>

One can again ask what elements of political union would be useful to defuse this conflict. The existence of common institutions to coordinate macroeconomic policies in general would clearly not change the course

of events in this case. But since Germany has been pushing for some time in the direction of a common foreign policy, an extension of majority voting and other measures aimed at increasing political integration, one could argue that the German public could be told that a slight increase in inflation is the price to be paid for political union. However, while such a compromise might be acceptable to some political actors (possibly some parties and the trade unions) it would not be an escape route in this particular case (nor should it be if one accepts the spirit of the Maastricht Treaty). The German Constitutional Court (Bundesverfassungsgericht) would not be able to take such a compromise in consideration. It has bound German participation to the maintenance of price stability and it would be very difficult for any German government to ignore its judgement.

Would a common fiscal policy be useful in this situation? The inflationary pressure that led to inflation might, in part, have been due to an expansionary fiscal policy pursued simultaneously in most member countries. Hence, one might argue that this would be a case where coordination of fiscal and monetary policy at the EU level is needed.

However, one has to keep in mind that fiscal policy in reality is determined mainly by domestic considerations, as evidenced by the many failed attempts to organise fiscal policy coordination on a global scale. Even at the European level fiscal policy coordination has never been implemented in the sense that a country has changed his fiscal policy stance substantially and against its own perceived short-run interests in order to fulfil its part of a multilateral bargain. There is little reason to believe that this will change under EMU.

If all members countries are in a similar situation, however, it is likely that they will react in a similar manner. For example, if the ECB increases interest rates because in its view an expansionary fiscal policy has lead to inflationary pressures it might be possible to achieve a coordinated response because it will be in the interest of each country to follow this policy. The elaborated procedures that can lead to the "broad economic guidelines" (implicitly foreseen in Article 103.2 of the Treaty) could then be useful to organise a concerted fiscal policy adjustment that

helps to ECB to achieve price stability. In this limited sense, the existing procedures might turn out to be useful, but there is no need for additional procedures or institutions to coordinate fiscal policy.

#### ii) Political shocks

The traditional instruments of national policy will no longer be a source of asymmetric shocks under EMU. Monetary policy will be made by the ECB and even the freedom of movement of fiscal policy will be circumscribed. Moreover, a number of indirect tax rates (especially VAT) should stay within a corridor fixed under the single market programme and the overall deficit has to stay below 3% of GDP.

It is therefore difficult to think of large movements in demand that could be caused by the traditional policy instruments. However, other shocks that are related to political developments will still be possible. One example would be wage settlements in one member country that go far beyond productivity gains, such as the ones that followed the May 1968 disorders in France. Politically induced shocks will then become much less likely since under EMU, the resistance to large wage increases will be much stronger both by the public and the private sector. The public sector will be bound by the Maastricht criteria and the private sector knows that the escape route of a devaluation no longer exists. But one cannot rule this type of shocks completely out.

What elements of political integration would be useful in this case? If there is more majority voting and more common policies (foreign, security, internal, etc.) coupled with a strengthening of the role of the EU institutions, political forces in general should be more integrated throughout the EU. The likelihood of such political shocks might be diminished because political actors in member countries would then be more aware of the constraints implied by membership of the Union and would be more accustomed to working as part of larger EU forces. Extreme national solutions would then become less likely. This is an indirect way in which political union could be useful. However, the importance of greater political integration in making large political shocks less likely is difficult to assess.

Would a common overall economic policy also be helpful? Since this type of shock would originate clearly from one country, a coordination of budgetary policies at the Union level would not have any effect on the course of events. Moreover, if a really large political shock occurs, it is likely that the general framework imposed by Maastricht, outlined above, will not be observed. Under these circumstances, it is also unlikely that general policy recommendations would be heeded by the country concerned.

#### iii) A large asymmetric shock occurs

This is the typical case considered by the literature on optimal currency Although we have presented reasons why large asymmetric shocks should be relatively unlikely, we wish to discuss this case because many opponents of EMU assume that such shocks are possible. What we have in mind here are shocks that are independent of policy, such as a collapse of trade with an important partner (Finland-Russia), or a sudden reduction in the demand for the main export product (which seems not to have happened so far in the EU). This would lead to a sharp rise in unemployment and pressures for a fiscal reaction (the Finnish experience is instructive in this respect). If it is really a "once in a life-time" shock (e.g. German unification), the EU, or rather the ECOFIN Council, will not insist on a strict adherence to the 3% limit on deficits. Nevertheless, it is likely that the Maastricht norms will imply some restrictions on the use of fiscal policy, which might be resented by national policy makers (At least in public; in private, policy-makers might welcome these constraints).

The crucial issue that will determine whether there will be tensions originating from the country hit by the shock is whether a devaluation and/or easier policy by the ECB will be *perceived* as being useful in alleviating the problems caused by the shock. If this is the case, EMU will be perceived as being part of the problem. What additional elements of integration could be helpful in this case? The wider issues debated at the IGC would again appear not to be of direct relevance, and any EU-wide coordination of macroeconomic policies would be of little help for the country hit by a large shock.

It is often argued that the experience of the US suggests that something else could help. The federal tax system of the US implies that a region hit by a negative shock pays automatically less taxes into the common budget and stands to receive more transfers. Such a system that automatically cushions shocks makes it certainly easier for the participating states to accept temporary shocks. Unfortunately, however, there has been considerable controversy about the size of the automatic off-set through the federal fiscal system in the US. The original contribution in this area (Sala-i-Martin and Sachs, 1992) claimed that it amounted to about 40%. Further research (Goodhart and Smith 1993, Pisani-Ferry, Italianer and Lescure 1993) resulted in lower, but still significant estimates (about 20%). These findings have subsequently been used in a number of instances to explain the success of the American monetary union and to assert that something similar is needed for EMU.

Proponents of the point of view that some "fiscal shock-absorber" mechanism is needed agree that any Community mechanism would have to be as automatic and "invisible" as possible and that its purpose would not be to equalise income levels, but to provide insurance against country-specific shocks. Assistance that involves a large discretionary element would be subject to "bureaucratic capture" and would pose obvious moral dilemmas. This is why it has been suggested (Eichengreen, 1990, and Bean et al, 1990) that the Community should finance a part of national unemployment insurance schemes and receive also a corresponding part of the contributions. Countries with aboveaverage changes in unemployment would then receive a transfer from countries with below-average changes in unemployment. Payments to the unemployed in the former would in effect be financed by contributions from those employed in the latter. Such a scheme would be automatic in the sense that no specific decisions concerning the direction and the magnitude of the transfers need to be taken once the system has been established. Italianer and Vanheukelen (1994) show that such a system would not have to be based on a large budget. 32

Other proposals for some Community fiscal redistribution mechanism refer to the MacDougall report, which documented that in most existing federations the federal budget redistributes income across regions and thus offsets at least part of the interrregional differences in income. For the United States, Mac Dougall (CEC, 1977) and Sala-i-Martin and Sachs (1992) estimate that the federal budget offsets about 30 to 40% of the differences in income per capita across states because poorer states contribute on average lower income taxes and receive higher social security payments. It has therefore been argued (Eichengreen, 1990) that because labour markets seem to be less flexible in the Community, the need for a fiscal shock absorber is even greater in the Community than in the United States, where migration in response to unfavourable economic shock can be quite substantial.

The argument that a stable EMU needs such a sizeable automatic fiscal equalisation scheme seems to be based on a misreading of the US experience. Gros and Jones (1994) find that the results indicating a high degree of stabilisation of income represent in reality the joint effect of the (automatic) stabilisation across states at any given point in time and the (at least partly discretionary) changes in the federal fiscal stance which stabilises income over time for all states together. Automatic stabilisation across states or regions accounts for less than one-half of the overall stabilisation, reducing the variability of personal income by about 15%. The federal fiscal stance turns out to have a stronger stabilising impact, but this part will remain in the hands of national government even under EMU. Given the importance of this issue and its technical complexity, Annex 4 provides enough details of the empirical results to allow the reader to form his own judgement.

Sorensen et al. (1995) go one step further and analyse the factors that allow households to smooth their consumption over time in the US. They observe that the variability of consumption is much lower than that of income, measured by gross state product (GSP). They find that capital and credit markets account for most of the consumption smoothing. The income smoothing provided by the federal government accounts for only 14% of shocks to GSP. This result provides another confirmation of the point of view taken here that the stabilising properties of the US federal fiscal system have been exaggerated.

All in all, it is therefore difficult to rest the case for some EU-wide shock absorber on the US experience. For those favouring such a policy on efficiency (as opposed to equity) grounds, it would therefore be imperative to spell out in more detail why capital markets or constraints on fiscal policies do not allow households and national governments to weather temporary adverse shocks by borrowing on the capital market. The latter could be constrained by the fiscal criteria. In this sense there is a trade-off between fiscal autonomy and the need for a common shock observer mechanism. Putting excessive constraints on national fiscal policy might create calls for an EMU-wide mechanism. Provided that member states remain clearly below the 3% of GDP deficit limit during good times, however, it should be possible to cushion the impact of "normal" transitory shocks. Under exceptional circumstances, the Union is likely to show its solidarity, and deficit limits could be temporarily relaxed. Permanent shocks are a different matter because they could not be financed idefinately and would thus require adjustment in real wages and/or migration. However, it is difficult to see how the Community could provide insurance against permanent country-specific shocks without addressing directly the issue of income redistribution.

In most discussions about fiscal shock absorbers, a fundamental point is often overlooked: the mechanisms that exist in the US (whatever their magnitude) do not necessarily contribute to an economically sensible adjustment to shocks. They basically mitigate the symptoms resulting from the lack of immediate adjustment. In the case of transitory shocks, borrowing or temporary transfers are appropriate responses, but in the case of permanent shocks, adjustment is required. The economically sensible adjustment comes through changes in wage rates and migration (Blanchard and Katz, 1992). This always takes time, even in the US where the economic system is purported to be much more flexible than in Europe. Even if a stock-absorbing mechanism were to be created in Europe, this would not weaken the argument for price and wage flexibility.

These speculations about concrete scenarios of problems for EMU have brought out that a key role will be played by the reaction of fiscal policy. Since fiscal policy will be subject to the excessive deficit procedure, it is necessary to discuss how this element of EMU will work after the start of the third stage.

#### 4. The Fiscal Criteria in the Long Run

A first important point to note is that if the 3% deficit rule is followed for a long enough period of time,<sup>33</sup> all member countries should get close to or even below a public debt-to-GDP ratio of 60% given that even with very low inflation, nominal GDP is likely to grow at least by 4-5% annually. This would be a huge improvement over the present situation since the average deficit is now close to 5% of GDP and the average debt ratio of the EU is at present above 70% of GDP. In some member countries, it would have come down from over 100% of GDP. There should therefore be no longer any question that the situation of public finances is sustainable.

It needs to be emphasised that this tightening of fiscal policy should be beneficial in the long run as explained in Box IV.1. Real interest rates could be much lower and growth would be stimulated because a larger part of private savings could go to productive investments. These arguments suggest that the Maastricht rules which force EU governments to save more are actually in the interest of their own countries. But this leads to the question: Why would governments engage in excessive deficits and debt which are against the long-term interest of the country?

The public choice approach (see Buchanan, 1977) starts from the fact that in most cases the benefits of a given fiscal measure, say a transfer or expenditure programme, accrue to a well defined group that will thus have an incentive to lobby for it. The cost has to be borne by all tax-payers and contributors to social security. The latter will find it more difficult to organise opposition to spending decisions because their interest are more dispersed. Hence, the process by which fiscal decisions are taken in a democracy risks entailing a "deficit bias". On average, special interest groups win although the cost of the overall set of all these decisions has be paid by everybody. The outcome is an excessively large public sector and a tendency to let future generations, who constitute the

## Box IV.1 Why are large deficits undesirable?

Ball and Mankiw (1995) provide a recent survey of the economic costs of budget deficits. The central point is that (at an unchanged external current account balance) an increase in public sector savings which is not offset by a fall in private sector savings must be mirrored one to one in an increase in investment. This in turn would increase growth. Empirical studies indicate that an increase in the investment rate (investment/GDP) of one percentage point generally leads to an increase in the growth rate of between 0.2 to 0.3 percentage points. This implies that a reduction in the deficit of 3 to 5 percentage points of GDP, sustained over several years, could increase growth by about 1 percentage point.

One has to take into account that growth will decelerate after a while even if the higher investment rate is sustained indefinitely because eventually decreasing returns to investment set in. This is taken into account in the 1994 Report to the US President (see Council of Economic Advisors, 1994) which estimates that a 1% increase in the rate of investment that is maintained indefinitely will eventually raise real income by 3.75%.

A number of member countries would have to reduce their deficits by between 3 to 5 percentage points of GDP in order to satisfy the Maastricht criteria. The corresponding increase in the investment rate which now stands typically close to 20% of GDP, should thus increase income eventually by more than 10%, possibly up to 15%. Increases in output are not equivalent to increases in welfare, but even if one concentrates on purely welfare-theoretic considerations Ball and Mankiw (1995) shows that even the relatively small US deficits could have very large social costs. It has been assumed so far, implicitly, that the economy is closed. This would not be the case for the EU although its degree of openness is much smaller than that of individual member states. Moreover, as suggested by Feldstein and Horioka (1980), the degree of international capital mobility is rather low and the experience of the US shows that a sustained large current account deficit is not the appropriate policy for an industrialised country.

To the extent that increased national savings in the EU are not invested domestically, output produced at home will not grow faster, but investment in the rest of the world also yields a return. Moreover, in light of a greying EU population, it seems entirely appropriate that the EU exports capital in order to finance at least part of its consumption at retirement with the returns from these investments. The illustrative calculation presented here should not be taken to mean that reducing deficits to below 3% of GDP will will increase growth rates necessarily by almost one half (say, from 2.5 to 3.5% p.a.). But they do suggest that reducing government dissaving could yield substantial benefits by increasing the pool of savings available in productive investments at home and abroad.

least effective lobby, pay for the debt that has accumulated in the meantime. For a detailed analysis of this problem, see von Hagen and Harden (1994) who conclude that a proper budgetary process can mitigate this problem. Masera (1995) also sees a need for a change in the constitution to ensure a long-lasting improvement in deficits.

This "deficit bias" view of fiscal policy should not be exaggerated. Fiscal policy is not always driven by special interest groups. But the important point is that the "deficit bias" will not disappear with EMU. Hence, it cannot be ruled out that some governments will give in and let the deficit go beyond 3% of GDP. Another event that cannot be ruled out is a fiscal reform whose results are wrongly anticipated. If the result is a large surplus, one can safely assume that the national government will correct it quickly. However, if a large deficit emerges, it might be difficult to correct quickly. The experience in Sweden has shown how quickly the combination of unexpected revenue shortfalls from fiscal reform with a deep recession can lead to extraordinary large deficits and such a rapid build up of debt that a confidence crisis ensues.

All this implies that it is likely that at times there will be strong political pressures in some countries to let the deficit rise above 3% of GDP, although this would clearly be a violation of a European obligation. How likely is this to arise? The treaty of Rome already had a strong enforcement mechanism that applies in principle for all provisions added in Maastricht, including the chapter on EMU. However, it has been little noticed so far that the Article dealing with the excessive deficit procedure excludes specifically in its paragraph 10 the normal enforcement mechanism of the treaty via the Court.<sup>34</sup> This is why Article 104c had to contain a new enforcement mechanism specifically designed to overcome the problem that it would be impossible to make member countries obey the prohibition of excessive deficits if there were no sanctions. This is the reason for the existence of the complicated "excessive deficit procedure" that was put into the treaty. There might have been valid reasons for this exclusion of the jurisdiction of the Court of Justice ("high politics" typically are not subject to Court rulings), but it remains strange that this fundamental reason for the existence of the complicated "excessive deficit procedure" is seldom mentioned in public.

Unfortunately, however, the enforcement mechanism foreseen in the Treaty is not very strong as shown in detail in Box IV.2. It seems to depend mainly on peer pressure. Until now, no member state has openly defied the legal and judicial system of the Community (for example, by refusing to implement a directive). This might be the reason why the the Treaty does not contemplate the possibility that a member country would not heed the requests for fiscal adjustment addressed to it.

The fiscal criteria, however, are a different matter from the rest of the business of the EU since fiscal policy remains fully under national control — even under EMU. Hence, the effectiveness of the excessive deficits procedure will depend on the sanctions that underpin it and the goodwill of member countries.

Another drawback of the excessive deficits procedure as it currently stands is that enforcement is discretionary (sanctions *may* be imposed), requiring a decision supported by a qualified majority by ECOFIN for each specific step. This body has not even been able to impose IMF-type conditionality towards Greece in the context of large support programmes. It would thus be better if the sanctions were not only more concretely specified, but also subject to more formel decision proceeding. Ideally, some action or decision would be triggered automatically once a certain threshold had been passed.<sup>35</sup>

This problem is difficult to solve. One has to recognise that fiscal "sovereignty" ultimately remains in national hands, even after the third stage of EMU has begun. If a country is really determined to accumulate excessive deficits, the EU will not be able to stop it. One solution would be to accept the principle that the European Union also has the right to say that under such circumstances, a country that continues to flout its basic rules cannot continue to be part of EMU. As proposed in Gros (1995b), 36 this would mean that member countries that run excessive deficits should ultimately be given a derogation as defined in Article 109K of the Treaty. This would exclude them from the decision-making bodies of EMU (the Council of the ECG and some ECOFIN decisions). Member countries would thus retain their fiscal sovereignty, but pay a price for clearly deviant behaviour. According to this approach, the

### Box IV.2 Sanctions for Excessive Deficits

The excessive deficit procedure detailed in Article 104c of the TEU starts with a report by the Commission that a country has an excessive deficit that has to be discussed by ECOFIN. After some other procedural steps of minor importance it is this body that could issue a recommendation and could finally impose sanctions. A closer look at the graduated response set forth in the article, however, suggests that it may not constitute a credible threat. Paragraph 11 is the key provision, as follows:

As long as a Member fails to comply with a decision taken in accordance with para. 9 [i.e. notification by ECOFIN of a time limit and measures to eliminate an excessive deficit) the Council <u>may</u> decide to apply or, as the case may be, intensify one or more of the following measures:

- to require that the Member State concerned shall publish additional information, to be specified by the Council, before issuing bonds and securities;
- to invite the European Investment Bank to reconsider its lending policy towards the Member State concerned;
- to require that the Member State concerned makes a non-interest-bearing deposit
  of an appropriate size with the Community until the excessive deficit has, in the
  view of the Council, been corrected;
- to impose fines of an appropriate size.

How should one evaluate the sanctions listed above? They seem to consist mainly of peer pressure. Their direct deterrent effect would be minor and hence they would do little to resolve the problem, as spelled out below.

- i) Requiring a state to publish additional information would not seem to be a very strong deterrent. What information that is not already widely known could be revealed in this way?
- ii) The EIB finances long-term investment projects at market rates of interest. It cannot hold up work on projects already begun and at any rate, there is almost no subsidy element in its lending. The threat of withholding structural funds would probably have a strong impact in the four main recipient countries, but this sanction has not been retained probably because it would appear unjust to subject only poorer countries to this discipline.
- iii) What would be the appropriate size of the non-interest-bearing deposit? One percent of GDP (about 10 billion ecu at current exchange rates for Italy)? At interest rates of 8%, this would amount to an annual cost (in terms of interest foregone) of 0.08% of GDP, hardly a strong deterrent.
- iv) What would be the appropriate size of the fines? In the hundreds of millions or in the billions of ecu? A large fine (say 1% of GDP) would only increase the deficit and make it even more difficult to get it below 3% of GDP. What should the money be used for?

The "pact for stability" presented by the German Ministry of Finance tries to answer some of these questions. See the main text.

principle would be that member countries retain a clear choice: participation in the common currency area or the freedom to pursue irresponsible fiscal policies.

It would, however, be unprecedented for the EU to exclude a member state from part of its business because it has not followed the Treaty. A country that followed a clearly deviant fiscal policy that endangered price stability for the entire EMU would be subject to immense pressure by the rest of the EU. Moreover, there would also be the threat of an action before the German Constitutional Court which could order Germany to leave EMU. The importance of the ruling by the German Constitutional Court can be debated, but it is clear that even the mere potential for a ruling against EMU will unsettle financial markets. One can only hope that this will be sufficient to prevent large deficits under EMU. This indirect enforcement mechanism has the disadvantage that the consequence would be a break-up of EMU so that the cost of deviant fiscal behaviour of any one country would have to be borne by the rest of the EU as well. Such a negative externality is clearly undesirable.

The potential conflict between the prohibition of excessive deficits and the principle that fiscal sovereignty remains at the national level cannot be resolved short of a Treaty revision that makes the continuation of excessive deficits incompatible with full membership in EMU. Since there is a general unwillingness to change any part in the chapter on EMU, one is forced to think about other ways to reinforce the excessive deficits procedure. One way to reduce its weakest points might be through an intergovernmental agreement that would be signed by all EMU participants. In such an agreement, the participating governments would pre-commit their voting behaviour in ECOFIN. For example, they could agree to always vote for sanctions once a country has failed to implement the recommendation to eliminate an excessive deficit. Moreover, the sanctions (i.e. the size of the fines) themselves could be specified in advanced.<sup>37</sup>

The "pact for stability" proposed by the German Minister for Finance in November of 1995, goes in this direction. The essence of this proposal is that those governments that participate in the third stage would agree among themselves that the sanctions foreseen in the Treaty should be specified as follows:

- i) The reference value of a 3% deficit would hold also under unfavourable economic conditions. Exemptions from this rule could be approved only in exceptional circumstances with a qualified majority vote (of the members of EMU).
- ii) If a country is found (during the semi-annual evaluation performed by the Commission) to have a deficit in excess of 3% of GDP, it would have to immediately make a non-interest-bearing deposit equivalent to 0.25% of GDP for each point of the excess deficit.
- iii) The deposit will be returned as soon as the deficit goes below 3%; if the excess deficit persists for over two years, the deposit becomes a fine.

These specifications would not require a change in the Treaty. Their implications would, however, be far-reaching. Large deviations from the 3% deficit rule would clearly become very expensive. For example, a country that ran a deficit of 7% for over two years would have to pay a fine (or more precisely, forfeit deposits) equivalent to 1% of GDP for each following year. This would be comparable to an average country's annual contribution to the EU budget. But it would be be substantially larger than the average *net* contribution. Payments of this size would certainly have a large political impact since they would require a substantial increase in taxes and/or reduction in expenditure, unless they are financed by issuing more debt.

In principle, large budgetary over-runs should no longer occur under EMU; hence, this problem should not arise. The main problems for EMU, however, are not deficits slightly above the 3% limit, but substantial excessive deficits (caused possibly by a combination of unfavourable economic circumstances and weak governments). EMU, and by extension the entire EU construction, might become deeply unpopular if citizens have to pay substantially higher taxes in order to pay these fines.

One consequence of tighter sanctions would be that member countries would have an even stronger incentive to keep items off-budget in order to produce better deficit numbers. The services of the Commission, which compile the official deficit measures would only partially be able to correct for such actions. Nevertheless, it would probably be impossible to hide deficits forever; they would have to show up sooner or later in the debt figures as a "stock-flow adjustment" implying that a specification of the debt criterion becomes even more important.

A concrete example can illustrate the problems that could arise in this situation. Assume that in a member country, the pressure for spending mounts, but given the 3% limit and the fines that might follow quickly, the government prefers to deflect this pressure into a special agency. The official deficit could thus be kept below 3% for some time. After a number of years, however, the government has to recognise the accumulated deficits, for example, by taking over the special agency. The debt figures would rise suddenly when this happens (there would be a "stock-flow adjustment"). If the debt ratio was clearly below 60% to begin with, ECOFIN could do little. However, if the debt ratio was already above 60%, ECOFIN could still make a finding for an "excessive deficit" (long after the deficit had actually occurred). How would one then calculate the size of the fine?

This problem would arise under any enforcement mechanism. But by linking the size of the fine to the size of the excess deficit, the incentive to "massage" the deficit numbers is much increased because this proposal would introduce an asymmetry between the enforcement mechanism of the deficit and the debt criterion.

Another drawback of large fines that go to the EU budget is that they are not directly linked to EMU. All the other countries, even those not participating in EMU, would benefit.

## Box IV.3 Decision-Making in the "Excessive Deficit Procedure"

The "procedure" starts when the Commission prepares a report on a country which violates either the deficit or the debt criterion. If there is no report the procedure cannot start. Whether or not an excessive deficit exists cannot be determined just by looking at the numbers since the Treaty says that small or temporary deficits above 3% might be acceptable and the debt criterion requires only that the debt/GDP ratio is "approaching the reference value (60% of GDP) at a satisfactory pace". Hence many judgemental elements concur in the decision, which is taken by ECOFIN with a qualified majority (of all its members) on the recommendation of the Commission. This implies that a minority of one third of the votes (Italy, Spain and the UK would have enough votes for a blocking minority) could block already a decision that an excessive deficit exists.

Once an excessive deficit has been found to exist, it is difficult to get out of this situation since a clean bill of health requires another super-majority, namely that of 2/3 of the weighted votes of all members, except the country concerned.

If an excessive deficits has been found, the ECOFIN Council will issue a first warning as it "shall make recommendations to the country with the view to bringing that situation to an end within a given period". The Treaty says that these recommendation should not be made public, unless the Council thinks that no effective action on this field have been taken by the country. In practice, however, the recommendations have so far always been made public immediately by the Ministers of Finance themselves because they are useful in their domestic political struggle. If a Member State fails to follow the recommendation of ECOFIN another warning follows: "the Council may decide to give notice to that state to take, within a specified time-limit, measures for the deficit reduction which are deemed necessary in order to remedy the situation".

The first and the second warning are decided by a majority of two thirds of the weighted votes of all members, except the country concerned.

Finally, if the Member State fails to comply with this second warning ECOFIN may decide to apply sanctions. ECOFIN can "require the state to make a non-interest bearing deposit of an appropriate size with the Community until the deficit has, in the view of the Council, been corrected", and finally, it may "impose fines of an appropriate size". The pact for stability proposed by Germany would specify what deposit or fine is "appropriate". It also seeks to ensure the ECOFIN always votes for these sanctions.

The decision to impose sanctions requires a recommendation of the Commission that has to be approved by a majority of two-thirds of the weighted votes of the countries without a derogation (i.e. only the participants in EMU) and excluding the votes of the state concerned.

#### 5. Conclusions

This Chapter has tried to find out what additional elements of political integration would be useful in solving conflicts that might arise under EMU. The main finding is that it is difficult to see how the issues that will be discussed at the Intergovernmental Conference on Political Union in 1996 could improve the working of EMU. More frequent recourse to majority voting, an effective common foreign and security policy, a common citizenship and greater transparency are all desirable in their own right, but their existence would not help to solve the occasional conflicts about proper monetary policy that are likely to arise under EMU. Moreover, if there are shocks that affect individual countries, any EU-wide coordination of economic policy in general is unlikely to be of any help. Unification of social and employment policies would be dangerous given the large productivity differentials that will persist for quite some time.

Our conclusion that "a bit more" political union is not necessary for EMU does not necessarily conflict with the view that "a lot more" political union is desirable. As argued in Von Hagen (1995) a monetary union might be stable at very low and very high degree of political integration. However, since a European state is not in the agenda for the foreseeable future it is of little use to discuss the consequences of full political union.

The general argument that a common monetary policy needs to be complemented by a common budgetary policy is difficult to refute or substantiate as was already noted during the preparation of the Delors report.<sup>38</sup> Budgetary policy these days is rarely used for demand management purposes since its effects are uncertain and act with a considerable delay. Moreover, there exist already quite elaborate coordination procedures, but they are not used in practice, because fiscal policy is mainly driven by domestic political factors. As long as this does not change little can be achieved by creating additional institutions and/or coordination procedures in this field.

The current debate on sanctions in the excessive deficits procedure

revolves essentially around one key issue: is it necessary for ECOFIN to take a specific decision to impose certain sanctions each time a particular country has an excessive deficit? Or should there be a presumption that the same type of sanctions will always be imposed automatically unless ECOFIN actively decides otherwise? These two approaches would impart a completely different dynamic to the excessive deficits procedure. Under the first approach a small group of countries that do not strongly feel the need for fiscal discipline could block the imposition of sanctions. Under the second approach the countries that care more about fiscal discipline would probably usually have enough votes to make sure that sanctions are actually imposed.

The argument in favour of automaticity is based on the observation that ECOFIN is different from other specialised Councils in that it has never had to take concrete decisions against a member country. The nature of ECOFIN has to change if it is to implement the key role it has been assigned in the excessive deficits procedure. The argument against automaticity is that it could involve excessive rigidity and could lead to conflicts between a state in distress and the Council.

The "Practical Application of Conditionality Provisions" of the Cohesion Fund adopted by the Commission in December of 1995 are a step into the direction of automaticity since they stipulate that if beneficiary country does not meet the deficit target set for it by ECOFIN (in accordance with article 104c(7) all financing for new projects has to be suspended. But this type of automatic pressure concerns only the four countries that receive financing under the Cohesion Fund.

More legal automaticity is difficult to achieve because the Treaty stipulates explicitly that sanctions can only be imposed after a decision of ECOFIN that requires a majority of two thirds. The challenge to those who favour more automaticity is to devise a political mechanism or understanding that yields a presumption that sanctions will be imposed.

#### **Endnotes**

- 24. A precise definition of political union should be demanded of those who subscribe to the sweeping statement that "EMU is impossible without Political Union". The proponents of this view, however, have not come up a generally agreed outline of what constitutes a "political union".
- 25. For a general discussion of the link between EMU and political union, see Frieden, Gros and Jones (1996).
- 26. This budget seems so far to have been more the product of political bargaining and hence more or less arbitrary political decisions than any rational strategy. Given its limited size, however, it is not worth dwelling any longer on the inefficiencies of the financing mechanisms and the follies of the common agricultural policies. The Maastricht Treaty, if applied strictly, would imply that common policies should be selected according to need and on the basis of the principle of subsidiarity.
- 27.Erster Grundsatz, "Die Politik des Staates sollte darauf gerichtet sein, wirtschaftliche Machtgruppen auflösen oder ihre Funktionen zu begrenzen."....."Zweiter Grundsatz: Die wirtschaftspolitische Tätigkeit des Staates sollte auf die Gestaltung der Ordnungsformen der Wirtschaft gerichtet sein, nicht auf die Lenkung des Wirtschaftsprozess." (pp. 334 and 336 in 1990 edition).
- 28. Kenen (1995) argues along these lines that the ECB should be made more accountable to European political institutions by requiring it to report regularly to the European Parliament.
- 29. In this context, the Federal Constitutional Court would presumably give a lot of weight to the evidence given by the German member(s) of the ECB Council.
- 30. A more complicated variant of this scenario would be that average inflation throughout EMU is low, but in Germany it is much higher because for some reason, there is a need for a continuous appreciation of the German price level compared to that of the rest of EMU. Fortunately, however, all the evidence indicates that regional discrepancies in inflation are likely to remain rather small in the long run. This might be different at the beginning if some currencies enter EMU with a real exchange rate that is far away from the long-run equilibrium. Fortunately, however, it is now likely that the German mark will enter EMU at a rate that is probably somewhat above the long-run equilibrium, which implies that at least initially prices should increase less in Germany than in the rest of EMU.
- 31. But the other member countries would then also perceive that a devaluation would adversely affect their interests.

- 32. The argument for a Community unemployment insurance scheme has often been made with reference to the United States where there is some reinsurance at the federal level. As reported by Von Hagen (1991), however, in practice, the federal reinsurance scheme has not been used for some time so that de facto in the United States unemployment insurance is organised and financed exclusively at the state level.
- 33. It would then be useful to establish a rule of thumb to determine whether a deficit above 3% is "exceptional and temporary and the ratio remains close to the reference value" (Art. 104c, 2a second indent; the first indent is presumably relevant only for the entry examination). However, this is a task that can be left to the future.
- 34. 104c (10) reads as follows: "The rights to bring actions provided for in Articles 169 and 170 may not be exercised within the framework of paragraphs 1 to 9 of this Article."
- 35. An excessive deficits procedure that does not "punish" the offending state, but helps it to get its fiscal accounts under control would, of course, be even better. But this seems difficult to achieve.
- 36. A precursor of this idea can be found in Giovannini and Spaventa (1992).
- 37. It is difficult to judge how useful such a political agreement would be. Some governments might find valid reasons in the future not to vote for sanctions after all, fearing that they might be the next victim. Moreover, the size of the sanctions will always be limited by the ability (and willingness) of a government to pay.
- 38. For two differents points of view, see Gros and Thygesen (1992) and Eichengreen and von Hagen (1995a). Von Hagen (1995) argues that the links between fiscal and monetary integration have to be determined together with the degree of political integration.

# Chapter V How do we get there?

This report has argued so far that EMU is desirable as it is currently designed and that the remaining hurdles can be overcome. The December 1995 Madrid Council also reiterated the commitment to starting EMU on 1 January 1999. This leads to the question: What should be done to make EMU happen? It goes without saying that all member countries have to do their homework, as discussed in Chapter III above. But is there anything that needs to be done at the EU level? Before one can answer this question, one has to realise what the starting point is.

#### 1) Where do we stand?

Between a rock and a hard place! On the one side, there is the politically unpleasant task of bringing public finances under control. On the other, there are the consequences in financial markets and the associated dangers for the single market that arise if the EMU project collapses. Financial markets are so nervous because operators have learned from past experience that fiscal adjustment is always difficult.

France has in this sense a responsibility for the entire EU since EMU can at least start with a small group of countries if France reduces its deficit to below 3% of GDP by 1997. The other countries that are "willing, but not yet able" would then join as they get ready. But without France, EMU cannot even start.

Apart from the fiscal problem, the economic environment is rather favourable. Eleven member countries satisfy the inflation criterion and there are no large differences in the business-cycle position. In this sense, EMU could be just around the corner. But because of the need for fiscal adjustment, the start of the third stage has already been postponed to 1999, which implies a rather long transition period. It is this transition that harbours the most dangerous problems for the entire EMU project.

#### 2) What needs to be done?

This paper has argued that the broad outline of EMU is acceptable. This

does not mean that nothing needs to be done, however. In our opinion, there are two concrete decisions that should be taken to make the transition to EMU easier. As both of them have been discussed in some detail above, we can be brief here.

First, some agreement is needed on the interpretation of the debt criterion, i.e. on the interpretation of what is implied by a debt ratio that is "approaching the reference value at a satisfactory speed". The uncertainty surrounding the debt criterion might create extremely serious controversies because a number of countries might come to the examination in 1998 (that will decide about membership in the initial core of EMU) with the expectation that they should be let in because their deficit is below 3% and their debt ratio has been declining a bit, whereas Germany and others might take the position that they should not be let in. The ECOFIN Council should therefore reach a consensus on what improvement in the debt ratio is required for participation in EMU. There is no need to change the treaty. A gentleman's agreement would be enough.

This paper proposes a practical numerical rule that would be consistent with the Treaty and could be used to eliminate the ambiguity surrounding the debt criterion. The rule would require that the debt ratio should decline each year by more than 5% of the difference between the starting value of the debt ratio and the 60% reference. According to this rule, the minimum reduction in the debt/GDP ratio to be achieved by 1998, would be 11 percentage points of GDP for Belgium (i.e. lowering the ratio from 134 to 123), which has the highest debt ratio in the EU, and a similar amount for Italy but for the Netherlands which is already much closer to the 60% reference value, the required adjustment would be much smaller. This rule should also be applied after EMU has begun in order to ensure that debt levels continue to decline.

Second, the countries that are close to satisfying the convergence criteria need to be reassured that their national interests will not be adversely affected by the start of EMU in 1999. This can be done, but only if the countries that cannot join EMU immediately reiterate in a credible manner their commitment to continue their convergence efforts. If

financial markets perceive that convergence will continue a strong exchange rate system can be created that reduces exchange variability and risk premia. For the countries that have already achieved the required inflation performance, a more ambitious solution should be considered: they could participate unilaterally as associated members in EMU; i.e. they would behave as if they were full members of EMU even though they would not initially be part of the decision-making mechanism.

If these two proposals are accepted, the transition should be somewhat easier. There is no miracle cure for the difficult period that lies ahead, however. Ultimately the principal responsibility remains with member countries which have to pursue their fiscal adjustments. The convergence efforts should be pursued whether or not the country can participate immediately in EMU simply on the grounds that they represent sensible policy.

## Annex 1 Lessons from the UK and General Lessons

#### a) Lessons from the UK Experience

What conclusions can one draw from the UK experience? The following discussion is based on a crude comparison with France, because this has been the dominant basis of recent policy discussion. A more careful analysis based on macroeconomic models is provided by Hughes Hallett and McAdam (1995).

The data for the comparison France-UK are contained in Table A.1.1. The last row shows that in terms of unemployment and employment growth, the UK indeed improved its position relative to that of France in 1993 and 1994. In 1992, employment fell faster in the UK than in France (2.5% in the UK versus 0.8% in France) and unemployment increased by more in the UK (1.7 percentage points versus 0.9 points for France). After the ERM existed (i.e. in 1993), the relative position of these countries turned around and the better performance of the UK in terms of these two variables persisted into 1994. In this sense, the popular conception is validated.

But what was the cause of the better employment performance of the UK during these years? One explanation could be "competitive depreciation", which one would expect to show up in a better export performance. In 1992 and 1993, the competitive position of the UK did indeed improve in terms of unit labour costs, whereas that of France deteriorated. The cumulative difference between France and the UK that one can calculate from the second row of Table A.1.1 was about 18%, if one compares end 1993 to end 1991. One would expect such a large gain in competitiveness to lead to a strong increase in (net) exports.

However, the contribution of the change in net exports to GDP growth remained actually higher in France than in the UK throughout the period considered here. The lower pound did apparently did not stimulate net exports as much as generally thought.

Table A.1.1
Advantages of Exiting the ERM

| rectaining the Eliti                                |                |  |            |                |                |                |
|---|----------------|--|------------|----------------|----------------|----------------|
|   | 1992           | UK<br>1993   | 1994       | 1992           | France<br>1993 | 1994           |
| Interest Rates:<br>Long-term<br>Short-term          | 9.1<br>9.6     | 7.5<br>5.9   | 8.2<br>5.4 | 9.0<br>10.3    | 7.0<br>8.6     | 7.5<br>5.8     |
| % Change in<br>Competitiveness<br>(labour costs)*   | + 3            | + 11   | - 2        | - 1            | - 3            | + 2            |
| Contribution to<br>GDP Growth (in%<br>of GDP) from: |                |  |            |                | 444            |                |
| -Change in Domestic Demand                          | - 0.2          | +1.8   | + 2.7      | + 0.8          | - 0.6          | + 1.4          |
| Domestic Demain                                     | - 0.9          | -0.0   | + 0.4      | + 1.0          | + 0.9          | - 0.3          |
| -Change in Net<br>Exports                           |                | , and a second s |            |                |                |                |
| Change in Fiscal<br>Deficit**<br>(1991-1990)        | + 3.5          | +1.5   | - 0.9      | + 1.7          | + 1.9          | - 0.1          |
| Change in:<br>-Employment***<br>-Unemployment       | - 2.5<br>+ 1.7 | -1.0<br>+0.3   | + 0.4      | - 0.8<br>+ 0.9 | - 1.2<br>+ 1.3 | - 0.6<br>+ 0.9 |

A + sign denotes an improvement in competitiveness as measured by unit labour costs in a common currency.

Source: OECD, Economic Outlook, Tables 55, 56, 42, 35 and 29, 19 and 20.

The main reason for the difference in employment performance must thus be sought elsewhere. Market commentators emphasised constantly in 1992-93 that the main reason for the exit of the pound from the ERM was that the British government was not willing to maintain the very high interest rates needed to follow the DM. Table A.1.1 shows that the

<sup>\*\*</sup> In % GDP, a + sign denotes an increase in the deficit.

<sup>\*\*\*</sup> Change of total employment in %.

ERM exit did indeed allow the UK to lower short-term nominal interest rates considerably. However, long-term rates did not move a lot with the result that in 1993 and 1994 the yield curve had a steep positive slope in the UK whereas it remained negatively sloped in France in 1993 and turned around only in 1994. Since the slope of the yield curve has recently (see Estrella and Mishkin (1995) for further references) been identified as an important determinant of economic activity, this would indicate that ERM brought at least some short-term benefits to the UK. One should note, however, that throughout this period, French long-term rates remained below UK ones and the decline in short-term rates over the entire period 1992-94 was actually larger in France.

Inflation was roughly constant in France during this period, whereas it declined from an initially higher level in the UK. Hence, real rates were generally higher in France throughout this period, but the decline over the period was also larger.

The general lesson that seems to emerge from this comparison is that in the case of the UK, monetary policy was considerably loosened after the ERM exit and that this apparently had a considerable impact on the economy. France benefited from a similar loosening of monetary policy, but only when German policy turned around one year later. It is too early to tell whether this will have a similar impact on the French economy.

#### b) General Lessons from Large Exchange Rate Adjustments

Instead of comparing the experience of one country that let the exchange rate go with one that maintained ties to the DM, one can also look at the three major EU countries that experienced major exchange rate adjustments. The following compares the exit of pound sterling from the ERM in 1992 and the continuing devaluations of the peseta and the lira in 1992-93 as a sort of laboratory element and ask whether these large exchange rate movements had the effects one generally expects. The 1995 exchange rate movements are too recent to have had any impact on macroeconomic aggregates. The following analysis is again based on a simple comparison.

Table A.1.2

The Impact of Large Exchange Rate Adjustments

|   | U              | UK         |               | Italy          |                | pain           |
|---|----------------|------------|---------------|----------------|----------------|----------------|
|   | 1993           | 1994       | 1993          | 1994           | 1993           | 1994           |
| % Change in ecu<br>rate (relative<br>to early 1992) |                |            |               |                |                |                |
| % Change in<br>Competitiveness<br>(labour costs)*   | + 11           | - 2        | + 17          | + 3            | + 14           | + 3            |
| Change in*** Domestic Demand                        | + 1.8          | +2.7       | - 3.7         | + 1.2          | - 3.7          | 0.3            |
| Change in Net<br>Exports**                          | 0              | +0.4       | + 4.6         | + 0.5          | + 2.9          | + 1.4          |
| Change in Fiscal<br>Deficit***<br>(1992-91)         | + 1.5<br>+ 3.5 | -0.9       | + 0.1         | + 0.7          | + 3.3          | - 0.7          |
| Change in: -employment**** -unemployment            | - 1.0<br>+ 0.3 | +0.4 - 0.8 | - 4.8<br>n.a. | - 2.6<br>+ 0.5 | - 4.3<br>+ 4.3 | - 0.9<br>+ 1.6 |

<sup>\*</sup> A + sign denotes an improvement in competitiveness as measured by unit labour costs in a common currency.

\*\* Contribution to GDP growth in% of GDP.

\*\*\*\* Change of total employment in %.

Source: OECD, Economic Outlook, Tables 55, 56, 42 and 29, 19 and 20.

Table A.1.2 presents the evidence for these three countries. The second row shows that all three countries had a similar improvement in competitiveness as measured by unit labour costs but the impact this had on net exports was quite different. In the UK, the contribution of net exports to real GDP growth was zero in 1993 and only 0.4 percentage points of GDP in 1994. By contrast in Italy and Spain, net exports contributed 4.6 and 2.9 percentage points to real GDP growth in 1993. This diminished in 1994, but remained above the level of the UK: plus 0.5 for Italy and 1.4 for Spain.

<sup>\*\*\*</sup> In % of GDP, a + sign denotes an increase in the deficit.

In the UK, the devaluation thus had only a very limited impact on foreign trade as already noted. By contrast in the case of Italy and Spain, exports reacted strongly leading to an almost immediate current account improvement without any J-curve effect. What was the reason for this difference in performance?

The better export performance of Italy and Spain was not just due to a different distribution of their export markets. UK exports actually grew less than demand in UK export markets (as measured by the OECD) in 1993, i.e. one year after the exit of the pound from the ERM. By contrast, Italian and Spanish exports grew by more than 10 percentage points faster than their respective export markets.

The data in Table A.1.2 strongly suggests that the decisive element that differentiates the UK from Italy and Spain is the behaviour of domestic demand in 1993: it contributed 1.8 percentage points to real GDP growth in UK, but detracted 3.7 and 2.9 percentage points in Italy and Spain. In 1994, the contribution of domestic demand to real GDP growth turned positive in Italy and Spain, but it remained still highest in the UK. This difference in the behaviour of domestic demand could explain the very large difference in the reaction of net exports (demand for imports declined in Italy and Spain) and the difference in overall export growth. As the domestic market collapsed in Italy and Spain, firms from these countries increased their efforts in the export markets, wheres UK firms apparently used the depreciation to increase their profit margins.

The behaviour of domestic demand was also the factor behind the better performance of the UK in terms of employment. In the UK, employment fell only slightly in 1993 (by 1%) and recovered somewhat in 1994 (+0.4%). In Spain and Italy, however, employment fell sharply in 1993 (by 4.8 and 4.3% respectively), and there was no recovery in 1994. The destruction of jobs slowed only down a bit. The unemployment rates also shown in Table A.1.2 again mirror this pattern.

What was behind the differences in the behaviour of domestic demand? Table A.1.2 suggests that fiscal policy might have played a role, but the evidence is not clear cut. In 1993, the deficit increased the most in Spain

(+ 3.3% of GDP), somewhat in the UK (+ 1.5% of GDP) and very little in Italy. However, Spain still had a drop in domestic demand as large as Italy, whereas in the UK domestic demand increased. Perhaps one could argue that fiscal policy acts with a lag. Table A.1.2 therefore also presents the changes in the deficit between 1992 and 1991. These figures correlate well with the change in domestic demand one year later, i.e. 1993. However, it is then difficult to explain why the growth in domestic demand accelerated in the UK and turned from a large negative to a small positive in Italy and Spain in 1994, whereas there was little change in the fiscal position the year earlier in these countries. It is thus difficult to explain the changes in domestic demand by changes in fiscal policy.

The stance of monetary policy is difficult to measure in Italy and Spain because interest rates were more variable than in other countries. But it is difficult to argue that there were large changes in the stance of monetary policy in these two countries over the period 1992-93. In both countries, interest rates remained rather high and the yield curve was initially negatively sloped and turned positive in 1993 (Italy) and 1994 (Spain).

If fiscal (and monetary) policy cannot be unambiguously identified as the main reason for the difference in the behaviour of domestic demand, one could still argue that the collapse of the latter in Italy and Spain was an exogenous event, unrelated to the devaluations that took place. One could then argue that the large depreciations and the ensuing expansion of exports were instrumental in averting an even greater disaster. But this would not explain why the sharp fall in domestic demand followed so closely the collapse of the fixed exchange rate policy.

# Annex 2 Interest Savings in EMU

All governments of the countries that participate in EMU should pay the same interest rate on their public debt except if there are important risk premia. A risk premium could arise because under EMU public debt becomes more risky since national government can no longer print the money they need to service their debt. As a benchmark, one could assume that the highly indebted countries would have to pay the same interest rate as Belgium (which has the highest debt/GDP ratio in the EU). This is done in Table A.2.1 below.

Table A.2.1
Interest Rate Burdens in Select Member States

|             | (1) Net Debt/GDP as defined by OECD | (2)<br>Yield on<br>Public<br>Debt | (3) Savings at German Yield [(2)- 7]*(1) | (4)<br>Inflation<br>(95) | (5) Savings at Belgium Yield [(2) -7.9] *(1) |
|-------------|-------------------------------------|-----------------------------------|--|--------------------------|--|
| Germany     | 35.8                                | 7.0                               |  | 2.4                      | - 0.3  |
| Belgium     | 130.0                               | 7.9                               | 1.2                                      | 1.7                      |  |
| Netherlands | 60.1                                | 7.2                               | 0.1                                      | 2.4                      | - 0.4  |
| Italy       | 117.9                               | 13.0                              | 7.0                                      | 4.3                      | 5.9  |
| Spain       | 42.2                                | 12.0                              | 2.1                                      | 4.8                      | 1.6  |
| Sweden      | 20.2 (80.0)                         | 11.0                              | 0.8 (3.2)                                | 2.6                      | 0.6 (2.4)                                    |

Source: The Economist, 1-7 April 1995, for yields on public debt; OECD Economic Outlook, 56, December 1994, for net financial obligations (net government debt). For Sweden, the net debt is given at 20% of GDP, but gross debt is given at 80%. This is the only country with such a large difference between net and gross debt. Figures for gross debt in parenthesis.

This table uses actual market rates and the *net* debt figures as defined by the OECD and is intended simply to give an idea of the order of magnitude of the problem. A more detailed empirical analysis would have to take into account the average maturity structure of public debt

and the structure of the assets and liabilities of general government. Since April 1995 was a time of financial crisis in Italy, Spain and Sweden, one could argue that this table gives an idea of the cost of "non-EMU" for these countries if one assumes that non-participation (e.g. because of lack of convergence in the fiscal area) causes a renewed crisis of confidence in 1998.

Another approach would be to simply take the data on actual interest payments (as reported by member states to the services of the Commission) and calculate the implicit interest rate paid on public debt, see Table A.2:2. This approach takes differences in maturity structure automatically into account.

Table A.2.2
Potential for Debt Service Savings

| E        | Basic Data (199 | Savings with German:                     |                                      |   |  |
|----------|-----------------|--|--------------------------------------|---|--|
|          | Debt/GDP<br>(1) | Long<br>Term<br>Interest<br>Rates<br>(2) | Implicit<br>Interest<br>Rates<br>(3) | Long-Term<br>Int. Rates<br>(4) =<br>(1)*[(2)-6.7] | Implicit<br>Interest<br>(5) =<br>(1)*[(2)-7.5] |
| Germany  | 59              | 6.7                                      | 7.5                                  |   |  |
| Belgium  | 134             | 7.8                                      | 7.5                                  | 1.5   | 0  |
| Greece   | 114             |  | 13.4                                 |   | 6.7  |
| Italy    | 125             | 10.6                                     | 10.8                                 | 4.9   | 4.1  |
| Portugal | 71              | 10.8                                     | 8.3                                  | 2.9   | 0.6  |
| Spain    | 65              | 9.7                                      | 9.4                                  | 1.9   | 1.2  |
| Sweden   | 81              | 9.5                                      |                                      | 2.2   |  |

Source: AMECO database.

The problem with these data is that the implicit interest rate reported by member countries, (which is calculated as the ratio of actual interest payments divided by the stock of debt) appears in some cases to be too

low to be believable. For example, for Portugal the reported interest payments on public debt are equivalent to an implicit interest rate of only 8.3%, whereas the long-term interest rate in the market is given at 10.8%. This discrepancy is probably due to the fact that for bonds that are sold at a discount, the national accounts register no direct interest payment. The discrepancy between the issuing price and the face value that has to be reimbursed at the end is then probably booked under the "stock flow" adjustment mentioned above. Nevertheless, this approach is still useful because it yields a lower bound for the interest savings. For Italy, this lower bound is still 4% of GDP. Table III.3 in the text uses an average, biased towards the lower of the two estimates provided here.

The debt service savings calculated here would of course not materialize immediately even if interest rates were to fall immediate upon participation (unilateral or full) in EMU because only part of public debt matures at any point in time. But for most of the countries in tables A.2.1 and A.2.2 the maturity structure is such that most of the savings would materialise within 1-2 years. It is not possible to predict what short and long interest rates will be in the EMU area in 1999. But all that matters here is the difference between interest rates paid on public debt in the "periphery" and the core.

# Annex 3 Historical Experiences with Monetary Union in 19th Century Europe

In attempting deriving lessons for European monetary integration today, three earlier efforts to form monetary union in the 19th century have received attention (see Table A.3.1).

Table A.3.1

Membership and Dates of Operation of Previous Monetary Unions

|  | Dates of Operation                   | Members  |
|--|--------------------------------------|--|
| Austrian-German Monetary<br>Union (AGMU) | 1857-1867                            | Germany, Austria,<br>Liechtenstein                             |
| Latin Monetary Union<br>(LMU)            | 1865-1927<br>(suspended during WW I) | France, Belgium, Italy,<br>Switzerland, Greece (after<br>1868) |
| Scandinavian Monetary<br>Union (SMU)     | 1872-1931<br>(suspended during WW I) | Denmark, Sweden, Norway<br>(after 1875)                        |

The AGMU was short-lived and built for political reasons only, because Austria intended to join the Zollverein. Prussia was reluctant to let Austria join because it feared losing its dominant political position. The AGMU was offered to Austria as a substitute for membership in the Zollverein. It will receive no further attention here. The LMU is also often seen as a way for France to extend political influence on the other states. The opposite effect is visible in the SMU where Norway refused to join first for the fear of being politically dominated by Sweden (Bergman et al. 1993). However, the LMU might be a more relevant example since it lasted longer and included more countries.

On the economic side, several important differences should be noted between the LMU and SMU on the one side, and EMU on the other side, restricting comparability seriously. Although trade among members was important, they were much less interconnected than the European economies are today. Although exact figures are hard to find (the following figures are based on Mitchell, 1975), it seems that the trade of

a typical member like Belgium with the LMU members was below 50% of the total in 1860 (in 1992, it was 73% with the EU 12). On the other hand, Belgium's trade with the outsiders Germany and UK accounted for more than 30% in 1860. In the period up to 1910, Belgium's bilateral trade with France, the most important member of the LMU, dropped by 10%. The same picture shows up for Switzerland. Trade with Germany and the UK was roughly as important as trade with the LMU, the latter declining over time (EU share in 1992: 65.6%). Italy's trade with the LMU fell most dramatically, from over 50% in 1860, it plummeted to less than one-quarter in 1910 (EU share in 1992: 58.3%). Finally, for France, the major country in the LMU, the trade with the UK and Germany was larger than its LMU trade (France's EU share in 1992: 64.3%). Hence, intra-EU trade is much higher than it was in the LMU.

The contrast between trade with the members of monetary union and the outside world is even more striking in the SMU than in the LMU. All SMU members were highly open, with trade shares of GDP ranging from 1/3 (Sweden) to 1/2 (Denmark). But Denmark's intra-SMU trade was about 20% of total in 1870, and fell to less than 10% in 1910. Trade with Germany and the UK accounted for more than two-thirds during the whole period. The same general pattern applies to the other SMU members, Norway and Sweden.

The second difference of today's EMU is that none of the monetary unions in the 19th century had a common and single monetary authority with issuing rights. Although the states agreed on upper limits of currency creation, these were hard to control and frequently violated. Since all currency created by one member circulated in the other countries as well, this gave rise to a serious free-rider problem. States had every incentive to increase the issue of banknotes and subsidiary coins (whose nominal value was higher than its metal content) to reap seigniorage revenue. Especially the large budgetary needs of countries, when involved in wars (like Italy and Greece) forced them to money-finance their expenditures. Moreover, at that time seigniorage was still one of the most important means to finance the budget. Therefore, it comes as no surprise that the countries ended up in a "prisoner's dilemma" where each tried to over-expand money issue and to export

inflation into the other countries of the arrangement. The LMU, where the free rider problem was particular strong, would have been probably dissolved much earlier, had there not been an agreement which made dissolution expensive for those countries that overissued currency. (The amount of inconvertible money issued had to be redeemed in gold by the issuing country.)

The absence of large exernal shocks, however, made the SMU more successful and viable than the LMU. While money growth rates had been quite similar and low during 1873-1914 (at around 5% annually), only after the dissolution of the gold standard in 1914, did money growth rates accelerate and diverge considerably, as did prices subsequently. Thus the real exchange rate was stable after 1873 until the outbreak of the first world war (Bergman et al. 1993). The divergence afterwards led to the collapse of that arrangement as well.

#### Rise and Fall of Monetary Unions

What can be seen as the reason behind these arrangements in the first place, given their bad design? The basic reason for the different attempts of monetary integration must be seen in the underlying integration of the European economies in the 19th century. Standardization of coinage and unification of the monetary standard was seen as a necessary requirement for trade expansion and traders pushed for convertibility of currencies (Theurl, 1992, p. 253). (Convertibility at that time was understood as the avoidance of fluctuating exchange rates that would result from severing the fixed link between national currencies and the metal standard.) Although, as argued above, trade among the LMU countries was rather small and declining, one reason for the LMU must be seen in the fact that the smaller countries were already on French currency before 1865.

When Belgium became independent in 1831, it had already adopted the French monetary system. Its coins were of the same fineness, value and name as the French coins. French money was even made legal tender in Belgium (Bartel, 1974). From 1853 onwards, Belgium completely stopped minting its own silver coins, as it was easier to buy the coins

(against gold) in France and import them for use (Willis, 1901), while full-valued coins were exported to the Netherlands and Germany, exhibiting the working of Gresham's law. (In 1860, 87% of the coin circulation in Belgium was of French origin. Gold was widely used too, but its non-legal tender character and the overly large denominations created difficulties for daily transactions.) Switzerland and Italy were also already on the French standard, with the French franc as legal tender in both countries too. As the franc circulated in these countries, in turn the national coins of Italy, Belgium, and Switzerland intercirculated among each other. Notice in this context that France was also the main creditor to these countries. Thus, another reason for the countries to adopt the French franc might have been its dominant role in the financial market because France played a major role in supplying credits to its neighbours.

According to Bergman et al. (1993), the highly open SMU countries were first interested in joining the LMU as well. They decided otherwise because Germany and the UK were important partners, both being on a single gold standard after 1871, while they remained formally on the bimetallic standard.

There is almost unanimous consent that the asymmetric shocks which undermined the viability of the regional monetary arrangements were of a political nature rather than of a real nature (Theurl, 1992; Bergman et al, 1993; Bartel, 1974; Krämer, 1971; and Cohen, 1994). The majority of technological shocks in the form of major innovations and their adoption occurred in the first half of the 19th century. Moreover, it seems that asymmetric shocks occurred rather along regional lines than along national borders. Around the middle of the 19th century, only few really developed industrial areas existed, being more regionally concentrated than along border lines (Fischer, 1985). Europe hence was composed more of industrial regions than industrialised countries.

The collapse of monetary unions started already with the return to protection among European countries in the 1870s. The great depression resulted in a general shift in trade policy (Irwin, 1993; Pollard, 1981). European economies became much less interested in trade, and hence the importance of stable currency relations among each other declined. The

second factor that undermined monetary integration were the seigniorage needs which forced many of the countries to suspend convertibility and to inflate their currencies to finance wars.

# Annex 4 Fiscal Stabilisers in the US Federal Fiscal System

The purpose of this annex is to provide the reader with the basic empirical results that are behind the differing assessments of the automatic shock amortisation provided by the US federal fiscal system. It is not possible to present all the arguments in detail in these few pages. For more detail, the reader should consult Gros and Jones (1994) and the references cited therein. The material presented in this annex should be sufficient, however, to allow the reader to form his own judgement on this controversy.

The most direct way to measure the extent to which the US federal fiscal system provides insurance against asymmetric shocks across states, at a point in time, is to look at cross-section regressions of (changes in) disposable personal income as a function of (changes in) earned personal income. The results reported below indicate that the US fiscal system offsets less than 20% of changes in personal income. Consider the following cross-section regression based on data from 1988 (50 states):

 $d(dpi) = 80.2 + 0.89 \times d(epi)$ (4.76) (27.8)

Adj.  $R^2 = 0.94$ , S.E. = 82, t-statistics in parenthesis

Source: Own calculations based on data from the Bureau of Economic Analysis, US Department of Commerce.

Where d(dpi) stands for the change in disposable income per capita and d(epi) stands for the change in earned income per capita. This equation shows that in 1988, the US federal fiscal system (i.e. the sum of federal income tax, social security and transfers to individuals) offset on average only about 11% of shocks to (earned) income per capita. Different years yield different results. However, the average over the 20 years from 1970 to 1989 is equal to 0.81, still below 20%. This suggests that the shock-absorbing function of the US federal fiscal system is probably

much lower than generally thought.

A confirmation of this result can be obtained by looking at the link between federal taxes and income. A simple cross-section regression (1988, 50 states) between earned income per capita and per capita taxes paid yields the following results:

$$d(tax) = -68.9 + 0.09 \times d(epi)$$
  
(-2.9) (3.4)

Adjusted  $R^{2'} = 0.17$ , S.E. = 76.8, t-statistics in parenthesis

NB: This measure of income per capita is "earned" income less personal contributions to social INSURANCE which are not subject to federal personal taxation.

Source: Own calculations based on data from the Bureau of Economic Analysis, US Department of Commerce.

Where d(tax) indicates the change in federal income taxes paid per capita. The coefficient of 0.09 on the change in earned income per capita (d(epi)) suggests again that the federal income tax system offsets less than 10% of shocks to income. It is remarkable that the transfer system does not increase the extent of shock absorption (the remaining 2% stabilisation comes from changes in per capita contributions to social insurance). On the contrary, the correlation between income and (admittedly the level of) transfers is positive as already mentioned above. It is thus clear that the income stabilisation that exists in the US has to come mainly from the tax system.

The evidence that the US federal fiscal system absorbs a large proportion of shocks to state or regional income was usually based on time series regressions that link changes in disposable income to changes in earned income (the difference represents the net impact of federal fiscal flows). A somewhat typical result was the one from a times series regression using data for California from 1970 to 1989:

 $d(dpi) = 105.8 + 0.51 \times d(epi)$ (24.0) (7.9)

Adj.  $R^2 = 0.76$  S.E. = 89.5, D.W. = 2.08, t-statistics in parenthesis

Source: Own calculations based on data from the Bureau of Economic Analysis, US Department of Commerce.

This result, for the 8th largest economy of the world, could be interpreted as implying an offset or stabilisation coefficient of 49% (the average for all states is much smaller though). However, this approach neglects the fact that over time, the federal fiscal balance changes. This affects all states or regions; hence, the previous regression mixes the impact of redistribution across states (at a given point in time) and the redistribution over time through the federal fiscal budget. If one separates out the latter by adding the US average of federal fiscal flows to individuals the result changes considerably:

 $d(dpi) = 27.6 + 0.78 \times d(epi) - 0.78 \times d(nfs)$ (1.27) (11.6) (5.1)

Adj.  $R^2 = 0.90$ , S.E. = 57.6, D.W. = 1.92, t-statistics in parenthesis

Source: Own Calculations from Bureau of Economic Analysis, US Department of Commerce.

Where the *net* federal fiscal stance (d(nfs)) is defined as the net overall federal fiscal flows to and from individuals (the average US-wide difference between earned and disposable income) except California. This regression shows that taking into account the federal fiscal stance reduces the estimate of the offset coefficient to 22%, less than half the first estimate.

Similar results obtain for other states or regions as documented in Gros

and Jones (1994). On average (for all 50 states), the coefficient on the change in earned income per capita is close to 0.9, which implies that the federal fiscal system offsets only about 10% of shocks to earned income per capita.

This confirms the claim that the stabilisation of income across regions is much smaller than generally thought.

#### References

# Annex 5 A Note on the CEPS Economic Policy Group

With the help of grants from the Bundesbank, the Bank of Spain, the Swedish Riksbank and other sources, CEPS established the Economic Policy Group to explore Europe's economic policy beyond Maastricht. Composed of economists and political scientists, its present members include:

Jeffrey Frieden, Professor of Political Science at Harvard University, and specialist on political economic aspects of international monetary relations.

Alberto Giovannini, Expert of the Legal Counsel in the Italian Ministry of Finance and currently Director of Research, Long Term Capital Investment, London.

Daniel Gros, Senior Research Fellow at CEPS and Director of the CEPS Economic Research Programme.

Andrew Hughes Hallett, Professor of Economics at the University of Strathclyde in Glasgow and specialist on international economics.

Jean Pisani-Ferry, Commission of the European Communities and now Director of the CEPII in Paris. He is an expert on European integration.

*Niels Thygesen*, Professor of Economics at the University of Copenhagen in Denmark. He served on the Delors Committee, preparing Monetary Union for Europe.

José Viñals, Head of Economic Studies at the Bank of Spain and an authority on macroeconomic aspects of European integration.

The group was created to analyse the present economic crisis in European Union countries from a long-term perspective. Its main focus is to analyse European Monetary Union (EMU), especially the links between EMU and political union, as well as the relations between the "ins" and "outs".

Adrian, Tobias (1995), "Neuere Erklärungsansätze der Wirtschaftsstruktur in Europa", unpublished diploma thesis, University of Frankfurt.

Balabriga, Fernando et al. (1995), "European Asymmetries", unpublished manuscript, ESADE.

Ball, Lawrence and N. Gregory Mankiw (1995), "What Do Budget Deficits Do?", National Bureau for Economic Research (NBER) Working Paper 5263.

Banian, King et al. (1994), "The Inflation Tax is Likely to be Inefficient at Any Level", Kredit und Kapital, 27, 30-42.

Barro, Robert J. (1995), "Inflation and Economic Growth", National Bureau for Economic Research (NBER), Working Paper 5326.

Bartel, Robert J. (1974), "International Monetary Unions: The XIXth Century Experience", *Journal of European Economic History*, 3, 689-704.

Bayoumi, Tamim (1994), "A Formal Model of Optimum Currency Areas", *IMF Staff Papers*, 41, 537-554.

Bayoumi, Tamim and Eswar Prasad (1995), "Currency Unions, Economic Fluctuations and Adjustment: Some Empirical Evidence", Centre for Economic Policy Research (CEPR), Discussion Paper 1172.

Bean, Charles et al. (1990), European Labour Markets: A Long-Run View, Centre for European Policy Studies, CEPS Paper No. 47.

Bergman, Michael, Stefan Gerlach and Lars Jonung (1993), "The Rise and Fall of the Scandinavian Currency Union 1873-1920", *European Economic Review*, 37, 507-517.

Bertola, Giuseppe (1989), "Factor Mobility, Uncertainty and Exchange Rate Regimes" in M. De Cecco and A. Giovannini, eds, *A European Central Bank?*, Cambridge: Cambridge University Press, 95-118.

Bini-Smaghi, Lorenzo and Silvia Vori (1992), "Rating the EC as an Optimal Currency Area: Is it Worse than the US?", in R. O'Brien, ed, *Finance and the International Economy*, 6, New York: Oxford University Press, 79-104.

Blanchard, Olivier and Lawrence Katz (1992), "Regional Evolutions", Brookings

Papers on Economic Activity, 1, 1-61.

Bofinger, Peter (1994), "Is Europe an Optimum Currency Area?", Centre for Economic Policy Research (CEPR) Discussion Paper 915, February.

Borio, Claudio E.V. (1995), "The Structure of Credit to the Non-Government Sector and the Transmission Mechanism of Monetary Policy: A Cross-Country Comparison", Bank for International Settlements (BIS) Working Paper 24.

Borio, Claudio E.V. and Wilhelm Fritz (1995), "The Response of Short-Term Lending Rates to Policy Rates: A Cross-Country Perspective", Bank for International Settlements (BIS) Working Paper 27.

Buchanan, James (1977), Democracy in Deficit. The Political Legacy of Lord Keynes, New York: Academic Press.

Canzoneri, Matthew B. et al. (1995), "Do Exchange Rates Move to Address National Imbalances?", unpublished manuscript, Bank of Spain.

Commission of the European Communities (CEC) (1977) ,The Role of Public Finances in the European Communities, Vol. 1 (MacDougall Report).

Commission of the European Communities (1995), "The Impact of Currency Fluctuations on the Internal Market".

Cohen, Benjamin J. (1993), "Beyond EMU: The Problem of Sustainability", Economics and Politics, 5, 187-203.

Cooper, Richard (1994), "Yes to European Monetary Unification, But Not to the Maastricht Treaty", in A. Steinherr, ed, 30 Years of European Monetary Integration, London: Longman.

Council of Economic Advisors (1994), "Economic Report of the President", Washington, D.C.

Coudert, Virginie and Benoît Mojon (1995), "Asymmétries Financières en Europe et Transmission de la Politique Monétaire", CEPII Document de Travail 95-07.

Davies, Garth and David Vines (1995), "Equilibrium Currency Crises: Are Multiple Equilibria Self-Fulfilling or History Dependent?", Centre for Economic Policy Research (CEPR) Discussion Paper 1239.

De Grauwe, Paul (1995), "The Economics of Convergence Towards Monetary Union in Europe", Discussion Paper 117, Catholic University of Leuven.

De Grauwe, Paul et al. (1991), "North/South in the EMS: Convergence and Divergence in Inflation and Real Exchange Rates", Centre for European Policy Studies (CEPS) Paper 50.

Eichengreen, Barry (1990), "One Money for Europe? Lessons from the U.S. Currency and Customs Union", *Economic Policy* 10, 107-158.

Eichengreen, Barry (1992), "Should the Maastricht Treaty be Saved?", Princeton Studies in International Finance 74.

Eichengreen, Barry and Jürgen von Hagen (1995a), "Fiscal Policy and Monetary Union: Federalism, Fiscal Restrictions and the No-Bailout Rule", Centre for Economic Policy Research (CEPR) Discussion Paper 1247.

Eichengreen, Barry and Jürgen von Hagen (1995b), "Fiscal Restrictions and Monetary Union: Rationales, Repercussions, Reforms", unpublished manuscript.

Eichengreen, Barry and Charles Wyplosz (1993), "The Unstable EMS", Brookings Papers on Economic Activity, 1, 51-143.

Emerson, Michael et al. (1991), One Market, One Money, Oxford: Oxford University Press.

Estrella, Arturo and Mishkin, S. Frederic (1995), "The Term Structure of Interest Rates and its Role in Monetary Policy for the European Central Bank", National Bureau for Economic Research (NBER) Working Paper 5279.

Eucken, Walter (1952), Grundsätze der Wirtschaftspolitik, Tübinger: Mohr (reprint 1990).

European Monetary Institute (1995), "The Changeover to the Single Currency".

Feldstein, Martin and Charles Horioka (1980), "Domestic Saving and International Capital Flows", *Economic Journal*, 90, 314-328.

Fischer, Wolfram (1985), "Wirtschaft und Gesellschaft Europas 1850-1914", in W. Fischer, ed, *Handbuch der Europäischen Wirtschafts- und Sozialgeschichte*, Vol. 5, Stuttgart: Klett-Cotta, 1-207.

Frieden, Jeffry and Alberto Giovannini (1996), "The Political Economy of European Monetary Union After Maastricht: A Conceptual Overview", in J. Frieden, D. Gros and E. Jones, eds, *Towards Economic and Monetary Union: Problems and Prospects*, Oxford: Oxford University Press, forthcoming.

Frieden, Jeffry, Daniel Gros and Erik Jones, eds, *Towards Economic and Monetary Union: Problems and Prospects*, Oxford: Oxford University Press, forthcoming.

Giavazzi, Francesco and Marco Pagano (1995), "Non-Keynesian Effects of Fiscal Policy Changes: International Evidence and the Swedish Experience", National Bureau for Economic Research (NBER) Working Paper 5332.

Giovannini, Alberto and Luigi Spaventa (1992), "Fiscal Rules in the European Monetary Union: A 'Non-Entry' Clause", in A. B. Atkeson and R. Brunetta, eds, *Economics for the New Europe*, London: MacMillan.

Goodhart, Charles and S. Smith (1993), "Stabilization", European Economy Reports and Studies, 5, 417-456.

Gros, Daniel (1995a), "Self-Fulfilling Public Debt Crises", unpublished manuscript, Centre for European Policy Studies (CEPS).

Gros, Daniel (1995b), *Towards a Credible Excessive Deficit Procedure*, Centre for European Policy Studies (CEPS) Working Document 95.

Gros, Daniel (1995c), Excessive Deficits and Debts, Centre for European Policy Studies (CEPS) Working Document 97.

Gros, Daniel (1996), "Regional Diversity in an Economic and Monetary Union", in J. Frieden, D. Gros and E. Jones, eds, *Towards Economic and Monetary Union: Problems and Prospects*, Oxford: Oxford University Press, forthcoming.

Gros, Daniel and Erik Jones (1994), Fiscal Stabilisers in the United States Monetary Union: Measurement Error and the Role of National Fiscal Policy, Centre for European Policy Studies (CEPS) Working Document 83.

Gros, Daniel and Alfred Steinherr (1991), "Einigkeit Macht Stark--The Deutsche Mark Also?" in R. O'Brien, ed, *Finance and the International Economy*, 5, Oxford: Oxford University Press.

Gros, Daniel and Niels Thygesen (1992), European Monetary Integration, London: Longman.

Horn, Henrik and Torsten Persson (1988), "Exchange Rate Policy, Wage Formation and Credibility", European Economic Review, 32, 1621-1636.

Hughes Hallett, Andrew and Peter McAdam (1995), "Fiscal Deficit Reductions in Line with the Maastricht Criteria for Monetary Union: An Empirical Analysis", unpublished manuscript, University of Strathelyde.

Hughes Hallett, Andrew and Jean Pisani-Ferry (1996), "The Costs of Fiscal Retrenchments", in J. Frieden, D. Gros and E. Jones, eds, *Towards Economic and Monetary Union: Problems and Prospects*, Oxford: Oxford University Press, forthcoming.

Irwin, Douglas A. (1993), "Multilateral and Bilateral Trade Policies in the World Trading System: An Historical Perspective", in J. de Melo and A. Panagariya, eds, *New Dimensions in Regional Integration*, Cambridge: Cambridge University Press, 90-119.

Ishiyama, Yoshihide (1975), "The Theory of Optimum Currency Areas: A Survey", *IMF Staff Papers*, 22, 344-383.

Italianer, Alexander and Jean Pisani-Ferry (1994), "The Regional-Stabilization Properties of Fiscal Arrangements", in J. Mortensen, ed: *Improving Economic and Social Cohesion in the European Community*, London: St. Martin's Press, 155-194.

Italianer, Alexander and Marc Vanheukelen (1993), "Proposals for Community Stabilisation Mechanisms: Some Historical Applications", *European Economy Reports and Studies*, 5, 429-510.

Jacquemin, Alexis and André Sapir (1995), "Is a European Hard Core Credible? A Statistical Analysis", Centre for Economic Policy Research (CEPR) Discussion Paper 1242.

Kenen, Peter B. (1969), "The Theory of Optimum Currency Areas: An Eclectic View" in R. Mundell and A. Swoboda, eds: *Monetary Problems of the International Economy*, Chicago: University of Chicago Press, 41-60.

Kenen, Peter B. (1995), Economic and Monetary Union in Europe. Moving Beyond Maastricht, Cambridge: Cambridge University Press.

Krämer, Hans R. (1971), "Experiences with Historical Monetary Unions", in H. Giersch, ed: *Integration durch Währungsunion?*, Tübingen: Mohr, 106-118.

Krugman, Paul (1993), "Inequality and the Political Economy of Eurosclerosis", Centre for Economic Policy Research (CEPR) Discussion Paper 867.

Locarno, Alberto and Salvatore Rossi (1995), "Inflazione e Conti con L'Estero Nell' Economia Italiana Postsvalutazione: Due Luoghi Comuni da Sfatare", Temi Di Discussione Della Banca D'Italia 254.

Lucas, Robert (1976), "Econometric Policy Evaluations: A Critique", in K. Brunner and A. Meltzer, eds, *The Phillips Curve and Labor Markets*, Amsterdam: North Holland.

Masera, Rainer (1995) "Bilancio e Costituzione: Ipotesi dei Revisione alle Luce del Trattato di Maastricht", unpublished manuscipt, Rome.

Masson, Paul R. and Mark P. Taylor (1993) "Currency Unions: A Survey of the Issues" in: P. Masson and M. Taylor, eds: *Policy Issues in the Operation of Currency Unions*, Cambridge: Cambridge University Press, 3-51.

Mc Kinnon, Ronald (1963), "Optimum Currency Areas", American Economic Review, 53, 717-725.

Mitchell, Brian R. (1975) , European Historical Statistics 1750-1970, London: Macmillan.

Mundell, Robert (1961), "A Theory of Optimum Currency Areas", *American Economic Review*, 51, 657-665.

Obstfeld, Maurice (1994), "The Logic of Currency Crises", National Bureau for Economic Research (NBER) Working Paper 4640, February.

OECD (Organisation for Economic Cooperation and Development) (1994) ,OECD Economic Outlook, Paris: OECD.

Pisani-Ferry, Jean (1996), "Variable Geometry in Europe: An Economic Analysis", in J. Frieden, D. Gros and E. Jones, eds, *Towards Economic and Monetary Union: Problems and Prospects*, Oxford: Oxford University Press, forthcoming.

Pisani-Ferry, Jean and Philippine Cour (1995), "The Costs of Fiscal Retrenchment Revisited", *Problèmes Economiques* 2448, November.

Pisani-Ferry, Jean, Alexander Italianer and Roland Lescure (1993), "Stabilization

Properties of Budgetary Problems: A Simulation Analysis", European Economy Reports and Studies, 5, 511-537.

Pollard, Sidney (1981), The Integration of the European Economy Since 1815, London: Allen & Unwin.

Portes, Richard (1993), "EMS and EMU After the Fall", *The World Economy*, 16, 1-15.

Saint-Paul, Gilles (1995), "A Framework for Analysing the Political Support for Active Labour Market Policy", Centre for Economic Policy Research (CEPR) Discussion Paper 1205.

Sala-i-Martin, Xavier and Jeffrey Sachs (1992), "Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States", in M. Canzoneri, V. Grilli and P. Masson, eds., *Establishing a Central Bank*, Cambridge: Cambridge University Press, 195-219.

Sievert, Olaf (1995), "Was wird aus der D-Mark?", Speech to the Société Générale, Leipzig, 19 September, reprinted in Deutsche Bundesbank, ed: Auszüge aus Presseartikeln, 4 October.

Sorensen, Bent E. et al. (1995), "Channels of Interstate Risksharing", unpublished manuscript, University of Copenhagen.

Sutherland, Alan (1995), "Fiscal Crises and Aggregate Demand: Can High Public Debt Reverse the Effects of Fiscal Policy?", Centre for Economic Policy Research (CEPR) Discussion Paper 1246.

Tietmeyer, Hans (1995), "Grußwort" to the 9th Colloquium of the Institute for Research into Banking History, Frankfurt, November 3.

Theurl, Theresia (1992) ,Eine gemeinsame Währung für Europa--12 Lehren aus der Geschichte, Innsbruck: Österreichischer Studienverlag.

Viñals, José and Juan F. Jimeno (1996), "European Unemployment and EMU", in J. Frieden, D. Gros and E. Jones, eds, *Towards Economic and Monetary Union: Problems and Prospects*, Oxford: Oxford University Press, forthcoming.

von Hagen, Jürgen (1991), "A Note on the Empirical Effectiveness of Formal Fiscal Restraints", *Journal of Public Economics*, 44, 199-210.

#### Daniel Gros

von Hagen, Jürgen (1995), "Monetäre, Fiskalische und Politische Integration: Das Beispiel der USA", in Deutsche Bundesbank, ed, Auszüge aus Presseartikeln 76, November 10.

von Hagen, Jürgen and Ian Harden (1994), "National Budget Processes and Fiscal Performance" *European Economy Reports and Studies*, 3, 310-418.

Werner, Helmut (1995), "EMS Faces Threat of Collapse", Financial Times, April 27.

Willis, Henry Parker (1901), A History of the Latin Monetary Union, Chicago: Chicago University Press (reprint New York: Greenwood Press, 1968).

#### About CEPS Paper No. 65

In this report for the CEPS Economic Policy Group, Daniel Gros argues that Economic and Monetary Union is still desirable and can be reached by the year 1999. The crises of the European Monetary System that started in 1992 and the turbulence experienced by the financial markets in 1995 should not be viewed as evidence that EMU is impossible or undesirable. On the contrary, they indicate that without EMU, there could be a continuation of financial market instability and excessive exchange rate variability which have a negative effect on growth and might even endanger the single market.

He further asserts that there is no need to automatically link EMU to political union. In the absence of visible progress in European integration, however, the political consensus behind EMU would be in danger. For this reason, the overall success of the 1996 intergovernmental conference (IGC) will be crucial for EMU. The combination of the single market, plus monetary union, plus the fiscal criteria, plus the provisions for policy coordination already constitutes a sort of «economic policy union». There is no need therefore for a centrally run fiscal policy. Furthermore, centralisation of social and employment policies is not desirable under EMU because large productivity differentials are likely to persist for some time.

The report advances two concrete proposals:

- For countries that are far advanced in their convergence efforts, but that do not fully satisfy the fiscal criteria because of high interest rates, associated membership in EMU might be a suitable option. These countries could mimic participation in EMU by binding their currencies irrevocably, and on a unilateral basis, to the common currency already by 1999, provided the ECB agrees that they otherwise qualify for EMU. This should lead to substantial debt-service savings and accelerate convergence so that full membership in EMU could follow rapidly.
- The ambiguity surrounding the Maastricht condition on public debt should be clarified. The Treaty says clearly that the reference value of a debt/GDP ratio of 60% is not an absolute limit. All that is required is that the ratio be «sufficiently diminishing and approaching the reference value at a satisfactory rate» (Art. 104c, 2b). This vague expression should be tranlated into the following rule: the debt ratio should decline each year by a sufficient amount to eliminate at least 1/20th of the discrepancy between the actual debt/GDP ratio and 60% of the GDP reference value.

#### **About CEPS**

The Centre for European Policy Studies was launched as an independent research institute in 1983 to encourage the study and discussion of public affairs in Europe. It aims:

- To provide decision-makers, inside and outside government, with authoritative and independent analysis of European affairs;
- To contribute to and influence the public debate about European institutions and policies through sound research and judgement; and
- To create a network of leaders and thoughtful individuals who are committed to working together to enhance the development of European integration and cooperation.