

Fall 1994

Economic and monetary union in Europe

Charalambos K. Demetriou
New Jersey Institute of Technology

Follow this and additional works at: <https://digitalcommons.njit.edu/theses>



Part of the [Business Commons](#)

Recommended Citation

Demetriou, Charalambos K., "Economic and monetary union in Europe" (1994). *Theses*. 1182.
<https://digitalcommons.njit.edu/theses/1182>

This Thesis is brought to you for free and open access by the Theses and Dissertations at Digital Commons @ NJIT. It has been accepted for inclusion in Theses by an authorized administrator of Digital Commons @ NJIT. For more information, please contact digitalcommons@njit.edu.

Copyright Warning & Restrictions

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be “used for any purpose other than private study, scholarship, or research.” If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of “fair use” that user may be liable for copyright infringement,

This institution reserves the right to refuse to accept a copying order if, in its judgment, fulfillment of the order would involve violation of copyright law.

Please Note: The author retains the copyright while the New Jersey Institute of Technology reserves the right to distribute this thesis or dissertation

Printing note: If you do not wish to print this page, then select “Pages from: first page # to: last page #” on the print dialog screen

The Van Houten library has removed some of the personal information and all signatures from the approval page and biographical sketches of theses and dissertations in order to protect the identity of NJIT graduates and faculty.

ABSTRACT

ECONOMIC AND MONETARY UNION IN EUROPE

by
Charalambos Demetriou

The plans for Economic and Monetary Union in Europe became difficult to achieve during the period 1992-1993. The convergence criteria set up in the Maastricht Treaty block the road towards unification. It is very complex to expect twelve governments with different shades of political colour and twelve states with different economic interests to compromise in such criteria (as inflation, government borrowing, exchange rate stability and interest rates) and eventually, speak with one voice at the end of this decade.

This current research provides significant modifications in The Maastricht Treaty , policy making, objectives, even changes in political behavior for better coordination to tackle any turbulence that stands on the way. These changes were unveiled and supported by outside views. The right time for transition to the monetary union depends on the rate of progress in Europe in meeting the stability requirements and in the willingness to move to a more developed political union. Monetary Union could occur late in 1990s but with a number of members left out with major dominant the Germany than the EMS.

ECONOMIC AND MONETARY UNION
IN EUROPE

by
Charalambos K Demetriou

A Thesis
Submitted to the Faculty of
New Jersey Institute of Technology
in Partial Fulfillment of the Requirements for the Degree of
Master of Science in Management

School of Industrial Management

January 1995

APPROVAL PAGE

ECONOMIC AND MONETARY UNION IN EUROPE

Charalambos K Demetriou

Dr. John Malindretos, Thesis Advisor _____ Date
Associate Professor of Finance, NJIT

Dr. Iftekhar Hasan, Committee Member _____ Date
Associate Professor of Finance, NJIT

Dr. Theodoros Homer Bonitsis, Committee Member _____ Date
Associate Professor of Finance, NJIT

BIOGRAPHICAL SKETCH

Author: Charalambos Demetriou
Degree: Master of Science in Management
Date: January 1995

Undergraduate and Graduate Education

- Master of Science in Management
New Jersey Institute of Technology, Newark, NJ, 1995
- Bachelor of Science in Accounting
Kean College, Union, NJ, 1993

Major: Accounting and Finance

This thesis is dedicated to
my father Kiriacos K. Demetriou

ACKNOWLEDGEMENT

The author wishes to express his great gratitude to his enthusiastic advisor Dr. John Malindretos, for his guidance, support and friendship, since this project would not have been possible without his help and encouragement.

The author is also grateful to the Committee members, Dr. Inftekar Hasan and Dr. Theologos Homer Bonitsis for their time and effort in reading and contributing to the correctness of this project.

Special thanks goes out to the Banks and others such as the Deutsche Bundesbank, the Commerzbank in New York, and the Commission of European Communities who have provided research materials, for the completion of this work.

TABLE OF CONTENTS

Chapter	Page
1 INTRODUCTION.....	1
2 A BRIEF HISTORY OF EUROPEAN MONETARY INTEGRATION.....	3
2.1 The Bretton Woods System in the 1960's.....	4
2.2 The Original Plans for an EMU.....	6
2.3 The "Snake" System in Operation.....	8
3 EVOLUTION AND EXPERIENCE OF THE EMS.....	12
3.1 Institutional Elements and Policymaking.....	13
3.1.1 The ECU.....	13
3.1.2 The Exchange Rate Mechanism.....	14
3.1.3 Intervention and Maintenance in the EMS.....	16
3.2 German Unification.....	18
4 GOALS OF THE EMU AND THE MAASTRICHT TREATY.....	21
4.1 Transitional Arrangements.....	21
4.2 Economic Policy.....	24
4.3 Monetary Policy.....	25
4.3.1 The Form of the ESCB and the Constitution of the ECB.....	25
5 PROBLEMS AND DIFFICULTIES IN THE EFFORT TO ACHIEVE EMU.....	28
5.1 Economic and Monetary Aspects of the Problem.....	28
5.1.1 Nominal Indicators.....	30
5.1.2 Fiscal Policy.....	30

TABLE OF CONTENTS
(Continued)

Chapter	Page
5.1.3 Exchange Rate Mechanism Crisis.....	31
5.1.4 Real Indicators.....	37
5.2 Political Implications of the Problem.....	43
6 BENEFITS AND COSTS.....	45
6.1 Efficiency and Growth.....	45
6.2 Price Stability.....	52
6.3 Public Finance.....	53
6.4 Adjusting to Economic Shocks - Cost of EMU.....	54
6.5 The International System.....	58
6.6 Transitional Costs and Benefits.....	62
6.7 Regional Impact.....	63
6.8 Convergence.....	67
7 RECOMMENDATIONS OR PROPOSALS FOR SOLUTION.....	68
7.1 National Central Bank Independency.....	68
7.2 Unemployment and Growth (Productivity).....	69
7.3 Margins of Fluctuation.....	70
7.4 The Central Bank Governors.....	73
7.5 New Members in EC.....	74
7.6 Fiscal Policy.....	75
7.7 Cohesion Fund.....	76

TABLE OF CONTENTS
(Continued)

Chapter	Page
7.8 People.....	76
7.9 Timetable.....	77
8 THE MEMBER STATES - OUTLOOK AND PROSPECTS.....	78
8.1 Outlook	78
8.2 Prospects.....	82
8.3 Germany.....	83
8.4 France.....	85
8.5 Italy and The United Kingdom.....	87
8.6 Spain.....	89
8.7 Belgium and Luxembourg.....	89
8.8 The Netherlands.....	91
8.9 Denmark.....	92
8.10 Ireland.....	93
8.11 Greece and Portugal.....	93
9 CONCLUSION.....	95
BIBLIOGRAPHY.....	97

LIST OF TABLES

Table	Page
1 Chronological History of the Snake.....	11
2 The European Currency Units Quantities and Relative Weights per Country.....	15
3 The Exchange Rate Realignments Within the EMS (1979-1990).....	15
4 Proposed Structure of The ECB in The Framework of the Maastricht Treaty.....	27
5 Number of EMU Convergence Criteria Fulfilled by by the EMS Member Countries (1985-1993).....	29
6 Converging Towards Union (1993 average).....	29
7 GDP per Head of Population at Current Market Prices Purchasing Power Standards, EC, (1975-1992).....	38
8 Exports as a Proportion of GNP, EC, 1975-1992 (percentage share).....	39
9 Structure of EC Exports, by Region, 1991 (percentage of total exports).....	41
10 Current Account Balances, EC, 1985-1992 (percentage of total GDP).....	43
11 Currency Transaction Losses in a (hypothetical) Round-Trip Through 10 Countries.....	47
12 Cost Savings on Intra-EC Settlements by Single EC Currency (in billion ecu, 1992).....	51
13 The Community in the World Economy (GDP;Trade).....	59
14 The Costs-Benefits by Member Country based on Intra-EC Trade and Differences in Economic Structure.....	66
15 EC Arithmetic. Population (m) of Member Countries and Votes in Council.....	75
16 Europe's Recovery. European Union Data and Forecasts for Twelve Member Nations Combined.....	83

LIST OF FIGURES

Figures	Page
1 Movements of Currencies Within the Bands.....	17
2 Long Term Interest Rates (percentage).....	19
3 Gross Public Debt as a Percentage of GDP.....	32
4 Budget Balance as a Percentage of GDP.....	33
5 Germany-Interest Rates and Output.....	35
6 Rest of Europe-Interest Rates and Output.....	35
7 The Wage Gap-Labor Costs of EC vs Rest of the world.....	40
8 Float vs Fixed Exchange Rates Macroeconomic Impact of EMU.....	57
9 The EC in World Finance - Foreign Exchange Reserves (in billions of ecu).....	60
10 Cost and Benefits Based on Intra-EC Trade and Differences in Economic Structure.....	64
11 The US has Created More Jobs than Europe.....	71
12 Germany-Percentage Change in Real GDP (1994,1995 projected).....	86
13 France-Percentage Change In Real GDP (1994,1995 projected).....	90
14 UK and Italy-Percentage Change in Real GDP (1994,1995 projected).....	88
15 Spain-Percentage Change in Real GDP (1994,1995 projected).....	90

ABBREVIATIONS

CAP	Common Agricultural Policy
ECU	European Currency Unit
EEC (EC)	European Economic Community
EDF	European Development Fund
EIB	European Investment Bank
EMCF	European Monetary Cooperation Fund
EMS	European Monetary System
ECA	European Currency Agreement
EU	Economic Union
ECB	European Central Bank
EFTA	European Free Trade Area
EMI	European Monetary Institute
EMU	Economic and Monetary Union
EPU	European Payments Union
ERM	Exchange Rate Mechanism
ESCB	European System of Central Banks
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GNP	Gross National Product
IMF	International Monetary Fund
OECD	Organization for Economic Cooperation and Development
SDR	Special Drawing Right
VSTF	Very Short Term Facility

CHAPTER 1

INTRODUCTION

The European Monetary System (EMS) came into operation March 13, 1979 with the objective of creating a "zone of monetary stability in Europe," comprising "greater stability at home and abroad." However, The EMS was also seen as a clear step toward economic and monetary union through achieving economic convergence as well as monetary control. European leaders announced in late 1991 that they had agreed to move forward to monetary union by the end of the decade (The Maastricht Treaty, December 1991). Now, more than two years later, plans for the unification has crumbled: the Italian lira and the British pound were forced out of The EMS exchange rate bands in September 1992, and in 1993. The bands of most of the remaining members were widened dramatically, leaving The EMS a shadow of its former self.

This paper reviews the plans for European Monetary Union and explores the problems and difficulties (as well as those in the foreign exchange markets) that have thrown those plans into disruption. In some countries there is evidence that devaluations were almost inevitable, given the policies of their governments. The fundamental source appears to have been the fallout from German unification. As background, the discussion first sketches the history and development of The EMS from World War II to its founding in 1979 and continues until the agreement in The Maastricht Treaty in 1991. European vision has always been to structure a Central

Banking System (EuroFed) similar to the one of The United States' (USFed) that would formulate monetary policy for the twelve EC countries and eventually issue a single currency.

In short, the purpose of this research is to examine the prospects of accomplishing a function of such an independent system (monetary union). Although some economists see EMU as an unfeasible event, we support that such a union could occur by the end of this decade, but with a number of states left out.

CHAPTER 2

A BRIEF HISTORY OF EUROPEAN MONETARY INTEGRATION

The Monetary History of Europe begins during the early post second world war period which is a natural starting point for any description of the long-run developments in European Monetary Integration. That period saw both the lowest point in terms of monetary integration and the beginning of the overall integration process that led later to the creation of the European Economic Community (EEC), the European Monetary System (EMS), and finally to the present plans for an Economic and Monetary Union (EMU).

The first step in this direction was the creation in 1948 of the Organization for European Economic Cooperation (OEEC) renamed in 1960, with an expanded membership, Organization for Economic Cooperation and Development (OECD). The OEEC was mainly a response to the US call for a cooperative European effort to make effective use of the US aid to be provided under the Marshall Plan. Although trade liberalization was necessary for the resumption of significant inter-European trade was not in itself sufficient for as long as payments remained severely constrained.

Bilateralism therefore, persisted even after the creation of the OEEC in 1948 and the exhaustion of the bilateral credit lines granted in 1946 and 1967 led to a complete jam in the intra-European payment system. Finally, after two years of long road, the European Payments Union (EPU)¹ was negotiated in all necessary detail in September

¹The history of the EPU negotiations and its operation is recorded in great detail in Kaplan and Schleisinger (1989).

1950 with retroactive implementation July 1, 1950. The EPU covered an area that accounted for about seventy percent of world trade. The EPU provided an escape from bilateralists because each month all bilateral deficits and surpluses were netted out into one overall net position vis-a-vis the union². The EPU was finally dissolved by a unanimous agreement at the end of 1958 and the participating countries made their currencies convertible. In a formal sense, the EPU was replaced by the European Monetary Agreement (EMA), negotiated as a successor arrangement already by 1955. The EMA was authorized to offer financial safety nets to participants, but it was clear that authority for suggesting policy adjustments and setting the terms for conditional lending would pass to the IMF Executive Board.

In retrospect, the dissolution of the EPU was a loss to European Monetary integration. The EPU Managing Board had achieved authority by its effective implementation of multilateral surveillance; though the weakening of the constraints on debtors in the course of its eight years of existence would in any case have diminished that authority, there were, as noted by Triffin (1966) arguments in favor of keeping EPU in preference to moving unilaterally, though simultaneously, to global convertibility.

2.1 The Bretton Woods System in the 1960

Only after the reestablishment of convertibility in 1958-59 did the Bretton Woods agreements become really operational. The core of the agreements establishing the IMF consisted of the system of fixed exchange rates which linked all currencies to the

²The success of the EPU was based on the compromise for the settlement of EPU balances that was finally obtained. This compromise was close to the ideas developed by Robert Triffin, see Triffin (1957) and (1966).

US dollar and the US dollar to gold. The IMF rates allowed for a one percent band of fluctuation around the central parities against the US dollar. This implied that any two European currencies could move by as much as six percent against each other if they switched their relative position against the US dollar. Since this was considered excessive, the European countries agreed to limit their fluctuations vis-a-vis the dollar to .75 percent, thus reducing the potential margin for intra-European exchange-rate fluctuations to three percent.

The Signing of the Treaty of Rome in which established among the "six" as they were then called the European Economic Community (ECC) came into effect in 1967. The main practical elements of the Treaty of Rome were the customs union (the common market) and the Common Agricultural Policy.³ The only aspect of these early years of the Community that matters in this context is the extent to which the customs union and the Common Agricultural Policy did affect the monetary sphere.

In the early 1960's was a period of low unemployment and relatively stable prices. In this environment there was little need for strong government intervention to stabilize the economy. The ratio of intra-EC trade to GDP stood only at six percent in 1960, but it went up to twelve percent in 1975; it is now at about fifteen percent. The functioning of the customs union was not really affected by these exchange rate changes, but the CAP required policy action if intra-EC exchange rates moved, because the prices of many agricultural products (especially cereal, but also dairy products) are fixed in a common unit which was then called the European Unit of Account (EUA), but has since become the ECU. The EUA was defined as the

³Apart from this episode exchange rates remained fixed until 1969 among the six EC currencies.

gold content of one US dollar, the international monetary standard of the time. However, since the French and German Governments did not accept the price changes that would have followed from the exchange-rate changes (common Agricultural Policy) the only solution was to let the common agricultural market split up and maintain different prices (for agricultural products) in different countries. Thus, in order to maintain prices at different levels, a complicated system of Monetary Compensations Amount (MCA's) had to be introduced (Boyd, 1990). Finally, it should be kept in mind that up to 1968 the western world had experienced a full decade of relatively stable exchange rates. It was hoped that this situation would continue, and, one of the best ways of ensuring the continuation of this state of affairs would be to create an EMU.

2.2 The Original Plans for an Economic and Monetary Union (EMU)

Four different plans for Economic and Monetary Union within the European Economic Community had been proposed during the period 1969-70 until the publication of the compromise (and second) Werner Plan in October 1970 (P. Coffey and J.R. Presley, 1971).

The fore-mentioned compromise plan was the result of the fundamental conflict between the two schools of thought, the Economists and the Monetarists. The former school mainly represented the official Monetary views of West Germany and the Netherlands and the school's main architect was Herr Schriller. The Monetarists, the latter school represented the official monetary views of France and Belgium and the school's main architects were Messieurs Barre and Giscard O'Estaing.

Basically, the differences between these two schools of thought concerned their attitudes to economic coordination and development, the fixing of exchange rates, the provision of credits for countries facing balance of payments problems, the liberalization of capital movements and the question of supranationality. In sum, these attitudes to a large degree reflected the economic and monetary experiences of the second world war. Nevertheless, there was some degree of similarity in their attitudes towards budgetary harmonization and coordination within the EEC (ibid.).

In very briefly discussing the Schilder Plan (economists), one notes that its overriding aim is the coordination of economic policies within the community. Unfortunately, it is possible to find any clear guide as to how such coordination is to be realistically achieved. Also, it is difficult to see how some countries could free capital movements without the provision of a well endowed monetary fund.

In contrast, the second Barre plan (monetarists), which was to have such an influence on the old "snake" system and on the present EMS, was notable because categorically rejected the principle of fluctuating exchange rates and because it wished to give a unified international monetary personality to the European economic community. The main reasons given for the rejection of fluctuating exchange rates is that such fluctuations would hinder the desired convergence of the different national economies, would hinder the creation of a community capital market and would have negative social and psychological effects on the EEC.

The next plan, the First Werner Report, which was examined by the community finance ministers in Venice in May 1970, was only concerned with the initial stage of integration, 1971-4. During the course of the examination by the

ministers, there seemed to be some consensus of opinion about the reduction of the marginal fluctuation around the parities of EEC national currencies, but a profound difference of opinion over the setting up of a reserve fund during the first stage of the EMU. Thus, the second and definitive Werner Plan was the compromise between the two schools of thought ("The Werner Report", Brussels, 1970). The Werner Report paid less attention to achieving convenient convergence and low inflation, because initial divergence in these respects among prospective participants was less visible than it is in the early 1990s. Although, the Werner Report was again unanimously endorsed by the council of ministers of economics and finance (ECOFIN) in March 1971 was never implemented. Therefore, the reason for the failure of the Werner Plan, might have been the implicit reliance on the Bretton-Woods system which was collapsing at exactly the time the first stages of the Werner Plan were supposed to be implemented in 1973 (Basevi, Giorgio, Classen, Salin and Thygesen, 1975). Moreover, the exchange rate stability of the early 1960s had been achieved in an environment in which the stabilization of exchange rates did not imply that important domestic policy targets had to be sacrificed; inflation and unemployment were low so that neither fiscal nor monetary policy needed to be used aggressively to correct major disequilibrium (ibid.).

2.3 The "Snake" System in Operation

The real technical manifestation of the system was to be the "Snake in the tunnel." This "Snake" was to have been a narrow band of fluctuation (of 1.2 percent) originally planned for the central parities of the national currencies of the participating

member states of the EEC - which was to have moved in the wider band of fluctuation (1.5 percent) formally allowed for the US dollar. However, following the major dollar crisis of 1971, the suspension of dollar convertibility against gold and the subsequent Smithsonian Agreement allowing a margin of fluctuation around the dollar of 4.5 percent, the EEC had to reexamine the situation. Therefore, in March 1971, it was agreed to introduce, on an experimental basis, before July 1, 1972 a system whereby the margin of fluctuation around the currencies of the participating EEC member states would be 2.25 percent - this was to move in a dollar tunnel of 4.5 percent. But, with the complete floating of the dollar in March 1973, the tunnel was dropped and the "snake" participants organized a joint float against the dollar (Gros and Thygesen, 1992).

Although, the "snake" system did constitute a zone of Monetary stability in a sea of considerable international upheavals, it was not a particularly happy experience (See Table 1). Furthermore, the international economic and financial turmoil of the early and mid-1970s quickly brought the process of monetary unification to a halt. Recurrent realignments and the exit of several EEC members soon made it clear that the snake was not capable of coordinating Europe's Monetary policies. With their very different approaches to stabilizing the economy the EC countries experienced correspondingly different inflation rates and volatile exchange rates. A fresh impulse for closer monetary coordination had to come again from the political side. In a famous speech in Florence in 1977, European Commission's President Ray Jenkins criticized the concept of a gradual "politique des petits pas" to build the monetary union on the basis of economic union (Jenkins 1978). Jenkins advocated a big leap

forward instead. Monetary union would become the driving political force to obtain economic integration.

This idea was taken up at the Bremen Summit in July 1978 by Chancellor Schmidt and President Giscard D'Estaing who embarked on a political "tour de force" for a new monetary arrangement, at the end of which the EC formed the EMS in December 1978 (Ludlow 1982). The EMS came into operation on March 13, 1979.

Table 1 **Chronological History of the Snake**

<u>1971</u>	
Aug 15	Suspension of dollar convertability to gold
Dec 19	Smithonian Agreement: Return to fixed parities for IMF Currencies: band of 4.5 percent allowed for the dollar
<u>1972</u>	
Mar 21	Resolution of the Council of the European Communities proposing the "Snake" of the community Currencies (a band of fluctuation of 2.25 percent) in the dollar tunnel (a band of 4.5 percent)
April 10	Basel Agreement Between EEC banks to implement the Resolution of 21 March
April 24	Implementation of Basel agreement. Participating countries: Belgium, France Germany (west), Italy , Luxembourg, and the Netherlands
May 1	The United Kingdom, Denmark, Ireland, join the "snake" Agreement
May 23	The Norway becomes associated
June 23	Britain and Ireland leave the "snake"
June 27	Denmark withdraws
October 10	Denmark rejoins the "snake"
<u>7 1973</u>	
Feb 13	Italy leaves The "Snake"
Mar 19	Transition to the joint float: interventions to maintain fixed margins against the dollar ("tunnel") are discontinued
Mar 19	Sweden becomes associated
Mar 19	The Deutsche Mark is revalued by 3 percent
Apr 3	Establishment of a European Monetary Cooperation Fund is approved
Jun 24	The DM is revalued by 5.5 percent
Sep 17	The Dutch Guilder is revalued by 5 percent against the EMUA
Nov 16	The Norwegian Kroner is revalued by 5 percent
<u>1974</u>	
Jan 19	France leaves The "Snake"
<u>1975</u>	
Jul 10	France Returns
<u>1976</u>	
Mar 15	France withdraws again
Oct 17	Special realignment (the Frankfurt "one") of exchange rates against the EMUA. The Danish Krone is devalued by 6 percent, the Dutch Guilder and the Belgian Franc by 2 percent and the Norwegian Krone and Swedish Krona by 3 percent
<u>1977</u>	
Apr 1	Devaluations against the EMUA. Swedish Krona: 6 percent and Danish and Norwegian Kroner: 3 percent
Aug 28	Sweden withdraws; the Danish and Norwegian Kroner are devalued by 5 percent
<u>1978</u>	
Feb 13	The Norwegian Krone is devalued by 8 percent
Oct 17	Revaluations against the EMUA. DM: 4 percent; Dutch Guilder and Belgian Franc by 2 percent.
Dec 12	Norway leaves The "Snake" System
<u>1979</u>	
Mar 13	The European Monetary System becomes operational

CHAPTER 3

EVOLUTION AND EXPERIENCE OF THE EMS

The new system proposed by Schmidt and D'Estaing was designed to attain three key objectives: First, to stabilize exchange rates as far as possible with the aim of promoting the monetary stability as well as the economic convergence of the participating countries; second, to impose indirect political pressure on the economic policies of those countries which lacked monetary and/or fiscal discipline, and third, gradually to develop the ECU into a common European Currency, thus, "finally" giving the European Currency Unit (ECU) the same international economic standing as the Dollar and the Yen. Thus, with only small exceptions, The Werner Proposals are very much the precursor of Maastricht⁴. Since, the differences are so small it is of paramount importance to explain why it is that the new attempt to attain economic and monetary union should succeed where the plans of 24 years ago failed.

The EMS has now been in existence for nearly 15 years. The most obvious changes in the EC during the 1970s and early 1980s were the three expansions which increased the community from six to twelve countries in three stages, United Kingdom, Denmark and the Irish Republic joining at the beginning of 1973, Greece in 1981 and Portugal and Spain in 1986. These accessions have considerably complicated the path of integration, not least because it has been necessary to get the

⁴The Maastricht Treaty, The Skeleton for Economic and Monetary Union used and signed in February 1992 to replace the existing Community treaties will be discussed later in this paper.

agreement of 12 parties rather than six. Spain, Portugal, Greece and Ireland had a standard of living considerably below that of the other member states, which extended the process of convergence.

3.1 Institutional Elements and Policymaking

The EMS consists of three main institutional elements: 1) a basket currency, the ECU, 2) The Exchange Rate Mechanism (ERM), and 3) credit provisions among the participating central banks. Of these three elements, ERM has emerged as the most visible and important element of the EMS.

3.1.1 The ECU

The ECU is a basket currency defined by fixed amount of each of the currencies of the member countries of the European Economic Community. The ECU is the common numerator of the ERM and is used as a means of payments among participating monetary authorities. For example, it is used for transactions related to central bank interventions in the EMS and the Credit facilities of the system. The European Monetary Cooperation Fund (EMCF) created an initial supply of ECU for intervention purposes against the deposit of 20 percent of the participating central banks gold and dollar reserves taking the form of three month revolving swap operations. With a fixed amount of each Currency in the basket, the relative weight of a currency in the ECU decreases as a consequence of a depreciation against the remaining currencies; the relative weight of an appreciating currency rises. This implies that the relative weights change significantly if individual currencies are

persistently weak or strong relative to the remaining ones, as has been the case in the history of EMS. In view of this tendency, the basket quantities of the ECU were adjusted in 1986, and 1989 to prevent the ECU from being dominated by the strong currencies in the system. Table 2 shows that the amounts of the two appreciating currencies in the basket, the DM and the Dutch guilder, were reduced, whereas the Italian lira, the French franc and the Greek drachma - three depreciating currencies acquire additional units in the basket. In September 1989 the Spanish peseta and the Portuguese escudo were admitted to the ECU Basket.

3.1.2 The Exchange Rate Mechanism

The cornerstone of the EMS is the agreement to limit bilateral exchange-rate fluctuations within margins of ± 2.25 percent around predetermined central parities⁵. Italy managed to obtain the wider margins of ± 6 percent for the lira in 1978; only on January 5, 1990 did the lira enter the narrow band. Spain joined the ERM on June 19, 1984, and the UK began participating October 8, 1990. Both the Spanish peseta and the British pound enjoy wider band of ± 6 percent. The Greek drachma and the Portuguese escudo remain outside the ERM. From its beginning, the ERM was not supposed to be a rigid system of fixed exchange rates. There was a common understanding that the central parities would be adjustable to changing economic conditions and the relative performance of the participating economies. Early proponents of the EMS stressed the point that the frequency of realignments should

⁵More precisely, the upper part of the band is 2.275 percent above the central parity, whereas the lower part of the band 2.285 percent below the central parity.

Table 2 The European Currency Unit

Countries	Currency Units			Relative Weights*		
	March 3 1979	Sept 7 1984	Sept.21 1989	March 3 1979	Sept.9 1984	Sept. 21 1989
Belgium/Luxemb.	3.8	3.85	3.431	9.63	8.57	8.09
Denmark	0.217	0.219	0.1976	3.06	2.69	2.53
France	1.15	1.31	1.332	19.83	19.06	19.3
Germany	0.828	0.719	0.6242	32.98	32.02	30.33
Italy	109	140	151.8	9.49	9.98	10.24
Netherlands	0.286	0.256	0.2198	10.51	10.13	9.49
Ireland	0.00759	0.00871	0.008552	1.15	1.2	1.12
Spain	-	-	6.85	-	-	5.16
Portugal	-	-	1.393	-	-	0.89
UK	0.0885	0.0878	0.08784	13.34	14.98	11.89
Greece		1.15	1.44		1.31	0.96

Note: *Based on central parities

Source: San Paolo, Ecu Newsletter, various issues

Table 3 Exchange Rate Realignments Within the EMS (percent)

Dates	Deutsche Mark	Dutch Guilder	French Franc	Belg/Lux. Franc	Italian Lira	Dunish Kroner	Irish Punt
Sep. 24, 1979	2.0	-	-	-	-	-2.9	-
Nov. 30, 1979	-	-	-	-	-	-4.8	-
Mar. 23, 1981	-	-	-	-	-6.0	-	-
Oct. 5, 1981	5.5	5.5	-3.0	-	-3.0	-	-
Feb. 22, 1982	-	-	-	-8.5	-	-3.0	-
Jan 14, 1982	4.25	4.25	-5.75	-	-2.75	-	-
Mar. 21, 1983	3.5	3.5	-2.5	1.5	-2.5	-2.5	-3.5
Jul. 22, 1985	2.0	2.0	2.0	2.0	-6.0	2.0	2.0
Apr. 7, 1986	3.0	3.0	-3.0	1.0	-	1.0	-
Aug. 4, 1986	-	-	-	-	-	-	-8.0
Jan. 12, 1987	3.0	3.0	-	2.0	-	-	-
Jan. 5, 1990	-	-	-	-	-3.7	-	-

Note: The numbers are percentage changes of a given currency's bilateral central rate against those currencies whose bilateral parities were not realigned. A positive number denotes an appreciation, and a negative number denotes a depreciation.

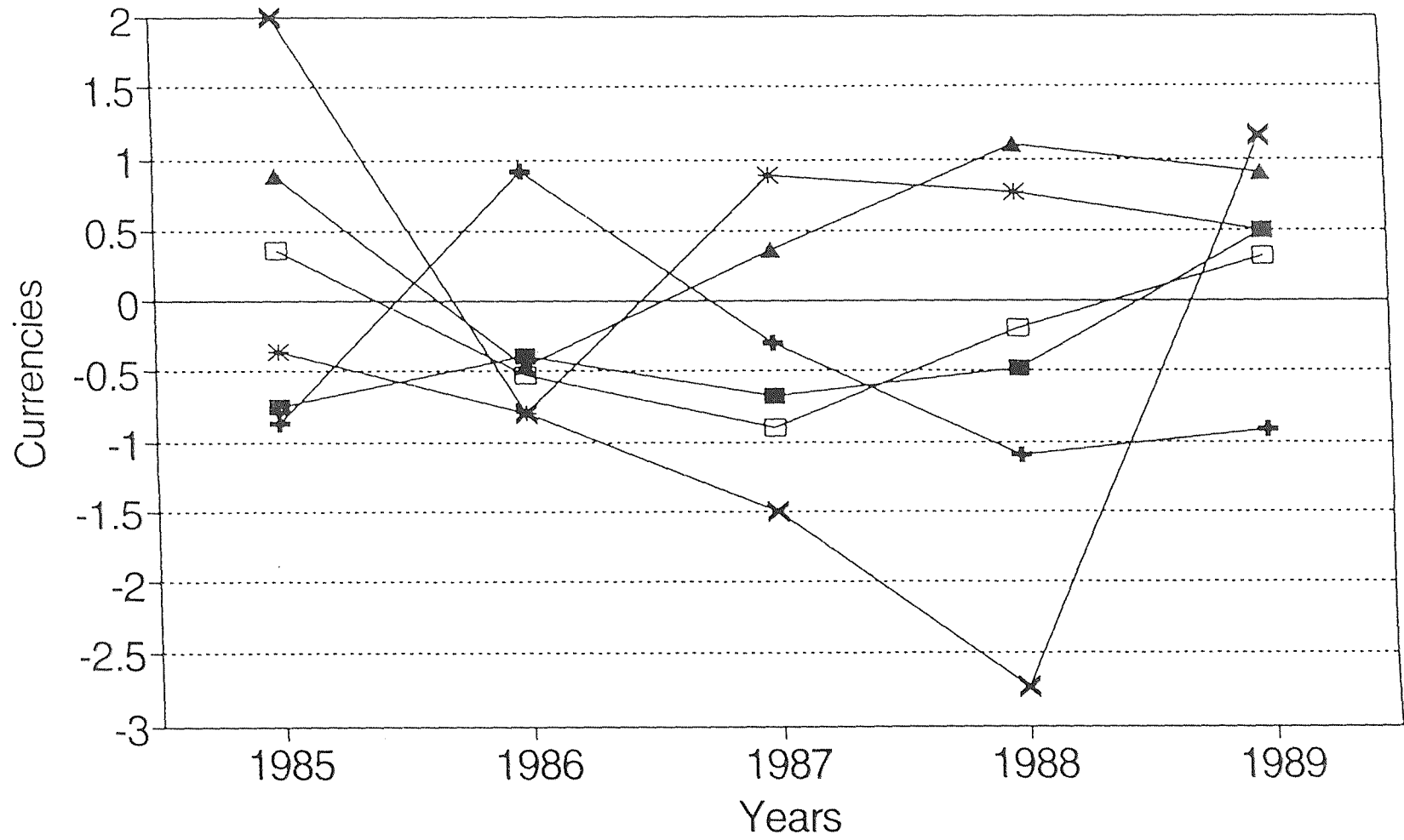
Source: Commission of the European Communities

not be regarded as a criterion of success or failure of the system (Commission of the EC 1979, 78; Van Ypersele 1974,9). Since 1979, there have been twelve realignments (See Table 3). In the roughly eight years from March 1979 to January 1987, when the 11th realignment occurred, the lira experienced the largest parity depreciation vis-a-vis the DM (45 percent); the Dutch guilder had the smallest depreciation against the DM (4 percent). The smallest bilateral parity change (2.6 percent) occurred between the Irish punt and the French franc. The evidence from the central parities shows that the EMS did not prevent sizable nominal exchange-rate changes over time. And this is consistent with the view that the monetary authorities did not regard the system as truly fixed exchange-rate arrangement but rather as one aiming at lower variability of nominal exchange rates (Van Ypersele 1979,6). For movements of currencies within the ERM bands see Figure 1.

3.1.3 Intervention and Maintenance in the ERM

Central Banks participating in the ERM are obliged to intervene in the foreign exchange markets if necessary to maintain exchange rates within their bands. If a currency approaches the upper or lower margins of its ERM band, then immediate action has to be taken (intervention at the margin). A weak currency central bank must sell foreign exchange in the exchange market to prevent its currency from depreciating further; conversely, a strong currency central bank must sell its own currency for foreign currency. To facilitate intervention the central banks can resort to the very short term facility (VSTF) of EMCF. Weak currency central banks can borrow, without limits, members' hard currencies under this arrangement, and

Figure 1 Movements of Currencies
Within their Bands

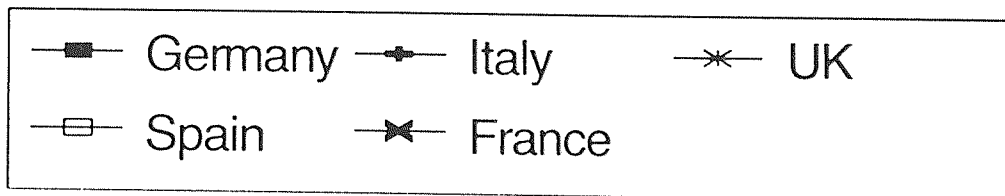
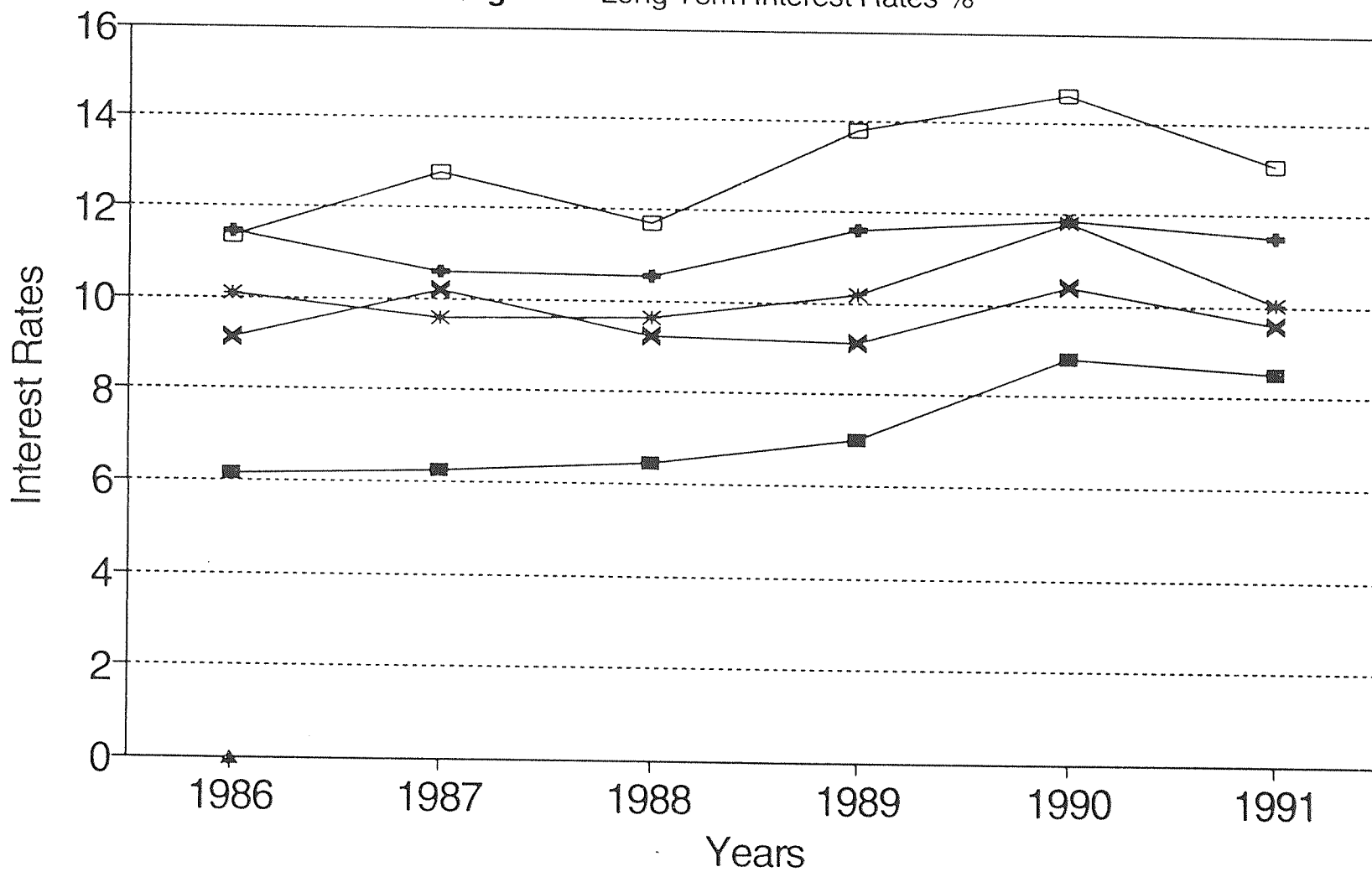


members are obliged to grant such credits upon request. The EMFC Credit Provisions were changed in 1985 for the purpose of promoting the use of the ECU. Positive net ECU positions in the EMFC can now be used to obtain dollars or community currencies for a period of three months (versus 45 days in 1987) with the possibility of renewal, and ECU can be used to repay more than 50 percent of VSTF loans. The computation of interest rates on EMCF net positions is now based on money-market interest rates rather than discount rates. Both changes have made the ECU more attractive as a reserve asset of high liquidity (Micossi 1985,340).

3.2 German Unification

The most important development during this time, was the collapse of communism in Eastern Europe and the resulting unification of Germany. As a result, Germany, for years the anchor of the EMS, moved almost overnight from having very low inflation, tight fiscal policy, and a large current account surplus to considerably higher inflation, massive budget deficits, and a large current account deficit. In the financial markets, the immediate reaction to the collapse of communism was a sharp rise in long term interest rates in Germany and most other industrialized countries (see Figure 2). The most common explanation for this rise was the notion that the formerly communist countries, filled with obsolete machinery and equipment, offered tremendous investment opportunities and would soon begin to attract large inflows of capital from the west. This new source of demand for capital would raise real (adjusted for inflation) interest rates throughout the world (Alexander and Joseph, 1990).

Figure 2 Long Term Interest Rates %



We have basically reviewed the history leading to the creation of the EMS, its basic institutional structure, and its basic economic performance since 1979. Our synopsis illustrates that EMS was not only seen as a clear step towards Economic and Monetary Union through trying to achieve economic convergence and monetary control, but also a drive to unify Europe politically. The result is the Maastricht agreement which produced a new treaty, signed on February 7, 1992 to replace the existing community Treaties. It emphasized not just convergence to achieve EMU but cohesion, and progress on the fronts and a determination to continue the process of creating an ever closer union among the peoples of Europe. EMU is a stage in the process, not the end of it, not just because of the potential for widening the Community but because of the intention of deepening it further.

CHAPTER 4

GOALS OF THE EMU AND THE MAASTRICHT TREATY

The Treaty sets out the nature, function, and constitution of the new central banking system which is to manage the single currency, monetary policy and foreign exchange in the new monetary union. It also explains how fiscal and budgetary policy are to be managed.

4.1 Transitional Arrangements

However, monetary union, as in The Werner and Delors proposals is intended to take place in three stages. The first stage which has largely been achieved, (with effect July 1, 1990) the freeing of capital movements within the twelve member states and the integration of financial markets under the single market program. That program in itself provides a major plank in the establishment of what is described as "economic union."

Article 109e of The Maastricht Treaty stipulates that the second stage for achieving economic and monetary union shall begin on January 1, 1994 (Handelsplatt, 1992). This second phase began as scheduled with the creation of the European Monetary Institute (EMI) which is phrased as the forerunner to a European Central Bank (ECB). The EMI is purely a transitional institution which will cease once it has been successful in bringing the community to the start of stage three and be replaced by the European Central Bank. Article 109f lists eleven different functions of the

EMI. In brief, the institute has roles of planning, monitoring and advising. In the transition, the member states' institutions have responsibility for the execution of monetary exchange rate and fiscal policy and the EMI is intended to promote closer cooperation between the national central banks. In addition, the EMI shall "strengthen the coordination of monetary policies" and "monitor the functioning of the European Monetary System." However, it is not until Stage Three that the ECB takes over responsibility for exchange rate and monetary policy. How exactly the ECB will function is to be established during the transition. What has been set out in the treaty is its objectives, constitution and the nature and composition of the board which will run it.

The ECB together with the central banks of the member states form the European System of Central Banks (ESCB) from the beginning of Stage Three. For example, national legislation for their own central banks will have to be compatible with the statute of the ESCB. The period of transition will be concluded by December 31, 1996 at the earliest or by December 31, 1998 at the latest.

However, the most important feature of the transition from the point of view of the present discussion is that for member states to participate in the monetary union, they have to meet four criteria of convergence.⁶

First is the rates of inflation which is close to that of at most the three best performing member states in terms of price stability; Second, a sustainable

⁶The exact def. of the 4 criteria is contained in two protocols appended to the treaty : "The Protocol of the Excessive Deficit Procedure" and "The Protocol on the Convergence Criteria" referred to in Article 109g of The Treaty Establishing the European Community.

government financial position, apparent from a government's budgetary position without a deficit that is excessive. The associated protocol defines this position in two respects: a maximum three percent for the ratio of the planned or actual government deficit to GDP at market prices; a maximum sixty percent for the ratio of government debt to GDP at market prices (deficit is net borrowing and debt). The government of the member states have an obligation under this protocol to ensure that their policies achieve these targets. Third, observance of the normal fluctuation margins provided for by the ERM of EMS for at least two years, without devaluing against any other member state currency (exchange rates stability). Fourth is the reflection of the durability of convergence in long term interest levels (ibid.). The associated protocol defines as a divergence not exceeding two percentage points from the nominal long-term government bond rates of at most the three best performing member states in terms of price stability (interest rates).

However, in determining the readiness for Stage Three, the Commission and the EMI also have to take account of the development of the ECU, the results of the integration of markets, the situation and developments of the balances of payments on current account, and the development of unit labor costs and other price indices. It is important to stress here that once the majority states converge according to The Treaty and proceed to EMU through the new institutional arrangements of the ESCB, the ECB and the Economic and Financial Committee, accept an irrevocable fixing of exchange rates which will lead to the introduction of the ECU as the single currency of Europe. Although, it is stated that should be a time table for this transition, the treaty does not say when the single currency should be introduced during Stage Three.

4.2 Economic Policy

The term "economic policy" as used in The Maastricht Treaty also embraces fiscal policy. The key elements in the community's future economic policy can be summarized as follows: reports (analyses) on economic performance in the individual member state; there will be multilateral surveillance of economic developments and the consistency of policies with the Council's guidelines; The Council can make recommendations to the member state, which it may choose to make public. In particular, The Commission will monitor the member states' budgetary and debt positions on the basis of the planned or actual ratios of the deficit to GDP and debt to GDP using the same criteria as set out in the convergence criteria for entry into Stage Three. If the deficit is thought excessive after taking into account "relevant factors," including whether it exceeds government investment then the Council can recommend action by the member state to remedy it. If the member state does not respond adequately to the recommendations then the Council can impose four sanctions: the requirement to publish further information before issuing bonds or securities; inviting the European Investment Bank (EIB) to review its lending to the member state; requiring the member state to make a non-interest bearing deposit while the deficit remains excessive; or levying a fine. In order to these sanctions and even make the recommendation for action the Council has to act on two thirds majority of the votes cast - excluding the member state concerned - using the usual weighting system. It also contains the duty to appear before the European Parliament; the granting of financial assistance; the prohibition of public sector deficit financing on the part of ECB (article 104c, paragraph 11).

The political intention of The Treaty is to subordinate the community's economic and fiscal policies to the principle of subsidiary. In other words, the formulation and implementation of economic and fiscal policies will continue to be the prime responsibility of the individual member states.

4.3 Monetary Policy

Monetary Policy, unlike economic policy will not be governed by the subsidiarity principle. The assumption or belief here is that the national central banks of the member states will not be able to work together to create a European "stability community" (Article 105 of the treaty).

4.3.1 The Form of the ESCB and the constitution of the ECB

It is the ESCB, composed of the national central banks and the ECB, which has the objective of maintaining price stability. Without prejudice to the objective of price stability, the ESCB shall also be obliged to support the general economic policies of the community. The ESCB has four basic tasks:

1. To define and implement monetary policy of the community
2. To conduct foreign exchange operations
3. To hold and manage the official foreign reserves of the member states
4. To promote the smooth operation of payment systems

The ECB is the executive organization in the system. It will be independent, i.e. "shall not seek or take instructions from community institutions or bodies, from any government of a member state or from any other body." Furthermore, "the member states undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the ECB" (Article 107). The ECB will

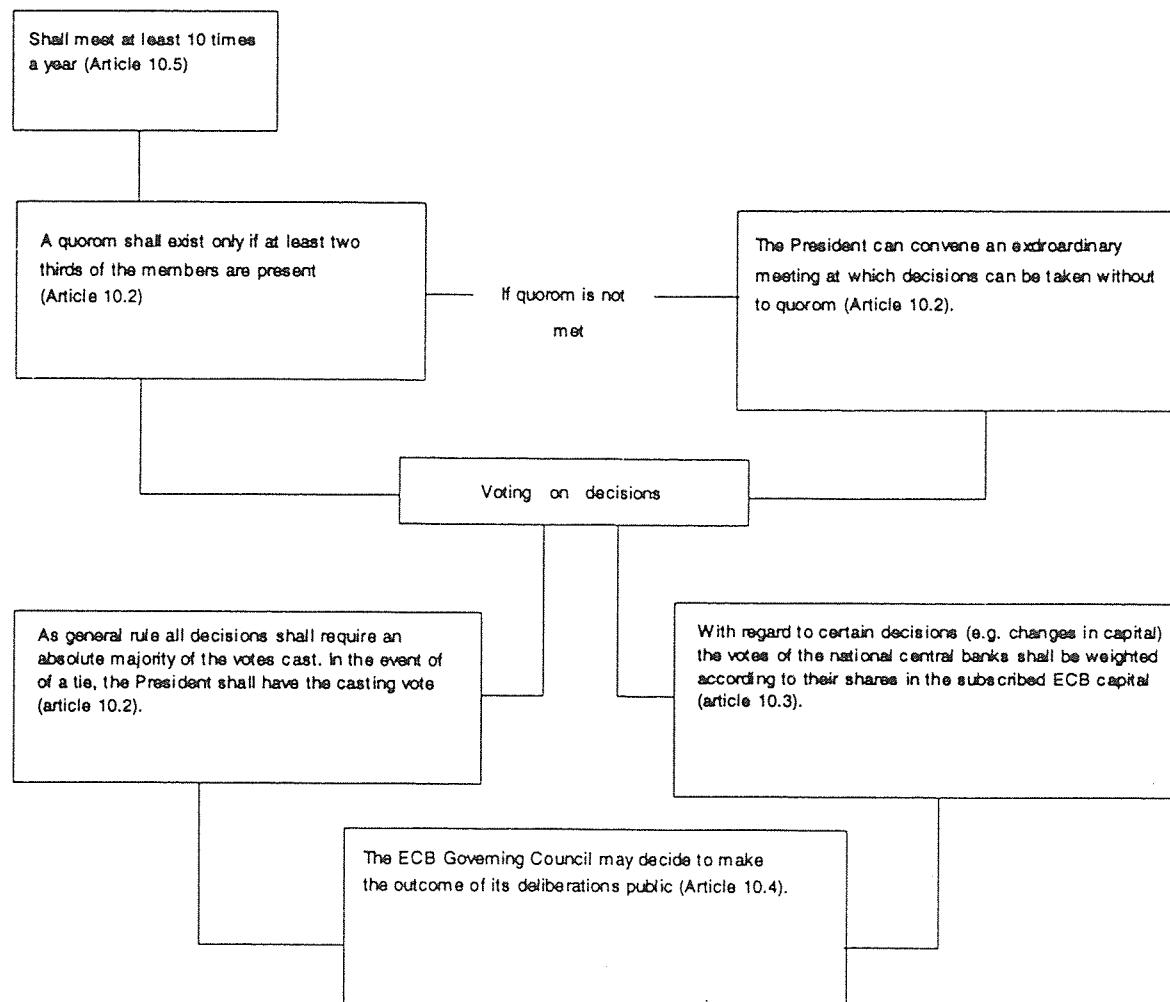
have the exclusive right to authorize the issue of banknotes within the community. In addition, the ECB will perform certain auxiliary functions in connection with bank supervision.

Table 4 shows the proposed structure of the ESCB and how the system will operate within the statutory framework established in The Maastricht Treaty.

The practical impediments are clear to all. Thus, next we will discuss the problems and difficulties that stand in the way of achieving unification between the twelve EC countries.

Table 4 Proposed Structure of the ECB

- (a) The ECB Governing Council shall comprise the Governors of the national central banks and the members of the Executive Board of the ECB . The Executive Board shall consist of the President, the Vice-President and four other members (Article 11.1) who are appointed by the Heads of state/government after consulting the European Parliament and the Governing Council of the ECB, the period of office being a single term of eight years.
- (B) Meetings of the the ECB Governing Council (in accordance with the Protocol on the Statute of the European System of Central Banks and of the ECB)



CHAPTER 5

PROBLEMS AND DIFFICULTIES IN THE EFFORT TO ACHIEVE EMU

The existing problems and difficulties that delay the process of unification between the twelve EC countries involves economic, monetary as well as political implications. It is very complex to compromise to the convergence criteria between the rather different perspectives brought to the subject of EMU by governments with different shades of political color and states with different economic interests.

5.1 Economic and Monetary Aspect of the Problem

The Stage One is entered when freedom of capital movements exists, Stage Two is begun with the coordination mechanism of EMI, but Stage Three is not commenced until the member states have "converged" in some sense (Maastricht, 1992). The intent for EMU are low inflation, low budget deficits, a stable exchange rate and a public debt limited to sixty percent of a country's Gross Domestic Product (GDP). No country, but Luxembourg at present meets all those criteria. Table 5 shows the relative divergence and convergence of the EC member states since 1985, on the basis of the key EMU criteria. Up to 1990 Germany fulfilled all four criteria. Since 1991 the public sector borrowing requirement has exceeded the EMU benchmark of three percent. As a result of the latest price increases, Germany runs the risk of failing to meet the EMU stability criterion (Barrell, 1992). France has fulfilled all four criteria since 1989. Luxembourg is the only country that has consistently fulfilled all four

Table 5

Number of EMU convergence criteria fulfilled by the EMS member countries

Country	1986	1987	1988	1989	1991	1992	1993
Belgium	2	1	2	2	2	2	2
Denmark	1	1	1	1	3	3	3
Germany	4	4	4	4	3	3	3
Greece	0	0	0	0	0	0	0
Spain	1	1	1	1	1	1	1
France	3	2	2	4	4	4	4
Ireland	0	0	0	1	2	2	2
Italy	0	0	0	0	0	0	0
Luxembourg	4	4	4	4	4	4	4
Netherlands	2	2	2	2	2	2	2
Portugal	0	0	0	0	0	0	0
U.K.	2	2	2	3	3	2	3

1 One criterion fulfilled

2 Two criteria fulfilled

3 Three criteria fulfilled

4 Criteria fulfilled

Source: Deutsche Bundesbank

Table 6

Converging towards union

1993 Averages*

Countries	Inflation rate %	Budget balance %of GDP	Debt % of GDP	Long term Interest rate %
Germany	4.1	-3.4	45	6.6
France	2.1	-5.9	39.2	7.0
Italy	4.3	-10	108.0	10.1
U.K.	1.6	-7.6	47.3	7.7
Spain	4.7	-7.2	48.8	10.8
Netherlands	2.2	-4.0	79.7	6.5
Belgium	2.7	-7.4	131.9	7.3
Denmark	1.3	-4.4	73.4	7.5
Portugal	6.7	-8.9	63.5	8.7
Greece	14.7	-15.4	106.7	23.9
Ireland	1.6	-3.0	91.6	8.2
Luxembourg	3.5	-2.5	7.3	7.5
Potential EU Members				
Sweeden	4.5	-13.0	53.0	8.8
Austria	3.7	-4.5	56.6	6.8
Norway	2.3	-3.4	43.3	7.2
Finland	2.2	-10.8	37.0	8.9

*Latest 12 Months

Source: European Commission;(OECD); National Statistics

criteria since 1985. Leaving aside Greece and Portugal, even such major economies and long-standing European Community members as the UK, Italy, Belgium and Denmark consistently failed to fulfill all four criteria between 1985 and 1991.

5.1.1 Nominal Indicators

Participants in Monetary Union must have inflation and interest rates close to the average of the three best performers. The cornerstone of monetary union must be the fight against inflation. Inflation is the key indicator around which all the other aspects of monetary union revolve. For example, a country (Spain, Portugal, Greece) with high inflation rate is unlikely to have a low level of public debt or stable exchange rate. Interest rates will be accordingly high (See Table 6). Potential newcomers such as Norway and Austria do better on both counts than the EU average.⁷ They could trigger monetary union before Spain and several others are ready to join, and stiffen the criteria for doing so. The EC is really targeting for an average inflation rate of three percent over the next twelve months. The rationale for having such criteria is to ensure that only countries whose microeconomic policies are compatible with monetary union and a low inflation future are able to join. So that, inflation is of great significance of a problem that most countries are experiencing.

5.1.2 Fiscal Policy

The prospect of monetary union in Europe has led to an increase in interest in the size and evolution of the government debt of the members of The European Community.

⁷By next year, Austria, Finland, Norway and Sweden could join the EU, crowding their central bankers into the cockpit.

The Treaty explicitly refers to the need to "avoid excessive public deficits," and sets the following thresholds which should not be exceeded:

- Public deficits as a share of GDP should not be higher than three percent.
- Gross public debt should be contained within sixty percent of GDP.

Our discussion so far has shown that government solvency is a crucial issue for Europe. The high budget deficit and government debt carried by major countries (such as Italy and UK) block the road to EMU. These criteria reflect German concerns that if countries with large deficits or stocks of debt enter the monetary union, they would inevitably be tempted to favor inflationary policies for the union as a whole as a way of reducing the real burden of their debts (Whitt, 1993). If we look at Figures 3 and 4 we see that Belgium's gross public debt is 130 percent of national income, Italy's 108, more than twice the "ceiling" of 60 percent set in The Maastricht Treaty, where Germany's is only 45 percent. In terms of budget deficit the leading countries are Italy with 10 percent of GDP, Netherlands with 7.4 percent and UK 7.6 percent (ignoring Greece and Portugal) as opposed to Germany with 3.4 percent (for Germany is considerably high due to German unification).

5.1.3 Exchange Rate Mechanism Crisis

The Exchange rate stability in the EMU grows difficulties for some ERM members in maintaining competitiveness and differences in the cyclical positions of countries within Europe. A major crisis in the European currency markets in September 1992, followed by recurrent periods of turbulence, made the European Monetary System, viewed as the essential stepping stone to monetary union, look vulnerable. It was indeed called, by analysts, potentially incapable of surviving.

Figure 3 Gross Public Debt as a Percentage of GDP

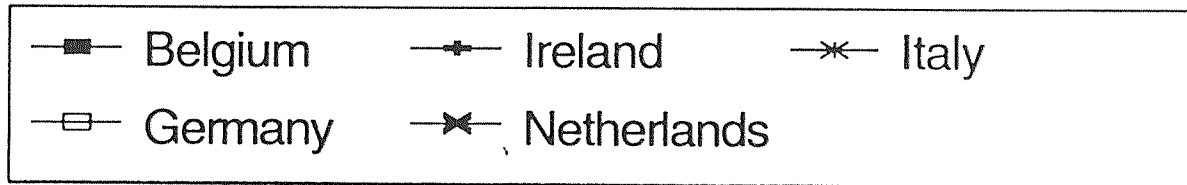
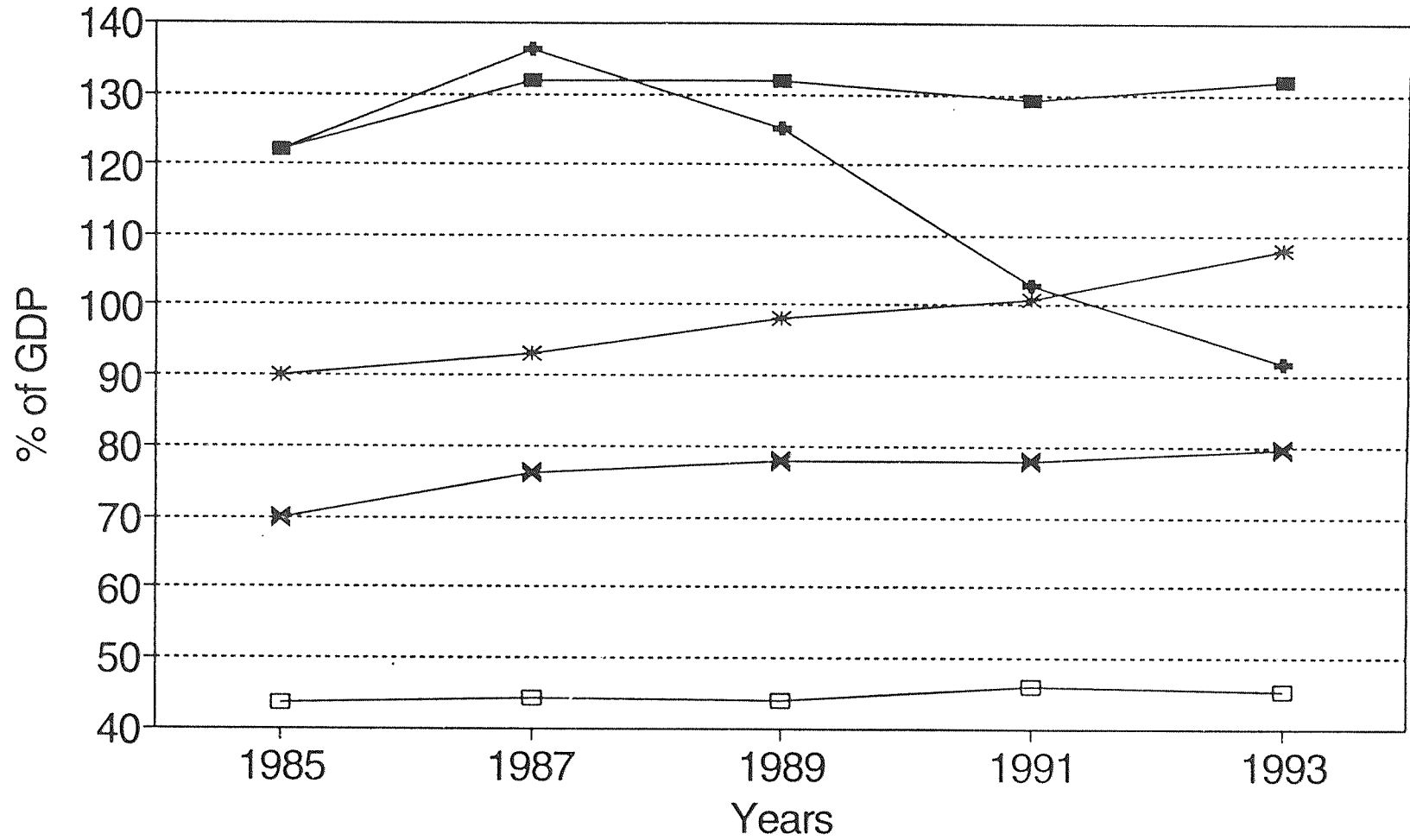
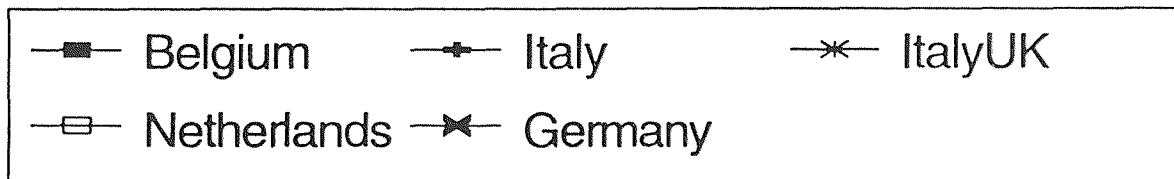
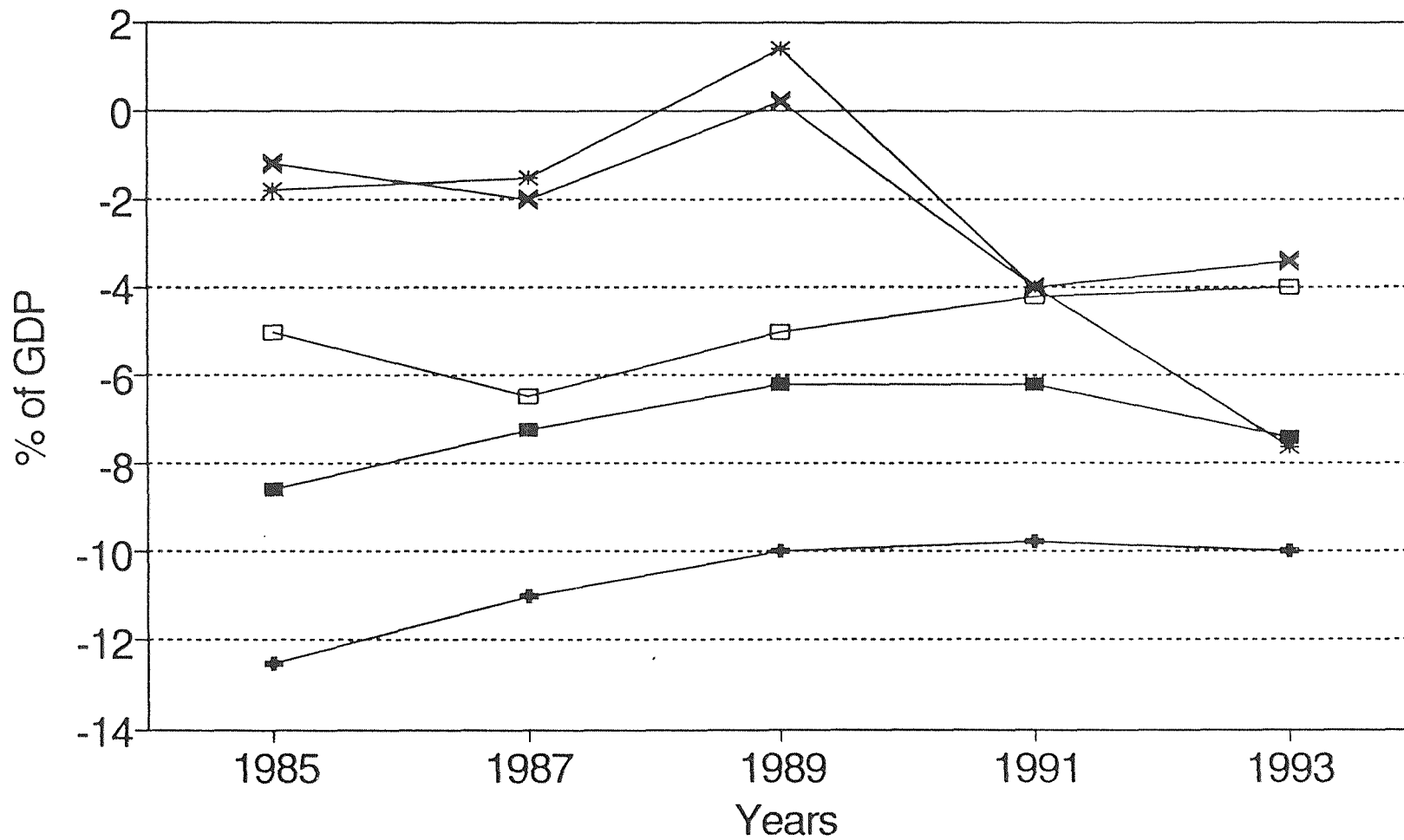


Figure 4 Budget Balance as a Percentage of GDP



A major explanation for this crisis that struck the EMS during 1992 and 1993 is the economic shocks resulting from German unification (ibid.). Almost over night, Germany expanded its territory by about one-third and its population by one-quarter. But let's examine the impact of German unification on the other European countries within an IS-LM theoretical framework (see Figures 5 and 6).

-IS schedule is based on the points of equilibrium in the commodities market.

$$S \text{ (savings)} = I \text{ (investment)} + G \text{ (gov't spending)}$$

-LM schedule is based on the points of equilibrium in the financial market.

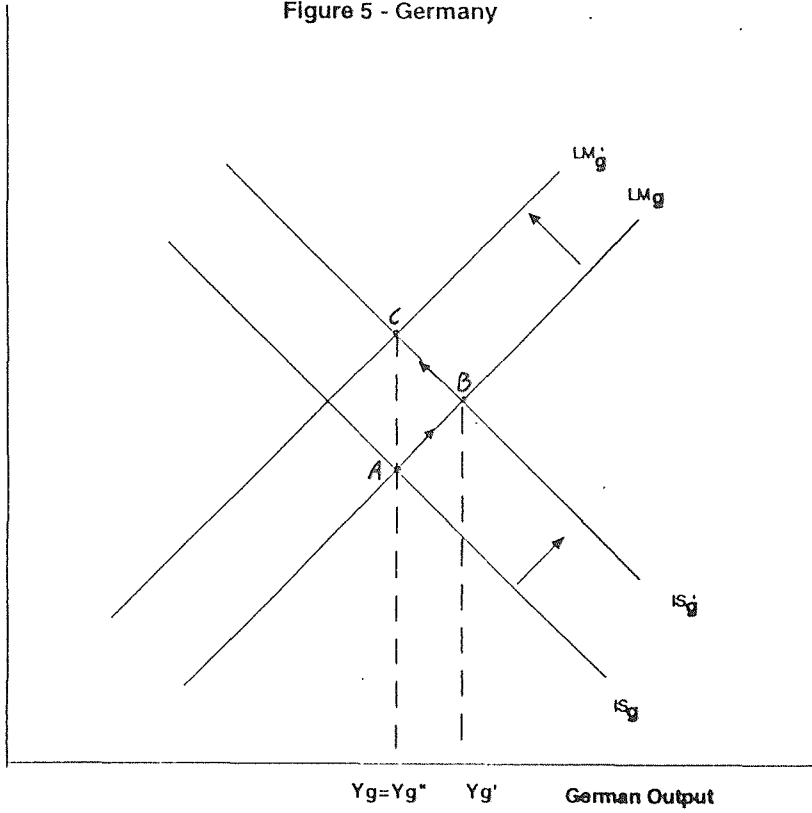
$$L \text{ (demand for money)} = M \text{ (money supply)}$$

The increase of budget deficit (from approximately zero in 1989 to 5 percent of West German GDP in 1992-see figure 4) leads to a rightward shift in the IS curve from IS to IS' in Figure 5. This raises the level of German output from Y_g to Y_g' and the level of German real interest rates from I_g to I_g' . The Bundesbank tightens German monetary policy to compensate, pushing output back down to Y_2 , the same level as Y_0 , while real interest rates rise even further from I_g' to I_g'' .

The fiscal policy stimulus spills over into the rest of Europe, causing an upward shift of the IS curve from IS_e to IS_e' . Consequently, as the Bundesbank tightens its monetary policy, the rest of Europe is forced to do so as well in order to maintain exchange rate parities in the ERM (+/-2.25%), shifting the LM curve to the left from LM_e to LM_e' . The German fiscal/monetary policy mix results in a level of output unchanged from the original level, but there is an overall fall in output in the rest of Europe from Y_e to Y_e'' . In the Figures the rise in European rates is shown to be the same as the rise in German rates i.e. $I_g'' - I_g = I_e'' - I_e$.

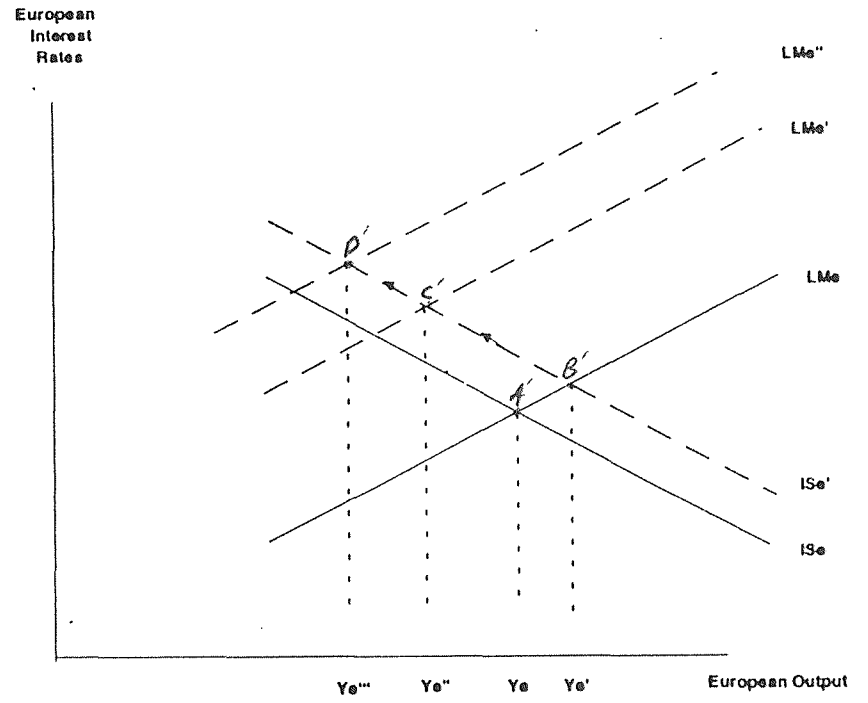
German Interest

Figure 5 - Germany



Note: IS : $S(\text{savings}) = I(\text{investment}) + G(\text{gov't spending})$

Figure 6 - Rest of Europe



Note: LM: $L(\text{demand for money}) = M(\text{money supply})$

However, as result of the uncertainty in financial markets during the exchange rate mechanism crisis, a risk premium had to be paid by the other European countries shown as $I_e''' - I_e''$. This wider interest rate differential between the rest of Europe with Germany, resulted in an even further contraction of output to Y_e''' . Warwick J. McKibbin (1990) has provided simulations showing that without a realignment other EMS members would have to tighten monetary policy considerably and endure an economic slowdown; the slowdown would be moderated considerably if the other EMS members allowed their currencies to depreciate versus the Deutsche mark. More recently, William H. Branson (1993) argued that the fiscal expansion put upward pressure on German interest rates, which in turn raise the equilibrium value of the Deutsche mark. For a time the lack of an EMS realignment held the Deutsche mark below its new equilibrium, but the shock was so large that eventually the EMS came apart. As a result, two countries, UK and Italy, unable to compete within the band, in September 1992, felt compelled to leave the system and no less than four realignments took place in less than five months. In November 1992 (peseta and escudo); January 1993, (punt) and May 1993 (peseta and escudo). This violated an earlier tradition in the EMS back in 1960s when realignments were equally large. Fluctuation margins were widened dramatically to ± 15 percent on August 1993. Since then, Italy and UK have not returned to ERM with wider band of fifteen percent and they are now nine members of ERM (excluding Greece which has never been a member).

The move calmed the markets, but raised another problem which puts in doubt whether a tighter system can ever be restored. That leaves one stipulation of The

Maastricht Accord that national currencies must trade in very close range to one another for months before a single currency takes effect. In the meantime, the French and Belgian francs and the Dutch guilder have moved back into the old 2.25 percent narrow range with the German mark, but the system remains vulnerable.

5.1.4 Real Indicators

When analyzing and comparing to assess national economic performance, economists have certain basic indicators at their disposal; first, the per capita national product and the national unemployment rate; second, the productivity of the working population; third, the relative strengths of the primary, secondary, and tertiary sectors in the economy and fourth, the country's trading links with other nations around the world. In addition to those, the state's share of gross national product, how public spending is financed, the relative proportions of government spending that are channeled into consumption and capital investment, and wage bargaining mechanisms, etc. (Spencer, 1990).

A key indicator of relative living standards is gross domestic product (GDP) per head of population. As Table 7 shows, significant disparities exist between the relative income positions of The European Community Member States. Apart from Luxembourg, Germany and Denmark have the highest per capita GDP within the community. Spain, Ireland, Portugal and Greece are at the bottom end of the income scale (the capita GDP of Portugal and Greece is only just over half the community average). Although significant progress has been made in the three decades since 1960, Spain, Ireland, Portugal and Greece have not come any closer to the average

Table 7 GDP per Head of Population at Current Market Prices and Purchasing Power Standards, EC, 1975-1992(community average=100)

Country	1975	1986	1990	1991	1992
Belgium	103.1	100.6	102.6	103	103.4
Denmark	110.5	117	108.2	109	110.2
Germany	109.9	114	112.8	114.2	113.6
France	111.8	110.1	110.1	108.9	108.4
Greece	57.3	55.9	52.6	52.5	52.1
UK	105.9	105.4	105.1	102.1	102.1
Ireland	62.7	63.4	69	68.9	68.9
Italy	94.6	103.1	103.1	103.9	102.7
Luxembourg	126.7	126.2	125.6	127.8	130
Netherlands	115.5	106	103.1	103.9	102.7
Portugal	52.2	52.5	55.7	56.3	56.3
Spain	81.9	72.8	77.8	79	79

=====
 Source: Commission of the European Communities, European Economy
 Annual Economic Report (1991-1992), p.222.

since 1975. Indeed, Spain and Greece have actually fallen further behind. These significant disparities in national income indicate that the various European Community countries find themselves at a very different stages in their economic development. The gap between Germany and the UK on the one hand, and The Netherlands and Italy on the other, amounts to a full ten percent.

In a study entitled "Ein Markt, eine Wahrung", The EC Commission emphasizes that regional differences in income and unemployment exist within the EC than is the case in the US. This leads the commission to assume that The Community is less well-equipped to withstand economic upheavals than the US.

"Europe has a problem as far as global competitiveness is concerned." says Henning Christophersen (Wall Street Journal, Sept. 30, 1994) , Economics Commissioner of the European Union. Western Europeans on average work fewer hours, earn more pay, take longer vacations, and enjoy far more social entitlement

and job protection than their chief competitors in North America and Asia. An average western German worker, the best paid in Europe, earned \$24.87 an hour in wages and benefits in 1993, compared with between \$16 and \$17 an hour for the average American and Japanese and \$4.93 an hour for a South Korean. It seems to be a lifestyle that few Europeans are willing to abandon (See Figure 7).

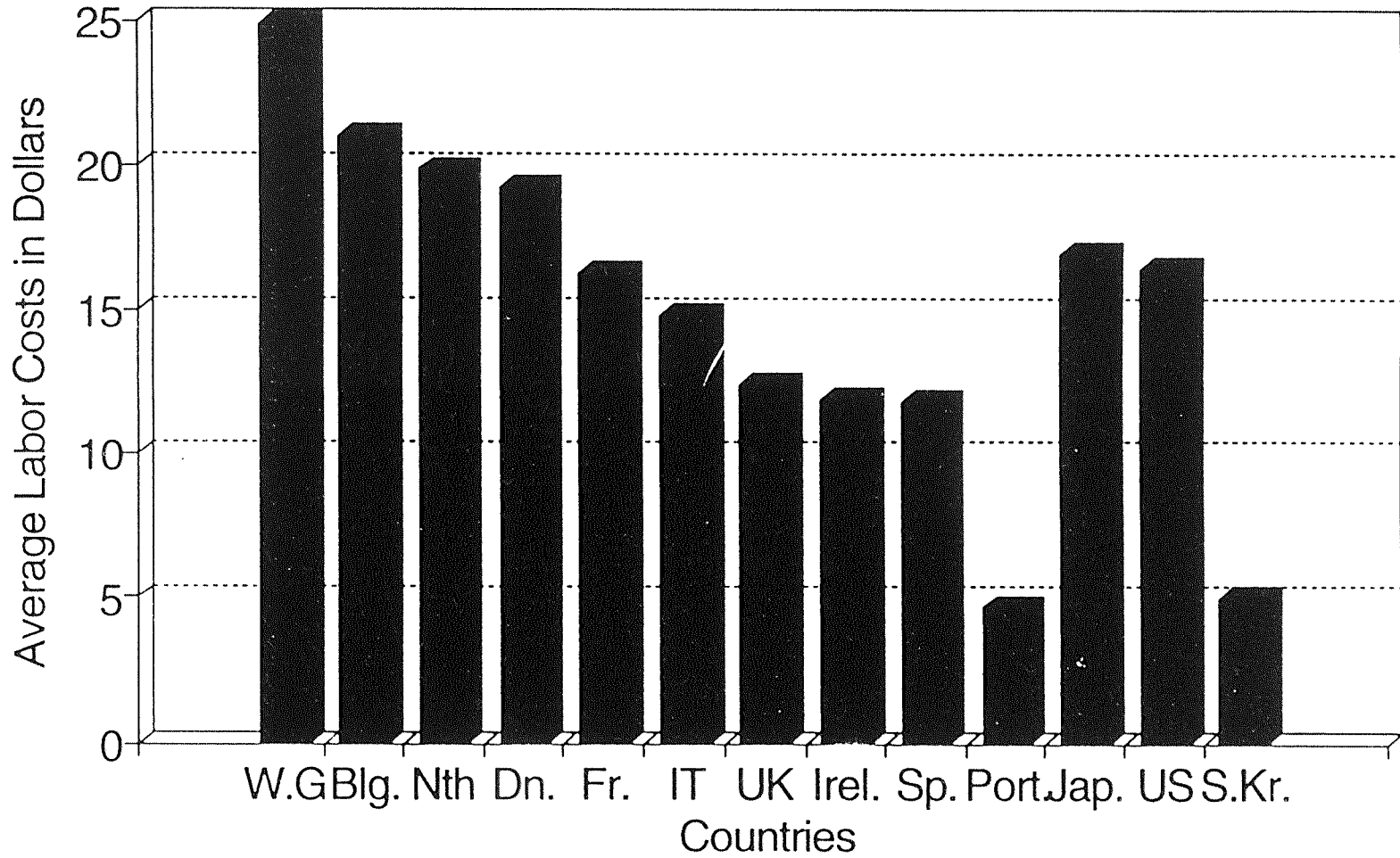
Other factors that indicate tremendous discrepancies between the individual EC member states are export dependence as well as the national account surplus or deficit. If the exports are measured as a proportion of GNP, the Benelux states and Ireland are most clearly dependent on external trade (with exports accounting for 50% of GNP in each case). The corresponding figures for the major European Community economies of Germany, France and Italy are significantly lower (34%, 23%, and 20% respectively, see Table 8). When these exports are broken down according to

Table 8 Exports as a Proportion of GNP, EC 1975-92 (percentage share)

Country	1975	1986	1990	1991	1992
Belgium	55.8	70.7	74.2	74.4	75.1
Denmark	30.1	32.0	34.9	35.8	37.3
Germany	24.5	29.7	31.3	33.7	34.4
France	19.1	21.2	22.9	22.7	23.2
Greece	16.9	22.4	22.6	20.7	21.2
U.K.	25.9	25.9	24.2	23.8	24.2
Ireland	42.7	55.2	62.1	63.5	65.0
Italy	20.5	20.3	20.8	20.3	20.3
Luxembourg	92.5	101.1	98.4	97.8	97.9
Netherlands	49.9	54.2	56.6	56.4	58.3
Portugal	20.4	33.2	36.4	32.0	30.0
Spain	13.2	19.9	17.2	17.1	17.3

=====
 Source: Commission of the European Communities, European Economy
 Annual Economic Report (1991-1992), p.248.

Figure 7 The Wage Gap-Average Hourly Labor Costs in Manufacturing in \$:1993



■ Morgan Stanley Res.

recipient countries and regions, there is a great inconsistency with regard to trade relations with EC and non-EC countries. Geography plays an important role here, as to the differing trading traditions of the EC member states. The Benelux countries, Ireland and Portugal are most strongly dependent on the European Community as a sales market (over 75% of total exports in each case). In contrast, only about half of the exports produced by Germany, Denmark and the UK remain within the EC, Germany maintains close trading links with Austria and Switzerland. Denmark's export trading is closely geared to the North European EFTA countries, while the UK still depends on its long established trading links with the USA (See Table 9).

Table 9 Structure of EC Exports, by Region, 1991
(percentage of total exports)

Country	Exports to EC	Exports to non EC countries	USA	Japan
Belg/luxemb.	75.1	24.9	4.3	1.3
Denmark	52.1	47.9	5.2	3.3
Germany	54.3	45.7	7.3	2.7
France	62.7	37.3	6.1	1.9
Greece	64.0	36.0	5.6	1.0
UK	52.6	47.4	12.6	2.6
Ireland	74.8	25.2	8.2	1.8
Italy	58.2	41.8	7.6	2.3
Netherlands	76.5	23.5	3.9	0.8
Portugal	73.5	26.5	4.8	1.0
Spain	64.9	35.1	5.5	0.9

=====
Source: Statistics of the Commission of the European Communities,p.257.

A budget deficit is commonly associated with a current account deficit, and hence a decline in net financial assets (the difference between gross assets and liabilities) for the economy as a whole. If observed over a prolonged period, a

country's current account (whether positive or negative) and its relation to GDP provide a rough guide of international competitiveness. The picture in 1991-92 was more evenly balanced. Only six of the twelve countries had deficits. Five of these countries (France, Greece, Italy, Portugal, Spain and the UK) had recorded deficits in the period 1974-1983 and in the years thereafter. In the second half of the 1980s, Ireland turned its balance of payments deficit into a surplus, as did Denmark in 1990. Germany's balance of payments position has worsened noticeably (See Table 10).

Table 10 Current Account Balances, EC, 1985-92
(percentage of total GDP)

Country	1985	1990	1991	1992
Belgium	0.3	1.2	1.4	1.4
Denmark	-4.6	0.5	1.3	1.7
Germany	2.4	3.2	0.8	0.3
France	0.1	-0.6	- 0.6	- 0.4
Greece	-8.2	-6.2	- 5.1	- 3.4
UK	0.5	-3.5	- 0.8	- 0.9
Ireland	-3.9	2.5	4.9	5.8
Italy	-0.9	-1.5	-1.8	- 2.0
Luxembourg	43.8	33.8	25.9	27.7
Netherlands	4.1	3.8	3.8	3.9
Portugal	0.4	-2.5	- 1.0	- 1.0
Spain	1.4	-3.7	- 3.5	- 3.3

=====

Source: Commission of the European Communities, European Economy
Supplement A, No 5/6 (1992),p.14.

Suffice it to say that a country's balance of payments determines employment opportunities, capital transactions, as well as improved prosperity derived from increased international division of labor. For this reason the countries entering into ECU will be well advised to pay strict attention to the structural trend in their external trade relations.

5.2 Political Implications of the Problem

Two important political factors continue to overshadow the plans. The first is national pride. Can anyone seriously imagine that Germany will give up the "mark" or Great Britain will abandon Sterling? Nobody admits it, but everyone seems to know that it is true. What about the people? Are they willing to give up their nationalities? Adopting a single currency would effectively mean giving up monetary sovereignty and that is proving hard to stomach of some (Gumbel, Sept. 30, 1994 Wall Street Journal). Furthermore, though most people in Western Europe like the idea of being Europeans, opinion polls show that they still tend to think of themselves first and foremost as British, French, Danish or Italian.⁸ They are wary of giving too much power to centralized institutions, because they do not trust them nor do they understand them very well and they are afraid of jeopardizing their national sovereignty. Just as there is not yet a United European soccer team, so governments are still reluctant to relinquish national control in political and economic matters.

The second and most important political factor is the independence of central banks of the European member states. Governments in other countries like France, Italy, and Greece have a different banking system that allows the government to exercise influence over the creation of money and the level of interest rates.

However, the Bundensbank was very clear that a major contribution to the success of the German economy was the independence of the central bank and its unequivocal focus on the control of inflation. Thus, the political pressure on certain European

⁸The Danish people rejected The Maastricht Treaty by a very narrow majority (50.7%) on June 2, 1992, and the positive outcome of The Bennett Referendum by, again, a very narrow margin (51.1%) in favor on September 20, 1992.

banks creates inflationary problems as well as high unemployment (De Grauwe, 1993). These are major convergence criteria and they must be met before the entrance to EMU.

CHAPTER 6

BENEFITS AND COSTS

The signing of The Maastricht Treaty opens up the road to EMU and the single currency before the end of this decade. The member states of The European Community have decided to follow this road for, broadly, three reasons. The first is political: there is a growing belief in Europe in a cultural unity with a focus on loyalty. The second is a matter of practical convenience and economic efficiency: the use of a dozen different kinds of money is a source of inefficiency and a handicap to business. The third concerns the conduct of monetary and fiscal policy: it is widely accepted that the countries of Europe stand a better chance of achieving price stability if they tackle the problem together.

In order to assess the potential benefits and costs of economic and monetary union, we analyze the three above reasons into a set of eight key criteria.

6.1 Efficiency and Growth

With the introduction of a single currency all exchange rate related conversion costs disappear on intra-community transactions.

These costs can be split into two parts. First, there are the direct transaction costs households and firms pay to the financial sector in the form of foreign exchange commissions and the difference between buying and selling rates. Second, there are the costs borne inside companies, arising for instance from the need to allocate

personnel and equipment to foreign exchange management (in house costs). A recent strand of research into economies (see Akerlof and Yelen, 1989), suggests that even small transaction or information costs can have significant economic effects. This research would imply that the economic losses from exchange rate transaction costs are much larger than the direct costs themselves.

The savings in transaction costs are derived from three different sectors. The highest transaction costs arise from the financial circle such as exchanging cash, banknote exchanges, and other retail transactions (Eurocheques, credit cards, etc.). These costs were illustrated vividly by the admittedly theoretical worked out by Bureau Europeen des Unions de Consommateurs, (BEUC) in 1988. For example, assume that a traveller embarks from Brussels in a clockwise tour of all of the community capitals (except Luxembourg and Dublin) with forty thousand Belgian francs. If he exchanges his cash into local banknotes at each leg of the round trip his total accumulated loss is about forty-seven percent. Table 11 shows how much he would lose at each of his consecutive conversions. The largest losses (16 and 21%) occur when buying or selling weak currencies like the drachma or the escudo (See Table 11). The cost of banknote conversion in the community is likely to amount to 2.5% of GDP. Using the latter percentage, total banknote transaction costs that will be eliminated by a single EC currency can be estimated to lie between ECU 1.3 and two billion. The exchange margin for traveller's checks is usually smaller than for cash, but there is a one percent commission charge. Eurocheques, which in many member states are free of charge (upon the payment of a fixed fee), when used domestically cost normally between two and three percent if written in a foreign

Table 11

Currency Transaction Losses In a (hypethetical) Round

Trip Through 10 Count ries

Exchanged on March 1988	Exchange rate applied in local currency		Amounts after exchange transaction	In Ecu*	Loss in %
B(Begin)			BFR 40,000	925.18	
UK	UKL 1	= BFR64,95	UKL 615,86	891.3	-3.66
F	FF 9,8065	= UKL 1	FF 6039,43	863.55	-3.11
E	PTA 19.47	= FF 1	PTA 117,587,49	843.69	-2.3
P	ESC 1.18	= PTA1	ESC 138,753,49	820.35	-2.77
I	LIT 7.75	= ESC1	LIT 1,075,339,52	706.43	-13.89
GR	DR 10,575	= LIT 100	DR 113,717,15	686.97	-2.75
D	DM 0.98	= DR100	DM 1,114,43	539.42	-21.46
DK	DKR 378.4	= DM100	DKR 4217,45	534.42	-0.95
NL	HFL 27.75	= DKR100	HFL 1,170,34	504.71	-5.36
B(End)	BFR 18,14	= HFL1	BFR 21,300	492.66	-2.39
Total					-46.75

Note: *Official Exchange rate published in the official Journal of the European Communities March 1988

Source BEUC 1988

currency. In the case of international credit cards, foreign currency costs vary between 1.5 and 2.5 percent. The associated economies a single currency would allow are, therefore, likely to lie between ECU 150-200 billion (Emerson , et. al., 1992).

Another direct transaction cost arises from intra-EC trade which involves mostly the corporate sector. Given the relatively high minimum fee, bank transfers tend to be a relatively costly international payments instrument for small amounts. They are the standard means of international settlements between enterprises, with bank charges being a function of the amount and the currency. Bankers' replies to a questionnaire submitted by the commission services suggest that when the amount involved is equivalent to ECU ten thousand, foreign currency bought on the spot market costs around .5 percent. Foreign currency conversion of an amount equivalent to ECU 100,000 was reported to cost about .3 percent; nevertheless, foreign exchange charges very often still exceed one percent for payments in reputedly weak currencies that are hardly used in international transactions, like the drachma or escudo. Very large amounts, equivalent to ECU five million or more involve costs of the order of .05 and .1 percent, which is the size of the spread that can be observed in the interbank market for foreign exchange.

Bank charges declining with the amount to be converted, an estimate of average exchange transaction costs for firms requires also information on the size distribution of foreign currency payments and receipts such data exist for a number of member states and show that in-and outflows with a value equivalent to ECU 100,000 or more claim about fifty-five percent of the total value of the current account

transactions in foreign EC currency. In short, small open economies with small currencies like Belgium, Luxembourg, Denmark, Ireland and to a lesser extent, the Netherlands, or countries with as yet unsophisticated financial markets like Greece, Portugal and Spain will benefit relatively more from the elimination of transaction costs (1% of their GDP) than Germany and France whose currency belongs to the ERM and is a well accepted means of international settlements (.1%-.2% of national GDP, Baldwin 1989 and 1991). Apart from eliminating exchange transaction costs, a single currency could also make an important contribution to cutting the present expenses and delays associated cross border-bank payments (BEUC, 1988). In comparison to the situation in the US, where a coast-to-coast cheque costs a fixed money transfer fee of 20 to 50 US cents and takes two working days, these costs and delays are substantial to the Community. A recent study by BEUC, 1988 found that a bank transfer from one member state to another of ECU 100 in the beneficiary's money cost on average more than 12 percent - of which less than 25 percent was caused directly by currency conversion - and took generally five working days. So that, with an estimated number of 220 million cross-border bank transfers in the community per year and the difference in fixed processing fee between a domestic and an international settlement (net of exchange transaction costs) around ECU 6 the potential supplementary gain could be set at ECU 1.3 billion (ibid.).

The second part of costs, as mentioned above, is the in-house costs. The existence of different currencies leads also to costs that are internal to the non-financial corporate sector. These costs arise for a variety of reasons. First, multiple currencies render the treasury and accounting functions more complicated so that

firms need to devote more personnel to these tasks. They also raise the managerial complexity in transnational firms in that they complicate central management's task of control and evaluation. Second, multiple currencies fragment cash management and thereby lead to company cash being poorly remunerated or conversely, to interest costs on debit positions. Third, they lengthen the delay between debiting and crediting bank accounts. Fourth, firms may incur opportunity cost in their attempt to avoid rather than manage, exposure to foreign exchange risk.

Table 12 summarizes the transaction costs savings that can be expected from a common currency. To these costs it is necessary to add the in-house costs, of the order of .1 percent of GDP, which the corporate sector faces. Moreover, a single currency is also a necessary condition for a reduction in cost and time of international bank and transfers which could yield another ECU 1.3 billion. The total quantifiable savings in terms of transaction costs are therefore around .3 to .4 percent of the GDP of the community or about ECU 13-19 billion per annum. This estimate can be confirmed by looking at the revenues banks obtain from intra-community foreign exchange operations. Surveys in several member countries show that about 5 percent of all revenues come from this source; given that the banking sector accounts for about 6 percent of GDP this implies a transaction cost saving of .3 percent of GDP.

Monetary union obviously eliminates exchange rate movements and hence uncertainty about intra-EC exchange rates which should stimulate trade and investment. EMU would eliminate nominal exchange rate variability among community currencies. However, some variability in national price levels might remain. Comparisons with other monetary unions indicate that the level of real

Table 12 Cost Savings on Intra-EC Settlements by Single EC Currency
(in billions ecu, 1992)

	Estimated Range	
	Bounds	
	lower	*Upper*
1. Financial transactions with bank transfers	6.4	10.6
Bank notes, Eurochecks, travellers checks, credit cards	1.8	2.5
Total	8.2	13.1
2. Corporate in house-costs	3.6	4.8
3. Reduction of cross-border payments cost	1.3	1.3
Total	13.1	19.2

Source: OECD

exchange rate (the nominal exchange rate adjusted for movements in the prices) variability existing at present inside the original narrow band ERM members is not far from what one could expect in EMU. However, aside from this group of countries, EMU should lead to a sharp reduction in real exchange rate variability (Poloz, 1990).

The gains from the suppression of exchange variability in terms of increased trade and capital movements are difficult to measure because firms can in many cases insure against this risk using sophisticated foreign exchange market operations. However, business surveys provide strong evidence that despite this possibility which is in itself costly, foreign exchange risk is still considered a major obstacle to trade. The suppression of exchange variability will be more important for small firms and countries with less developed financial markets that do not have access to sophisticated hedging techniques (Artis and Taylor, 1988). The irrevocable fixing of exchange rates might bring an additional benefit by leading to the complete equalization of interest rates. However, experience in the EMS has shown that even if exchange rates are "de facto" fixed for some time, interest rates do not converge

completely as long as the possibility of exchange rate changes remains⁹ (Williamson 1993).

Therefore, once uncertainties about exchange rates have been dispelled and transaction costs eliminated, there will "undoubtedly be gains in efficiency" associated with the realization of The Single Market. If, furthermore, business and industry really believed in the imminent establishment of economic and monetary union, then the union would contribute in the not too distant future to a further strengthening of investment and growth.

6.2 Price Stability

It is generally agreed that the EuroFed which determines monetary policy in EMU should aim at price stability. This is generally accepted objective, and beneficial economically in its own right.

The problem is attaining price stability at least cost, and then maintaining it. However, this is not an easy task. The community has the opportunity to build its monetary union on the basis of the reputation of monetary stability of its least inflationary member states. Inflation involves substantial costs that are difficult to measure. The nature of these costs differs between anticipated and unanticipated inflation. Standard macroeconomic theory suggests that anticipated inflation of ten percent leads to direct welfare losses that are of the same order of magnitude, about .3 percent of GDP, as the direct transaction costs savings through EMU.

⁹A good example is provided by the Dutch Guilder/German Mark that since 1983 the Dutch Guilder has exposed not depreciated against the DM and the exchange rate has never moved outside a corridor of about +/-0.5% from the average.

The macroeconomic experience of the industrialized world suggests that, on average, high inflation countries have a higher unemployment rate and a lower per capita income. In addition, high inflation is usually associated with highly variable inflation rates and therefore, also with unanticipated inflation. Since unanticipated inflation can affect output temporarily, this explains why countries with higher inflation have also on average more unstable growth rates (Emerson, et. al., 1992). With all these in effect, assuming that the issues of institutional central bank design are handled well, there will probably be some gain in terms of the stability of the real economy, such as lesser fluctuations in output and employment.

6.3 Public Finance

EMU will have strong implications for economic policy at large, including policies for product and factor markets. These policies will be regulatory and financial in character.

In the reorganization of public finances, a new framework of incentives and constraints will condition national budgetary policies, for which the key words will be autonomy (to respond to a country's specific problems), discipline (to avoid excessive deficits) and coordination (to assure an appropriate overall policy-mix in the community). In other words, those are the logical requirements of a well-functioning economic and monetary union. The need for fiscal autonomy and flexibility arises from the loss of the monetary and exchange rate instrument for individual countries. Indeed, EMU will place new demands on fiscal policy at the national level for short term stabilization and medium-term adjustment purposes in the case of country-

specific disturbances. Fiscal discipline is a vital component of EMU. Since the present fiscal position of some member states cannot be considered as sustainable, this is a serious matter of concern. An important issue is whether EMU could weaken the incentives towards fiscal discipline. Effects in opposite directions can be expected. On the one hand, participation in EMU is indeed disciplinary since it implies the acceptance of monetary discipline and therefore the renunciation of debt monetarization. Financial integration should also lead to a better market assessment of national fiscal positions, although the effectiveness of market discipline cannot be taken for granted. On the other hand, markets cannot be expected to behave as if solidarity across community member states were completely ruled out, since concerns for solidarity are integral to the philosophy of the community. On balance, there is no compelling evidence that EMU would have strong adverse effects on fiscal discipline, but there is a case for addressing the risk of failures of market discipline (Boverberg, Kremers and Masson, 1990).

On the spending side, a timely move towards EMU substantially reduces the ex-post cost of public borrowing during the transition to price convergence since present interest rates carry inflation expectations and risk premiums. Some countries would also experience a more permanent decline in the cost of public borrowing. However, this gain should not be regarded as general (ibid.).

6.4 Adjusting to Economic Shocks- Cost of EMU

The main disadvantage or "principal cost of economic and monetary union" is seen in the fact that national governments can no longer use monetary and exchange-rate

policy as an instrument for regulating the domestic economy. However, this loss does not bring much worry for the following offsetting reasons.

1) Exchange rate flexibility will still exist outside the EMS which leaves the possibility for the community to change its exchange rate with respect to the rest of the world.

2) For the original members of the exchange rate mechanism of the EMS, nominal exchange rate realignments have already been largely abandoned within the EMS. The costs associated with this nominal fixity have been borne or adjusted to , although the benefits of EMU are still to be obtained.

3) Moreover, the very existence of economic and monetary union will diminish the impact of economic downturns on individual countries and enable future downturns to be tackled more successfully. In other words, economic integration will make the occurrence of country specific shocks less likely since product differentiation tends to dominate product specialization. For example, if product market integration is characterized by inter-industry specialization, this implies that a common shock to a specific sector (e.g. general drop in demand for a certain product) will asymmetrically affect the country in which the industry concerned is located. On the other hand, if intra-industry specialization is taking place, the shock will be more symmetric, affecting all industries in different countries involved in the production of the product concerned. Within the community, product market integration tends to be of the intra-industry type, notably in the manufacturing sector (Greenaway and Milner, 1986). A recent study by the commission of the EC (1990), finds that except for Portugal and Greece the share of intra-industry trade in intra-community trade varied

between fifty-seven percent and eighty-three percent in 1987. Since intra-industry integration is characterized by the occurrence of economies of scale and product differentiation, the removal of barriers obstructing the exploitation of these advantages will increase intra-industry integration (Jacquemin and Sapir, 1988).

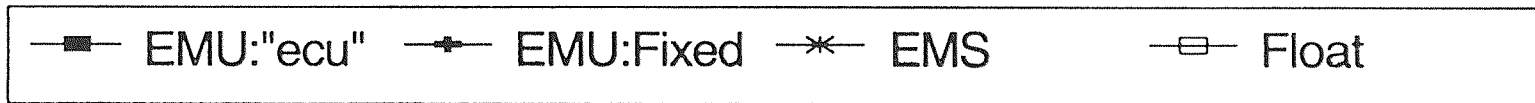
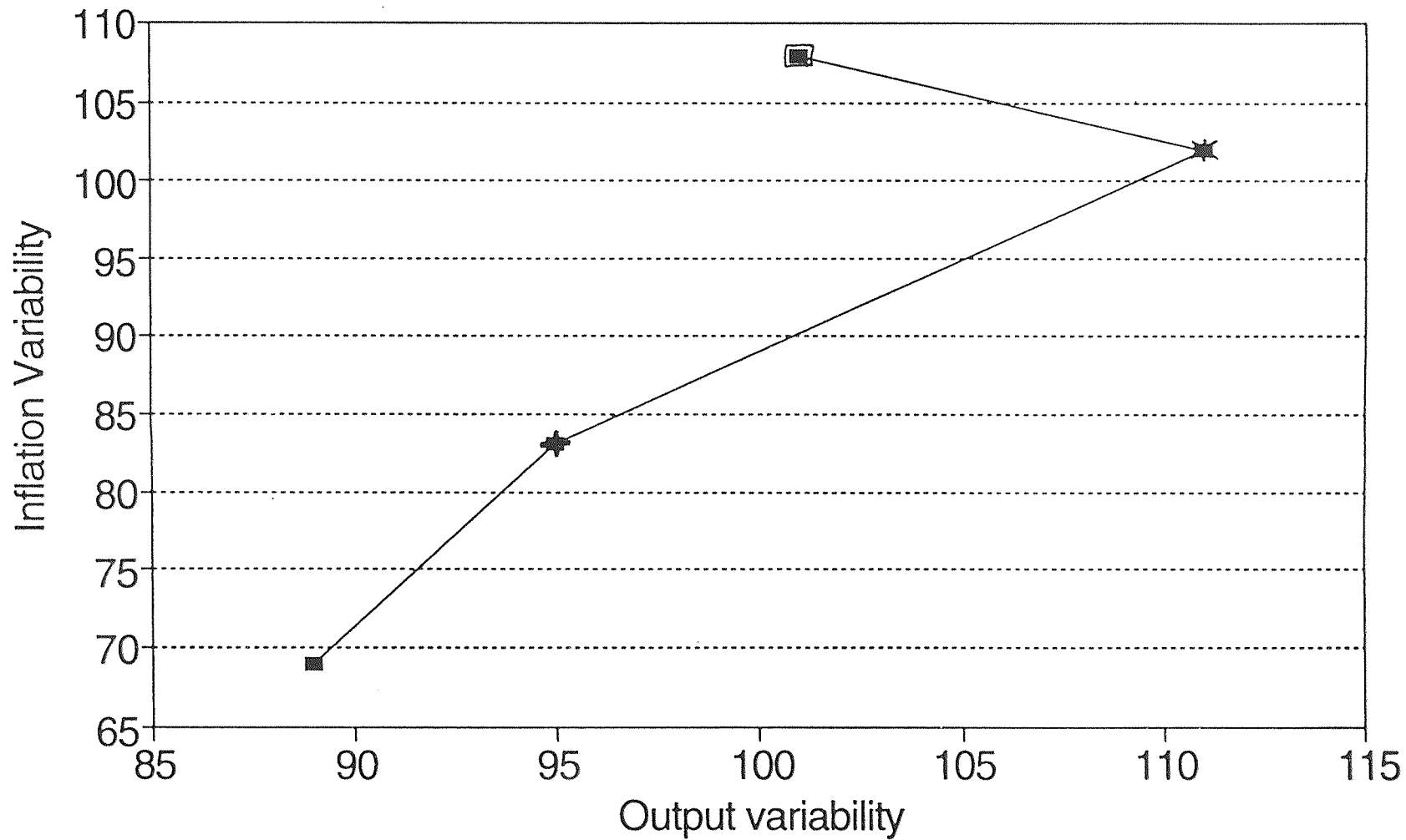
4) EMU removes the external constraint inside the community which means that the current account balance of each country will no longer have any bearing in economic policy. It will no longer be a limiting factor (ie. facilitating external financing of temporary external imbalances for individual countries).

5) The disappearance of exogenous asymmetric intra-community exchange rate shocks, the absence of non-cooperative exchange rate policies and the disciplinary effect on wages and prices tend to offset the negative impact of asymmetric shocks (Begg, 1990).

The community would have been able to absorb the major economic shocks of the last two decades with less disturbance in terms of the rate of inflation and to some extent also, the level of real activity. For example, Figure 8¹⁰ shows sure advantages in regard to better overall price stability. Compared to a floating exchange-rate regime, EMU improves greatly on the stability of inflation and real economic activity. In other words EMU will reduce the variability of output and notably inflation; compared to the EMS, variability also decreases, since asymmetric monetary policy is replaced by a common monetary policy which is concerned with macroeconomic stabilization of the Community as a whole. The decrease in output and inflation

¹⁰The position of each of the four regimes (free float, EMS, asymmetric EMU, and EMU) corresponds to an intersection between a regime-dependent output-inflation trade-off curve and a shifting preference curve. Indices EC average, free float = 100.

Figure 8 Float vs Fixed Exchange Rates
macroeconomic impact of EMU



variability may be experienced by all EMU members, but is also dependent on national economic policies and the behavior of economic agents, notably for output stabilization. This is a renewed relevance, given that the Gulf crisis of summer 1990 once again subjects the community to a potentially damaging economic shock.

6.5 The International System

The primary economic aim of EMU is to strengthen the integration of the community and to improve its economic performance. However, due to the Community's weight EMU will also have far-reaching implications for the world economy.

Before we discuss major effects of EMU on the world economy, it is useful to provide some data that show The Community is indeed large enough in economic terms to affect global economic relations. The two measures of economic size that are most often used are GDP and external trade. Table 13 presents some data about GDP and international trade for the three major world economies (the Community, the US and Japan). Moreover, further progress towards EMU (including the completion of the internal market) should lead to higher growth in the Community than in the United States over the next few years.

This table suggests that the EC is large enough to affect the world economy. Both in terms of total GDP and in terms of foreign trade The Community is of the same size as the US. The Community is also a significant part of the global economy since its external trade accounts for nearly one sixth of world trade; it accounts for more than a third of the total GDP of the OECD (whose member countries represent all of the important market economies).

Table 13 The Community in the World Economy

	<u>.....GDP.....</u>		<u>.....Trade*.....</u>	
	billion ecu	% of OECD total	billion ecu	% of World total
EC 12	4,700	34.4	430.7	16.1
US	4,300	31.5	386.9	14.5
Japan	2,550	18.7	218.5	8.2

Note:

*Trade is measured by (imports + exports)/2, excluding intra-EC exports and imports for the Community.

Trade: 1989 data; GDP: 1990 data

Source: Annual economic report of the Commission 1990/91 and OECD

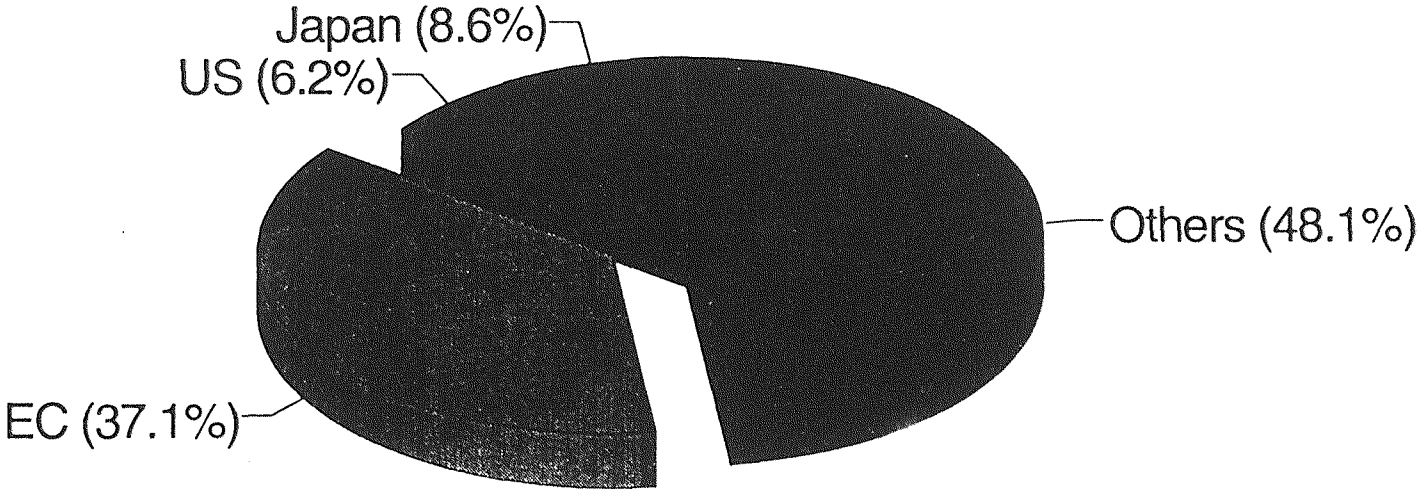
In terms of financial indicators, The Community would appear to be much bigger than the United States, as shown by Figure 9. Member states hold about 200 billion ECU in foreign exchange reserves which represents more than a third of the world total and is more than five times the amount held by the US and about four times the amount held by Japan.¹¹

With the ECU as a Common European Currency, it would be a strong competitor for the US dollar in the international financial system and can therefore be expected to partially replace the US dollar in global financial investments.

Expansion of the ECU as a vehicle currency will yield some small microeconomic efficiency gains for the EC economy by reducing transaction costs on the exchange market for trade with non-EC countries for up to 0.05% of Community GDP. Moreover, it will , due to the development of ECU invoicing (which might

¹¹Foreign exchange reserves fluctuate widely from year to year because of interventions in the foreign exchange markets and the valuation effects of exchange-rate changes. The data should therefore be taken only as an approximate indicator.

Figure 9 The EC in World Finance
Foreign Exchange Reserves(Billion Ecu)



increase by 10% of EC trade), reduce exchange rate risks, and also give to European banks enlarged opportunities to work in their own currency. The Central Banks of ECU would be able to reduce their present reserves of foreign exchange and thus amount savings perhaps to 200 billion US dollars that will be converted into ECUS. It would also be beneficial to partner countries, especially in Eastern Europe, who could choose to pay their currency to the ECU (Emerson, 1992).

As the European Currency will become a vehicle for trade, an increase in the demand for ECU assets can also be expected in financial markets. This effect is likely to be a relatively small size (about 5% of total international markets) because international portfolios are already well diversified. This would increase the exposure of the European monetary policy to external shifts in preferences or in the amount of ECU borrowing by non-residents, but this exposure would remain more limited than it would be for Germany if the DM were to develop further as an international currency. Whether or not this would lead to a temporary appreciation of the ECU can not be assessed with certainty. However, the exchange rate policy of The Community should be ready to react to an exchange rate shock (Canzoneri, 1985).

EMU will strengthen the Community as an economic policy pole within the world economy because adoption of a common monetary policy under the leadership of EuroFed will enhance the Community's identity and weight in international policy cooperation. Monetary coordination at this level can be expected to become easier, provided the sharing of responsibilities for exchange rate policy between EuroFed and the Council ensures an efficient handling of this policy (Feldstein, 1988).

Generally, within the world financial system the use of the ECU would benefit the banks and businesses belonging to the EMS. By acting in concert The Community would be in a stronger position to assert its interests in international decision-making processes and forums.

6.6 Transitional Costs and Benefits

Where inflation rates and budget deficits need to be brought down in response to the demands of monetary union, costs will inevitably be incurred primarily in the form of unemployment and a fall in the national product, which in turn places additional strains on the budget.

The Commission believes these costs would be confined to the transitional phase, and would be greatly reduced by a clear political commitment to full EMU in the not too distant future: If economic agents (public authorities, companies, trade unions, individuals) perceive these commitments to be credible, they will anticipate EMU in their economic strategies and behavior. The Commission is aware of the beginning of the unification process (as set out in The Delors Committee report), whereas some of the important benefits (elimination of exchange rate uncertainty and transaction costs) arise only after the final phase has begun with a single currency. It follows from this that the transitional period should be kept as short as possible. The main factor limiting the desirable speed for the transition might be the cost of too rapid or insufficient convergence (Giavazzi and Pagano, 1988).

Convergence towards low inflation would be made easier through a credible exchange rate commitment, as shown by the experience with the EMS. The extreme

form of an exchange rate commitment would be the adoption of the single currency. For some of the high inflation countries the cost of disinflation might therefore be substantially reduced and the transition period much shorter if they adhered to the single currency once the low inflation countries decide to take this step.

6.7 Regional Impact

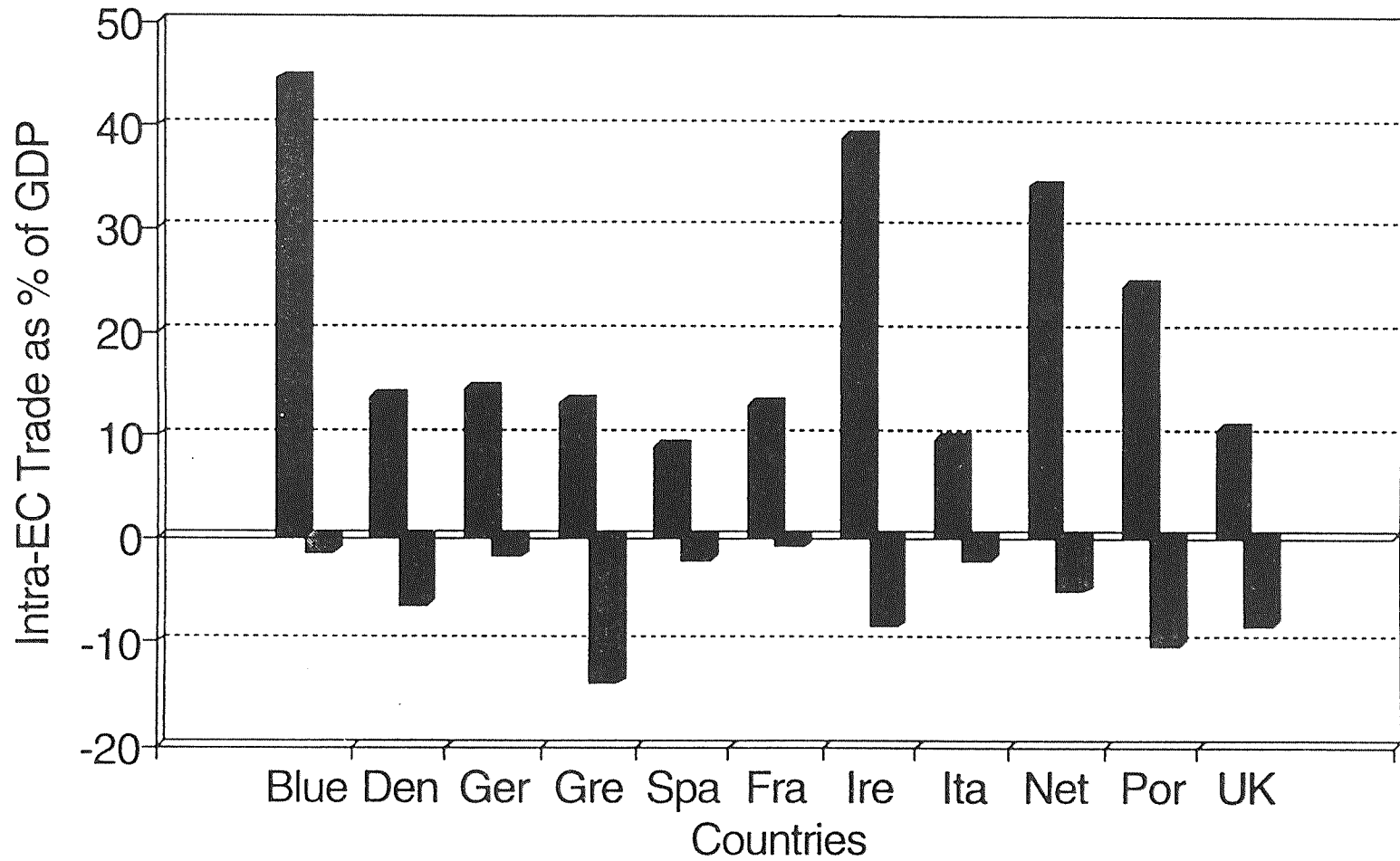
Where impact is concerned, the final distribution of costs and gains associated with the process of adjustment cannot be predicted, i.e. it is impossible to determine in advance which areas will be the winners and which will be the losers. The purpose of this section is, therefore, merely to provide two indicators of the approximate strength of the main costs and benefits for each member country.

The first indicator is simply the importance of intra-EC trade measured as a percentage of GDP. A high value of this indicator implies that the transaction cost savings as well as all the other indirect benefits of a common currency discussed previously are important.¹² Figure 10¹³ shows that intra-EC trade accounts for more than 20 percent of GDP in four member countries: Belgium, Ireland, The Netherlands and Portugal. These countries are therefore the ones that would benefit most from the direct and indirect microeconomic benefits of a full monetary union. For all the remaining member countries, intra-EC trade is much less important, but it never falls below 10 percent of GDP. The second indicator is a statistical measure of

¹²Furthermore, as argued previously, a high degree of openness also implies that use of the exchange rate distabilizes the domestic price level.

¹³Source: European Commission. The R in Figure 10 has been taken from a regression of each country's economic structure over a weighted EC average (using ecu weights).

Figure 10-Costs and Benefits Based on
Intra EC Trade and Differences



Benefits= $(Ex+Im)/2$
 Costs= $(R2-1)*100$

the difference between the economic structure (the distribution of value added over thirty different branches of the economy) of the country considered and the structure of the economy of The Community on average.¹⁴ Differences in economic structure indicate the likelihood of country-specific shocks for which the exchange rate would be useful adjustment instrument. And this indicator, therefore, represents the importance of the main cost of a monetary union, namely the loss of the exchange rate as an adjustment instrument. Since it measures a cost, this indicator is reported as a negative value. The more a country's economic structure differs from that of the community the lower (the more negative) becomes this indicator.

Table 14 shows, again not surprisingly, that the poorer member countries have different economic structure. Greece, Ireland and Portugal have the highest cost indicators. But two of these (Ireland and Portugal) the benefits indicators are also very high, so that the overall balance should still be positive. Greece stands out as the worst balance since it has the highest value for the costs indicator and only a moderate value for benefits. The results for the other countries are also interesting because they correspond almost exactly to the political attitudes towards EMU. Belgium and Holland, two very open economies with a structure very similar to that of the community, on average stand to gain most of EMU. The four large continental member countries (France, Germany, Italy, and Spain) have little to lose from no longer being able to use the exchange rate because their structure is very close to The

¹⁴The statistical measure used here is the adjusted correlation coefficient between the national values and the community averages of the shares of about 30 economic sectors in total value added. Table 14 reports the value of this coefficient minus one.

Table 14 Costs and Benefits by Member Country Based on Intra-EC Trade and Differences in Economic Structure

Countries	Benefits	Costs	Difference
Belg/Luxemb.	44.5	- 1.39	42.11
Denmark	13.65	- 6.47	7.18
Germany	14.35	- 1.81	12.54
Greece	13.25	-14.1	- 0.76
Spain	8.95	- 2.07	6.88
France	12.95	- 0.71	12.24
Ireland	38.85	- 8.48	30.37
Italy	9.7	- 2.02	7.68
Netherlands	34.2	- 5.14	29.06
Portugal	24.55	- 10.31	14.24
UK	10.7	- 8.40	2.3

=====
 Note: Benefits = Intra-EC trade as a percentage of GDP = (exports+imports)/2
 Costs = (R"-1) x 100

Source: European Commission; The R has been taken from a regression of each Country's economic structure over a weighted EC average (using ecu weights).

Community average. However, their gains are somewhat smaller than those of smaller countries, such as Belgium and Holland because their economies are less open. In the case of Spain the result is somewhat surprising because this country is often put into the same category as Portugal and Greece. The UK and Denmark are the countries next to Greece, for which the balance of costs and benefits is more uncertain since both countries do not trade very intensively, with the rest of The Community and their industrial structure differs more from The Community average. This last factor has perhaps been overlooked in discussions about EMU when it is often just assumed that all countries with a similar income per capita also have a similar economic structure. These economic factors are certainly not the sole or even the main determinants of the British hostility towards EMU, but they might explain why the economic benefits of EMU are less widely perceived in the United Kingdom (Gross and Thygesen, 1992).

Overall this brief analysis suggests that for most member countries the benefits should clearly outweigh the costs. On the basis of two simple indicators used here this does not appear to be the case for Greece, but it would surely benefit from another aspect of EMU, namely a high degree of price stability that has eluded Greece so far, but that can be expected from the policy of The European Central Bank.

6.8 Convergence

The difficulties that stand in the way of achieving convergence have not been sufficiently discussed (*ibid.*). Instead the report simply asserts that Belgium, Denmark, Germany, France, Ireland, Luxembourg and the Netherlands could enter into monetary union today without any great difficulty. Three other countries (Spain, Italy and UK) have some adjustments to make, but these are surely feasible within a few years. The two remaining countries (Greece and Portugal) have larger adjustments to make, but these countries too could, with political will set their sights on participation in the full EMU, at the same date as the rest of The Community.

CHAPTER 7

RECOMMENDATIONS OR PROPOSALS FOR SOLUTION

We discussed the operational and institutional aspects of EMU as agreed in The Maastricht Treaty in Chapter Four and we saw that countries with different tax regions, technical rates and standards are sensitive to different economic and regional downturns in Chapter Four. In Chapter Six we identify the economic strengths and weaknesses of each country which will enable us to offer our personal conjecture of how to better the monetary integration process as proceed over the coming years, leading hopefully to the introduction of a common currency for a large majority of member states well before the end of the decade. We will give recommendations in two different scopes 1) by looking at problems arising directly from individual member states on their trial to converge, and 2) The Community as a whole.

7.1 National Central Bank Independence

All participating governments should gradually commit themselves to reducing their influence on monetary policy: In other words, we suggest that participating governments give up their power over monetary policy before EMU is reached, and therefore, central banks earn their independence. This will enable them to establish price stability in such a way that they will be ready for unification at the time set for the final stage. Consequently, government states will be induced to adopt budgetary policies compatible with central bank independence on the way to EMU.

Furthermore, national central bankers would have much less incentive to manipulate the competitiveness of national industries or the real value of government debt by their policies during the final transition.

7.2 Unemployment and Growth (Productivity)

As we discussed before in Chapter Four, the complete absence of convergence criteria for real variables such as unemployment and growth, make the current Maastricht framework an insufficient basis on which to enter into the final stage of economic union.

Thus, we propose that unemployment become the fifth major variable of convergence criteria of EMU which will integrate the health of an economy.

The Center for International Prospective Studies and Information, maintained in a recent study that European economies would have to grow by a Herculean 5% average rate for the rest of the decade in order to reduce their average unemployment rate to 5% from more than 11% currently. Clearly, there should be a realization in Europe for structural changes to begin shifting to something more flexible. That means deregulating rigid rules on unemployment, wages, and working schedules (Van der Ploeg, 1992). For example, countries with lower productivity, in order to maintain their competitiveness, are forced to offer other cost-related advantages such as lower wages, longer working hours, lower taxes, cheaper rents etc. Under the conditions of Monetary Union, any increase in labor costs in the weaker and less developed countries would have to be offset by a parallel rise in productivity. If not, these countries would continue down the path of growth stagnation and

destabilization. In the stronger countries, regions with below average productivity would continue to depend on internal transfers of funds (as has long be the case, for example, in the Federal Republic of Germany and USA, *ibid.*).

Furthermore, we recommend that another factor that would enable European Community to create jobs and gradually restore full employment, the open market to privatization competition of various Business sectors, agreeing to abolish the monopolies. For example, more than 80% of the 35 million jobs created in the US since 1974 came from the private sector, according to a global jobs study by the OECD. By contrast, two thirds of the 10 million jobs created in Western Europe during the same period came courtesy of taxpayers (Wall Street Journal, October 30, 1994).

In Europe, private employers are wary of hiring new workers, with their high salaries and fat benefit packages, because they become practically tenured under European job-protection laws (*ibid.*). This effectively prevents them from copying the U.S. example of laying off workers when demand is weak and returning, when the economy picks up (See Figure 11).

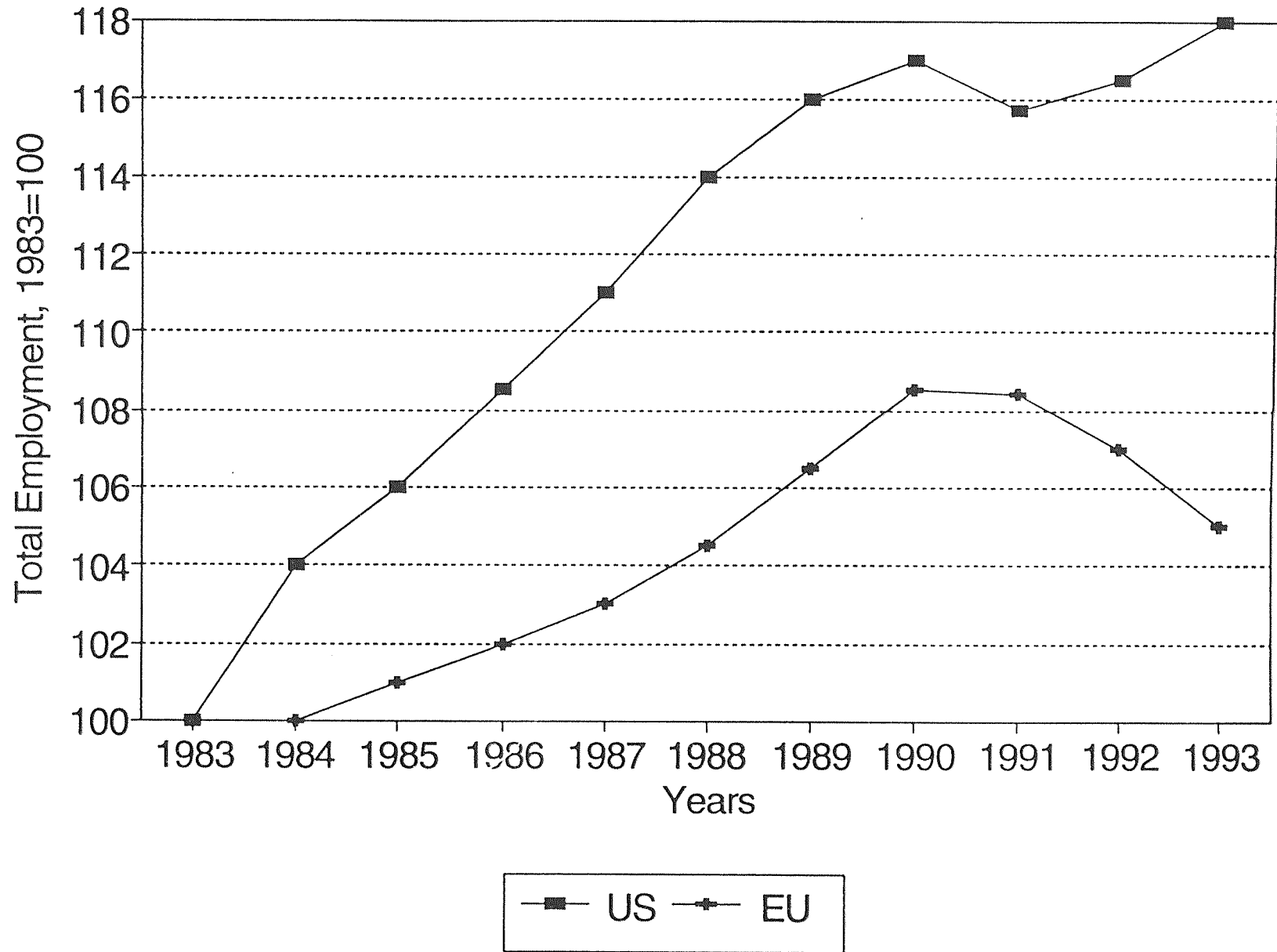
7.3 Margins of Fluctuation

The widening of the fluctuation margins to +/-15 percent on August 2, 1993 was an appropriate and necessary solution (Hans Tietmeyer, Deutsche Bundesbank, 1994).

The EMS is still alive and probably healthier than it was before August 1993.

Despite this positive assessment, Europe could have avoided most of the turbulence in the past few years, if it had accepted the necessary realignments and the widening of

Figure 11 The US Has Created More Jobs Than Europe



margins earlier. This is clearly the predominant view among central bankers and finance minister, in Europe. It takes better account of diverging conditions in the countries concerned and extends their room for maneuver.

We therefore suggest that the wide band remain and give the option to each monetary authority to adhere to old narrow bands of ± 2.25 percent as a police commitment. Surprisingly, for many observers, most of the EMS currencies quickly returned to the old margins after August 1993.¹⁵ They did so, not because of any obligation on the part of central banks to intervene in the foreign exchange markets, but rather because of the governments' own efforts. Governments are free to signal their commitment to price stability and EMU by adhering to narrow bands, vis-a-vis the most stable currencies in the EMS. Inflation and interest rates are converging, even among countries whose currencies were forced out of the ERM. The Bundensbank is cutting interest rates and hard-core central banks are shadowing its moves.

At the same time it has also curbed exchange rate speculation. There is no longer a one way bet. Furthermore, the system is not exposed to speculative attacks as exchange rates approach the limits of the narrow bands, because interventions as mentioned above are not obligatory, and consequently, speculators bear the risk of capital losses even at the margins of the narrow bands. The proposed voluntary nature of the narrow-band interventions means that hard-currency central banks in the system can not be forced to soften their monetary discipline to support weaker

¹⁵The ERM's "hard-core" currencies including the French, Belgium and Luxembourg francs - have gone back to their earlier 2.25% trading bands, though they are free to veer as much as 15% from their central parities.

currencies. This fosters the convergence of inflation rates at a low level. A formal return to old fluctuation margins combined with a respective obligation to intervene, is under present circumstances neither necessary nor an adequate condition for the EMU convergence process (ibid.)

7.4 The Central Bank Governors

It is widely evident in view of our study that most of the EC countries are coping with problems of high inflation, unemployment and necessary realignments in their effort to keep exchange rates within a designated band.

As the scheduled date for entrance for full EMU approaches, we suggest that the council of EMS Central Bank Governors meet at least once a month to evaluate each member state's position - where they stand in terms of convergence and if they spot weak positions, discuss monetary policy and make policy recommendations. This builds experience and provides the information necessary for increasingly closer policy coordination and eventually, a common monetary policy. Until EMU has been achieved, authority over monetary policy rests entirely with the national institutions.

If individual exchange rates move outside the band then the states should be encouraged to state the reasons for the realignment and thus enable The Council to reach and issue a formal decision to realign or to maintain the relevant central parities. Moreover, making realignment decisions regular and formal events would reduce the symbolic and political content of these decisions. This would destroy the current unfortunate perception in some EMS countries of a trade off between political

commitment to EMU and desirable exchange-rate flexibility¹⁶ (Neumann and Von Hagen, 1992).

7.5 New Members in EC

The EC should target expanding The European Market to raise annual growth rates. Current and most potential candidates like Austria, Sweden, Norway, and Finland should be encouraged and promoted to join EC as scheduled (January 1995) because their entry into EU will bring another 25.5 million consumers who will bring an added economic output roughly equivalent to Canada's domestic product (OECD, 1993). As we have seen before in our analysis, their economic performance and their convergence towards union are even better than some countries already members of The Community. Still to come are the Eastern European countries, which are on track for entry within the next 10 years. But Table 15 shows that the number of votes in The Council of Ministers is an issue dividing big and small. Big countries have more votes in the decision-making Council of Ministers so they cannot be out-voted by a gaggle of small ones. On the other hand big countries may object to further expansion because they will have to wait for years before their turn for the presidency of The Council comes again.¹⁷

¹⁶That such a change in political and symbolic value of monetary policy variable is possible without much difficulty is exemplified by the German discount rate. Up until the mid-1970's, changes in the discount rate received much public attention because they were generally regarded as an indication of future policy intentions. Since then, this role has been taken by other Bundesbank instruments and discount rate changes go widely unnoticed in Germany.

¹⁷At the moment the presidency of The Council - which carries the responsibility for organizing the EC's affairs -

Table 15 EC Arithmetic

Countries	Votes on the Council
Germany	10
Britain	10
France	10
Italy	10
Spain	8
Netherlands	5
Greece	5
Belgium	5
Portugal	5
Sweden*	4 or 5
Austria*	4 or 5
Denmark	3
Finland*	3
Norway*	3
Ireland	3
Luxembourg	2

=====
 Note:* Potential new-comers

Source: European Commission

7.6 Fiscal Policy

Countries with high budget deficits and high public debts are in great need of corrective fiscal action. These countries are encouraged as they take austere fiscal measures in cutting consumer and business, taxes and government expenditures so that they reduce large deficits. Major reforms in Congressional and Executive Branch budget procedures should be adopted promptly so that the total Government spending can be brought under effective control. Another consequence for The Community as a whole for the lack of fiscal discipline would be a general rise in interest rates and an external deficit for Europe vis-a-vis the rest of the world (Guglielmo, 1992).

The creation of Monetary Union will inevitably affect the setting of fiscal policy. Even if monetary policy becomes the only responsibility of the new

rotates from one country to another for a term of six months.

Community institutions, with fiscal policy remaining in the domain of national governments, the fact that they will no longer be able to monetize debt has implications for policy choices. Fiscal Policy may play a more important role as stabilization tool in EMU. In the standard Mundell-Flemming framework (Frankel and Razin, 1987), in which sticky prices are assumed fiscal policy is most effective when exchange rates are fixed and there are free Capital movements. Because in fixed rate system a fiscal expansion does not lead to a rise in interest rates and to an appreciation of the exchange rate, some countries might resort more frequently to fiscal measures to respond to shocks, especially if they are country-specific.

7.7 Cohesion Fund

We propose that EC countries agree to a cohesion fund which will be solely used to strengthen the ability of the poorer EC countries to reduce high fiscal budget deficits. This fund will be supported by stronger countries like Germany, France and The Netherlands where they also should create additional demand so that weaker economies such as Greece and Portugal would be able to increase their exports and thus cut domestic unemployment. The treatment of cohesion formed an integral part of the discussions at Maastricht and its role has been considerably enhanced in the ensuing treaty (NIESR, 1991).

7.8 People

People are a big factor in the successful process of EMU, and it should not be forgotten. Because they reserve the right to vote and consequently as a comprising

body of the country, are able to cause problems in the economy in their struggle to maintain monetary values (such as prices, wages, mortgages, receivables and liabilities) at satisfactory levels. Moreover, people are emotionally attached to their own currencies and a longer period of preparation may not suffice to win their hearts and minds. Therefore, governments need to take people more seriously by explaining The Maastricht Treaty and persuading them by portraying the expected benefits. This explains, for example, why The Treaty has had such a smooth ride in countries like Greece, Spain, Portugal and Italy where their respective governments have been effective and persuasive in this manner (De Grauwe, 1993).

7.9 Timetable

According to The Maastricht Treaty, as mentioned in Chapter Four, members of the EC that meet the convergence criteria are committed to going ahead with monetary union no later than January 1, 1999. Nevertheless, an enormous amount of uncertainty continues regarding the timing of monetary union and about the identities of the participating countries. To shrink the lengthy period of uncertainty that invites turmoil in the foreign exchange markets, we propose that those countries that meet the convergence criteria move ahead earlier. The Treaty itself allows for an earlier union, but only if a majority of members are ready by the end of 1996. Because it appears that this condition is unlikely to be met, the treaty itself is an obstacle to earlier union. Moreover, the period of uncertainty might continue into the next century because of the possibility that none of the EC members will satisfy all The Treaty's criteria for union by the deadline of January 1, 1999.

CHAPTER 8

THE MEMBER STATES - OUTLOOK AND PROSPECTS

Finally, we have reached Chapter Eight, where we are expected to give an outside view of what analysts and experts (economists) think about EMU, as well as our, and we will also give our opinion on the prospect of what countries are ready to step in the house of EMU at the designated timetable. We will conclude with a brief discussion of the reasons why the political, institutional and economic environment makes it likely that EMU will in our view be achieved by the end of this decade.

8.1 Outlook

Martin Feldstein (1992) - Professor of Economics at Harvard University argues that the European Community should abandon its plans for monetary union. The European Commission has summarized in the title of its publication, "One Market, One Money" that the adoption of a single currency is necessary to perfect the single market's free trade in goods and services. This is what Martin says: "The creation of a single market for goods and services does not require a monetary union. It is possible to have all the benefits of free trade without a common currency. Indeed, the shift to a common currency could actually diminish trade within Europe. It is also likely to reduce economic well-being by raising future unemployment and increasing the cyclical volatility of activity within individual countries. And it could cause a higher rate of inflation than the current monetary arrangements." He uses as

an example the recent US establishment of a Free-Trade Agreement with Canada and Mexico. Nobody seriously suggests that The United States, Canada and Mexico should form a currency union. Martin continues that this difference does not reflect the economic requirements for efficient free-trade zones in Europe or North America. Instead, it reflects different political goals. EMU is sought by those who want to move to a political union among the current members of The European Community. They seek a common currency both as public symbol of super-nationhood and as an effective way to shift decisions on monetary and eventually fiscal policy from national capitals to Brussels.

Mr. Max Kohnstamm (1994), a part time consultant at EU headquarters in Brussels (Wall Street Journal, July 28, 1994) says, "I'm more optimistic than I was one year ago because the debate about European integration has come out into the open. For much of the last year, Europe has been like a sailing ship with no wind. Nothing is worse than that. Once there is a wind, you may go in the wrong direction, but at least you are going somewhere." Government leaders are already preparing for a conference in 1996 that is supposed to take key decisions on the EU's future shape and direction. Mr. Kohnstamm says major changes are vital, and overdue, if the union is to function efficiently and counter the sense of alienation many people feel about it. He continues with European integration as being in his view an overriding political issue in which economic matters are used because they are necessary in themselves, but are at the same time means to an end.

The signs are not very auspicious. Maastricht allowed Britain and Denmark to "opt out" of an eventual single European currency, which Mr. Kohnstamm says is the

most coherent part of the treaty, "I am deeply opposed to Europe a-la-carte."¹⁸ He says, "It destroys the essence of a community structure." At the same time, he can't resist smiling at the way European nations have already moved so close to one another, despite all the difficulties.

David de Pury (November 5, 1992), Co-chairman of the Swedish-Swiss Heavy-Industrial Aden Brown Boveri Group, thinks that Europe is making tremendous in becoming a single market, if you look at the new rules of the European economic area (combining the twelve members of the EC and the five members of the European Free Trade Area). De Pury says, "But Europe is obviously not a one speed market. You have the Deutschemark zone and there are countries which are outside this zone." He concludes that there is no doubt in his mind that towards the end of this decade Europe would have become one of the most dynamic markets in the world. "But I would be cautious today for the future because I see growing political turmoil in Eastern Europe and monetary turmoil in the EC." Another businessman named Bridgen(1992) chief Executive of Asea Group, believes that there is a compelling inevitability that there will be a monetary union and that the clear leader of Europe is Germany.

Bayoumi and Eichengreen (1992) estimated a model with two variables, output growth and inflation. They assumed that movements in these two variables are induced by shocks to aggregate demand, caused, for example, by changes in monetary policy or shocks to aggregate supply such as changes in production technology. A

¹⁸The opt-outs from Maastricht won by Britain and by Denmark suggest that as the EC prepares to admit newcomers to its table, it offer them less of a set menu and more a-la-carte.

positive demand shock caused by an increase in the money supply would be expected to raise both output and inflation, though in the long run economic theory suggests that the effect in output would eventually fade away to zero. A positive supply shock caused by the development of computers that make factories more efficient would be expected to raise output but lower inflation. In recent years, sudden rises in the price of oil caused by OPEC decisions to limit oil exports have often been cited as negative supply shocks to industrialized countries that rely heavily on imported oil.

So that, using their model, Bayoumi and Eichengreen estimated the historical time series of aggregate demand and supply shocks in each country. Taking Germany as an anchor country, they found substantial positive correlations between demand and supply shocks in core countries and similar shocks in Germany. They concluded that monetary union makes much more sense for these core countries than for the entire EC, as envisaged by The Maastricht Treaty. Using similar techniques, but different data, Joseph A. Whitt, Jr. (1993) concluded that even the core European Countries may not be good candidates for monetary union with Germany because asymmetric demand shocks appear to be common. A senior Clinton administration (Wall Street Journal, Sep. 30, 1994) official sums up one outsiders view like this, "As a rule, big institutions are hard to change. Europe's problem is that it knows it cannot afford the system but still can't bring itself to abandon it." On the other hand, Mr. Giscard D'Estaing, (*ibid.*, 1994) says, "The year 1996 will be the moment of truth for Europe. Either we succeed and continue the process of integration or we fail to reform." In that case he adds, "governments and the public will have to ask themselves some very tough questions regard to what Europe is really all about."

Although many economists see European unity still as unfinished business and as an unfeasible event, in our view, it is indeed not true. Europe has a strong potential of becoming a powerful market in the world that will begin to overtake its major competitors, Japan and The United States, by the end of the century.

All member countries have taken the matter seriously and they are working intensively and closely to overcome economic turmoil and to meet the stability requirements. They have seen a light at the end of the tunnel, because the benefits outweigh the costs (as we examined in Chapter Six) in moving to full EMU. I believe that entrance into EMU has taken place as a personal goal to each individual country, since they have all shown willingness to move to a more developed political union. Here is why we think positively.

8.2 Prospects

Europe is growing again. With Germany's economy rebounding - almost a half year ahead of schedule - The European Commission now expects European Union economies to expand about 1.6% this year after a 0.3% contraction last year. That compares with previously forecasted growth of 1.3% for 1996, which many economists last year considered hopelessly optimistic. The rebound is expected to accelerate to near 2.5% growth or more in 1995, according to the latest commission forecasts. Inflation remains low and is expected to run only 2% to 3% in Europe this year (see Table 16). Corporate profits are bouncing back from two years of steep declines as orders pick up and companies rigorously reduce costs.

Table 16 Europe's Recovery

	1992	1993	1994
Imports	4.2%	- 3.8%	2.5%
Inflation	4.6	3.7	3.0
Industrial Product	- 1.2	- 3.3	1.6
GDP	1.1	- 0.5	1.3

=====
 Note: European Union data and forecasts for 12 member
 nations combined

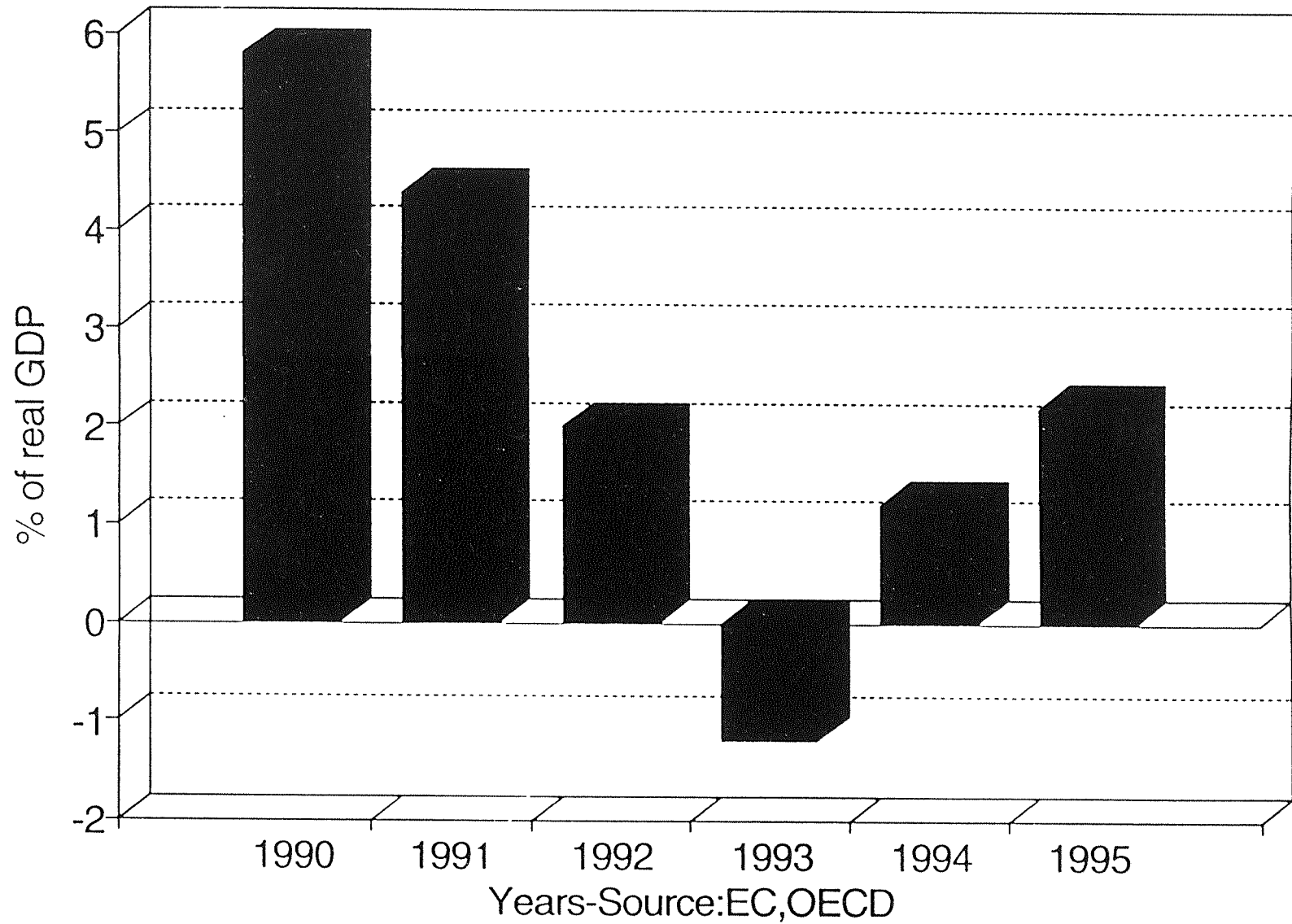
Source: OECD

8.3 Germany

The motor behind Germany's recovery has been a revival of exports. By May, economists were busily upgrading their 1994 forecasts from less than 1% growth in Western Germany to something closer to 1.5%. Deutsche Bank Research last month lifted its forecast for all of Germany to show 2% growth for the year, reflecting 1.5% expansion in Western Germany and 8% growth in the country's restructuring eastern half (Commission of European Communities 1994). Demand remains weak, however as companies favor downsizing over new expansion, unemployment remains high and continued cost cutting reduces disposable income. The best domestic news is that Germany's annual inflation rate could shrink to below 3% by year end, compared with an average 4% in 1993. One reason for the popularity of EMU throughout Europe is the ambition of other member states to copy the institutions of Germany and hence, to share its price stability and also its prosperity (Barell, 1992).

Obviously, EMU as now intended is impossible without German participation, and although unemployment is expected to remain near four million at the end of 1994, that participation seems assured. Figure 12 shows the country's percentage change in real GDP, as 1994 and 1995 projected.

**Figure 12- Germany-Perc. Change in
in Real GDP: 1994 and 1995 projected**



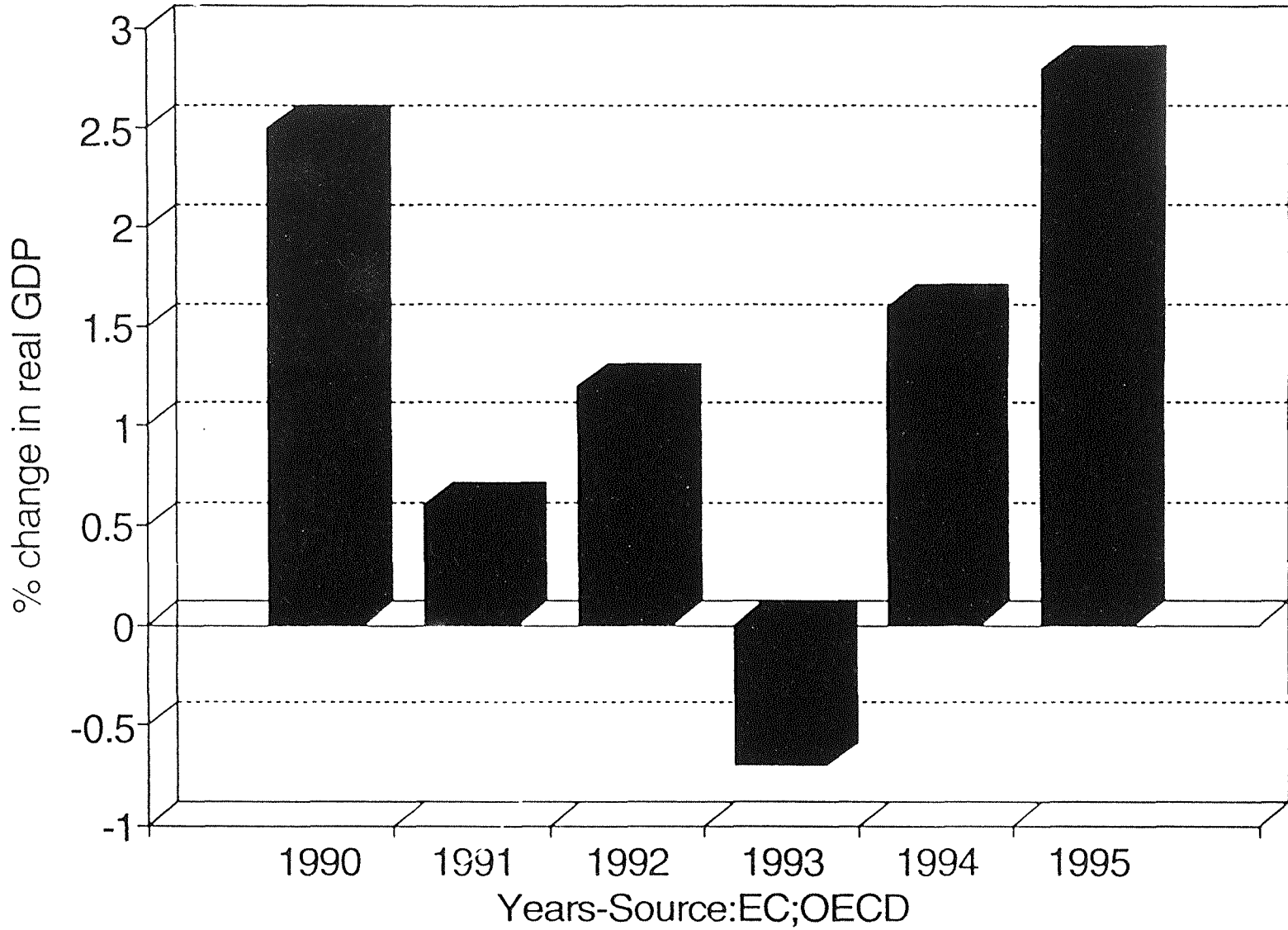
8.4 France

The French economy is showing a mild revival in both exports and domestic demand, helped by government stimulus for the automotive and housing markets. Most growth projections for this year have been revised up to between 1.3% and 1.7% from previous forecasts of about 1%. Although France has been able to hold annual inflation at just under 2%, it continues to pay a high price for its strong franc policy of holding the franc and French interest rates in tight alignment with their German counterparts. But the wish of the French government naturally, enough, is to participate in the decisions which shape the monetary policy of Europe, not just to follow the German lead (Bordes and Girardin, 1992).

The French rebound that began in the third quarter of 1993 was largely fueled by a rise in consumer spending. This increase, came despite a jobless rate of nearly 12% that government reform efforts have been unable to correct in the face of popular opposition (See Figure 13).

"Unemployment is still going up, but people have the feeling that the big layoff phase is over." says Francois-Xavier Chouchat, an economist with Banque Indonsnez in Paris (Wall Street Journal, June 14, 1994). "Now the key for domestic demand will be whether we will see a rise in capital spending by industry." The government favors moving rapidly to EMU, for both political and economic reasons. On our view it is unlikely that EMU will ever take place at all unless France is able to participate. Its participation by determined dates seems to be assured.

Figure 13 France: % Change in Real GDP: 1994 and 1995 Projected



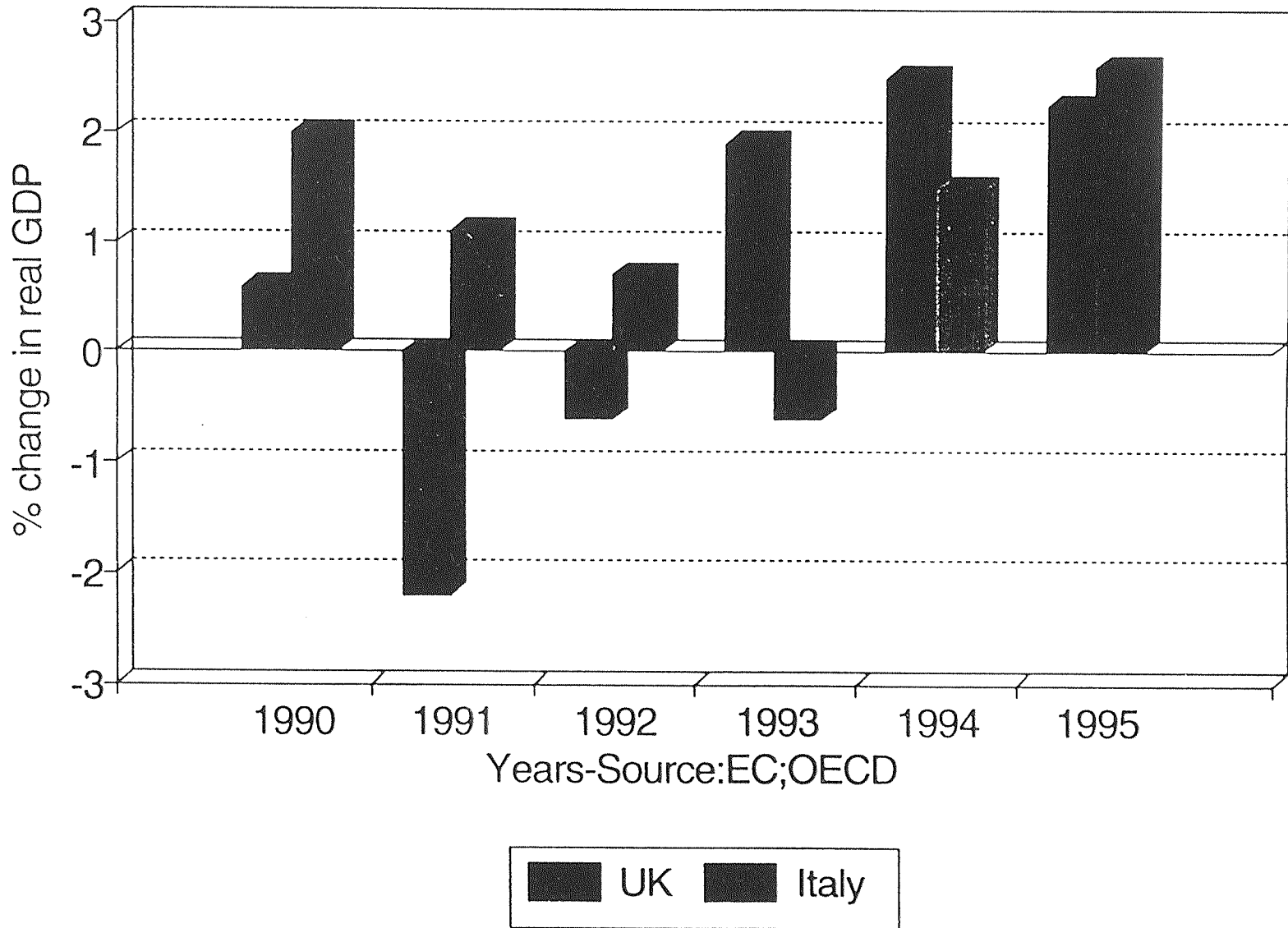
8.5 Italy and United Kingdom

Britain and Italy are of nearly equal population and yet they provide one of the starkest contrasts. Britain has followed a textbook free market model. It sold nationalized companies to the private sector, slashed government jobs and phased out loss-producing industries particularly in the coal and steel sectors (annual report, IMF, 1993). Lower interest rates have revived property markets and consumer demand, helping to boost projected economic growth of up to 2.5% this year. A competitive currency and the US recovery helped lift exports by 3% in 1993 and are seen gaining pace this year (see Figure 14). Unemployment remains high at nearly 10%, but the chances for a broader recovery could begin providing new jobs in the months ahead.

Italy, on the other hand, remains top heavy with state-supported industries. Plagued by political scandals, it has yet to take some of the difficult economic steps that Britain did. A recent industry survey showed a surprise 1.7% increase in industrial production during 1993-1996 mid-period. Of all western economies, Italy's still depends most heavily on state-owned entities that dominate whole sectors, including energy, banking, steel, insurance, chemicals and telecommunications.

The reason we chose to examine these countries together is that, it seems that neither country can be characterized as better off than the other. Each has continuing and quite different home grown problems to solve. "You can argue for both countries being poised for growth." says Jane Schofield (Wall Street Journal Sep.30,1994) a London base consultant who works for several Italian companies. Thus, we are not expecting these two large communities in the EC to converge by the first period

Figure 14 UK & IT: % Change in Real GDP: 1994 and 1995 Projected



deadline (1996), but we do believe that they have a great potential for participation by the end of 1998.

8.6 Spain

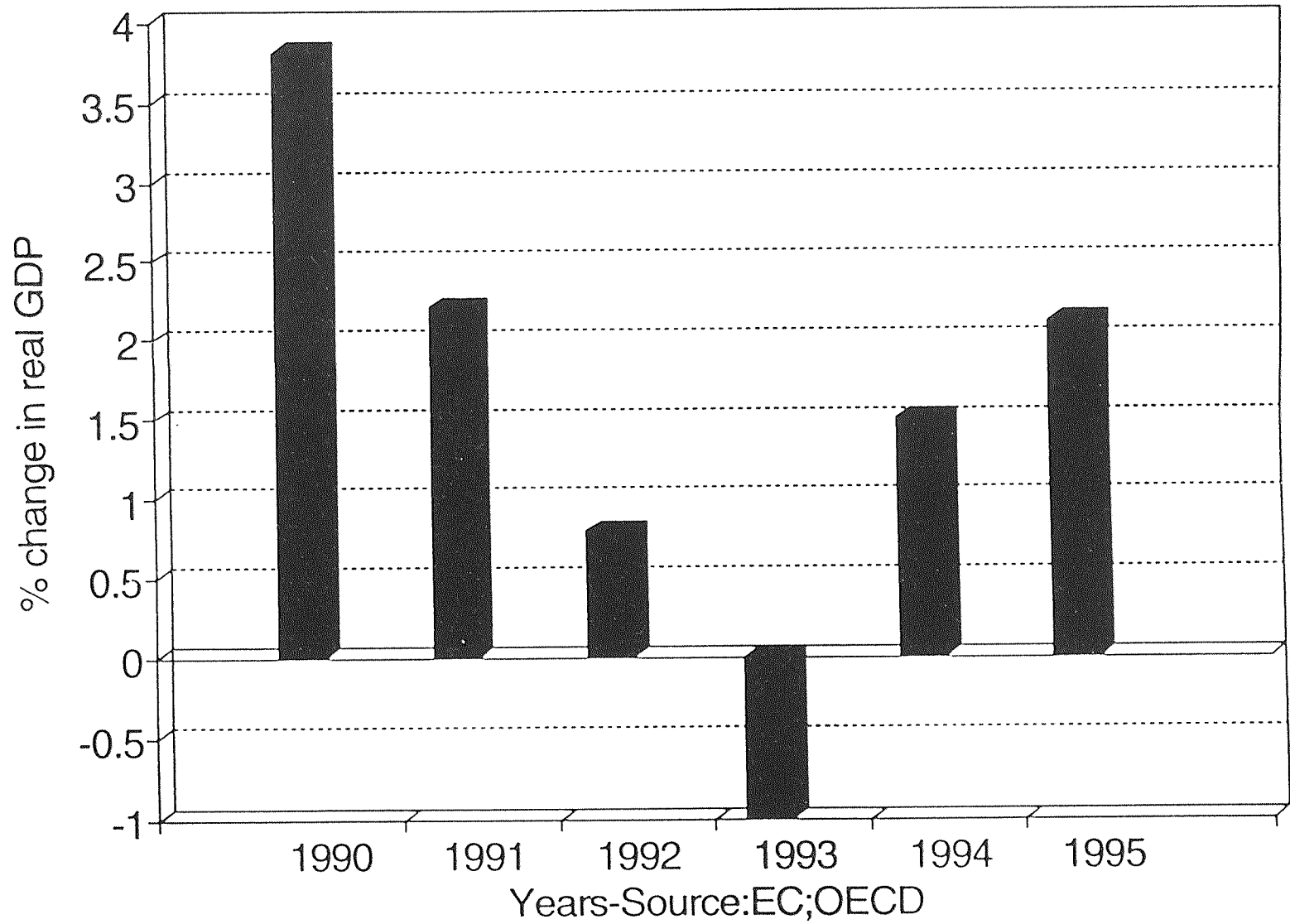
Total national income per head of population in Spain is about two thirds that of Italy or the UK. Helped by a sharply devalued currency, Spanish exports surged 10% in the first quarter of this year, from the previous quarter. But some economists warn that Spain may have to wait longer for a homemade recovery. Despite the government's efforts to liberalize labor markets by making working times more flexible and easing firing procedures, the country's 24% jobless rate is expected to come down only gradually, limiting consumer spending. Growth projections for Spain vary broadly, ranging between 0.5% to 1.5% for 1994, compared with 1% contraction in 1993 (See Figure 15). Thus, Spain is classified in the same category as Italy and UK where it ought to be possible to accomplish convergence, but is also unlikely.

8.7 Belgium and Luxembourg

Luxembourg, the smallest country in the EC faces no problem at this time in meeting the convergence criteria and thus entering the EMU. Luxembourg is the only country that has consistently fulfilled all four criteria since 1985 (see also table 5).

The average rate of inflation in Belgium over the past twenty years is just under 6%. The gross public debt is nearly 130 percent of national income, more than twice the ceiling of 60% laid down in The Maastricht Treaty. The budget deficit is

Figure 15 Spain: % Change in Real GDP: 1994 and 1995 Projected



around 6% of national income. The position on the stock of debt (but not on the rate of borrowing) appears to be considerably more serious in Belgium than in The Netherlands but the debt-to-income ratio is not actually rising in Belgium anymore. Projections by The European Commission suggest that it will remain virtually constant for the next couple of years. It is, of course, impossible at that rate for Belgium to meet the convergence criteria at first date in 1996 (Gross and Thygesen, 1992). The problem for the Belgians is that interest payments on the debt are accounting for about a quarter of government revenue. Clearly, that situation would be eased if interest rates in Europe generally were to fall, but this remains at best a remote prospect. The Belgians will therefore, have higher taxation or lower public spending of other kinds than their neighbors elsewhere in Europe for the foreseeable future. But at the second determined date where there is no need for the majority to go ahead for the EMU, it is highly unlikely that Belgium will not participate (ibid).

8.8 The Netherlands

In many respects The Netherlands is already in a monetary union with Germany. This relatively small open economy, with output per person employed high by international standards, but output per head of the population rather lower than in France or Germany due to unusually low participation rate. Trading links with Germany are of the first importance (OECD, 1991).

The rate of unemployment is rather higher than in Germany. It would be difficult now to see this as the cost of reducing inflation, since inflation has been low and fairly constant for the best part of the decade. The only problem which could not

be a real one is that the ratio of debt to National Income and the scale of public borrowing may both be "excessive" (79.7, -6.0 respectively) according to The Maastricht Treaty protocol. The Netherlands' close relationship with Germany forms no doubts about its capability of moving to EMU at the time specified. If EMU takes place at all it is very hard to imagine it taking place without the Dutch.

8.9 Denmark

The Danish economy is also small, but prosperous, with output per head of the population similar to that in Germany. The agricultural sector is rather larger than in Germany, but still employs under 6 percent of the labor force. There are well-established links with Germany and The United Kingdom.

The inflation in Denmark since the change of government in 1982, has been reduced by 1990 down to 2% from an averaged 8.2% over the past twenty years. Unemployment in Denmark followed the common European pattern of a steeply rising from the mid-1970's to the mid-1980's, when it reached about 10%. Statistical studies suggest that this rise in unemployment played an important part in slowing down inflation. The most persistent problem of the Danish economy has been the deficit on the current account of the balance of payments, which persisted for an unbroken run of 26 years until 1990. It can be attributed to unusually low savings rather than unusually high investment. However, the tightening of fiscal policy in the early 1980's was accompanied by a period of quite rapid growth.

Moreover, if the Danish economy maintains its recent performance it should have little difficulty if not at all, in passing the entrance examination for EMU.

8.10 Ireland

In a small open economy like Ireland, the rate of inflation is very dependent on the exchange rate and on world prices. The rate of inflation has been low since the mid-1980's, and recently has become one of the lowest in Europe (1.6%), and the central rate of the Irish pound in the EMS has been changed on only three occasions in the last decade.

In short, the recent performance of the Irish is impressive, but it has underlying problems such as the ratio of public debt to national income which is high (91.6%). Because of the higher level of interest payments which that implies the level of government borrowing is also above The Community average. The very high level of unemployment (about 16 percent) makes Ireland a difficult model to recommend for the first date. But we believe that if Ireland improves competitiveness for the next few years, it will be able join the others without any great difficulty by 1998.

8.11 Greece and Portugal

Output per head of the population in Greece is broadly the same as in Portugal (if calculated using indices of purchasing power), but lower in any other member state if calculated at current exchange rates. The agricultural sector accounts for more than a quarter of total employment - the highest of any member state. Over the past 20 years, the rate of inflation in Greece has averaged 16 percent. In 1990, it was just over 20 percent, much higher than in any other member in The Community. Despite this high rate of inflation, Greece was not spared from the general rise in

unemployment, although the level stayed below the European average. The drachma does not participate in the ERM of EMS at this time and continues to depreciate rapidly each year against the ECU.

Portugal's living standards are similar to those of Greece. About 20 percent of the work force is employed in agriculture. Unemployment in Portugal is very low compared with Spain and well below The Community average. The economy is showing signs of overheating and it is doubtful that such a good unemployment record could be maintained at the same time as the rate of inflation is being brought down. However, Portugal is one step ahead of Greece because it has already join the ERM of the EMS. Both countries face serious problems with convergence criteria and it is highly unlikely that they will go ahead with the others. They are aware of this fact, and they are taking serious measures to converge their economies within a reasonable timetable. But, in our view, if Greece and Portugal continue with the same economic tightening and determination, they will be ready to join at the end of the century after the creation of the single market along with whatever other countries qualify by then.

CHAPTER 9

CONCLUSION

We have finally reached the point in our thesis where we must justify our statement. Throughout the paper we have seen that the right time for transition to the monetary union depends on the rate of progress in Europe in meeting the stability requirements and on the willingness to move to a more developed political union. The political factors are admittedly beyond the scope of our target in this paper. For this reason they have not been developed. It is apparent that The Community is much more integrated in political terms. As we have seen discussed previously, The Maastricht Treaty offers two alternative deadlines: 1997 or 1999. If these deadlines clash with economic realities, the monetary union cannot be established until later. No one knows at present how many countries will be capable of fulfilling all the criteria by the review dates.

Our research illustrates that the chances of the majority of the EU countries qualifying by the end of 1996, as stipulated in The Treaty, are not very great at the moment. But as we saw in our analysis the balance of costs and benefits in economic terms has also moved decisively in favor of EMU. Taken with the new political environment in Europe, there is every reason to believe that economic and monetary union will be attained, as the prospects for the second deadline look naturally better and brighter.

Once Maastricht is ratified, as we have proposed, we believe that those

countries - Germany, France, Luxembourg, The Netherlands, Denmark, and possibly Belgium and Ireland will speed up moves towards monetary union on their own at the second deadline which is January 1999. Spain, Italy, and UK will join later as they feel ready - Greece and Portugal possibly even later.

In our view, monetary stability fosters both national and international business activity. Nowadays, the financial markets are closely interlinked. When one of the bigger nations sneezes (such as the US), then everybody else is likely to catch cold. For example, if investors in any country fear fresh inflation, turbulence in the markets there can quickly spread to other nations. This is why they should all have an interest in currencies being as stable as possible.

To conclude, as the EC is moving forcefully to adopt a single currency and a central bank modelled on the US Federal Reserve Board, if all goes according to plan, Europe in ten years could be the home not only of the world's largest financial market but also of a EuroFed and supercurrency rivaling The Federal Reserve and dollar in global influence.

BIBLIOGRAPHY

- Akertof, G., Yelen, J. (1989) "Regional Models of Irrational Behavior," *American Economic Review*, May, pp.137-142.
- Alexander Lewis S., and Joseph E. Gagnon, " The Global Economic Implications of German Unification", Board of Governors of the Federal Reserve System, *International Finance Discussion Paper*, No. 379, April 1990.
- Artis, M., Taylor, V. (1988), "Exchange rate, interest rates, capital controls and the European Monetary system: assessing the track record," Chapter 7: *The European Monetary System*, Giavazzi, F., Micossi, S. and Miller, M. etc, USA, 1988.
- As formulated by The EC Commission *Ein Markt, Eine Wahrung* (Brussels, October 1990) p.9, 20.
- Baldwin, Richard (1989), "On the Growth Effects of 1992," *Economic Policy* 9, October :248-81. 1991, "On Microeconomics of European Monetary Union," in *European Economy*, special issue October.
- Barrell, R. (ed) (1992), "Economic Convergence and Monetary Union in Europe", London, Sage Publications.
- Basevi, Giorgio, Emil Classen, Pascal Salin and Niels Thygesen (1976), "Towards Economic Equilibrium and Monetary Unification in Europe (OPTICA Reports, 1975)", Commission of the European Communities, Brussels, March.
- Bayoumi, Tamin and Eichengreen, Barry; "Shocking Aspects of European Monetary Unification," *National Bureau of Economic Research Working Paper*, No:3949, January 1992.
- Begg, D. (1990), "Alternative Exchange Rate Regimes: the Role of the Exchange Rate and the Implications for Wage-Price Adjustment", in *European Economy* - "The Economies of EMU", special issue 1990.
- BEUC - Bureau European des Unions de Consommateurs (1988) "Holiday Money," July.
- Bordes C. and Girardin, E. (1992), "The Achievements of the ERM and the Preconditions for Monetary Union: a French Perspective", in Barrel R, (ed) op. cit..
- Boyd, Christopher (1990), "The EMS, the Move Towards EMU and the Agrimonetary System," paper prepared for The Agrimoney Conference, London, October.

BIBLIOGRAPHY
(Continued)

Bovenberg, L., Kremers, J. and Masson, P. (1990), "Economic and Monetary Union in Europe and Constraints on National Budgetary Policies," paper prepared for a conference on "The political economy of government debt," University of Amsterdam, June.

Branson, William H. "Comment," *Brookings Paper on Economic Activity*, No. 1 (1993):125-29.

Canzoneri, M., Gray J.A. (1985), "Monetary Policy Games and the Consequences of Non-Cooperative Behavior", *International Economic Review*, Vol 26, No 3, October.

Coffey, P. and Presley J.R., *European Monetary Integration*, Part Two, Macmillan, London, 1971.

Commission of European Communities (1990) "Annual Economic Report 1990/91," *European Economy*, 46, December.

De Grauwe, Paul, "The Political Economy of Monetary Union in Europe," *World Economy*, Vol:16, Iss:6, Nov 1993, p: 653-661.

Emerson, Michael; Gros, Daniel; Italianer, Alexander; Jean Pisani, Ferry; Reinchenbach, Horst. *One Market, One Money*, Alden Press, Oxford University, Great Britain 1992.

Feldstein, M. (1988), "Distinguished Lecture on Economics in Government: Thinking about International Economic Coordination", *Journal of Economic Perspectives*, Vol 12, No 2, Spring.

Feldstein, Martin. "The Case Against EMU." *The Economist*, June 13, 1992.

Frankel, Jacob and Rarin, Assaf (1987), "The Mandel Flemming Model a Quarter Century Later: A Unified Exposition >" *International Monetary Fund Staff Papers*, 34, N.4, 567-620.

Giavazzi, F., Pagano M. (1988), "The Advantage of Tying One's Hands", *European Economic Review*, 32, pp. 1055-82.

Greenaway, D., Milner, C. (1986) *The Economics of Intra-Industry Trade*, Basil Blackwell, Oxford/New York.

BIBLIOGRAPHY
(Continued)

Gros, Daniel, and Thygesen, Niels, European Monetary Integration. New York: St. Martin's Press, 1992.

Guglielmo Maria Caporale, "Fiscal Solvency in Europe: Budget Deficits and Government Debt under European Monetary Union", *National Institute Economic Review*, May 1992.

Hotta, Bridgen, Fung, and de Pury. "Borderless Economy." *Far Eastern Economic Review*, November 5, 1992.

Handelsblatt, Wirtschaftss, "The Maastricht Treaty," *Protocols*, Frankfurt vol. 24, March 1992.

Jacquemin, A., Sapir, A. (1988), "International Trade and Integration of the European Community: An Economic Analysis," *European Economic Review*, 32, No. 7, September, pp. 1439-1449.

Jenkins, Roy (1978), "European Monetary Union," *Lloyds Bank Review*, N.127 (January):1-14.

Kaplan, Jacob and Gundher Schleiminger (1989), The European Payment Union, Clarendon Press, Oxford.

Ludlow, Peter (1982), *The Making of the European Monetary System*, London: Butterworths.

Micossi, Stefano (1985), "The Intervention and Financial Mechanisms of the EMS and the Role of the ECU," *Banca Nazionale del Lavoro Quarterly Review*, N. 155:327-346.

McKibbin, Warwick J. "Some Global Macroeconomic Implications of German Unification." *Brookings Discussion Papers in International Economics*, No.81, May 1990.

Mundell, Robert, "A Theory of Optimum Currency Areas", *American Economic Review*, 51 (November 1961): 509-17.

National Institute of Economic and Social Research (1991), "A New Strategy for Social and Economic Cohesion after 1992", European Parliament, Research and Documentation Paper No.18.

BIBLIOGRAPHY
(Continued)

Newmann, Manfred and Von Hagen, Jurgen (1992), "Monetary Policy in Germany," In Michele Pratianni and Dominick Salvatore (eds.), *Handbook of Monetary Policy in Industrial Countries*, Westport, CT: Greenwood.

Organization for Economic Cooperation and Development *OECD Economic Surveys: Germany*. Paris: OECD, 1991.

Poloz, S. (1990), "Real Exchange Rate Adjustments Between Regions in a Common Currency Area," mimeo, Bank of Canada, February.

Spencer Milton H., *Contemporary Economics*, Seventh Edition, Wayne State University, Worth Publishers, Inc., N.Y. 1990.

Tietmeyer, Hans, "German Monetary Policy in an International Perspective" Deutsche BundesBank Frankfurt am Main, Vol. 4, November 1994.

Triffin, Robert (1957), *Europe and the Money Muddle, From Bilateralism to Near-Convertibility, 1947-56* Yale University Press, New Haven (1966), *The World Money Maze*, Yale University Press, New Haven.

Ungerer, H., Evans, O., Mayer, T., Young, P., (1988), "The European Monetary System: Recent Developments," Occasional Paper No. 48, International Monetary Fund, Washington, D.C., December.

Van der Ploeg, Frederick, "Fiscal Stabilization and Monetary Integration in Europe: A Short Run Analysis", *Economist-Leiden*, (ECM), Vol.140, Iss.1, 1992, p. 16-44.

Van Ypersele, Jacques. "Operating Principles and Procedures of the European Monetary System." *The European Monetary System: Its Promise and Prospects*, edited by Philip H. Trezise, 5-24. Washington: The Brookings Institution, 1979.

Werner, Pierre, Baron Hubbert Ansiaux, George Brouwers, Bernard Clappier, Ugo Mosca, Jean-Baptiste Schollhorn, Giorgio Staminatti (1970), Report to the Council and the Community ("Werner Report") Supplement to Bulletin II-1970 of the European Communities Brussels.

Whitt Joseph A., Jr "European Monetary Union: Evidence from Structural VAR's", Mimeo, Federal Reserve Bank of Atlanta, May 1993.

Williamson J. (1993) "Exchange Rate Management" *Economic Journal*, Col.103, January, pp.188-97.